

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

**IN RE:        KENT COUNTY WATER AUTHORITY )  
              APPLICATION TO CHANGE RATE     )     DOCKET NO. 4611  
              SCHEDULES                                 )**

**SETTLEMENT AGREEMENT**

**I.     INTRODUCTION**

The Kent County Water Authority (the “KCWA”), the Division of Public Utilities and Carriers (the “Division”), Town of Coventry, City of Warwick, Coventry Fire District and Central Coventry Fire District (collectively referred to as the “Parties”) have reached an agreement on KCWA’s rate filing and jointly request the approval of this Settlement Agreement by the Public Utilities Commission (the “Commission”).

**II.    RECITALS**

1.     On April 7, 2016, KCWA filed a rate application (hereinafter the “Application”) pursuant to R.I.G.L. § 39-3-11 and Part II of the Commission’s Rules of Practice and Procedure.
2.     In the Application, KCWA sought to implement a multi-year rate plan through a three-step increase.
3.     In the first step of the rate plan, KCWA sought approval of new rates designed to generate additional revenues in the amount of \$3,296,334 to support total operating revenue of \$23,023,351.
4.     The impact of this request on a quarterly bill with an average consumption of 20 HCF would have been an increase of \$14.61 per quarter or 12.7%.

5. In the second step of the rate plan, KCWA sought approval to implement rates effective July 1, 2017 to collect additional operating revenues of \$874,192.

6. The impact of this request would have been an across-the board rate increase of 3.85% on all rate classes.

7. In the third step of the rate plan, KCWA proposed to implement rates effective July 1, 2018 designed to collect additional operating revenues of \$1,480,302. The impact of the third step would have been an across-the board rate increase of 6.28% on all rate classes.

8. In the Application, KCWA also proposed the following: 1) a demand surcharge that would be a fixed charge based on meter size to fund \$500,000 of KCWA's debt service, 2) an alternative seasonal rate to promote conservation pursuant to R.I.G.L. § 39-15.1-3(d), and 3) an optional Public Fire Service Charge based on size of meter.

9. In support of the Application, KCWA filed the direct testimony and schedules of Timothy J. Brown, P.E., General Manager Chief Engineer and Jo-Ann Gershkoff of KCWA; Christopher P.N. Woodcock of Woodcock & Associates, Inc.; and Thomas B. Nicholson, P.E., President/Chief Engineer, C & E Engineering Partners, Inc.

10. The City of Warwick, the Town of Coventry, the Central Coventry Fire District and the Coventry Fire District filed each a motion to intervene in this docket, which the Commission granted after receiving no objections.

11. In response to the Application, the Division conducted an investigation and review with the assistance of staff and two outside expert consultants.

12. In order to assist its investigation and review, the Division issued eight sets of data requests to KCWA to which KCWA responded.

13. Coventry Fire District also conducted discovery of the Application.

14. On September 1, 2016, the Division filed the Direct Testimony of Alberico Mancini, Jerome Mierzwa and Lafayette K. Morgan, Jr.

15. On or about October 20, 2016, KCWA filed Rebuttal Testimony of Mr. Woodcock and Mr. Brown.

16. On November 18, 2016, the Division filed Surrebuttal Testimony of Mr. Morgan and Mr. Mierzwa.

17. On November 18, 2016 Coventry Fire District filed Surrebuttal Testimony of David P. Krekorian, C.P.A., M.S.T.

18. Following the filing of the surrebuttal testimony, the Division and KCWA engaged in extensive settlement discussions and negotiations.

19. The principal differences that remained between the Division and KCWA at this stage of the proceedings were in the following expense categories:

- a) The Adoption of a proposed Demand Surcharge;
- b) The adoption of new, direct Public Fire Protection Charges;
- c) IFR expenses;
- d) Reduced CIP expenses;
- e) Employee Benefits;
- f) Property and Liability Insurance;
- g) Rate Case Expense;
- h) Operation Studies; and
- i) Inflation.

20. After due consideration of the testimony, exhibits and other documentation included in the filings of KCWA, of the Division and of the intervenors, the Parties have now

agreed to a comprehensive settlement which resolves all issues relating to KCWA's application. The Parties 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.

### **III. TERMS OF SETTLEMENT**

21. Incorporated herein and attached hereto as Exhibit 1 are Joint Settlement Schedules 1 - 15, (excluding Sch 14 and all Sch 14s<sup>1</sup>) which memorialize the Parties' settlement.

22. As set forth in Exhibit 1, in the first step of KCWA's multi-year rate plan, KCWA is authorized to adjust rates as of January 1, 2017 to obtain an amount not to exceed an additional \$2,780,976 of revenues or 14.34% of normalized Test Year revenues.

23. The parties agreed to consolidate the second and third steps of the multi-year rate plan into a single second step to be effective January 1, 2018. As part of this second step increase, and as set forth in Exhibit 1, the parties agree to an increase of revenues by an amount not to exceed \$1,057,660 or 4.77%. KCWA agrees to update its production numbers as part of the filing for the second step increase.

24. In addition, the Parties agree to the following terms:

- a. KCWA agrees to file a request with the Commission, no later than October 1, 2019, to terminate the funding related to the meter replacement program effective January 1, 2020 or on whatever date the program funding is completed. The filing should include the most recent information related to the actual cost of the program as well as the salvage value of old meters.

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<sup>1</sup> These dealt with seasonal rates and the Demand Surcharge which are no longer relevant under the proposed settlement.

- b. KCWA withdraws its proposed demand surcharge and seasonal rate alternatives;
- c. KCWA withdraws its proposal to recover costs associate with public fire service directly from individual retail customers; KCWA also withdraws its request to codify in its tariff the proposed practice of charging for hydrant installations;
- d. By April 1, 2017, KCWA agrees to complete an investigation as to whether compound meters are supporting private protection service, and report the findings of its investigation to the Division and the Commission; *five (5) MBs*
- e. KCWA will not codify in any tariff filing its current practice of charging for lost water caused by the actions of third persons;
- f. The parties agree to the method used for derivation of public and private fire service costs as appropriate. However, because of the magnitude of the public and private fire charge increases, the parties agree to limit the increase in public and private fire charges in the initial step in this docket to a 30% increase. In KCWA's next rate filing, the parties agree to move the public and private fire service charges toward the full cost of service.
- g. Kent County Water Authority will be allowed to draw from the Cash Capital Account in advance to fund the Meter Replacement Program with the full understanding that the Cash Capital Fund will be

reimbursed from collections restricted to the Meter Replacement Program, prior to the Meter Replacement Program completion;

- h. The parties agree that KCWA will continue with all current reporting requirements; and
- i. The parties agree that KCWA will fund its Commission restricted accounts at the following levels.

Account	Rate Year	Step Increase Effective Jan 1, 2018
Infrastructure Replacement	\$5,400,000	\$6,000,000
Debt Service	\$2,178,500	\$2,183,500
Cash Capital	\$1,753,819	\$1,453,819
Renewal & Repl – Equip.	\$100,000	\$100,000

#### **IV. 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 this 6<sup>th</sup> day of December, 2016.

KENT COUNTY WATER  
AUTHORITY

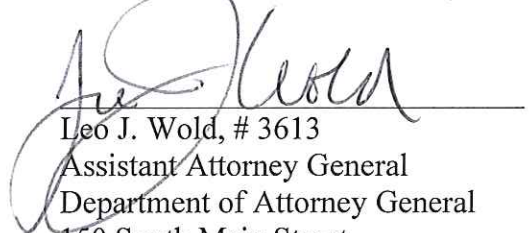
By its attorney,



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TOWN OF COVENTRY and CENTRAL  
COVENTRY FIRE DISTRICT  
By its attorney,

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By its attorney

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**CERTIFICATE OF SERVICE**

I certify that a copy of the document was forwarded by e-mail to the Service List in the above docket on the \_\_\_\_ day of \_\_\_\_\_, 2016.

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**PRO FORMA EXPENSES**

Expense Item	Test Year <u>June 30, 2015</u>	Summary of Adjustments	Rate Year <u>7/1/16-6/30/17</u>	<----- Adjustments Detail ----->				
				Labor Increase (Sch 1B/1D)	One Time Costs	Other Adjustments	Supporting Schedule	Non-Labor Inflation
SOURCE OF SUPPLY								
maint of wells/supply study	\$0	\$18,520	\$18,520	\$0		\$18,520 nt Settl. Sch. 1D		
purchased water	<u>\$4,999,638</u>	<u>-\$702,057</u>	<u>\$4,297,581</u>	<u>\$0</u>		<u>-\$702,057</u> nt Settl. Sch. 1C		
Subtotal	\$4,999,638	-\$683,537	\$4,316,101	\$0	\$0	-\$683,537		\$0
PUMPING OPERATIONS								
fuel for pumping	\$22,662	\$1,031	\$23,693	\$0				\$1,031
power	\$606,405	\$163,277	\$769,682	\$0		\$163,277 nt Settl. Sch. 1E		
labor-pumping	\$82,493	\$3,355	\$85,848	\$3,160				\$195
pumping expense	\$0	\$0	\$0	\$0				\$0
maint. - structures & improv	\$63,789	\$22,621	\$86,410	\$22,228				\$393
diesel oil	\$0	\$0	\$0	\$0				\$0
maint. - equip	<u>\$36,986</u>	<u>\$21,591</u>	<u>\$58,577</u>	<u>\$20,728</u>				<u>\$863</u>
Subtotal	\$812,335	\$211,875	\$1,024,210	\$46,116	\$0	\$163,277		\$2,482
WATER TREATMENT								
chemicals	\$40,519	\$122,393	\$162,912	\$0		\$122,393 nt Settl. Sch. 1E		
labor	\$186,426	\$7,575	\$194,001	\$7,189				\$386
operating / Mishnock	\$65,420	\$2,977	\$68,397	\$0				\$2,977
maint. - water treat equip	\$17,556	\$799	\$18,355	\$0				\$799
maint. - structure	<u>\$651</u>	<u>\$30</u>	<u>\$681</u>	<u>\$0</u>				<u>\$30</u>
Subtotal	\$310,572	\$133,773	\$444,345	\$7,189	\$0	\$122,393		\$4,192
TRANS & DISTR. EXPENSE								
storage facilities exp.	\$0	\$0	\$0	\$0				\$0
labor	\$23,745	\$1,081	\$24,826	\$0				\$1,081
supplies	\$106,875	\$4,863	\$111,738	\$0				\$4,863
labor-meter	\$52,568	\$2,141	\$54,709	\$1,988				\$152
meter - supp & exp	\$12	\$1	\$13	\$0				\$1
cust. install.	\$0	\$0	\$0	\$0				\$0
misc.	\$13,258	\$603	\$13,861	\$0				\$603
maint - struct. & improv.	\$57,000	\$2,594	\$59,594	\$0				\$2,594
maint.- res & stdp	\$20,465	\$841	\$21,306	\$717				\$124
maint. - mains	\$565,681	\$63,871	\$629,552	\$54,800				\$9,071
maint. - service	\$105,892	\$44,458	\$150,350	\$42,852				\$1,606
maint. - meters	\$139,823	\$6,123	\$145,946	\$1,901				\$4,221
maint. - hydrants	\$79,531	\$3,439	\$82,970	\$1,426				\$2,013
construction labor	<u>-\$68</u>	<u>\$0</u>	<u>-\$68</u>	<u>\$0</u>				<u>\$0</u>
Subtotal	\$1,164,782	\$130,014	\$1,294,796	\$103,685	\$0	\$0	\$0	\$26,330

**PRO FORMA EXPENSES**

<u>Expense Item</u>	<u>Test Year</u>	<u>Summary of</u>	<u>Rate Year</u>	<u>&lt;----- Adjustments Detail -----&gt;</u>				
	<u>June 30, 2015</u>	<u>Adjustments</u>	<u>7/1/16-6/30/17</u>	<u>Labor Increase</u>	<u>One</u>	<u>Other</u>	<u>Supporting</u>	<u>Non-Labor</u>
				<u>(Sch 1B)</u>	<u>Time Costs</u>	<u>Adjustments</u>	<u>Schedule</u>	<u>Inflation</u>
CUSTOMER ACCOUNT								
labor- meter read	\$110,533	\$4,496	\$115,029	\$4,226				\$269
cust record labor	\$204,210	\$8,301	\$212,511	\$7,848				\$453
cust records sup	\$95,811	\$4,360	\$100,171	\$0				\$4,360
meter read supplies	\$2,505	\$114	\$2,619	\$0				\$114
uncollectible	\$57,397	\$2,612	\$60,009	\$0				\$2,612
Subtotal	\$470,456	\$19,883	\$490,339	\$12,074	\$0	\$0		\$7,808
ADMIN. & GENERAL								
salaries	\$428,341	\$36,783	\$465,124	\$17,291				\$19,492
office supplies & expenses	\$257,632	\$11,724	\$269,356	\$0				\$11,724
insurance (property/liability/wc)	\$249,166	\$20,175	\$269,341	\$0		\$20,175 nt Settl. Sch. 1D		
OPEB Trust Contrib.	\$0	\$80,000	\$80,000	\$0		\$80,000 nt Settl. Sch. 1D		
employee benefits	\$927,939	\$37,918	\$965,857	\$0		\$37,918 nt Settl. Sch. 1D		
maint. - plant	\$146,750	\$6,084	\$152,834	\$4,703				\$1,381
maint. - vehicles	\$60,303	\$2,726	\$63,029	\$142				\$2,584
miscellaneous	\$15,840	\$721	\$16,561	\$0				\$721
vacation, holiday, sick	\$299,762	\$12,829	\$312,591	\$12,829				\$0
regul. exp.	\$136,920	\$15,778	\$152,698	\$0		\$15,778 nt Settl. Sch. 1E		
outside service	\$89,877	\$4,090	\$93,967	\$0				\$4,090
Subtotal	\$2,612,530	\$228,828	\$2,841,358	\$34,965	\$0	\$153,871		\$39,992
TOTAL O&M	\$10,370,313	\$40,836	\$10,411,149	\$204,029	\$0	-\$243,996		\$80,803

