

**Exhibit No.:**

**Issue(s):**

Class Cost of Service/

Rate Design/

Triumph Revenue Imputation/

Warren County Water/

Brunswick District Phase-Ins/

MSD Revenues

**Witness/Type of Exhibit:** Meisenheimer/Rebuttal

**Sponsoring Party:**

Public Counsel

**Case No.:**

WR-2008-0311

**REBUTTAL TESTIMONY**

**OF**

**BARBARA A. MEISENHEIMER**

Submitted on Behalf of the Office of the Public Counsel

**Missouri-American Water Company**

**Case No. WR-2008-0311**



September 30, 2008

**BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI**

In the Matter of Missouri-American                     )  
Water Company's request for authority                )  
to implement a general rate increase                )  
for water and sewer service provided                )  
in Missouri Service Areas                                )

WR-2008-0311

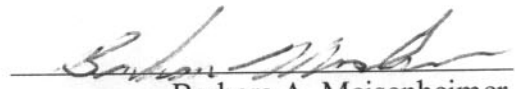
**AFFIDAVIT OF BARBARA A. MEISENHEIMER**

STATE OF MISSOURI            )  
  )  
COUNTY OF COLE            )

ss

Barbara A. Meisenheimer, of lawful age and being first duly sworn, deposes and states:

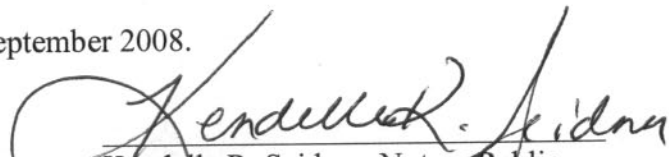
1. My name is Barbara A. Meisenheimer. I am the Chief Utility Economist for the Office of the Public Counsel.
2. Attached hereto and made a part hereof for all purposes is my rebuttal testimony.
3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.

  
Barbara A. Meisenheimer

Subscribed and sworn to me this 30th day of September 2008.



KENDELLE R. SEIDNER  
My Commission Expires  
February 4, 2011  
Cole County  
Commission #07004782

  
Kendelle R. Seidner, Notary Public

My commission expires February 4, 2011.

**REBUTTAL TESTIMONY**  
**OF**  
**BARBARA A. MEISENHEIMER**

**MISSOURI-AMERICAN WATER COMPANY**

**CASE NO. WR-2008-0311**

1     **Q.     PLEASE STATE YOUR NAME, TITLE, AND BUSINESS ADDRESS.**

2     A.     Barbara Meisenheimer, Chief Economist, Office of the Public Counsel, P. O. Box  
3             2230, Jefferson City, Missouri 65102.

4     **Q.     HAVE YOU TESTIFIED PREVIOUSLY IN THIS CASE?**

5     A.     Yes, I submitted direct testimony on the issues of district rate design for the  
6             Missouri American Water Company (MAWC or the Company) on September 5,  
7             2008.

8     **Q.     WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?**

9     A.     The purpose of my rebuttal testimony is to present Office of the Public Counsel  
10            (OPC or Public Counsel)'s updated Class Cost of Service (CCOS) studies and rate  
11            design recommendations. I will also respond to the direct testimony of the Public  
12            Service Commission Staff (Staff), the Company, and AG Processing, Inc.

1  
2 **Q. PLEASE EXPLAIN THE CHANGES YOU HAVE MADE TO THE CLASS COST OF**  
3 **SERVICE STUDIES FILED IN YOUR DIRECT TESTIMONY.**

4 A. The CCOS studies that I filed in direct testimony were based on Company and  
5 Staff provided accounting data, demand data and billing determinants. I have  
6 updated my studies to reflect updated accounting data received from the Staff and  
7 additional information on average daily consumption for private and public fire  
8 services received from the Company in response to an OPC data request. I have  
9 also added a customer charge calculation in my CCOS studies. I will discuss the  
10 customer charge calculation later in this testimony in response to the Company,  
11 Staff and Ag Processing proposals to raise customer charges. Finally, I have  
12 adjusted the St. Joseph Industrial class revenues to reflect a revenue imputation  
13 for Triumph Foods Premium Pork (Premium Pork).

14 **Q. PLEASE EXPLAIN THE NEED FOR A REVENUE IMPUTATION TO ADJUST THE ST.**  
15 **JOSEPH INDUSTRIAL CLASS FOR PREMIUM PORK.**

16 A. Premium Pork's actual water use and actual revenues were reflected in the  
17 Industrial Class costs and revenues in my CCOS study filed in direct testimony.  
18 However, historically Premium Pork has taken service under a special discounted  
19 contract. The impact on my CCOS study of including actual use but only the  
20 discounted revenues resulted in the entire Industrial Class appearing to have  
21 revenues misaligned with costs. By imputing revenues equal to the difference  
22 between the revenues that would be generated under regular industrial rates and  
23 the revenues collected under the special contract, the discount given to Premium

Pork does not adversely affect either the Industrial Class or any other customer class included in my CCOS study for the St. Joseph district.

**Q. WON'T THE PREMIUM PORK REVENUE IMPUTATION REFLECTED IN YOUR STUDY RESULT IN RATES THAT RECOVER LOWER OVERALL REVENUES FOR THE COMPANY?**

A. Yes. I believe this adjustment should also be made to the Staff's St. Joseph district revenue calculation resulting in a reduction to the St. Joseph district revenue requirement of \*\* \_\_\_\_\_ \*\*

**Q. IS THIS REVENUE IMPUTATION CONSISTENT WITH THE COMMISSION'S ORDER APPROVING THE PREMIUM PORK SPECIAL CONTRACT?**

A. Yes. Imputing revenue is consistent with the Commission's Order approving the Premium Pork special contract in WT-2004-0192. In that Order, the Commission found that;

The record also shows, and the Commission finds, that the proposed Special Service Contract provides for a reasonable contribution toward "all other costs associated with the provision of service" and that this contribution will constitute a benefit to the other customers of the St. Joseph district because it will serve to reduce the revenue requirement of the district as a whole. No other customer's rates will increase because this Special Service Contract is approved. No detriments to either the state of Missouri or to the other water service customers in the St. Joseph district have been identified. (emphasis added)

By imputing revenues related to the Premium Pork special contract, no other customer's rates will increase.