**PRO FORMA EXPENSES**

<u>Expense Item</u>	<u>Test Year</u> <u>June 30, 2015</u>	<u>Summary of</u> <u>Adjustments</u>	<u>Rate Year</u> <u>7/1/16-6/30/17</u>	<u>----- Adjustments Detail -----&gt;</u>				
				<u>Labor Increase</u> <u>(Sch 1B/1D)</u>	<u>One</u> <u>Time Costs</u>	<u>Other</u> <u>Adjustments</u>	<u>Supporting</u> <u>Schedule</u>	<u>Non-Labor</u> <u>Inflation</u>
FIXED CHARGES								
Debt Service								
Existing	\$2,179,500	(\$1,000)	\$2,178,500			-\$1,000	nt Settl. Sch. 1D	
New	\$0	\$0	\$0			\$0	nt Settl. Sch. 1D	
Reserves and Coverage								
O&M Reserve	\$0	\$14,185	\$14,185			\$14,185	nt Settl. Sch. 1D	
R&R Reserve	\$77,607	\$54,729	\$132,336			\$54,729	nt Settl. Sch. 1D	
Renewal & Replacement - Equip	\$100,000	\$0	\$100,000					
Infrastructure Replacement	\$5,400,000	\$0	\$5,400,000				\$0 nt Settl. Sch. 1D	
Meter Replacement	\$0	\$2,000,000	\$2,000,000			\$2,000,000	nt Settl. Sch. 1D	
CIP	\$0	\$1,753,819	\$1,753,819			\$1,753,819	nt Settl. Sch. 1D	
Payroll Taxes	\$154,417	\$21,204	\$175,621			\$21,204	nt Settl. Sch. 1D	
PILOT	\$23,123	\$0	\$23,123			\$0		
SUBTOTAL FIXED	\$7,934,647	\$3,842,937	\$11,777,584	\$0	\$0	\$3,842,937		\$0
OPERATING REVENUE	\$583,313	-\$250,449	\$332,864			-\$250,449		
TOTAL EXPENSES	\$18,888,273	\$3,633,324	\$22,521,597	103.32%	\$204,029	\$0	\$3,348,492	\$80,803
Less:								
Miscellaneous Income	(\$235,485)	-\$9,310	(\$244,795)			-\$9,310	nt Settl. Sch. 1A	
Interest Income	(\$25,826)	\$4,362	(\$21,464)			\$4,362	nt Settl. Sch. 1A	
Merchand & Jobbing	(\$16,230)	-\$2,581	(\$18,811)			-\$2,581	nt Settl. Sch. 1A	
6.9% of Water Prot Fee	(\$46,107)	\$526	(\$45,581)			\$526	nt Settl. Sch. 1A	
NET REQUIRED FROM RATES	\$18,564,625	\$3,626,322	\$22,190,946					\$80,803

**TEST YEAR & PRO FORMA REVENUES**

<b><u>Revenues</u></b>	Test Year <b><u>Revenues</u></b>	<b><u>Adjustments</u></b>	Rate Year <b><u>7/1/16-6/30/17</u></b>	
Miscellaneous				
Less:				
Miscellaneous Income	\$42,131	-\$9,310	\$32,821	Joint Settl. Sch. 1D
Interest Income	\$25,826	\$4,362	\$30,188	Joint Settl. Sch. 1D
Merchand & Jobbing	\$16,230	-\$2,581	\$13,649	Joint Settl. Sch. 1D
6.9% of Water Prot Fee	<u>\$46,107</u>	<u>\$526</u>	<u>\$46,633</u>	(2)
Total Misc.	\$130,294		\$123,291	
Metered Rates	<b>\$17,780,588</b>	\$155,891	\$17,936,479	(1)
Public Fire	<b>\$1,309,184</b>	\$4,615	\$1,313,799	(1)
Private Fire	<b>\$167,510</b>	-\$7,819	\$159,691	(1)
Total Revenue	\$19,387,576	\$152,688	\$19,533,261	
<b><u>Required Revenue</u></b>			\$22,521,597	
<b><u>Required Revenue from Rates</u></b>			\$22,398,306	
<b><u>Rate Increase Needed</u></b>			\$2,988,336	

## NOTES:

(1) Normalized Test Year Revenues at Current Rates based on Joint Settl. Sch. 11 - current rates for full year.

(2) WP revenue based on rate of \$0.01511 with 95% non-exempt customers.

Non-exempt Use RY =	3,086,260 ccf
Rate (\$/ccf)	\$0.01511
RY Revenue	\$46,633

**TEST YEAR & RATE YEAR LABOR COSTS**

		Test Year		Rate Year
EXPENSE ITEM		<u>June 30, 2015</u>	<u>Adjustments (1)</u>	<u>7/1/16-6/30/17</u>
SOURCE OF SUPPLY				
PUMPING OPERATIONS				
624A	labor-pumping	\$78,206	\$3,160	\$81,365
631	maint. - structures & improv	\$55,160	\$22,228	\$77,388
633	maint. - equip	\$18,027	\$20,728	\$38,755
WATER TREATMENT				
642A	labor	\$177,937	\$7,189	\$185,126
TRANS & DISTR. EXPENSE				
663A	labor-meter	\$49,219	\$1,988	\$51,207
672	maint.- res & stdp	\$17,751	\$717	\$18,468
673	maint. - mains	\$366,344	\$54,800	\$421,144
675	maint. - service	\$70,596	\$42,852	\$113,448
676	maint. - meters	\$47,062	\$1,901	\$48,963
677	maint. - hydrants	\$35,288	\$1,426	\$36,713
CUSTOMER ACCOUNT				
902	labor- meter read	\$104,614	\$4,226	\$108,840
903	cust record labor	\$194,254	\$7,848	\$202,101
ADMIN. & GENERAL				
920	salaries	\$435,569	\$17,291	\$452,860
932A	maint. - plant	\$116,408	\$4,703	\$121,111
932B	maint. - vehicles	\$3,516	\$142	\$3,658
679	miscellaneous	\$0	\$0	\$0
933	vacation, holiday, sick	<u>\$317,555</u>	<u>\$12,829</u>	<u>\$330,384</u>
0	SUBTOTAL LABOR	\$2,087,504	\$204,029	\$2,291,533
	Capitalized Labor	<u>\$4,000</u>	<u>\$162</u>	<u>\$4,162</u>
	TOTAL LABOR COSTS	\$2,091,505	\$204,191	\$2,295,695
(1) See Schedule 1D				

**WHOLESALE WATER COSTS**Wholesale Water Purchases (updated per Div. DR 3-9)

	<u>Rate (\$/mg)</u>	<u>Purchases (mg)</u>	<u>Cost</u>
PWSB Rate (/mg)	<u>\$1,731.16</u>	2,482.49	\$4,297,581
Net Wholesale Purchases (gallons) - Rate Year			
Warwick Purchases		1,135,328,000	
PWSB Purchases		<u>1,456,357,231</u>	
Total Purchases		2,591,685,231	
Sales To Warwick		<u>-109,199,000</u>	
Net Purchases		2,482,486,231	
Rate Year Sales		2,482,486,231	

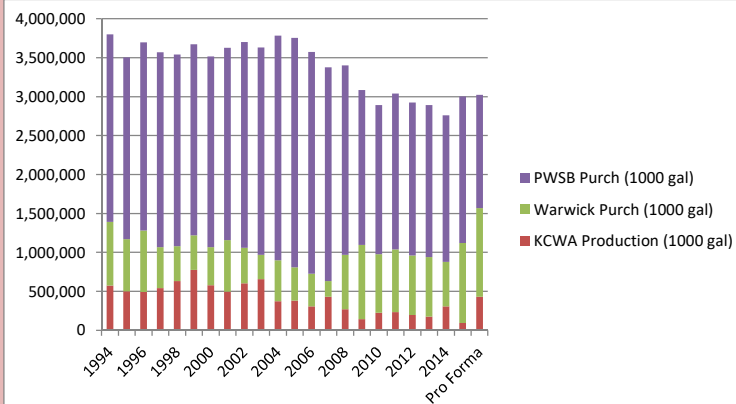
Fiscal Yr -- >	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>Pro Forma</u>
KCWA Production (1000 gal)	231,080	195,110	175,420	304,651	92,176	96,175	430,800 (1)
Warwick Purch (1000 gal)	808,282	766,301	763,513	572,651	1,028,956	1,135,328	1,135,328 (2)
PWSB Purch (1000 gal)	<u>1,999,838</u>	<u>1,962,717</u>	<u>1,952,095</u>	<u>1,883,039</u>	<u>1,882,339</u>	<u>1,781,270</u>	<u>1,456,357</u> (4)
Total	3,039,200	2,924,128	2,891,028	2,760,341	3,003,471	3,012,773	3,022,485 (3)
Total Purchased	2,808,120	2,729,018	2,715,608	2,455,690	2,911,295	2,916,598	2,591,685
Sales To Warwick (1000 gal)	<u>73,595</u>	<u>92,976</u>	<u>91,487</u>	<u>92,039</u>	<u>102,354</u>	<u>109,199</u>	<u>109,199</u> (2)
Net Purchases	2,734,525	2,636,042	2,624,121	2,363,651	2,808,941	2,807,399	2,482,486

(1) KCWA rate year (FY 2017) production based on E. Greenwich start-up 11/16 and projections based on past monthly use, Mishnock on line 2/17

(2) No change projected in purchases from or sales to Warwick from 2015 values

(3) Overall amount changed from 2015 in same proportion as sales.

(4) Calculated to equal the total volume minus KCWA Production and minus Warwick Purchase.



**EXPLANATION OF ADJUSTMENTS TO TEST YEAR COSTS**

<u>Adjustment to:</u>	<u>Explanation</u>
<b>Fixed Charges Associated with Debt Service:</b>	
O&M Reserve	Set to achieve reserve level equal to 25% of operating costs.
	"O&M" Costs (Joint Settl. Sch. 1) = \$10,411,149
	Payroll Taxes \$175,621
	PILOT <u>\$23,123</u>
	Total Operating \$10,609,893
	Required O&M Reserve (25%) \$2,652,473
	Balance 6/30/15 \$2,382,240
	Additions October 2015 <u>\$256,048</u>
	Estim. Balance Start of Rate Year \$2,638,288
	Required deposit = \$14,185
R&R Reserve	Set to equal 1% of Net Utility Plant (NUP)
	NUP Value (6/30/16) <u>\$145,130,806</u>
	Estimated Additions <u>\$5,700,000</u>
	Pro Forma NUP \$150,830,806
	Required Balance (1%) \$1,508,308
	Balance 6/30/15 \$1,350,565
	Additions October 2015 <u>\$25,407</u>
	Estim. Balance Start of Rate Year \$1,375,972
	Addition to Reserve Required \$132,336

**Source of Supply Operations (studies)**

Cost of Water Supply, CIP, & IFR Plans =	<u>\$17,600</u>
Cost of Conservation Program =	<u>\$25,000</u>
New Vulnerability Study =	<u>\$50,000</u>
Total	<u>\$92,600</u>
Normalize over 5 yrs	\$18,520
Change over Test Year	\$18,520

**Admin - Fees**

Based on the May 2015 notice from the Dept. of Health, the annual PWS Renewal Fee is \$32,500



**EXPLANATION OF ADJUSTMENTS TO TEST YEAR COSTS**

<b>Debt Service</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>
<u>2012 Series A Bonds</u>						
Principal	\$1,485,000	\$1,540,000	\$1,605,000	1,690,000	\$1,775,000	\$1,870,000
Interest	<u>\$694,500</u>	<u>\$635,100</u>	<u>\$573,500</u>	<u>493,250</u>	<u>\$408,750</u>	<u>\$320,000</u>
Total	\$2,179,500	\$2,175,100	\$2,178,500	\$2,183,250	\$2,183,750	\$2,190,000
<u>New Debt</u>						
Principal	\$0	\$0	\$0	\$0	\$0	\$0
Interest	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Total	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Total Debt	\$2,179,500	\$2,175,100	\$2,178,500	\$2,183,250	\$2,183,750	\$2,190,000

Note that payments on bonds are due in January and July. Although the July payment is due the fiscal year following the due date, the funds must be accumulated the prior months to have sufficient amounts to make the payments.

**Infrastructure Replacement**

Based on most recently approved IFR Report for KCWA the annual IFR requirement is **\$7,000,000**

However, to minimize the current requested adjustment, the Authority is requesting the increase through the step adjustments proposed.