**NP**

**Q. IF THE COMPANY OR ANY OTHER PARTY IS UNWILLING TO ACCEPT A REVENUE IMPUTATION IN ORDER HOLD OTHER CUSTOMERS HARMLESS WITH RESPECT TO THE PREMIUM PORK DISCOUNT, CAN THE COMMISSION REVISIT THE APPROPRIATENESS OF THE SPECIAL CONTRACT DISCOUNT GRANTED TO PREMIUM PORK?**

A. Yes. The special contract entered into on September 3, 2003, as amended October 8, 2003, \*\*\_\_\_\_\_

**Q. SHOULD THE COMMISSION REVISIT THE PREMIUM PORK DISCOUNT IF THE COMPANY OR ANY OTHER PARTY IS UNWILLING TO ACCEPT A REVENUE IMPUTATION IN ORDER HOLD OTHER CUSTOMERS HARMLESS?**

A. Yes. In the event that the Company or any other party objects to a revenue imputation, Public Counsel requests a Commission review of the special contract rate granted to Premium Pork.

**Q. PLEASE DISCUSS THE RESULTS OF YOUR CLASS COST OF SERVICE STUDIES.**

A. My CCOS study results for individual districts are provided in Schedule BAM REB 1-1 through Schedule BAM REB 1-9. A summary comparing current cost percentage and revenue percentage by class and by district is provided in Table 1.

Table 1 - Percentage of Current Cost at Equalized Return and Percentage of Current Rate Revenue by Customer Class							
	TOTAL	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	OTHER PUBLIC AUTHORITY	SALES FOR RESALE	PRIVATE FIRE SERVICE
Jefferson City	Cost %	55.26%	29.27%	4.87%	7.75%		2.86%
	Revenue %	54.55%	29.59%	4.94%	8.13%		2.79%
Brunswick	Cost %	55.30%	14.17%	0.81%	2.19%	25.34%	2.19%
	Revenue %	51.72%	13.75%	0.97%	2.33%	28.66%	2.57%
Joplin	Cost %	54.77%	20.08%	17.19%	3.35%	3.44%	1.17%
	Revenue %	52.36%	21.55%	16.33%	3.56%	3.21%	2.99%
Mexico	Cost %	46.53%	13.69%	17.74%	8.94%	9.67%	3.43%
	Revenue %	46.70%	13.70%	16.47%	8.91%	10.76%	3.46%
Parkville	Cost %	72.09%	19.87%	0.66%	1.18%	3.96%	2.23%
	Revenue %	71.32%	19.56%	0.57%	1.20%	4.70%	2.65%
St. Charles	Cost %	88.71%	10.12%	0.03%	0.90%		0.25%
	Revenue %	84.59%	11.17%	0.02%	2.62%		1.59%
St. Joseph	Cost %	51.53%	19.68%	17.57%	3.21%	7.96%	0.05%
	Revenue %	47.70%	18.22%	20.60%	3.35%	9.07%	1.05%
Warrensburg	Cost %	54.50%	21.73%	2.42%	12.60%	7.03%	1.71%
	Revenue %	55.04%	20.26%	2.28%	12.36%	7.42%	2.63%
		RES COM OPA Rate A & K	INDUSTRIAL Rate J	OTHER WATER UTILITIES Rate B, G & H			PRIVATE FIRE Rate E & H
St Louis	Cost %	89.78%	4.99%	4.76%			0.47%
	Revenue %	90.25%	4.51%	4.17%			1.07%

1  
2 Table 1 illustrates that Residential Class revenues are generally aligned  
3 with costs. The greatest discrepancy between pre true-up revenue percentage and  
4 pre true-up cost percentage for the Residential Class occurs in St. Charles but is  
5 still just over 4%.

6 **Q. THE STAFF PROPOSES TO ADJUST CLASS REVENUES WITHIN DISTRICTS TO THE**  
7 **LEVELS REFLECTED IN THE STAFF'S CLASS COST OF SERVICE STUDIES. DO YOU**  
8 **AGREE?**

9 A. No. The Staff's proposal would result in huge shifts between classes. For  
10 example, in St. Louis, Rate J would receive a 158.6% increase while Rates E & F  
11 would receive a 45.03% decrease. Given the results of my CCOS studies and the  
12 inherent impreciseness in allocating joint and common costs to customer classes, I  
13 would support adjusting class revenues in each district by an equal percent in  
14 order to generate the district specific revenues discussed later in this testimony.

15 **Q. IF, DESPITE YOUR RECOMMENDATION FOR EQUAL PERCENTAGE ADJUSTMENTS**  
16 **BY CLASS, THE COMMISSION DECIDES TO MAKE SOME ADJUSTMENT ON A**  
17 **REVENUE NUTRAL BASIS, WHAT WOULD YOU PROPOSE?**

18 A. With the exception of St. Louis, I would propose adjusting the Commercial,  
19 Industrial, Other Public Authority and Sales for Resale classes by an amount  
20 equal to half the amount needed to reach the class cost presented in my CCOS  
21 studies. The sum of these adjustments would be offset by the Residential Class.  
22 For St. Louis, I would recommend adjusting Rate Group J and Rate Groups, B, G  
23 & H by an amount equal to half the amount needed to reach the class cost



presented in my CCOS studies. The sum of these adjustments would be offset by Rate Group A&K. Fire services generally represent a small class in terms of percentage of district costs and revenues. This results in the CCOS study results being less reliable for the Fire Class. Therefore, I would recommend no change on a revenue neutral basis for the Fire Class in any district. The revenue neutral shifts that would result from this alternative proposal are shown in Table 2.