Increase over test year = **\$0**

**PILOT**

based on following payments in lieu of taxes:

<u>City &amp; Towns</u>	<u>Totals</u>
W. Warwick	\$8,264.82
Warwick	\$58.00
Coventry	\$12,813.37
Scituate	\$260.05
W. Greenwich	\$364.43
<u>Fire Districts</u>	
Cent. Cov.-Cov.	\$302.50
Cent.Cov.-Harris	\$50.00
Cent.Cov-Tiogus	\$121.00
Cent Coventry	\$349.00
Hopkins Hills	<u>\$540.00</u>
	\$23,123.17

**Insurance - Liability/Property/Worker's Comp**

	<u>FY 12</u>	<u>FY 13</u>	<u>FY 14</u>	<u>FY 15</u>	<u>FY 2016</u>	<u>Rate Year</u>	<u>Avg Increase</u>
Liability/Property Insurance	<u>130,590</u>	<u>146,686</u>	<u>156,105</u>	<u>166,811</u>	<u>166,015</u>	176,281	6.2%
Worker's Comp. Insurance	<u>62,127</u>	<u>65,154</u>	<u>80,541</u>	<u>85,521</u>	<u>84,158</u>	90,792	7.9%
Total	\$192,717	\$211,840	\$236,646	\$252,332	250,173	\$269,341	6.74%

Estimated Rate Year amounts based on average annual increases over past four years.

**EXPLANATION OF ADJUSTMENTS TO TEST YEAR COSTS**

<b>Benefits</b>	<u>FY 2014</u>	<u>Test Yr. (FY15)</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
Medical - Blue Cross	\$510,912	\$528,254	\$513,573				
Delta Dental	\$41,303	\$46,702	\$46,279				
Group P-65 Retirees	\$74,314	\$73,682	\$68,554				
Life Insurance	\$5,826	\$6,487	\$6,331				
Disability Insurance	\$7,768	\$8,867	\$9,162				
Coastline Employee Assist	\$1,200	\$1,500	\$1,500				
Education	\$8,835	\$29,218	\$9,026				
Pension Contribution	\$311,745	\$228,129	\$243,161				
Xmas Bonus	\$5,100	\$5,100	\$5,100				
Total	\$967,003	\$927,939	\$902,686				
Less Retiree Costs (*)	-\$72,808	-\$46,337	-\$74,305				
Net for Current Employees	\$894,195	\$881,602	\$828,381	\$891,551	\$936,644	\$955,377	\$974,484
Labor Costs	\$1,956,599	\$2,091,505	\$2,133,035	\$2,295,695	\$2,341,609	\$2,388,441	\$2,436,210
Benefits as % of Current Labor	45.70%	42.15%	38.84%	40.00%	40.00%	40.00%	40.00%
Retiree Costs (**)				\$74,305	\$74,305	\$74,305	\$74,305
Plus Benefits (above)				\$891,551	\$936,644	\$955,377	\$974,484
Total Benefits				\$965,857	\$1,010,949	\$1,029,682	\$1,048,790
Change in Benefits for RY				\$37,918			
Annual Increase After Rate Year					83,010	\$18,733	\$19,108
* includes payments to retired employees for Delta-Dental, Group 65 Retirees and Life Insurance							
** based on Division testimony, kept at FY2106 values							

**New OPEB Contribution to Trust**

<b>Miscellaneous Revenues</b>	<u>Misc Income</u>	<u>Interest Inc</u>	<u>Merch &amp; Jobbing</u>
FY15	\$42,131	\$25,826	\$16,320
FY14	\$19,376	\$26,152	\$20,277
FY13	\$36,955	\$38,586	\$4,350
Average	\$32,821	\$30,188	\$13,649

	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
	\$80,000	\$80,000	\$80,000	\$80,000

**EXPLANATION OF ADJUSTMENTS TO TEST YEAR COSTS****Labor Adjustments**

Test year (FY 2015) labor increased to FY 2016 based on 2% increase and actual 2015 OT

For Rate Year, the FY 2016 labor costs were increased 2% for existing positions, with OT at FY 2015/2016 levels plus:

Two operators to replace transfers to Treatment Plant @ \$40,000 each (split between maint of mains and services)

One additional Maintenance Mechanic @ \$40,000 (split between pumping structures and equipment)

FY 2018 increased at 2%

	<u>Test Yr (FY15)</u>	<u>FY 2016</u>	<u>Rate Yr (FY 17)</u>	<u>FY 2018</u>
<i>Pumping Expense</i>				
Pumping Labor	\$78,206	\$79,770	\$81,365	\$82,993
Maint. Structure	\$55,160	\$56,263	\$77,388	\$78,936
Maint. Equip.	\$18,027	\$18,387	\$38,755	\$39,530
<i>Water Treatment Expense</i>				
Operator Labor	\$177,937	\$181,496	\$185,126	\$188,829
<i>Transmission &amp; Distribution</i>				
Meter Labor	\$49,219	\$50,203	\$51,207	\$52,231
Maint. Reser. & Standpipes	\$17,751	\$18,106	\$18,468	\$18,837
Maint. Mains	\$366,344	\$373,671	\$421,144	\$429,567
Maint. Services	\$70,596	\$72,007	\$113,448	\$115,717
Maint. Meters	\$47,062	\$48,003	\$48,963	\$49,942
Maint. Hydrants	\$35,288	\$35,993	\$36,713	\$37,448
<i>Customer Accounts</i>				
Meter Reading	\$104,614	\$106,706	\$108,840	\$111,017
Customer Records	\$194,254	\$198,139	\$202,101	\$206,143
<i>Admin. &amp; General</i>				
Salaries (Admin & Board)	\$435,569	\$443,980	\$452,860	\$461,917
Genrl Plant Maint.	\$116,408	\$118,737	\$121,111	\$123,533
Vehicle Maint.	\$3,516	\$3,586	\$3,658	\$3,731
Vac., Holiday, Sick	\$317,555	\$323,906	\$330,384	\$336,992
Capitalized Labor	<u>\$4,000</u>	<u>\$4,080</u>	<u>\$4,162</u>	<u>\$4,245</u>
<i>Totals</i>	\$2,091,505	\$2,133,035	\$2,295,695	\$2,341,609

**Payroll Taxes**

FICA set at 7.65% of salary 175,621

**Non-Labor Inflation**

Non-labor items increased from test year using an average annual increase of 2.25%  
per year or 4.55% over 2 years to account for inflation.

**Power**

See Schedule 1E

**Operating Revenue**

See testimony-operating revenue based on total rate revenues (total less misc. revenues) at 1.50% 1.5% restricted/1.5% non-restricted

**EXPLANATION OF ADJUSTMENTS TO TEST YEAR COSTS****Capital Spending****Meter Replacement**

The authority is planning to replace all the customer owned water meters. The total estimated cost is \$6.6 million. For the rate year, initial funding of **\$2,000,000** is requested. In FY 2018 funding of \$2,000,000 is requested. For FY 2019, the balance is included.

**Capital Improvement Program**

The Authority has developed a capital improvement program (CIP) that it is looking to finance from rates. With the refinancing of its debt, available funds in the Restricted Debt Account, and available balances in the Restricted Operating Revenue Account, the Authority proposes to use these savings to help phase-in the program. The Authority is looking for authorization equal to the reduction in the debt service that had been authorized by the PUC.

Authorized Debt Doc. 4142 = \$3,932,319      Difference from rate year debt = \$1,753,819

**Restricted Funds Activity for Rate Year**

	<u>R&amp;R Reserve</u>	<u>O&amp;M Reserve</u>	<u>Debt</u>	<u>IFR</u>	<u>R&amp;R Equip</u>	<u>Res. Oper. Rev.*</u>
Beginning Balance (7/1/14)	<b>1,272,826</b>	<b>2,493,284</b>	2,026,555	<b>6,277,494</b>	<b>262,937</b>	<b>1,507,265</b>
Funding	<b>77,607</b>	<b>0</b>	2,179,500	<b>5,400,000</b>	<b>100,000</b>	<b>291,656</b>
Interest	<b>132</b>	<b>242</b>	98	<b>676</b>	<b>20</b>	<b>133</b>
Expenditures (actual) *	<b>0</b>	<b>111,286</b>	<b>2,373,650</b>	<b>4,391,122</b>	<b>303,930</b>	<b>0</b>
Ending Balance (6/30/15)	1,350,565	2,382,240	1,832,503	7,287,048	59,027	1,799,054

	<u>2012 Refunding</u>	<u>2004 Series A</u>	<u>Total Debt</u>
Beginning Balance (7/1/14)	<b>1,800,909</b>	<b>225,646</b>	2,026,555
Funding (TY)	<b>2,179,500</b>	<b>0</b>	2,179,500
Interest	<b>92</b>	<b>6</b>	98
Expenditures (actual)	<b>2,148,000</b>	<b>225,650</b>	<b>2,373,650</b>
Ending Balance (6/30/15)	1,832,501	2	1,832,503

\* Note -\$607,077 was withdrawn from the Restricted Operating Revenue Account after June 30, 2015 reducing this account

SUPPLEMENTAL DATA**Regulatory Expenses**

<u>Fiscal Year</u>	<u>Annual Assmnt</u>	<u>Legal</u>	<u>Consultants</u>	<u>DPUC Fees</u>	<u>Total</u>
2011	45,874	0	600	3,769	50,243
2012	53,179	0	1,800	698	55,677
2013	64,890	22,920	17,000	2,960	107,770
2014	97,253	30,289	53,328	908	181,778
2015	84,080	12,507	39,876	457	136,921
Estimated Rate Case Expense - this docket		50,000	60,000	20,000	130,000
			Other Rate Case (Prov Water, Pass Thru)		50,000
			Amortized over 3 yrs		60,000
			DPUC Assessment (Estim RY) *		92,698
			Rate Year Regulatory Expense =		152,698

Note: Estimated costs for current docket do NOT include KCWA regulatory costs for intervention in filings by Providence Water nor do they include costs for pass through rate filings to pass on wholesale rate increases.

\* PUC Assessments

FY 2011	\$45,874	
FY 2012	\$53,179	15.92%
FY 2013	\$64,890	22.02%
FY 2014	\$97,253	49.87%
FY 2015	\$84,080	-13.55%
Average increase =	18.57%	
Estimated Annual Change =	5.00%	
Estim FY 2016 (RY)	\$88,284	
Estim FY 2017 (RY)	\$92,698	

SUPPLEMENTAL DATA**Chemical Costs****East Greenwich**

	Production (1000 gal/yr)	Chlorine Gallons	Tetrapotassium Pyrophosphate Gallons	Potassium Hydroxide Gallons	Chem Delivery and Freight PyroPhos	Chem Delivery and Freight POT HYD
FY 2011	232,130	533	271	26,025	\$427	\$1,305
FY 2012	190,990	439	223	19,904	\$496	\$2,025
FY 2013	175,282	403	205	19,560	\$525	\$2,120
FY 2014	223,338	513	261	25,576	\$555	\$2,835
FY 2015	off line					
FY 2016	off line					
FY 2017 Proj	138,819	319	162	15,384	\$556	\$1,400
COST/GAL (12/15)		\$2.43	\$10.46	\$6.70		
FY 2016 COST		\$775	\$1,695	\$103,073	\$556	\$1,400
<b>Total FY 2017 chemical costs (E. Greenwich)</b>						<b>\$107,498</b>

	Production (1000 gal/yr)	Potassium Permanganate Gallons	Chlorine Gallons	Potassium Hydroxide Gallons	Citric Acid Gallons	Sodium Bisulfite Gallons	Sulfuric Acid Gallons	Chemical Deliver Fees	Lab Chems
<b><u>Mishnock</u></b>									<b><u>\$/FY</u></b>
FY 2013	0	0	0	0	0	0	0	\$0	\$0
FY 2014	50,000	3,481	376	399	125	188	4	\$575	\$3,600
FY 2105	100,000	7,080	780	820	250	375	8	\$1,236	\$3,600
FY 2016	96,175	7,080	780	820	250	375	8	\$1,418	\$3,600
FY 2017 PROJ USE	292,000	20,674	2,278	2,394	250	375	8	\$14,818	\$4,000
COST/GAL		\$1.08	\$2.43	\$6.70	\$11.06	\$4.69	\$3.54		
FY 2017 COST		\$22,328	\$5,536	\$16,040	\$2,765	\$1,759	\$28		
<b>Total FY 2017 chemical costs (Mishnock)</b>								<b>\$48,455</b>	<b>\$3,358</b>
<b><u>FY 2017 Chemical Costs</u></b>		\$7,646	\$1,895	\$5,494	\$2,765	\$1,759	\$28	1,236	3,600
E. Greenwich	\$107,498								
Mishnock	\$48,455								
Mishnock Delivery	\$3,358								
Lab Chemicals	\$3,600								
Total - Rate Year	<b>\$162,912</b>								
Increase over Test Year	\$122,393								

**Treatment Power Costs**

	<b><u>East Greenwich</u></b>		<b><u>Mishnock</u></b>		<b><u>Both</u></b>
	Power KWH USED	AVG Power \$/KWH	Power KWH USED	AVG Power \$/KWH	
FY 2011	454,207	\$0.122			\$55,413
FY 2012	465,600	\$0.124			\$57,734
FY 2013	387,360	\$0.130			\$50,357
FY 2014	547,920	\$0.135	188,547	\$0.166	\$105,268
FY 2015			346,320	\$0.185	\$64,069
FY 2016			346,320	\$0.186	\$64,416
FY 2017 Proj	313,385	\$0.186	908,907	\$0.186	\$227,346
Increase over test year					\$163,277

**UNITS OF SERVICE**

	Test Year <u>Actual</u>	<u>Adjustments</u>	Rate Year <u>Projected</u>
<u>Metered Water Sales (100 cubic feet)</u>			
Small (5/8-2" meters)	2,921,091	18,493	2,939,584
Medium (3&4" meters)	66,302	420	66,721
Large (6" & up meters)	<u>240,864</u>	1,525	<u>242,389</u>
	3,228,257		3,248,694

Meters By Size

	Quarterly <u>June 2015</u>		
5/8 & 3/4	22,099	-19	22,080
1	3,636	14	3,650
1 1/2	322	2	324
2	503	-1	502
3	13	-2	11
4	84	5	89
6	85	4	89
8 & up	65	2	67
<u>Monthly</u>			
5/8 & 3/4	5	0	5
1	1	0	1
1 1/2	9	0	9
2	9	-1	8
3	1	0	1
4	4	-1	3
6	7	0	7
8 & up	5	0	5

Public Fire Service (Sept 2015)

Public Fire Hydrants	2,352	5	2,357
Bills	32		32

Private Fire Service

<u>Size (in)</u>			
4	16	0	16
6	97	-2	95
8	19	-3	16
10	1	0	1
12	1	0	1
Hydrants	128	-6	122

**ALLOCATION OF RATE YEAR EXPENSES TO  
GENERAL WATER, FIRE, AND CUSTOMER SERVICE**

EXPENSE ITEM	RATE YEAR	ALLOC.	GENERAL WATER		FIRE SERVICE		CUST. SERVICE	
	EXPENSE	SYMBOL (1)	%	AMOUNT	%	AMOUNT	%	AMOUNT
SOURCE OF SUPPLY								
maint of wells/supply study	\$18,520	A	99.5%	\$18,427	0.5%	\$93	0.0%	0
purchased water	\$4,297,581	A	99.5%	\$4,276,093	0.5%	\$21,488	0.0%	0
PUMPING OPERATIONS								
fuel for pumping	\$23,693	A	99.5%	\$23,575	0.5%	\$118	0.0%	0
power	\$769,682	A	99.5%	\$765,834	0.5%	\$3,848	0.0%	0
labor-pumping	\$85,848	P	79.7%	\$68,455	20.3%	\$17,393	0.0%	0
pumping expense	\$0	P	79.7%	\$0	20.3%	\$0	0.0%	0
maint. - structures & improv	\$86,410	P	79.7%	\$68,903	20.3%	\$17,507	0.0%	0
diesel oil	\$0	P	79.7%	\$0	20.3%	\$0	0.0%	0
maint. - equip	\$58,577	P	79.7%	\$46,709	20.3%	\$11,868	0.0%	0
WATER TREATMENT								
chemicals	\$162,912	A	99.5%	\$162,097	0.5%	\$815	0.0%	0
labor	\$194,001	A	99.5%	\$193,031	0.5%	\$970	0.0%	0
operating / Mishnock	\$68,397	A	99.5%	\$68,055	0.5%	\$342	0.0%	0
maint. - water treat equip	\$18,355	A	99.5%	\$18,263	0.5%	\$92	0.0%	0
maint. - structure	\$681	A	99.5%	\$677	0.5%	\$3	0.0%	0
TRANS & DISTR. EXPENSE								
storage facilities exp.	\$0	D	75.0%	\$0	25.0%	\$0	0.0%	0
labor	\$24,826	B	74.8%	\$18,570	25.2%	\$6,256	0.0%	0
supplies	\$111,738	B	74.8%	\$83,580	25.2%	\$28,158	0.0%	0
labor-meter	\$54,709	C	0.0%	\$0	0.0%	\$0	100.0%	54,709
meter - supp & exp	\$13	C	0.0%	\$0	0.0%	\$0	100.0%	13
cust. install.	\$0	C	0.0%	\$0	0.0%	\$0	100.0%	0
misc.	\$13,861	F	48.3%	\$6,689	23.0%	\$3,188	28.7%	3,984
maint - struct. & improv.	\$59,594	F	48.3%	\$28,760	23.0%	\$13,708	28.7%	17,127
maint.- res & stdp	\$21,306	D	75.0%	\$15,979	25.0%	\$5,326	0.0%	0
maint. - mains	\$629,552	B	74.8%	\$470,905	25.2%	\$158,647	0.0%	0
maint. - service	\$150,350	C	0.0%	\$0	0.0%	\$0	100.0%	150,350
maint. - meters	\$145,946	C	0.0%	\$0	0.0%	\$0	100.0%	145,946
maint. - hydrants	\$82,970	E	0.5%	\$415	99.5%	\$82,555	0.0%	0
construction labor	(\$68)	F	48.3%	(\$33)	23.0%	(\$16)	28.7%	(20)
CUSTOMER ACCOUNT								
labor- meter read	\$115,029	C	0.0%	\$0	0.0%	\$0	100.0%	115,029
cust record labor	\$212,511	C	0.0%	\$0	0.0%	\$0	100.0%	212,511
cust records sup	\$100,171	C	0.0%	\$0	0.0%	\$0	100.0%	100,171
meter read supplies	\$2,619	C	0.0%	\$0	0.0%	\$0	100.0%	2,619
uncollectible	\$60,009	C	0.0%	\$0	0.0%	\$0	100.0%	60,009
ADMIN. & GENERAL								
salaries	\$465,124	G	73.3%	\$340,899	7.7%	\$35,627	19.0%	88,598
office supplies & expenses	\$269,356	G	73.3%	\$197,417	7.7%	\$20,632	19.0%	51,307
insurance (property/liability/wc)	\$269,341	G	73.3%	\$197,406	7.7%	\$20,631	19.0%	51,305
OPEB Trust Contrib.	\$80,000	H	55.8%	\$44,631	11.9%	\$9,483	32.4%	25,886
employee benefits	\$965,857	H	55.8%	\$538,840	11.9%	\$114,486	32.4%	312,531
maint. - plant	\$152,834	G	73.3%	\$112,015	7.7%	\$11,706	19.0%	29,112
maint. - vehicles	\$63,029	G	73.3%	\$46,195	7.7%	\$4,828	19.0%	12,006
miscellaneous	\$16,561	G	73.3%	\$12,138	7.7%	\$1,268	19.0%	3,155
vacation, holiday, sick	\$312,591	H	55.8%	\$174,391	11.9%	\$37,052	32.4%	101,148
regul. exp.	\$152,698	G	73.3%	\$111,916	7.7%	\$11,696	19.0%	29,086
outside service	<u>\$93,967</u>	G	73.3%	<u>\$68,870</u>	7.7%	<u>\$7,198</u>	19.0%	<u>17,899</u>
SUBTOTAL O&M	\$10,411,149	G	78.6%	\$8,179,704	6.2%	\$646,965	15.2%	1,584,480



**ALLOCATION OF RATE YEAR EXPENSES TO  
GENERAL WATER, FIRE, AND CUSTOMER SERVICE**

	RATE YEAR	ALLOC.	GENERAL WATER		FIRE SERVICE		CUST. SERVICE	
EXPENSE ITEM	EXPENSE	SYMBOL (1)	%	AMOUNT	%	AMOUNT	%	AMOUNT
FIXED CHARGES								
Debt Service	\$2,178,500	J	78.2%	\$1,703,232	19.8%	\$430,431	2.1%	\$44,837
O&M Reserve	\$14,185	G	73.3%	\$10,397	7.7%	\$1,087	19.0%	\$2,702
R&R Reserve	\$132,336	J	78.2%	\$103,465	19.8%	\$26,147	2.1%	\$2,724
Renewal & Replacement - Equip	\$100,000	J	78.2%	\$78,184	19.8%	\$19,758	2.1%	\$2,058
Infrastructure Replacement	\$5,400,000	I	78.2%	\$4,221,920	19.8%	\$1,066,940	2.1%	\$111,140
Meter Replacement	\$2,000,000	M	100.0%	\$2,000,000	0.0%	\$0	0.0%	0
CIP	\$1,753,819	I	78.2%	\$1,371,200	19.8%	\$346,522	2.1%	\$36,096
Payroll Taxes	\$175,621	H	55.8%	\$97,977	11.9%	\$20,817	32.4%	\$56,827
PILOT	<u>\$23,123</u>	L	77.9%	<u>\$18,010</u>	21.0%	<u>\$4,864</u>	1.1%	<u>\$250</u>
SUBTOTAL FIXED	\$11,777,584		81.5%	\$9,604,384	16.3%	\$1,916,566	2.2%	\$256,634
OPERATING REVENUE	\$332,864	K	80.1%	\$266,788	11.6%	\$38,457	8.3%	\$27,619
TOTAL EXPENSES	\$22,521,597	K	80.1%	\$18,050,875	11.6%	\$2,601,988	8.3%	\$1,868,734
Less:								
Miscellaneous Income	(\$244,795)	K	80.1%	(\$196,201)	11.6%	(\$28,282)	8.3%	(\$20,312)
Interest Income	(\$21,464)	K	80.1%	(\$17,203)	11.6%	(\$2,480)	8.3%	(\$1,781)
Merchand & Jobbing	(\$18,811)	K	80.1%	(\$15,077)	11.6%	(\$2,173)	8.3%	(\$1,561)
6.9% of Water Prot Fee	(\$45,581)	K	80.1%	(\$36,532)	11.6%	(\$5,266)	8.3%	(\$3,782)
Total Revenue Requirement	\$22,190,946	K	80.1%	\$17,785,861	11.6%	\$2,563,787	8.3%	\$1,841,298

(1) See Joint Settl. Sch. 3B

**ALLOCATION OF RATE YEAR LABOR EXPENSES TO  
GENERAL WATER, FIRE, AND CUSTOMER SERVICE**

<u>EXPENSE ITEM</u>	<u>RATE YEAR</u>	<u>ALLOC.</u>	<u>GENERAL WATER</u>		<u>FIRE SERVICE</u>		<u>CUST. SERVICE</u>	
	<u>LABOR</u>	<u>SYMBOL (1)</u>	<u>%</u>	<u>AMOUNT</u>	<u>%</u>	<u>AMOUNT</u>	<u>%</u>	<u>AMOUNT</u>
SOURCE OF SUPPLY								
maint of wells/supply study	\$0	A	99.5%	\$0	0.5%	\$0	0.0%	\$0
purchased water	\$0	A	99.5%	\$0	0.5%	\$0	0.0%	\$0
PUMPING OPERATIONS								
fuel for pumping	\$0	A	99.5%	\$0	0.5%	\$0	0.0%	\$0
power	\$0	A	99.5%	\$0	0.5%	\$0	0.0%	\$0
labor-pumping	\$81,365	P	79.7%	\$64,881	20.3%	\$16,485	0.0%	\$0
pumping expense	\$0	P	79.7%	\$0	20.3%	\$0	0.0%	\$0
maint. - structures & improv	\$77,388	P	79.7%	\$61,710	20.3%	\$15,679	0.0%	\$0
diesel oil	\$0	P	79.7%	\$0	20.3%	\$0	0.0%	\$0
maint. - equip	\$38,755	P	79.7%	\$30,903	20.3%	\$7,852	0.0%	\$0
WATER TREATMENT	\$0							
chemicals	\$0	A	99.5%	\$0	0.5%	\$0	0.0%	\$0
labor	\$185,126	A	99.5%	\$184,200	0.5%	\$926	0.0%	\$0
operating / Mishnock	\$0	A	99.5%	\$0	0.5%	\$0	0.0%	\$0
maint. - water treat equip	\$0	A	99.5%	\$0	0.5%	\$0	0.0%	\$0
maint. - structure	\$0	A	99.5%	\$0	0.5%	\$0	0.0%	\$0
TRANS & DISTR. EXPENSE	\$0							
storage facilities exp.	\$0	D	75.0%	\$0	25.0%	\$0	0.0%	\$0
labor	\$0	B	74.8%	\$0	25.2%	\$0	0.0%	\$0
supplies	\$0	B	74.8%	\$0	25.2%	\$0	0.0%	\$0
labor-meter	\$51,207	C	0.0%	\$0	0.0%	\$0	100.0%	\$51,207
meter - supp & exp	\$0	C	0.0%	\$0	0.0%	\$0	100.0%	\$0
cust. install.	\$0	C	0.0%	\$0	0.0%	\$0	100.0%	\$0
misc.	\$0	F	48.3%	\$0	23.0%	\$0	28.7%	\$0
maint - struct. & improv.	\$0	F	48.3%	\$0	23.0%	\$0	28.7%	\$0
maint.- res & stdp	\$18,468	D	75.0%	\$13,851	25.0%	\$4,617	0.0%	\$0
maint. - mains	\$421,144	B	74.8%	\$315,016	25.2%	\$106,128	0.0%	\$0
maint. - service	\$113,448	C	0.0%	\$0	0.0%	\$0	100.0%	\$113,448
maint. - meters	\$48,963	C	0.0%	\$0	0.0%	\$0	100.0%	\$48,963
maint. - hydrants	\$36,713	E	0.5%	\$184	99.5%	\$36,530	0.0%	\$0
construction labor	\$0	F	48.3%	\$0	23.0%	\$0	28.7%	\$0
CUSTOMER ACCOUNT	\$0							
labor- meter read	\$108,840	C	0.0%	\$0	0.0%	\$0	100.0%	\$108,840
cust record labor	\$202,101	C	0.0%	\$0	0.0%	\$0	100.0%	\$202,101
cust records sup	\$0	C	0.0%	\$0	0.0%	\$0	100.0%	\$0
meter read supplies	\$0	C	0.0%	\$0	0.0%	\$0	100.0%	\$0
uncollectible	\$0	C	0.0%	\$0	0.0%	\$0	100.0%	\$0
ADMIN. & GENERAL	\$0							
salaries	\$452,860	G	73.3%	\$331,911	7.7%	\$34,687	19.0%	\$86,262
office supplies & expenses	\$0	G	73.3%	\$0	7.7%	\$0	19.0%	\$0
insurance (property/liability/wc)	\$0	G	73.3%	\$0	7.7%	\$0	19.0%	\$0
OPEB Trust Contrib.	\$0	H	55.8%	\$0	11.9%	\$0	32.4%	0
employee benefits	\$0	H	55.8%	\$0	11.9%	\$0	32.4%	0
maint. - plant	\$121,111	G	73.3%	\$88,765	7.7%	\$9,277	19.0%	\$23,070
maint. - vehicles	\$3,658	G	73.3%	\$2,681	7.7%	\$280	19.0%	\$697
miscellaneous	\$0	G	73.3%	\$0	7.7%	\$0	19.0%	\$0
vacation, holiday, sick	\$330,384	H	55.8%	\$184,317	11.9%	\$39,161	32.4%	106,906
regul. exp.	\$0	G	73.3%	\$0	7.7%	\$0	19.0%	\$0
outside service	\$0	G	73.3%	\$0	7.7%	\$0	19.0%	\$0
<b>TOTAL LABOR</b>	<b>\$2,291,533</b>	<b>H</b>	<b>55.8%</b>	<b>\$1,278,419</b>	<b>11.9%</b>	<b>\$271,622</b>	<b>32.4%</b>	<b>\$741,493</b>