Table 2 - Alternative Proposal Revenue Neutral Shift by Customer Class							
	TOTAL	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	OTHER PUBLIC AUTHORITY	SALES FOR RESALE	PRIVATE FIRE SERVICE
Jefferson City	Shift %	-1.64%	0.97%	8.26%	2.45%		0.00%
Brunswick	Shift %	0.71%	0.67%	-15.66%	-5.40%	-0.63%	0.00%
Joplin	Shift %	0.67%	7.53%	-10.36%	5.57%	-14.87%	0.00%
Mexico	Shift %	1.67%	0.27%	-7.99%	-0.63%	5.17%	0.00%
Parkville	Shift %	-0.63%	-1.74%	-15.45%	-0.33%	18.76%	0.00%
St. Charles	Shift %	-1.81%	5.18%	-16.41%	36.29%		0.00%
St. Joseph	Shift %	-2.59%	-4.27%	6.85%	1.65%	6.01%	0.00%
Warrensburg	Shift %	4.17%	-10.35%	-7.38%	-3.84%	6.00%	0.00%
		RES COM OPA Rate A & K	INDUSTRIAL Rate J	SALE FOR RESALE Rate B, G & H			PRIVATE FIRE Rate E & H
St Louis	Shift %	-0.07%	-0.40%	1.96%			0.00%

**Q. WITH A FEW EXCEPTIONS, THE COMPANY AND STAFF PROPOSE THAT DISTRICT REVENUE BE SET AT A LEVEL THAT RECOVERS DISTRICT COSTS. DO YOU AGREE?**

A. I would generally agree that district revenues should be aligned with district costs. However, the Company proposes to merge the St. Louis, St. Charles and Warren

1 County Water districts into a Metro St. Louis district and to provide inter-district  
2 support flowing from the Metro St. Louis district to Brunswick and Parkville.  
3 The Staff proposes to maintain Warren County Water as a distinct district from a  
4 merged St. Louis/St. Charles district and to provide inter-district support flowing  
5 from the St. Louis/St. Charles district to both Brunswick and Warren County  
6 Water.

7 Public Counsel is not opposed to merging the St. Louis and St. Charles  
8 County districts since they are physically and operationally connected. However,  
9 the Company has provided no evidence that Warren County Water will be  
10 interconnected with St. Louis/St. Charles in the foreseeable future making it  
11 difficult to justify a consolidation that includes Warren County Water. Public  
12 Counsel is also well aware of the ongoing concerns regarding inter-district  
13 support flows to Brunswick and is reluctant to compound the problem by  
14 extending similar treatment to Warren County Water without a plan to eliminate  
15 the support flows. Based on Staff accounting data, Warren County Water  
16 district's rates would need to increase by more than 100% and Brunswick's rates  
17 would need to increase by almost 150% to align district revenues and district  
18 costs. I recommend that the Commission adopt a three-year phase-in for Warren  
19 County Water and Brunswick, with carrying costs to be paid by the respective  
20 district to the Company at a rate equal to the Company's Allowance for Funds  
21 Used During Construction (AFUDC) rate. I recommend the phase-in collect 50%  
22 of the district deficiency in the first year, with the balance and carrying costs to be  
23 recovered in approximately equal amounts in years two and three.

1       **Q.     BASED ON THE CCOS RESULTS, DO YOU AGREE WITH PARTIES THAT PROPOSE**  
2       **INCREASES IN THE CUSTOMER CHARGES?**

3       A.    No. The fixed monthly customer charge is usually associated with customer  
4       related costs defined as those costs directly related to the number of customers.  
5       My class cost of service studies identify the investments and expenses directly  
6       related to the number of customers by class as including meters, services,  
7       operations and maintenance, and depreciation expenses related to meters and  
8       services, meter reading and arguably some portion of customer records expense.  
9       For residential and small commercial customers these costs vary significantly by  
10      district with a simple average across districts of \$8.71. To compare this cost result  
11      with the Company and Staff rate proposals, we need to remember that meters with  
12      diameters of 5/8" and 3/4" are the predominant size of meters used by residential  
13      and commercial customers. For districts other than St. Louis, the Company  
14      proposes a \$13 customer charge for customers with a 5/8" meter and a \$16.65  
15      customer charge for customers with a 3/4" meter. For St. Louis, the Company  
16      proposes a \$10 customer charge for customers with a 5/8" meter and a \$10.42  
17      customer charge for customers with a 3/4" meter. Ag Processing supports the  
18      Company proposed customer charges for St. Joseph. The Staff proposes customer  
19      charges for 5/8" and 3/4" meters that are in some cases even higher than the  
20      Company's proposed customer charges. Based on my studies, the Company and  
21      Staff customer charge proposals far exceed costs. In addition, the Company  
22      proposal for uniform customer charges is inconsistent with the variation in actual  
23      customer related costs by district. I encourage the Commission to reject both the  
24      Company and Staff proposals to increase the residential and commercial customer

1 charges. My primary recommendation is to hold customer residential and  
2 commercial charges at current levels.

3 **Q. DOES PUBLIC COUNSEL SUPPORT THE AGREEMENT BETWEEN THE COMPANY AND**  
4 **THE METROPOLITAN ST. LOUIS SEWER DISTRICT (MSD) THAT WOULD RETAIN**  
5 **THE CURRENT RATE CHARGED BY THE COMPANY FOR PROVIDING CUSTOMER**  
6 **BILLING INFORMATION TO MSD?**

7 A. No. The Company has conducted cost studies that indicate that MSD pays a rate  
8 higher than incremental cost but significantly lower than fully distributed costs.  
9 It seems reasonable that if other customers' rates are to increase, then MSD  
10 should share some responsibility for the increase. Public Counsel would propose  
11 that, at a minimum, MSD pay the St. Louis system average increase based on  
12 true-up.