(1) See Joint Settl. Sch. 3B

**ALLOCATION SYMBOLS**

ALLOCATION SYMBOL	GEN'L WATER	FIRE SERVICE	CUST SERVICE
A	99.50%	0.50%	0.00% Supply & Treatment
B	74.80%	25.20%	0.00% T&D Mains
C	0.00%	0.00%	100.00% Meters
D	75.00%	25.00%	0.00% Storage
E	0.50%	99.50%	0.00% Hydrants
F	48.26%	23.00%	28.74% Misc T&D
G	73.29%	7.66%	19.05% Direct O&M (50% of Purch Water) Benefits & Vacation
H	55.79%	11.85%	32.36% Labor
I	78.18%	19.76%	2.06% IFR Costs (same as Debt/Capital)
J	78.18%	19.76%	2.06% Debt/Capital
K	80.15%	11.55%	8.30% Total Expense
L	77.89%	21.03%	1.08% PILOT
M	100.00%	0.00%	0.00% Meter Replacement Program - all costs to small meter rate
P	79.74%	20.26%	0.00% Pumping Facilities

<i>Symbol B</i>	<u>Gal/Min</u>	<u>%</u>
Model Max. Day	10,410	74.84%
Fire Demand	3,500	25.16%
Max. Day Plus Fire	13,910	100.00%

<i>Symbol J - Debt Service/CIP</i>	<u>Plant In Service</u>	<u>Symbol</u>	<u>Gen Water</u>	<u>Fire</u>	<u>Cust A</u>	<u>Cust B</u>
Plant Value 6/30/2015						
Source of Supply	\$1,841,541	A	\$1,832,333	\$9,208	\$0	\$0
Pumping Plant	\$8,413,011	A	\$8,370,946	\$42,065	\$0	\$0
Water Treat. Plant	\$22,057,416	A	\$21,947,129	\$110,287	\$0	\$0
T&D Storage	\$9,696,568	D	\$7,272,426	\$2,424,142	\$0	\$0
T&D Mains	\$95,652,793	B	\$71,548,289	\$24,104,504	\$0	\$0
T&D Hydrants	\$1,362,339	E	\$6,812	\$1,355,527	\$0	\$0
T&D Services	\$2,919,253	C	\$0	\$0	\$2,919,253	\$0
T&D Meters	\$2,193	C	\$0	\$0	\$2,193	\$0
General Plant	\$3,103,245	J	\$2,426,232	\$613,144	\$63,869	\$0
General Structures	\$727,760	J	\$568,990	\$143,792	\$14,978	\$0
Total	\$145,776,119		\$113,973,156	\$28,802,669	\$3,000,294	\$0
Percent			78.18%	19.76%	2.06%	0.00%

*Symbol L - PILOT*

	<u>Total</u>	<u>Symbol</u>	<u>Gen Water</u>	<u>Fire</u>	<u>Cust A</u>	<u>Cust B</u>
Storage	\$7,258	D	\$5,443	\$1,814	\$0	\$0
Office	\$1,311	G	\$961	\$100	\$125	\$125
PS/Wells/Treatment	\$14,554	P	\$11,605	\$2,949	\$0	\$0
Total	\$23,123		\$18,010	\$4,864	\$125	\$125
Percent			77.89%	21.03%	0.54%	0.54%

*Symbol M - Meter Replacement Program*

The Authority is proposing to replace all residential meters that are 2" and less. Accordingly, we propose to assign all the meter replacement costs to the small meter rate (for meters 2" and less).

*Symbol P - Pumping Facilities (per Decision in Dockets 2098, 2555, 3660, 4067)*

	<u>Percent</u>	<u>Symbol</u>	<u>Gen Water</u>	<u>Fire</u>	<u>Cust A</u>	<u>Cust B</u>
Supply Well Pumps	20.00%	A	19.90%	0.10%	0.00%	0.00%
Distribution Pumps	80.00%	B	59.84%	20.16%	0.00%	0.00%
Total	100.00%	P	79.74%	20.26%	0.00%	0.00%

**PROPOSED FIRE SERVICE CHARGES**

**PUBLIC FIRE SERVICE**

Quarterly Charge/Hydrant =	\$181.13
Plus Billing Charge =	\$8.72

**PRIVATE FIRE SERVICE**

SERVICE SIZE (inches)	QUARTERLY CHARGE
4	\$72.90
6	\$195.16
8	\$406.04
10	\$723.24
12	\$1,162.88
HYDRANT	\$195.16

**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	2,357	111.31	262,360	89.84%	\$2,210,877	\$102,812	\$2,313,689
PRIVATE FIRE SERVICE							
SIZE (IN)							
4	16	38.32	613				
6	95	111.31	10,575				
8	16	237.21	3,795				
10	1	426.58	427				
12	1	689.04	689				
HYDRANTS	122	111.31	13,580				
TOTAL-PRIV.	251		29,679	10.16%	\$250,097	\$0	\$250,097
	=====		=====	=====	=====	=====	=====
GRAND TOTALS	2,608		292,038	100.00%	\$2,460,975	\$102,812	\$2,563,787
Total Fire Allocation	\$2,563,787						
Less Direct Hydrant Related							
O&M	(\$82,555)						
Debt	(\$20,257)						
Net Non-Hydrant	\$2,460,975						

(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)	\$1,707,648	
----- =	----- =	\$724.50
NUMBER OF PUBLIC HYDRANTS	2,357	
TOTAL QUARTERLY		\$181.13
+ BILLING		\$8.72

**PRIVATE FIRE PROTECTION**

PRIVATE FIRE ALLOCATION (1,2)	\$198,848	
----- =	----- =	\$6.70 /EQUIV.
NO. OF EQUIV. UNITS	29,679	

<u>SIZE (IN)</u>	<u>DEMAND FACTOR</u>	<u>ANNUAL CHARGE</u>	<u>QUARTERLY CHARGE</u>	<u>BILLING CHARGE</u>	<u>CALCULATED CHARGE</u>
4	38.32	\$256.74	\$64.19	\$8.72	\$72.90
6	111.31	\$745.79	\$186.45	\$8.72	\$195.16
8	237.21	\$1,589.30	\$397.32	\$8.72	\$406.04
10	426.58	\$2,858.11	\$714.53	\$8.72	\$723.24
12	689.04	\$4,616.64	\$1,154.16	\$8.72	\$1,162.88
HYDRANTS	111.31	\$745.79	\$186.45	\$8.72	\$195.16

(1) Allocation from Sch 4A. Less subsidy

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

Service Line Maintenance Cost =	\$150,350	
Addtl Allocation to Fire Service =	\$12,726	(8.46%)

<u>Service Line Equivalents</u>			<u>Metered Water Service</u>		<u>Private Fire Service</u>	
<u>Meter Size (in)</u>	<u>Service Size (in)</u>	<u>Equivalents *</u>	<u>Number</u>	<u>Equivalents</u>	<u>Number</u>	<u>Equivalents</u>
5/8 & 3/4	1	1.00	22,085	22,085		
1	1.5	1.80	3,651	6,572		
1 1/2	2	3.30	333	1,099		
2	3	4.60	510	2,346		
3	4	6.30	12	76	16	101
4	6	9.60	92	883	95	912
6	8	16.90	96	1,622	138	2,332
>8	10	29.60	72	<u>2,131</u>	2	<u>59</u>
Total				36,814		3,404
				91.54%		8.46%

\* See Sch 5D

**Fire Protection Subsidy Calculation**

	<u>Existing</u>	<u>Initial</u>	<u>Proposed</u>	<u>Difference</u>
Public Fire	\$1,313,603	\$2,313,725	\$1,707,684	\$606,041
Private Fire	<u>\$159,691</u>	<u>\$271,574</u>	<u>\$207,599</u>	<u>\$63,976</u>
Total	\$1,473,295	\$2,585,300	\$1,915,283	\$670,017

**PROPOSED SERVICE CHARGES & DEMAND SURCHARGES**

METER SIZE (inches)	<u>SERVICE CHARGE</u>		<u>DEMAND SURCHARGE</u>	
	<u>QUARTERLY ACCOUNTS</u>	<u>MONTHLY ACCOUNTS</u>	<u>QUARTERLY ACCOUNTS</u>	<u>MONTHLY ACCOUNTS</u>
5/8 &				
3/4	\$14.71	\$10.71	\$0.00	\$0.00
1	\$19.50	\$12.31	\$0.00	\$0.00
1 1/2	\$28.49	\$15.31	\$0.00	\$0.00
2	\$36.28	\$17.90	\$0.00	\$0.00
3	\$46.47	\$21.30	\$0.00	\$0.00
4	\$66.24	\$27.89	\$0.00	\$0.00
6	\$109.99	\$42.47	\$0.00	\$0.00
>8	\$186.09	\$67.84	\$0.00	\$0.00

**ALLOCATION OF CUSTOMER SERVICE EXPENSES**

<u>EXPENSE ITEM</u>	<u>TOTAL CUST. SERV.</u>	<u>ALLOC. SYMBOL (1)</u>	<u>&lt;-CUST. METER-&gt; %</u>	<u>AMOUNT</u>	<u>&lt;--CUST. BILL--&gt; %</u>	<u>AMOUNT</u>
TRANS & DISTR. EXPENSE						
labor	\$0	AA	100.00%	\$0	0.00%	0.00
supplies	\$0	AA	100.00%	\$0	0.00%	0.00
labor-meter	\$54,709	AA	100.00%	\$54,709	0.00%	0.00
meter - supp & exp	\$13	AA	100.00%	\$13	0.00%	0.00
cust. install.	\$0	AA	100.00%	\$0	0.00%	0.00
misc.	\$3,984	AA	100.00%	\$3,984	0.00%	0.00
maint - struct. & improv.	\$17,127	AA	100.00%	\$17,127	0.00%	0.00
maint.- res & stdp	\$0	AA	100.00%	\$0	0.00%	0.00
maint. - mains	\$0	AA	100.00%	\$0	0.00%	0.00
maint. - service	\$150,350	AA	100.00%	\$150,350	0.00%	0.00
maint. - meters	\$145,946	AA	100.00%	\$145,946	0.00%	0.00
maint. - hydrants	\$0	AA	100.00%	\$0	0.00%	0.00
construction labor	(\$20)	AA	100.00%	(\$20)	0.00%	0.00
CUSTOMER ACCOUNT						
labor- meter read	\$115,029	BB	0.00%	\$0	100.00%	115,028.76
cust record labor	\$212,511	BB	0.00%	\$0	100.00%	212,510.92
cust records sup	\$100,171	BB	0.00%	\$0	100.00%	100,171.00
meter read supplies	\$2,619	BB	0.00%	\$0	100.00%	2,618.99
uncollectible	\$60,009	BB	0.00%	\$0	100.00%	60,008.92
ADMIN. & GENERAL						
salaries	\$88,598	CC	42.46%	\$37,617	57.54%	50,981.12
office supplies & expenses	\$51,307	CC	42.46%	\$21,784	57.54%	29,523.44
insurance (property/liability/w	\$51,305	CC	42.46%	\$21,783	57.54%	29,521.80
OPEB Trust Contrib.	\$25,886	CC	42.46%	\$10,991	57.54%	14,895.56
employee benefits	\$312,531	DD	41.02%	\$128,213	58.98%	184,318.43
maint. - plant	\$29,112	CC	42.46%	\$12,360	57.54%	16,751.72
maint. - vehicles	\$12,006	CC	42.46%	\$5,097	57.54%	6,908.48
miscellaneous	\$3,155	CC	42.46%	\$1,339	57.54%	1,815.19
vacation, holiday, sick	\$101,148	DD	41.02%	\$41,495	58.98%	59,653.09
regul. exp.	\$29,086	CC	42.46%	\$12,349	57.54%	16,736.87
outside service	<u>\$17,899</u>	CC	42.46%	<u>\$7,600</u>	57.54%	<u>10,299.49</u>
SUBTOTAL O&M	\$1,584,480	CC	42.46%	\$672,736	57.54%	911,743.79
FIXED CHARGES						
Debt Service	\$44,837	JJ	100.00%	\$44,837	0.00%	0.00
O&M Reserve	\$2,702	CC	42.46%	\$1,147	57.54%	1,554.83
R&R Reserve	\$2,724	JJ	100.00%	\$2,724	0.00%	0.00
O&M Reserve	\$2,058	JJ	100.00%	\$2,058	0.00%	0.00
Infrastructure Replacement	\$111,140	JJ	100.00%	\$111,140	0.00%	0.00
Meter Replacement	\$0	JJ	100.00%	\$0	0.00%	0.00
CIP	\$36,096	JJ	100.00%	\$36,096	0.00%	0.00
Payroll Taxes	\$56,827	DD	41.02%	\$23,313	58.98%	33,514.43
PILOT	<u>\$250</u>	EE	48.57%	<u>\$121</u>	51.43%	<u>128.48</u>
SUBTOTAL FIXED	\$256,634			\$221,436		35,197.74
OPERATING REVENUE	\$27,619	EE	48.57%	\$13,414	51.43%	14,205.54
TOTAL EXPENSES	\$1,868,734	EE	48.57%	\$907,587	51.43%	961,147.07
Less:						
Miscellaneous Income	(\$20,312)	EE	48.57%	(\$9,865)	51.43%	(10,447.05)
Merchand & Jobbing	(\$1,561)	EE	48.57%	(\$758)	51.43%	(802.78)
6.9% of Water Prot Fee	(\$3,782)	EE	48.57%	(\$1,837)	51.43%	(1,945.23)
	=====			=====		=====
Total Revenue Requirement	\$1,843,079	EE	48.57%	\$895,127	51.43%	947,952.01

(1) See Joint Settl. Sch. 5C



**ALLOCATION OF CUSTOMER SERVICE LABOR EXPENSES**

<u>EXPENSE ITEM</u>	<u>TOTAL</u>	<u>ALLOC.</u>	<u>&lt;-CUST. METER-&gt;</u>		<u>&lt;--CUST. BILL--&gt;</u>	
	<u>CUST. SERV.</u>	<u>SYMBOL (1)</u>	<u>%</u>	<u>AMOUNT</u>	<u>%</u>	<u>AMOUNT</u>
TRANS & DISTR. EXPENSE			-	-----	-	-----
labor	0.00	AA	100.00%	\$0	0.00%	0.00
supplies	0.00	AA	100.00%	\$0	0.00%	0.00
labor-meter	51,207.23	AA	100.00%	\$51,207	0.00%	0.00
meter - supp & exp	0.00	AA	100.00%	\$0	0.00%	0.00
cust. install.	0.00	AA	100.00%	\$0	0.00%	0.00
misc.	0.00	AA	100.00%	\$0	0.00%	0.00
maint.- res & stdp	0.00	AA	100.00%	\$0	0.00%	0.00
maint. - mains	0.00	AA	100.00%	\$0	0.00%	0.00
maint. - service	113,447.63	AA	100.00%	\$113,448	0.00%	0.00
maint. - meters	48,962.86	AA	100.00%	\$48,963	0.00%	0.00
maint. - hydrants	0.00	AA	100.00%	\$0	0.00%	0.00
construction labor	0.00	AA	100.00%	\$0	0.00%	0.00
CUSTOMER ACCOUNT						
labor- meter read	108,840.28	BB	0.00%	\$0	100.00%	108,840.28
cust record labor	202,101.46	BB	0.00%	\$0	100.00%	202,101.46
cust records sup	0.00	BB	0.00%	\$0	100.00%	0.00
meter read supplies	0.00	BB	0.00%	\$0	100.00%	0.00
uncollectible	0.00	BB	0.00%	\$0	100.00%	0.00
ADMIN. & GENERAL						
salaries	86,261.78	CC	42.46%	\$36,625	57.54%	49,636.88
office supplies & expenses	0.00	CC	42.46%	\$0	57.54%	0.00
insurance (property/liability/w	0.00	CC	42.46%	\$0	57.54%	0.00
OPEB Trust Contrib.	0.00	DD	41.02%	\$0	58.98%	0.00
employee benefits	0.00	DD	41.02%	\$0	58.98%	0.00
maint. - plant	23,069.54	CC	42.46%	\$9,795	57.54%	13,274.71
maint. - vehicles	696.77	CC	42.46%	\$296	57.54%	400.94
miscellaneous	0.00	CC	42.46%	\$0	57.54%	0.00
vacation, holiday, sick	106,905.57	DD	41.02%	\$43,857	58.98%	63,048.62
regul. exp.	0.00	CC	42.46%	\$0	57.54%	0.00
outside service	<u>0.00</u>	CC	42.46%	<u>\$0</u>	57.54%	<u>0.00</u>
TOTAL LABOR	741,493.12	DD	41.02%	\$304,190	58.98%	437,302.88

(1) See Joint Settl. Sch. 5C

**ALLOCATION SYMBOLS - CUSTOMER SERVICE**

<u>ALLOCATION SYMBOL</u>	<u>CUSTOM METER</u>	<u>CUSTOM BILL</u>	<u>TOTAL</u>
AA	100.00%	0.00%	100.00% Meters
BB	0.00%	100.00%	100.00% Billing
CC	42.46%	57.54%	100.00% O&M
DD	41.02%	58.98%	100.00% Labor
EE	48.57%	51.43%	100.00% All Expenses
JJ	100.00%	0.00%	100.00% Capital/Debt

**DETERMINATION OF EQUIVALENT METERS**

METER SIZE (IN)	NUMBER	EQUIVALENCY FACTOR (1)	EQUIV. 5/8 IN. METERS	DEMAND FACTOR (2)	DEMAND EQUIVLNTS
5/8 & 3/4	22,085	1.00	22,085	1.00	22,085
1	3,651	1.80	6,572	1.67	6,085
1 1/2	333	3.30	1,099	3.33	1,110
2	510	4.60	2,346	5.33	2,720
3	12	6.30	76	10.67	128
4	92	9.60	883	16.67	1,533
6	96	16.90	1,622	33.33	3,200
>8	72	29.60	2,131	53.33	3,840
TOTALS	26,851		36,814		40,701

(1) Based on prior KCWA dockets

(2) Based on rated capacity of meter sizes

**DETERMINATION OF PROPOSED SERVICE & DEMAND CHARGES**

**SERVICE CHARGES**

**BILLING CHARGE**

CUST. BILLING ALLOC. (1)	=	\$947,952	=	
-----		-----		\$8.72 PER BILLING
NUMBER OF BILLINGS		108,752		

**METER CHARGE**

CUST. METER ALLOC. (1,3)	=	\$882,401	=	
-----		-----		\$23.97 / EQ. METER/YR
NO. EQUIV. METERS (2)		36,814		

**TOTAL SERVICE CHARGES**

<u>QUARTERLY ACCOUNTS</u>				<u>MONTHLY ACCOUNTS</u>		
<u>METER SIZE (IN)</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 & 3/4	\$5.99	\$8.72	\$14.71	\$2.00	\$8.72	\$10.71
1	\$10.79	\$8.72	\$19.50	\$3.60	\$8.72	\$12.31
1 1/2	\$19.77	\$8.72	\$28.49	\$6.59	\$8.72	\$15.31
2	\$27.56	\$8.72	\$36.28	\$9.19	\$8.72	\$17.90
3	\$37.75	\$8.72	\$46.47	\$12.58	\$8.72	\$21.30
4	\$57.53	\$8.72	\$66.24	\$19.18	\$8.72	\$27.89
6	\$101.27	\$8.72	\$109.99	\$33.76	\$8.72	\$42.47
>8	\$177.37	\$8.72	\$186.09	\$59.12	\$8.72	\$67.84

(1) See Joint Settl. Sch. 5A

(2) See Joint Settl. Sch. 5D

(3) Less allocation of Service Maintenance Costs to Private Fire Service - see Joint Settl. Sch. 4B and less

**DEMAND SURCHARGE**

DEMAND COSTS (4)	=	\$0	=	
-----		-----		\$0.00 / DEMAND EQ./YR
NO.DEMAND EQUIVS (2)		40,701		

**TOTAL DEMAND SURCHARGES**

<u>METER SIZE (IN)</u>	<u>QUARTERLY CHARGE</u>	<u>MONTHLY CHARGE</u>
5/8 & 3/4	\$0.00	\$0.00
1	\$0.00	\$0.00
1 1/2	\$0.00	\$0.00
2	\$0.00	\$0.00
3	\$0.00	\$0.00
4	\$0.00	\$0.00
6	\$0.00	\$0.00
>8	\$0.00	\$0.00

(4) Share of fixed costs allocated based on meter capacity ratios

Costs to be recovered \$0

**ALLOCATION OF GENERAL WATER EXPENSES TO  
BASE AND EXTRA CAPACITY**

EXPENSE ITEM	TOTAL	ALLOC.	BASE	EXTRA CAP.-MAX DAY		EXTRA CAP.-PEAK HR	
	GEN'L WATER	SYMBOL (1)	%	AMOUNT	%	AMOUNT	%
SOURCE OF SUPPLY							
maint of wells/supply study	\$18,427	aa	100.00%	\$18,427	0.00%	\$0	0.00%
purchased water	\$4,276,093	aa	100.00%	\$4,276,093	0.00%	\$0	0.00%
PUMPING OPERATIONS							
fuel for pumping	\$23,575	aa	100.00%	\$23,575	0.00%	\$0	0.00%
power	\$765,834	aa	100.00%	\$765,834	0.00%	\$0	0.00%
labor-pumping	\$68,455	pp	62.64%	\$42,880	37.36%	\$25,575	0.00%
pumping expense	\$0	pp	62.64%	\$0	37.36%	\$0	0.00%
maint. - structures & improv	\$68,903	pp	62.64%	\$43,161	37.36%	\$25,742	0.00%
diesel oil	\$0	pp	62.64%	\$0	37.36%	\$0	0.00%
maint. - equip	\$46,709	pp	62.64%	\$29,259	37.36%	\$17,451	0.00%
WATER TREATMENT							
chemicals	\$162,097	aa	100.00%	\$162,097	0.00%	\$0	0.00%
labor	\$193,031	aa	100.00%	\$193,031	0.00%	\$0	0.00%
operating / Mishnock	\$68,055	aa	100.00%	\$68,055	0.00%	\$0	0.00%
maint. - water treat equip	\$18,263	aa	100.00%	\$18,263	0.00%	\$0	0.00%
maint. - structure	\$677	aa	100.00%	\$677	0.00%	\$0	0.00%
TRANS & DISTR. EXPENSE							
storage facilities exp.	\$0	dd	0.00%	\$0	0.00%	\$0	100.00%
labor	\$18,570	bb	53.30%	\$9,898	46.70%	\$8,672	0.00%
supplies	\$83,580	bb	53.30%	\$44,548	46.70%	\$39,032	0.00%
labor-meter	\$0	cc	0.00%	\$0	0.00%	\$0	0.00%
meter - supp & exp	\$0	cc	0.00%	\$0	0.00%	\$0	0.00%
cust. install.	\$0	cc	0.00%	\$0	0.00%	\$0	0.00%
misc.	\$6,689	ff	51.89%	\$3,471	45.40%	\$3,037	2.71%
maint - struct. & improv.	\$28,760	ff	51.89%	\$14,923	45.40%	\$13,057	2.71%
maint. - res & stdp	\$15,979	dd	0.00%	\$0	0.00%	\$0	100.00%
maint. - mains	\$470,905	bb	53.30%	\$250,992	46.70%	\$219,913	0.00%
maint. - service	\$0	cc	0.00%	\$0	0.00%	\$0	0.00%
maint. - meters	\$0	cc	0.00%	\$0	0.00%	\$0	0.00%
maint. - hydrants	\$415	aa	100.00%	\$415	0.00%	\$0	0.00%
construction labor	(\$33)	ff	51.89%	(\$17)	45.40%	(\$15)	2.71%
CUSTOMER ACCOUNT							
labor- meter read	\$0	cc	0.00%	\$0	0.00%	\$0	0.00%
cust record labor	\$0	cc	0.00%	\$0	0.00%	\$0	0.00%
cust records sup	\$0	cc	0.00%	\$0	0.00%	\$0	0.00%
meter read supplies	\$0	cc	0.00%	\$0	0.00%	\$0	0.00%
W/P Reimbursement	\$0	cc	0.00%	\$0	0.00%	\$0	0.00%
ADMIN. & GENERAL							
salaries	\$340,899	gg	88.84%	\$302,840	10.60%	\$36,132	0.57%
office supplies & expenses	\$197,417	gg	88.84%	\$175,376	10.60%	\$20,924	0.57%
insurance (property/liability/wc)	\$197,406	gg	88.84%	\$175,367	10.60%	\$20,923	0.57%
OPEB Trust Contrib.	\$44,631	hh	75.59%	\$33,737	22.93%	\$10,232	1.48%
employee benefits	\$538,840	gg	75.59%	\$407,310	22.93%	\$123,529	1.48%
maint. - plant	\$112,015	gg	88.84%	\$99,509	10.60%	\$11,872	0.57%
maint. - vehicles	\$46,195	gg	88.84%	\$41,038	10.60%	\$4,896	0.57%
miscellaneous	\$12,138	gg	88.84%	\$10,783	10.60%	\$1,286	0.57%
vacation, holiday, sick	\$174,391	hh	75.59%	\$131,822	22.93%	\$39,979	1.48%
regul. exp.	\$111,916	gg	88.84%	\$99,421	10.60%	\$11,862	0.57%
outside service	<u>\$68,870</u>	gg	88.84%	<u>\$61,181</u>	10.60%	<u>\$7,300</u>	0.57%
SUBTOTAL O&M	\$8,179,704		91.74%	\$7,503,967	7.84%	\$641,399	0.42%