13 **Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?**

14 A. Yes.

Office of the Public Counsel  
MAWC Class Cost of Service Summary

**Brunswick District**

**CLASS COST OF SERVICE SUMMARY:**

	TOTAL	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	OTHER PUBLIC AUTHORITY	SALES FOR RESALE	PRIVATE FIRE SERVICE	PUBLIC FIRE SERVICE
1 O & M Expenses	436,779	182,091	47,254	2,301	7,297	113,329	5,935	78,572
2 Depreciation Expenses/TOIT Def Tax Exp	89,975	40,540	10,261	479	1,521	21,046	1,478	14,651
3 Current Income Taxes	57,043	24,930	6,244	285	918	12,461	1,026	11,179
4 TOTAL Expenses and Taxes	583,797	247,561	63,759	3,065	9,736	146,836	8,439	104,402
5 Spread of fire expenses & taxes to others	104,402	81,828	19,505	761	2,307	0	0	(104,402)
6 TOTAL Expenses and Taxes after Spread	583,797	329,389	83,265	3,826	12,042	146,836	8,439	0
9 Current Revenue	295,760	152,925	40,679	2,888	6,916	84,740	7,612	0
10 Rate Revenue	3,515	1,851	472	22	71	1,031	69	0
11 Other Revenue	0	0	0	0	0	0	0	0
12 Spread of fire revenue to others	299,275	154,776	41,151	2,910	6,987	85,771	7,681	0
13 TOTAL Current Revenues	100.00%	51.72%	13.75%	0.97%	2.33%	28.66%	2.57%	0.00%
14 Current Revenue Percentage	(284,522)	(174,614)	(42,114)	(916)	(5,055)	(61,065)	(758)	0
15 Net OPERATING INCOME	1,569,529	685,948	171,812	7,838	25,254	342,859	28,227	307,589
16 (57,043)								
17 TOTAL Rate Base	307,589	241,083	57,467	2,243	6,796	0	0	(307,589)
18 Spread of fire rate base to others	1,569,529	927,032	229,279	10,081	32,050	342,859	28,227	0
19 TOTAL Rate Base after Spread	-18.13%	-18.84%	-18.37%	-9.08%	-15.77%	-17.81%	-2.69%	0
20 Implicit Rate of Return (ROR)	(284,522)	(168,051)	(41,563)	(1,828)	(5,810)	(62,153)	(5,117)	0
21 Net Operating Income with Equalized ROR	(583,797)	(322,827)	(82,714)	(4,738)	(12,797)	(147,924)	(12,798)	0
22 Class COS with Equalized ROR	100.00%	55.30%	14.17%	0.81%	2.19%	25.34%	2.19%	0
23 Current Class COS Percentage	(284,522)	(168,051)	(41,563)	(1,828)	(5,810)	(62,153)	(5,117)	0
24 Net Operating Income with Equalized ROR	(0)	6,563	551	(912)	(755)	(1,088)	(4,359)	0
25 Revenue Neutral Shift to Equalize Class ROR	0.00%	4.24%	1.34%	-31.33%	-10.80%	-1.27%	-56.75%	0
26 Revenue Increase/Decrease % of Current Revenue	7.823%	7.823%	7.823%	7.823%	7.823%	7.823%	7.823%	0
27 Staff Midpoint ROR	122,784	72,522	17,937	789	2,507	26,822	2,208	0
28 Net Operating Income with Recommended ROR	31,928	16,812	4,283	202	645	9,364	622	0
29 True-up plus add'l taxes	738,509	418,723	105,484	4,817	15,194	183,022	11,270	0
30 Class COS with Staff Recommended ROR	100.00%	56.70%	14.28%	0.65%	2.06%	24.78%	1.53%	0
31 Potential Post True-up Class COS Percentage	439,234	263,947	64,334	1,906	8,207	97,251	3,589	0
32 Required revenue to reach post true-up Class COS								

Office of the Public Counsel  
MAWC Class Cost of Service Summary

Jefferson City

CLASS COST OF SERVICE SUMMARY:

	TOTAL	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	OTHER PUBLIC AUTHORITY	SALES FOR RESALE	PRIVATE FIRE SERVICE	PUBLIC FIRE SERVICE
1 O & M Expenses	3,286,377	1,721,432	943,265	196,935	243,866		35,518	145,361
2 Depreciation Expenses TOT Def Tax Exp	872,720	382,582	235,832	45,078	64,536		18,035	126,657
3 Current Income Taxes	52,881	21,976	13,961	2,595	3,857		1,357	9,136
4 TOTAL Expenses and Taxes	4,211,978	2,125,990	1,193,058	244,607	312,259		54,910	281,154
5								
6 Spread of fire expenses & taxes to others	281,154	170,483	70,516	4,386	35,770		0	(281,154)
7 TOTAL Expenses and Taxes after Spread	4,211,978	2,296,473	1,263,574	248,993	348,028		54,910	
8								
9 Current Revenue								
10 Rate Revenue	5,351,600	2,919,103	1,583,279	263,551	435,411		150,256	0
11 Other Revenue	39,715	21,876	11,919	2,550	3,058		313	0
12 Spread of fire revenue to others	0	0	0	0	0		0	0
13 TOTAL Current Revenues	5,391,315	2,940,979	1,595,198	266,101	438,469		150,569	0
14 Current Revenue Percentage	100.00%	54.55%	29.59%	4.94%	8.13%		2.79%	0.00%
15								
16 Net OPERATING INCOME	1,179,337	644,506	331,624	17,108	90,441		95,659	0
17								
18 TOTAL Rate Base	13,086,819	5,438,616	3,454,969	642,137	954,522		335,715	2,260,860
19								
20 Spread of fire rate base to others	2,260,860	1,370,912	567,046	35,266	287,636		0	(2,260,860)
21 TOTAL Rate Base after Spread	13,086,819	6,809,528	4,022,015	677,403	1,242,158		335,715	
22								
23 Implicit Rate of Return (ROR)	9.01%	9.46%	8.25%	2.53%	7.28%		28.49%	
24								
25 Net Operating Income with Equalized ROR	1,179,337	613,650	362,450	61,045	111,939		30,253	
26								
27 Class COS with Equalized ROR	(4,211,978)	(2,327,329)	(1,232,749)	(205,055)	(326,530)		(120,315)	
28 Current Class COS Percentage	100.00%	55.26%	29.27%	4.87%	7.75%		2.86%	
29								
30 Net Operating Income with Equalized ROR	1,179,337	613,650	362,450	61,045	111,939		30,253	
31 Revenue Neutral Shift to Equalize Class ROR	0	(30,856)	30,825	43,937	21,498		(65,405)	
32 Revenue Increase/Decrease % of Current Revenue	0.00%	-1.05%	1.93%	16.51%	4.90%		-43.44%	
33								
34 Staff Midpoint ROR	7.823%	7.823%	7.823%	7.823%	7.823%		7.823%	
35								
36 Net Operating Income with Recommended ROR	1,023,782	532,709	314,642	52,993	97,174		26,263	
37 True-up plus add'l taxes	325,281	179,171	97,623	20,882	25,045		2,560	
38 Class COS with Staff Recommended ROR	5,561,041	3,008,353	1,675,839	322,867	470,248		83,733	
39 Potential Post True-up Class COS Percentage	100.00%	54.10%	30.14%	5.81%	8.46%		1.51%	
40								
41 Required revenue to reach post true-up Class COS	169,726	67,374	80,641	56,767	31,779		(66,835)	