**ALLOCATION OF GENERAL WATER EXPENSES TO  
BASE AND EXTRA CAPACITY**

<u>EXPENSE ITEM</u>	<u>TOTAL GEN'L WATER</u>	<u>ALLOC. SYMBOL (1)</u>	<u>BASE %</u>	<u>AMOUNT</u>	<u>EXTRA CAP.-MAX DAY %</u>	<u>AMOUNT</u>	<u>EXTRA CAP.-PEAK HR %</u>	<u>AMOUNT</u>
<b>FIXED CHARGES</b>								
Debt Service	\$1,703,232	jj	60.52%	\$1,030,815	32.93%	\$560,804	6.55%	\$111,613
O&M Reserve	\$10,397	gg	88.84%	\$9,236	10.60%	\$1,102	0.57%	\$59
R&R Reserve	\$103,465	jj	60.52%	\$62,618	32.93%	\$34,067	6.55%	\$6,780
Renewal & Replacement - Equip	\$78,184	jj	60.52%	\$47,318	32.93%	\$25,743	6.55%	\$5,123
Infrastructure Replacement	\$4,221,920	ii	60.52%	\$2,555,152	32.93%	\$1,390,103	6.55%	\$276,664
Meter Replacement	\$2,000,000	mm	100.00%	\$2,000,000	0.00%	\$0	0.00%	\$0
CIP	\$1,371,200	ii	60.52%	\$829,866	32.93%	\$451,479	6.55%	\$89,855
Payroll Taxes	\$97,977	hh	75.59%	\$74,061	22.93%	\$22,461	1.48%	\$1,455
PILOT	<u>\$18,010</u>	ll	44.60%	<u>\$8,033</u>	25.01%	<u>\$4,505</u>	30.38%	<u>\$5,472</u>
SUBTOTAL FIXED	\$9,604,384			\$6,617,098	25.93%	\$2,490,264	5.17%	\$497,022
 OPERATING REVENUE	 \$266,788	 kk	 79.40%	 \$211,837	 17.61%	 \$46,980	 2.99%	 \$7,971
 TOTAL EXPENSES	 \$18,050,875	 kk	 79.40%	 \$14,332,902	 17.61%	 \$3,178,642	 2.99%	 \$539,331
Less:								
Miscellaneous Income	(\$196,201)	kk	79.40%	(\$155,789)	17.61%	(\$34,550)	2.99%	(\$5,862)
Interest Income	(\$17,203)	kk	79.40%	(\$13,660)	17.61%	(\$3,029)	2.99%	(\$514)
Merchand & Jobbing	(\$15,077)	kk	79.40%	(\$11,971)	17.61%	(\$2,655)	2.99%	(\$450)
6.9% of Water Prot Fee	(\$36,532)	kk	79.40%	(\$29,008)	17.61%	(\$6,433)	2.99%	(\$1,092)
=====				=====		=====		=====
Total Revenue Requirement	\$17,785,861	kk	79.40%	\$14,122,473	17.61%	\$3,131,975	2.99%	\$531,413
Less: Demand Surcharge Rev	<u>\$0</u>	jj	60.52%	\$0	32.93%	\$0	6.55%	\$0
Required From Metered Rates	\$17,785,861			\$14,122,473		\$3,131,975		\$531,413
Less: Meter replace. costs	<b>(\$2,000,000)</b>	mm	100.00%	<b>(\$2,000,000)</b>	0.00%	\$0	0.00%	\$0
Plus Fire Subsidy	\$670,017			\$670,017				
Net After Meter Replacement	\$16,455,878			\$12,792,490		\$3,131,975		\$531,413
(1) See Joint Settl. Sch. 6B				77.74%		19.03%		3.23%

**ALLOCATION OF GENERAL WATER LABOR EXPENSE TO  
BASE AND EXTRA CAPACITY**

	TOTAL	ALLOC.	BASE	EXTRA CAP.-MAX DAY		EXTRA CAP.-PEAK HR		
EXPENSE ITEM	GEN'L WATER	SYMBOL (1)	%	AMOUNT	%	AMOUNT	%	AMOUNT
PUMPING OPERATIONS								
labor-pumping	\$64,881	pp	62.64%	\$40,641	37.36%	\$24,239	0.00%	\$0
maint. - structures & improv	\$61,710	pp	62.64%	\$38,655	37.36%	\$23,055	0.00%	\$0
maint. - equip	\$30,903	pp	62.64%	\$19,358	37.36%	\$11,545	0.00%	\$0
WATER TREATMENT								
labor	\$184,200	aa	100.00%	\$184,200	0.00%	\$0	0.00%	\$0
TRANS & DISTR. EXPENSE								
labor	\$0	bb	53.30%	\$0	46.70%	\$0	0.00%	\$0
maint.- res & stdp	\$13,851	dd	0.00%	\$0	0.00%	\$0	100.00%	\$13,851
maint. - mains	\$315,016	bb	53.30%	\$167,903	46.70%	\$147,112	0.00%	\$0
maint. - hydrants	\$184	aa	100.00%	\$184	0.00%	\$0	0.00%	\$0
CUSTOMER ACCOUNT								
labor- meter read	\$0	cc	0.00%	\$0	0.00%	\$0	0.00%	\$0
cust record labor	\$0	cc	0.00%	\$0	0.00%	\$0	0.00%	\$0
cust records sup	\$0	cc	0.00%	\$0	0.00%	\$0	0.00%	\$0
meter read supplies	\$0	cc	0.00%	\$0	0.00%	\$0	0.00%	\$0
uncollectible	\$0	cc	0.00%	\$0	0.00%	\$0	0.00%	\$0
ADMIN. & GENERAL								
salaries	\$331,911	gg	88.84%	\$294,855	10.60%	\$35,179	0.57%	\$1,877
maint. - plant	\$88,765	gg	88.84%	\$78,855	10.60%	\$9,408	0.57%	\$502
maint. - vehicles	\$2,681	gg	88.84%	\$2,382	10.60%	\$284	0.57%	\$15
miscellaneous	\$0	gg	88.84%	\$0	10.60%	\$0	0.57%	\$0
vacation, holiday, sick	\$184,317	hh	75.59%	\$139,326	22.93%	\$42,255	1.48%	\$2,737
regul. exp.	\$0	gg	88.84%	\$0	10.60%	\$0	0.57%	\$0
outside service	\$0	gg	88.84%	\$0	10.60%	\$0	0.57%	\$0
TOTAL LABOR	\$1,278,419	hh	75.59%	\$966,359	22.93%	\$293,078	1.48%	\$18,982

(1) See Joint Settl. Sch. 6B

**ALLOCATION SYMBOLS - GENERAL WATER**

ALLOCATION SYMBOL	BASE %	EXTRA CAPACITY		TOTAL	
		MAX DAY %	PEAK HOUR %		
aa	100.00%	0.00%	0.00%	100.00%	Supply & Treatment
bb	53.30%	46.70%	0.00%	100.00%	T&D Mains
cc	0.00%	0.00%	0.00%	0.00%	Meters
dd	0.00%	0.00%	100.00%	100.00%	Storage
ee	0.00%	0.00%	0.00%	0.00%	Not Used
ff	51.89%	45.40%	2.71%	100.00%	Misc. T&D
gg	88.84%	10.60%	0.57%	100.00%	Direct O&M plus 50% Purch Water
hh	75.59%	22.93%	1.48%	100.00%	Labor
ii	60.52%	32.93%	6.55%	100.00%	IFR - same as capital
jj	60.52%	32.93%	6.55%	100.00%	Debt/Capital
kk	79.40%	17.61%	2.99%	100.00%	All Expenses
ll	44.60%	25.01%	30.38%	100.00%	PILOT
pp	62.64%	37.36%	0.00%	100.00%	Pumping Facilities
mm	100.00%	0.00%	0.00%	100.00%	Meter costs just to small meter class base

Symbol bb

	<u>Gal/Min</u>	<u>%</u>
Average Day	5,552	53.33%
Max Day Increment	4,858	46.67%
Maximum Day	10,410	100.00%

Symbol jj

Item	Amount (1)	Symbol	BASE	EXTRA CAPACITY	
				MAX DAY	PEAK HOUR
Source of Supply	\$1,832,333	aa	\$1,832,333	\$0	\$0
Pumping Plant	\$8,370,946	pp	\$5,243,561	\$3,127,386	\$0
Water Treat. Plant	\$21,947,129	aa	\$21,947,129	\$0	\$0
T&D Storage	\$7,272,426	dd	\$0	\$0	\$7,272,426
T&D Mains	\$71,548,289	bb	\$38,135,238	\$33,413,051	\$0
T&D Hydrants	\$6,812	aa	\$6,812	\$0	\$0
T&D Meters	\$0	cc	\$0	\$0	\$0
General Plant	\$2,426,232	jj	\$1,468,382	\$798,858	\$158,992
General Structures	\$568,990	jj	\$344,359	\$187,345	\$37,286
Total	\$113,973,156		\$68,977,813	\$37,526,639	\$7,468,704
Percent			60.52%	32.93%	6.55%

(1) See Joint Settl. Sch. 3B

Symbol ll

Item	Amount (1)	Symbol	BASE	EXTRA CAPACITY	
				MAX DAY	PEAK HOUR
Storage	\$5,443	dd	\$0	\$0	\$5,443
Office	\$961	kk	\$763	\$169	\$29
PS/Wells	\$11,605	pp	\$7,270	\$4,336	\$0
Total	\$18,010		\$8,033	\$4,505	\$5,472
Percent			44.60%	25.01%	30.38%

(1) See Joint Settl. Sch. 3B

Symbol pp

Item	%	Symbol	BASE	EXTRA CAPACITY	
				MAX DAY	PEAK HOUR
Supply Wells	20.00%	aa	20.00%	0.00%	0.00%
Distribution	80.00%	bb	42.64%	37.36%	0.00%
Total	1	pp	62.64%	37.36%	0.00%



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

**Class Demands**

CUSTOMER CLASS	AVERAGE DEMANDS		FACTOR [1]	MAX DAY EXTRA CAPACITY		
	(GALS/DAY)	PERCENT		OTAL GAL/DAY	XTRA GAL/DAY	PERCENT
Small	6,024,134	90.49%	2.7	16,265,161	10,241,027	96.83%
Medium	136,733	2.05%	2	273,466	136,733	1.29%
Large	<u>496,732</u>	<u>7.46%</u>	1.4	<u>695,425</u>	<u>198,693</u>	<u>1.88%</u>
Total	6,657,599	100.00%		17,234,052	10,576,453	100.00%

CUSTOMER CLASS	AVERAGE DEMANDS		FACTOR	PEAK HOUR EXTRA CAPACITY		
	(GALS/DAY)	PERCENT		OTAL GAL/DAY	XTRA GAL/DAY	PERCENT
Small	6,024,134	90.49%	3.4	20,482,055	4,216,894	96.48%
Medium	136,733	2.05%	2.4	328,159	54,693	1.25%
Large	<u>496,732</u>	<u>7.46%</u>	1.6	<u>794,771</u>	<u>99,346</u>	<u>2.27%</u>
Total	6,657,599	100.00%		21,604,985	4,370,933	100.00%

[1] - Described in the April, 1992 Cost of Service Study and as used in the Dockets # 2098 through 4067

**Allocation of Costs to Classes**

CUSTOMER CLASS	BASE COSTS		MAX. DAY EXTRA CAPACITY		PEAK HR. EXTRA CAPACITY		TOTAL AMOUNT
	PERCENT	AMOUNT	PERCENT	AMOUNT	PERCENT	AMOUNT	
Small *	90.49%	\$13,575,296	96.83%	\$3,032,646	96.48%	\$512,685	\$17,120,627
Medium	2.05%	\$262,730	1.29%	\$40,490	1.25%	\$6,650	\$309,870
Large	<u>7.46%</u>	<u>\$954,464</u>	<u>1.88%</u>	<u>\$58,838</u>	<u>2.27%</u>	<u>\$12,078</u>	<u>\$1,025,381</u>
Total	100.00%	\$14,792,490	100.00%	\$3,131,975	100.00%	\$531,413	\$18,455,878

\* Adjusted to include all meter replacement costs in small class rate.