Office of the Public Counsel  
MAWC Class Cost of Service Summary

Mexico

CLASS COST OF SERVICE SUMMARY:

	TOTAL	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	OTHER PUBLIC AUTHORITY	SALES FOR RESALE	PRIVATE FIRE SERVICE	PUBLIC FIRE SERVICE
1 O & M Expenses	1,522,991	671,756	195,504	190,468	126,904	176,629	41,437	120,293
2 Depreciation Expenses/TOIT Def Tax Exp	598,054	261,217	75,960	80,398	49,193	69,389	20,396	41,500
3 Current Income Taxes	(60,855)	(25,368)	(7,774)	(8,675)	(5,149)	(7,469)	(2,132)	(4,287)
4 TOTAL Expenses and Taxes	2,060,190	907,605	263,690	262,192	170,947	238,549	59,701	157,506
5								
6 Spread of fire expenses & taxes to others	157,506	117,228	20,976	10,141	9,161		0	(157,506)
7 TOTAL Expenses and Taxes after Spread	2,060,190	1,024,833	284,666	272,332	180,109	238,549	59,701	
8								
9 Current Revenue								
10 Rate Revenue	3,480,713	1,620,560	476,504	577,210	310,116	374,403	121,920	0
11 Other Revenue	53,083	29,660	7,677	4,923	4,713	5,735	374	0
12 Spread of fire revenue to others	0	0	0	0	0	0	0	0
13 TOTAL Current Revenues	3,533,796	1,650,220	484,181	582,133	314,829	380,138	122,294	0
14 Current Revenue Percentage	100.00%	46.70%	13.70%	16.47%	8.91%	10.76%	3.46%	0.00%
15								
16 Net OPERATING INCOME	1,473,606	625,387	199,514	309,801	134,721	141,589	62,593	0
17								
18 TOTAL Rate Base	11,907,314	4,963,736	1,521,194	1,697,403	1,007,575	1,461,404	417,257	838,746
19								
20 Spread of fire rate base to others	838,746	624,260	111,701	54,000	48,785	0	0	(838,746)
21 TOTAL Rate Base after Spread	11,907,314	5,587,995	1,632,894	1,751,403	1,056,361	1,461,404	417,257	
22								
23 Implicit Rate of Return (ROR)	12.38%	11.19%	12.22%	17.69%	12.75%	9.69%	15.00%	
24								
25 Net Operating Income with Equalized ROR	1,473,606	691,550	202,081	216,747	130,731	180,858	51,638	
26						#DIV/0!		
27 Class COS with Equalized ROR	(2,060,190)	(958,670)	(282,099)	(365,386)	(184,098)	(199,280)	(70,656)	
28 Current Class COS Percentage	100.00%	46.53%	13.69%	17.74%	8.94%	9.67%	3.43%	
29								
30 Net Operating Income with Equalized ROR	1,473,606	691,550	202,081	216,747	130,731	180,858	51,638	
31 Revenue Neutral Shift to Equalize Class ROR	(0)	66,163	2,567	(93,054)	(3,989)	39,269	(10,955)	
32 Revenue Increase/Decrease % of Current Revenue	0.00%	4.01%	0.53%	-15.98%	-1.27%	10.33%	-8.96%	
33								
34 Staff Midpoint ROR	7.823%	7.823%	7.823%	7.823%	7.823%	7.823%	7.823%	
35								
36 Net Operating Income with Recommended ROR	931,509	437,149	127,741	137,012	82,639	114,326	32,642	
37 True-up plus add'l taxes	193,355	108,038	27,962	17,934	17,168	20,892	1,362	
38 Class COS with Staff Recommended ROR	3,185,054	1,570,020	440,369	427,278	279,915	373,766	93,705	
39 Potential Post True-up Class COS Percentage	100.00%	49.29%	13.83%	13.42%	8.79%	11.74%	2.94%	
40								
41 Required revenue to reach post true-up Class COS	(348,742)	(80,200)	(43,811)	(154,856)	(34,914)	(6,372)	(28,589)	

Office of the Public Counsel  
MAWC Class Cost of Service Summary

Parkville

CLASS COST OF SERVICE SUMMARY:

	TOTAL	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	OTHER PUBLIC AUTHORITY	SALES FOR RESALE	PRIVATE FIRE SERVICE	PUBLIC FIRE SERVICE
1 O & M Expenses	1,362,347	897,876	239,990	5,775	13,008	94,012	22,997	88,688
2 Depreciation Expenses(TOIT Def Tax Exp	1,185,973	709,417	187,205	3,778	11,036	72,967	39,355	162,216
3 Current Income Taxes	137,688	79,983	21,521	424	1,246	8,693	4,900	20,922
4 TOTAL Expenses and Taxes	2,686,008	1,687,276	448,715	9,976	25,291	175,673	67,252	271,826
5								
6 Spread of fire expenses & taxes to others	271,826	206,630	58,174	917	6,104		0	(271,826)
7 TOTAL Expenses and Taxes after Spread	2,686,008	1,893,906	506,889	10,893	31,395	175,673	67,252	
8								
9 Current Revenue								
10 Rate Revenue	3,878,080	2,766,088	758,762	21,985	46,658	181,325	103,236	26
11 Other Revenue	43,605	30,882	8,205	199	452	3,137	729	0
12 Spread of fire revenue to others	26	20	6	0	1	0	0	0
13 TOTAL Current Revenues	3,921,685	2,796,990	766,973	22,184	47,111	184,462	103,965	0
14 Current Revenue Percentage	100.00%	71.32%	19.56%	0.57%	1.20%	4.70%	2.65%	0.00%
15								
16 Net OPERATING INCOME	1,235,677	903,084	260,084	11,291	15,716	8,789	36,713	0
17								
18 TOTAL Rate Base	16,551,702	9,614,890	2,587,034	50,916	149,828	1,044,999	588,997	2,515,040
19								
20 Spread of fire rate base to others	2,515,040	1,911,827	538,251	8,483	56,479	0	0	(2,515,040)
21 TOTAL Rate Base after Spread	16,551,702	11,526,717	3,125,285	59,399	206,306	1,044,999	588,997	
22								
23 Implicit Rate of Return (ROR)	7.47%	7.83%	8.32%	19.01%	7.62%	0.84%	6.23%	
24								
25 Net Operating Income with Equalized ROR	1,235,677	860,534	233,320	4,434	15,402	78,015	43,972	
26						#DIV/0!		
27 Class COS with Equalized ROR	(2,686,008)	(1,936,456)	(533,653)	(17,750)	(31,709)	(106,447)	(59,993)	
28 Current Class COS Percentage	100.00%	72.09%	19.87%	0.66%	1.18%	3.96%	2.23%	
29								
30 Net Operating Income with Equalized ROR	1,235,677	860,534	233,320	4,434	15,402	78,015	43,972	
31 Revenue Neutral Shift to Equalize Class ROR	(0)	(42,550)	(26,764)	(6,857)	(314)	69,226	7,259	
32 Revenue Increase/Decrease % of Current Revenue	0.00%	-1.52%	-3.49%	-30.91%	-0.67%	37.53%	6.98%	
33								
34 Staff Midpoint ROR	7.823%	7.823%	7.823%	7.823%	7.823%	7.823%	7.823%	
35								
36 Net Operating Income with Recommended ROR	1,294,840	901,735	244,491	4,647	16,139	81,750	46,077	
37 True-up plus add'l taxes	764,992	541,792	143,954	3,494	7,935	55,032	12,786	
38 Class COS with Staff Recommended ROR	4,745,840	3,337,433	895,334	19,033	55,470	312,455	126,115	
39 Potential Post True-up Class COS Percentage	100.00%	70.32%	18.87%	0.40%	1.17%	6.58%	2.66%	
40								
41 Required revenue to reach post true-up Class COS	824,155	540,443	128,361	(3,151)	8,359	127,993	22,150	



Office of the Public Counsel  
MAWC Class Cost of Service Summary

St. Charles

CLASS COST OF SERVICE SUMMARY:

	TOTAL	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	OTHER PUBLIC AUTHORITY	SALES FOR RESALE	PRIVATE FIRE SERVICE	PUBLIC FIRE SERVICE
1 O & M Expenses	3,470,525	2,225,207	290,821	350	74,853		109,620	769,673
2 Depreciation Expenses TOIT Def Tax Exp	2,029,455	1,326,542	170,484	204	48,192		60,093	423,941
3 Current Income Taxes	(90,236)	(58,324)	(7,589)	(9)	(2,029)		(2,781)	(19,503)
4 TOTAL Expenses and Taxes	5,409,744	3,493,426	453,716	544	121,016		166,932	1,174,111
5								
6 Spread of fire expenses & taxes to others	1,174,111	836,968	212,980	182	123,980		0	(1,174,111)
7 TOTAL Expenses and Taxes after Spread	5,409,744	4,330,394	666,696	727	244,996		166,932	
8								
9 Current Revenue								
10 Rate Revenue	10,013,671	8,494,326	1,110,547	2,014	259,173		147,611	0
11 Other Revenue	287,351	219,507	40,148	48	11,226		16,422	0
12 Spread of fire revenue to others	0	0	0	0	0		0	0
13 TOTAL Current Revenues	10,301,022	8,713,833	1,150,695	2,062	270,399		164,033	0
14 Current Revenue Percentage	100.00%	84.59%	11.17%	0.02%	2.62%		1.59%	0.00%
15								
16 Net OPERATING INCOME	4,891,278	4,383,439	483,999	1,335	25,403		(2,899)	0
17								
18 TOTAL Rate Base	42,739,060	27,624,281	3,594,559	4,318	961,243		1,317,151	9,237,509
19								
20 Spread of fire rate base to others	9,237,509	6,584,985	1,675,656	1,435	975,433		0	(9,237,509)
21 TOTAL Rate Base after Spread	42,739,060	34,209,266	5,270,215	5,753	1,936,676		1,317,151	
22								
23 Implicit Rate of Return (ROR)	11.44%	12.81%	9.18%	23.21%	1.31%		-0.22%	
24								
25 Net Operating Income with Equalized ROR	4,891,278	3,915,084	603,151	658	221,643		150,741	
26								
27 Class COS with Equalized ROR	(5,409,744)	(4,798,749)	(547,545)	(1,403)	(48,756)		(13,291)	
28 Current Class COS Percentage	100.00%	88.71%	10.12%	0.03%	0.90%		0.25%	
29								
30 Net Operating Income with Equalized ROR	4,891,278	3,915,084	603,151	658	221,643		150,741	
31 Revenue Neutral Shift to Equalize Class ROR	0	(468,355)	119,151	(677)	196,240		153,640	
32 Revenue Increase/Decrease % of Current Revenue	0.00%	-5.37%	10.35%	-32.82%	72.57%		93.66%	
33								
34 Staff Midpoint ROR	7.823%	7.823%	7.823%	7.823%	7.823%		7.823%	
35								
36 Net Operating Income with Recommended ROR	3,343,477	2,676,191	412,289	450	151,506		103,041	
37 True-up plus add'l taxes	727,955	556,084	101,709	121	28,439		41,602	
38 Class COS with Staff Recommended ROR	9,481,176	7,562,668	1,180,694	1,298	424,941		311,574	
39 Potential Post True-up Class COS Percentage	100.00%	79.77%	12.45%	0.01%	4.48%		3.29%	
40								
41 Required revenue to reach post true-up Class COS	(819,846)	(1,151,165)	29,999	(764)	154,542		147,541	