**METERED WATER RATES**

**Small (5/8-2" meters)**

Total Expense (2)	\$17,120,627	=	
-----	-----		
Metered Sales (HCF) (1)	2,939,584	=	\$5.8240

**Medium (3&4" meters)**

Total Expense (2)	\$309,870	=	
-----	-----		
Metered Sales (HCF) (1)	66,721	=	\$4.6440

**Large (6" & up meters)**

Total Expense (2)	\$1,025,381	=	
-----	-----		
Metered Sales (HCF) (1)	242,389	=	\$4.2300

(1) See Sch 2

(2) See Sch 7

**COMPARISON TO CURRENT RATES**

		<u>Current</u>	<u>Proposed</u>	<u>\$ Change</u>	<u>% Change</u>
<b><u>METERED RATES</u></b>					
	Small (5/8-2" meters)	\$5.254	\$5.824	\$0.570	10.85%
	Medium (3&4" meters)	\$4.476	\$4.644	\$0.168	3.75%
	Large (6" & up meters)	\$3.816	\$4.230	\$0.414	10.85%
<b><u>SERVICE CHARGES</u></b>					
Quarterly	5/8 & 3/4	\$10.26	\$14.71	\$4.450	43.37%
	1	\$13.57	\$19.50	\$5.930	43.70%
	1 1/2	\$19.78	\$28.49	\$8.710	44.03%
	2	\$25.17	\$36.28	\$11.110	44.14%
	3	\$32.20	\$46.47	\$14.270	44.32%
	4	\$45.86	\$66.24	\$20.380	44.44%
	6	\$76.08	\$109.99	\$33.910	44.57%
	8 & up	\$126.66	\$186.09	\$59.430	46.92%
Monthly	5/8 & 3/4	\$7.51	\$10.71	\$3.200	42.61%
	1	\$8.61	\$12.31	\$3.700	42.97%
	1 1/2	\$10.67	\$15.31	\$4.640	43.49%
	2	\$12.47	\$17.90	\$5.430	43.54%
	3	\$14.82	\$21.30	\$6.480	43.72%
	4	\$19.37	\$27.89	\$8.520	43.99%
	6	\$29.44	\$42.47	\$13.030	44.26%
	8 & up	\$46.97	\$67.84	\$20.870	44.43%

**COMPARISON TO CURRENT RATES****FIRE CHARGES**Fire Service (per quarter)

		<u>Current</u>	<u>Proposed</u>	<u>\$ Change</u>	<u>% Change</u>
Public	/hydrant	\$139.33	\$181.13	\$41.800	30.00%
	/bill	\$6.12	\$8.72	\$2.600	42.48%

## Private (per quarter)

	4 in	\$55.69	\$72.90	\$17.210	30.90%
	6 in	\$150.09	\$195.16	\$45.070	30.03%
	8 in	\$312.94	\$406.04	\$93.100	29.75%
	10 in	\$557.88	\$723.24	\$165.360	29.64%
	12 in	\$897.35	\$1,162.88	\$265.530	29.59%
	hydrant	\$150.09	\$195.16	\$45.070	30.03%

**IMPACT OF PROPOSED RATES**

	METER	QUARTERLY	CURRENT	<----- PROPOSED ----->		
	SIZE	USE - CU FT	RATES	NEW BILL	\$ INCREASE	% INCREASE
Small	5/8	1,500	\$89.07	\$102.07	\$13.00	14.6%
	<b>5/8</b>	<b>2,000</b>	<b>\$115.34</b>	<b>\$131.19</b>	<b>\$15.85</b>	<b>13.7%</b>
	5/8	2,500	\$141.61	\$160.31	\$18.70	13.2%
	5/8	3,500	\$194.15	\$218.55	\$24.40	12.6%
	5/8	4,000	\$220.42	\$247.67	\$27.25	12.4%
	5/8	5,000	\$272.96	\$305.91	\$32.95	12.1%
	5/8	6,000	\$325.50	\$364.15	\$38.65	11.9%
	5/8	6,666	\$360.49	\$402.94	\$42.45	11.8%
	5/8	8,000	\$430.58	\$480.63	\$50.05	11.6%
	5/8	10,000	\$535.66	\$597.11	\$61.45	11.5%
	5/8	12,000	\$640.74	\$713.59	\$72.85	11.4%
	5/8	14,000	\$745.82	\$830.07	\$84.25	11.3%
	5/8	15,000	\$798.36	\$888.31	\$89.95	11.3%
	5/8	20,000	\$1,061.06	\$1,179.51	\$118.45	11.2%
	5/8	25,000	\$1,323.76	\$1,470.71	\$146.95	11.1%
	1	30,000	\$1,589.77	\$1,766.70	\$176.93	11.1%
	1	40,000	\$2,115.17	\$2,349.10	\$233.93	11.1%
	1	46,666	\$2,465.40	\$2,737.33	\$271.93	11.0%
	1	75,000	\$3,954.07	\$4,387.50	\$433.43	11.0%
	2	100,000	\$5,279.17	\$5,860.28	\$581.11	11.0%
	2	200,000	\$10,533.17	\$11,684.28	\$1,151.11	10.9%
	2	300,000	\$15,787.17	\$17,508.28	\$1,721.11	10.9%
	2	400,000	\$21,041.17	\$23,332.28	\$2,291.11	10.9%
	2	600,000	\$31,549.17	\$34,980.28	\$3,431.11	10.9%
Medium	3	200,000	\$8,984.20	\$9,334.47	\$350.27	3.9%
	3	400,000	\$17,936.20	\$18,622.47	\$686.27	3.8%
	3	600,000	\$26,888.20	\$27,910.47	\$1,022.27	3.8%
	4	800,000	\$35,853.86	\$37,218.24	\$1,364.38	3.8%
	4	1,000,000	\$44,805.86	\$46,506.24	\$1,700.38	3.8%
	4	1,200,000	\$53,757.86	\$55,794.24	\$2,036.38	3.8%
Large	6	400,000	\$15,340.08	\$17,029.99	\$1,689.91	11.0%
	6	600,000	\$22,972.08	\$25,489.99	\$2,517.91	11.0%
	6	800,000	\$30,604.08	\$33,949.99	\$3,345.91	10.9%
	6	1,200,000	\$45,868.08	\$50,869.99	\$5,001.91	10.9%
	6	1,333,333	\$50,956.07	\$56,509.98	\$5,553.91	10.9%
	8	2,000,000	\$76,446.66	\$84,786.09	\$8,339.43	10.9%
	8	5,000,000	\$190,926.66	\$211,686.09	\$20,759.43	10.9%
	8	10,000,000	\$381,726.66	\$423,186.09	\$41,459.43	10.9%
Municipal Fire Service 400 hydrants		\$55,738.12	\$72,460.72	\$16,722.60	30.0%	
Private Fire Service 3 Inch Service		\$150.09	\$195.16	\$45.07	30.0%	

**REVENUE RECONCILIATION**

Service Charge:

	<----- Current ----->			<----- Proposed ----->	
<u>Quarterly</u>	<u>Number</u>	<u>Rate</u>	<u>Revenue</u>	<u>Rate</u>	<u>Revenue</u>
5/8 & 3/4	88,320	\$10.26	\$906,163	\$14.71	\$1,299,187
1	14,600	\$13.57	\$198,122	\$19.50	\$284,700
1 1/2	1,296	\$19.78	\$25,635	\$28.49	\$36,923
2	2,008	\$25.17	\$50,541	\$36.28	\$72,850
3	44	\$32.20	\$1,417	\$46.47	\$2,045
4	356	\$45.86	\$16,326	\$66.24	\$23,581
6	356	\$76.08	\$27,084	\$109.99	\$39,156
8 & up	268	\$126.66	\$33,945	\$186.09	\$49,872
<u>Monthly</u>					
5/8 & 3/4	60	\$7.51	\$451	\$10.71	\$643
1	12	\$8.61	\$103	\$12.31	\$148
1 1/2	108	\$10.67	\$1,152	\$15.31	\$1,653
2	96	\$12.47	\$1,197	\$17.90	\$1,718
3	12	\$14.82	\$178	\$21.30	\$256
4	36	\$19.37	\$697	\$27.89	\$1,004
6	84	\$29.44	\$2,473	\$42.47	\$3,567
8 & up	60	\$46.97	\$2,818	\$67.84	\$4,070

**REVENUE RECONCILIATION**

	<u>Number</u>	<u>&lt;----- Current -----&gt;</u>		<u>&lt;----- Proposed -----&gt;</u>	
		<u>Rate</u>	<u>Revenue</u>	<u>Rate</u>	<u>Revenue</u>
Consumption Charge:	100/cu.ft.				
Proposed					
Small (5/8-2" meters)	2,939,584	\$5.25	\$15,444,574	\$5.82	\$17,120,137
Medium (3&4" meters)	66,721	\$4.48	\$298,644	\$4.64	\$309,853
Large (6" & up meters)	242,389	\$3.82	\$924,957	\$4.23	\$1,025,307
Fire Protection:					
Public Hydrants	2,357	\$557.32	\$1,313,603	\$724.52	\$1,707,694
# bills	32	\$6.12	\$196	\$8.72	\$279
Private Fire Protection					
4 in	16	\$222.76	\$3,564	\$291.60	\$4,666
6 in	95	\$600.36	\$57,034	\$780.64	\$74,161
8 in	16	\$1,251.76	\$20,028	\$1,624.16	\$25,987
10 in	1	\$2,231.52	\$2,232	\$2,892.96	\$2,893
12 in	1	\$3,589.40	\$3,589	\$4,651.52	\$4,652
hydrant	122	\$600.36	\$73,244	\$780.64	\$95,238
			=====		=====
Total			\$19,409,970		\$22,192,240
Plus: Misc Revenues			\$330,651		\$330,651
			=====		=====
Pro Forma Revenue			\$19,740,621		\$22,522,891
Required Revenue			\$22,521,597		\$22,521,597
Difference			-2,780,976		\$1,294
					0.01%
Increase in Revenues					\$2,782,270
Increase in Rate Revenues					\$2,782,270
Percent Increase in Total Revenues					14.09%
Percent increase in Rate Revenues					14.33%

**SUMMARY OF COST OF SERVICE**

	<u>Test Year</u>	<u>Adjustments</u>	<u>Rate Year</u>
<b>Revenues</b>			
Service Charges	\$1,268,303	\$553,071	\$1,821,375
Demand Surcharge:	\$0	\$0	\$0
Metered Rates	\$16,668,176	\$1,787,121	\$18,455,297
Fire Protection	\$1,473,490	\$442,078	\$1,915,568
Miscellaneous	<u>\$330,651</u>	<u>\$0</u>	<u>\$330,651</u>
<i>Total Revenue</i>	\$19,740,621	\$2,782,270	\$22,522,891
<b>Expenses</b>			
<u>O&amp;M</u>			
Supply	\$4,999,638	(\$683,537)	\$4,316,101
Pumping	\$812,335	\$211,875	\$1,024,210
Treatment	\$310,572	\$133,773	\$444,345
T&D	\$1,164,782	\$130,014	\$1,294,796
Customer	\$470,456	\$19,883	\$490,339
Admin	<u>\$2,612,530</u>	<u>\$228,828</u>	<u>\$2,841,358</u>
Total O&M	\$10,370,313	\$40,836	\$10,411,149
<u>Fixed Charges</u>			
Debt Service	\$2,179,500	(\$1,000)	\$2,178,500
Reserves and Coverage	\$77,607	\$68,914	\$146,521
Renewal & Replacement	\$100,000	\$0	\$100,000
Infrastructure Replacement	\$5,400,000	\$0	\$5,400,000
Meter Replacement	\$0	\$2,000,000	\$2,000,000
CIP	\$0	\$1,753,819	\$1,753,819
Payroll Taxes	\$154,417	\$21,204	\$175,621
PILOT	<u>\$23,123</u>	<u>\$0</u>	<u>\$23,123</u>
Total Fixed	\$7,934,647	\$3,842,937	\$11,777,584
<u>Operating Revenue</u>	<u>\$583,313</u>	<u>(\$250,449)</u>	<u>\$332,864</u>
<i>Total Expenses</i>	\$18,888,273	\$3,633,324	\$22,521,597



**PROPOSED STEP INCREASES**

<b><u>YEAR 1 - CY 2018</u></b>		
Rate Year (FY 2017) Revenue Requirements =		\$22,190,946
Step Increases for 2018		
New Debt (see Joint Settl. Sch. 1D) \$	4,750	
Salaries (full yr) (See Joint Settl. Sch. 1D) \$	69,330	
Inflation (non-labor O&M) \$	275,573	
Additional Benefits \$	92,377	
Additional Meter Program Costs \$	300,000	
Additional CIP Costs \$	(300,000)	
IFR Increase \$	600,000	
Rev. Stabiliz @ 1.5% \$	15,630	
	\$ 1,057,660	
FY 2018 Revenue Requirement =		\$23,248,606
Proposed Step Increase for FY 2018		4.77%

**PROPOSED STEP RATES**

	<u>Current</u>	<u>Proposed</u> <u>(FY2017)</u>	<u>Step Increase (CY</u> <u>2018)</u>
<u>Metered Rates</u>			
Small (5/8-2" meters)	\$5.254	\$5.824	\$6.102
Medium (3&4" meters)	\$4.476	\$4.644	\$4.865
Large (6" & up meters)	\$3.816	\$4.230	\$4.432
<u>Service Charges</u>			
<u>Quarterly</u>			
5/8 & 3/4	\$10.26	\$14.71	\$15.41
1	\$13.57	\$19.50	\$20.43
1 1/2	\$19.78	\$28.49	\$29.85
2	\$25.17	\$36.28	\$38.01
3	\$32.20	\$46.47	\$48.68
4	\$45.86	\$66.24	\$69.40
6	\$76.08	\$109.99	\$115.23
8 & up	\$126.66	\$186.09	\$194.96
<u>Monthly</u>			
5/8 & 3/4	\$7.51	\$10.71	\$11.22
1	\$8.61	\$12.31	\$12.90
1 1/2	\$10.67	\$15.31	\$16.04
2	\$12.47	\$17.90	\$18.75
3	\$14.82	\$21.30	\$22.32
4	\$19.37	\$27.89	\$29.22
6	\$29.44	\$42.47	\$44.49
8 & up	\$46.97	\$67.84	\$71.07
<u>Fire Service</u>			
Public \$/hydrant/quarter	\$139.33	\$181.13	\$189.76
\$/bill	\$6.12	\$8.72	\$9.14
Private (\$/quarter)			
4 in	\$55.69	\$72.90	\$76.37
6 in	\$150.09	\$195.16	\$204.46
8 in	\$312.94	\$406.04	\$425.39
10 in	\$557.88	\$723.24	\$757.71
12 in	\$897.35	\$1,162.88	\$1,218.30
hydrant	\$150.09	\$195.16	\$204.46