Office of the Public Counsel  
MAWC Class Cost of Service Summary

Joplin

CLASS COST OF SERVICE SUMMARY:

	TOTAL	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	OTHER PUBLIC AUTHORITY	SALES FOR RESALE	PRIVATE FIRE SERVICE	PUBLIC FIRE SERVICE
1 O & M Expenses	6,063,699	2,397,444	1,468,564	626,834	224,961	93,298	474,601	777,996
2 Depreciation Expenses/TOIT Def Tax Exp	2,230,591	1,006,214	475,177	299,780	76,804	61,078	126,291	185,248
3 Current Income Taxes	(435,097)	(184,703)	(95,781)	(64,403)	(15,487)	(12,581)	(24,163)	(37,979)
4 TOTAL Expenses and Taxes	7,859,193	3,218,956	1,847,960	862,211	286,278	141,794	576,729	925,265
5								
6 Spread of fire expenses & taxes to others	925,265	694,302	167,597	32,999	30,368	0	0	(925,265)
7 TOTAL Expenses and Taxes after Spread	7,859,193	3,913,257	2,015,557	895,210	316,646	141,794	576,729	
8								
9 Current Revenue								
10 Rate Revenue	13,229,519	6,956,498	2,800,242	2,214,157	465,233	442,452	350,937	0
11 Other Revenue	241,081	97,341	102,243	(15,010)	13,896	(9,697)	52,308	0
12 Spread of fire revenue to others	0	0	0	0	0	0	0	0
13 TOTAL Current Revenues	13,470,600	7,053,839	2,902,485	2,199,147	479,129	432,755	403,245	0
14 Current Revenue Percentage	100.00%	52.36%	21.55%	16.33%	3.56%	3.21%	2.99%	0.00%
15								
16 Net OPERATING INCOME	5,611,407	3,140,582	886,928	1,303,937	162,483	290,961	(173,484)	0
17								
18 TOTAL Rate Base	38,548,166	16,364,064	8,485,886	5,705,894	1,372,112	1,114,661	2,140,776	3,364,773
19								
20 Spread of fire rate base to others	3,364,773	2,524,862	609,474	120,002	110,436	0	0	(3,364,773)
21 TOTAL Rate Base after Spread	38,548,166	18,888,926	9,095,359	5,825,895	1,482,548	1,114,661	2,140,776	
22								
23 Implicit Rate of Return (ROR)	14.56%	16.63%	9.75%	22.38%	10.96%	26.10%	-8.10%	
24								
25 Net Operating Income with Equalized ROR	5,611,407	2,749,637	1,324,000	848,068	215,813	162,260	311,630	
26						#DIV/0!		
27 Class COS with Equalized ROR	(7,859,193)	(4,304,202)	(1,578,485)	(1,351,079)	(263,316)	(270,495)	(91,615)	
28 Current Class COS Percentage	100.00%	54.77%	20.08%	17.19%	3.35%	3.44%	1.17%	
29								
30 Net Operating Income with Equalized ROR	5,611,407	2,749,637	1,324,000	848,068	215,813	162,260	311,630	
31 Revenue Neutral Shift to Equalize Class ROR	0	(390,945)	437,072	(455,869)	53,330	(128,701)	485,114	
32 Revenue Increase/Decrease % of Current Revenue	0.00%	-5.54%	15.06%	-20.73%	11.13%	-29.74%	120.30%	
33								
34 Staff Midpoint ROR	7.823%	7.823%	7.823%	7.823%	7.823%	7.823%	7.823%	
35								
36 Net Operating Income with Recommended ROR	3,015,623	1,477,681	711,530	455,760	115,980	87,200	167,473	
37 True-up plus add'l taxes	4,014,993	1,621,131	1,702,769	(249,980)	231,428	(161,498)	871,143	
38 Class COS with Staff Recommended ROR	14,889,809	7,012,069	4,429,855	1,100,990	664,054	67,496	1,615,345	
39 Potential Post True-up Class COS Percentage	100.00%	47.09%	29.75%	7.39%	4.46%	0.45%	10.85%	
40								
41 Required revenue to reach post true-up Class COS	1,419,209	(41,770)	1,527,370	(1,098,157)	184,924	(365,259)	1,212,100	

Office of the Public Counsel  
MAWC Class Cost of Service Summary

St. Joseph

CLASS COST OF SERVICE SUMMARY:

	TOTAL	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	OTHER PUBLIC AUTHORITY	SALES FOR RESALE	PRIVATE FIRE SERVICE	PUBLIC FIRE SERVICE
1 O & M Expenses	7,968,478	3,097,962	1,235,389	1,829,800	256,673	811,456	156,821	580,376
2 Depreciation Expenses TOIT Def Tax Exp	4,085,508	1,576,212	634,944	940,408	132,601	411,690	132,601	304,989
3 Current Income Taxes	(626,653)	(237,885)	(98,376)	(146,325)	(20,612)	(63,808)	(12,780)	(46,867)
4 TOTAL Expenses and Taxes	11,427,333	4,436,289	1,771,957	2,623,883	368,662	1,159,338	228,704	838,498
5	838,498	664,957	120,489	29,660	23,391	0	0	(838,498)
6 Spread of fire expenses & taxes to others	11,427,333	5,101,246	1,892,447	2,653,544	392,054	1,159,338	228,704	
7 TOTAL Expenses and Taxes after Spread								
8								
9 Current Revenue								
10 Rate Revenue	22,593,550	10,814,117	4,112,671	4,635,162	754,729	2,046,577	230,294	0
11 Other Revenue	290,799	102,789	57,416	78,379	12,804	29,821	9,589	0
12 Spread of fire revenue to others	0	0	0	0	0	0	0	0
13 TOTAL Current Revenues	22,884,349	10,916,906	4,170,087	4,713,541	767,533	2,076,398	239,883	0
14 Current Revenue Percentage	100.00%	47.70%	18.22%	20.60%	3.35%	9.07%	1.05%	0.00%
15								
16 Net OPERATING INCOME	11,457,016	5,815,660	2,277,641	2,059,997	375,479	917,060	11,179	0
17								
18 TOTAL Rate Base	80,131,965	30,419,066	12,579,632	18,710,973	2,635,725	8,159,294	1,634,218	5,993,057
19								
20 Spread of fire rate base to others	5,993,057	4,752,696	861,182	211,993	167,187	0	0	(5,993,057)
21 TOTAL Rate Base after Spread	80,131,965	35,171,761	13,440,814	18,922,966	2,802,912	8,159,294	1,634,218	
22								
23 Implicit Rate of Return (ROR)	14.30%	16.54%	16.95%	10.89%	13.40%	11.24%	0.68%	
24								
25 Net Operating Income with Equalized ROR	11,457,016	5,028,748	1,921,725	2,705,546	400,752	1,166,590	233,655	
26								
27 Class COS with Equalized ROR	(11,427,333)	(5,888,158)	(2,248,362)	(2,007,995)	(366,781)	(909,808)	(6,228)	
28 Current Class COS Percentage	100.00%	51.53%	19.68%	17.57%	3.21%	7.96%	0.05%	
29								
30 Net Operating Income with Equalized ROR	11,457,016	5,028,748	1,921,725	2,705,546	400,752	1,166,590	233,655	
31 Revenue Neutral Shift to Equalize Class ROR	(0)	(786,912)	(355,916)	645,549	25,273	249,530	222,476	
32 Revenue Increase/Decrease % of Current Revenue	0.00%	-7.21%	-8.53%	13.70%	3.29%	12.02%	92.74%	
33								
34 Staff Midpoint ROR	7.823%	7.823%	7.823%	7.823%	7.823%	7.823%	7.823%	
35								
36 Net Operating Income with Recommended ROR	6,268,724	2,751,487	1,051,475	1,480,344	219,272	638,302	127,845	
37 True-up plus add'l taxes	544,306	192,396	107,470	146,706	23,966	55,819	17,949	
38 Class COS with Staff Recommended ROR	18,240,363	8,045,129	3,051,391	4,280,594	635,291	1,853,458	374,498	
39 Potential Post True-up Class COS Percentage	100.00%	44.11%	16.73%	23.47%	3.48%	10.16%	2.05%	
40								
41 Required revenue to reach post true-up Class COS	(4,643,986)	(2,871,777)	(1,118,696)	(432,947)	(132,241)	(222,940)	134,615	

Office of the Public Counsel  
MAWC Class Cost of Service Summary

St. Louis County

CLASS COST OF SERVICE SUMMARY:

	TOTAL	RATE A & K	RATE J	RATE B, G & H	PRIVATE FIRE SERVICE	PUBLIC FIRE SERVICE
1 O & M Expenses	74,692,151	62,136,726	4,325,851	4,624,527	1,311,243	2,293,804
2 Depreciation Expenses TOIT Def Tax Exp	27,902,001	23,666,354	768,781	667,365	999,277	1,800,224
3 Current Income Taxes	5,531,436	4,769,940	108,172	72,804	218,829	361,691
4 TOTAL Expenses and Taxes	108,125,588	90,573,020	5,202,803	5,364,696	2,529,349	4,455,719
5						
6 Spread of fire expenses & taxes to oth	4,455,719	4,309,017	146,702	0	0	(4,455,719)
7 TOTAL Expenses and Taxes after Spread	108,125,588	94,882,037	5,349,505	5,364,696	2,529,349	
8						
9 Current Revenue						
10 Rate Revenue	129,215,522	110,356,145	5,591,154	5,366,135	1,364,770	6,537,318
11 Other Revenue	1,321,225	1,137,704	76,462	80,559	26,500	0
12 Spread of fire revenue to others	6,537,318	6,322,081	215,237	0	0	0
13 TOTAL Current Revenues	130,536,747	117,815,930	5,882,853	5,446,694	1,391,270	0
14 Current Revenue Percentage	100.00%	90.25%	4.51%	4.17%	1.07%	0.00%
15						
16 Net OPERATING INCOME	22,411,159	22,933,892	533,348	81,998	(1,138,080)	0
17						
18 TOTAL Rate Base	420,724,104	362,804,282	8,227,621	5,537,496	16,644,273	27,510,433
19						
20 Spread of fire rate base to others	27,510,433	26,604,668	905,764	0	0	(27,510,433)
21 TOTAL Rate Base after Spread	420,724,104	389,408,950	9,133,385	5,537,496	16,644,273	
22						
23 Implicit Rate of Return (ROR)	5.33%	5.89%	5.84%	1.48%	-6.84%	
24						
25 Net Operating Income with Equalized ROR	22,411,159	20,743,061	486,518	294,972	886,608	
26						
27 Class COS with Equalized ROR	(108,125,588)	(97,072,868)	(5,396,336)	(5,151,723)	(504,661)	
28 Current Class COS Percentage	100.00%	89.78%	4.99%	4.76%	0.47%	
29						
30 Net Operating Income with Equalized ROR	22,411,159	20,743,061	486,518	294,972	886,608	
31 Revenue Neutral Shift to Equalize Class ROR	0	(2,190,831)	(46,830)	212,974	2,024,688	
32 Revenue Increase/Decrease % of Current Revenue	0.00%	-1.86%	-0.80%	3.91%	145.53%	
33						
34 Staff Midpoint ROR	7.823%	7.823%	7.823%	7.823%	7.823%	
35						
36 Net Operating Income with Recommended ROR	32,913,247	30,463,462	714,505	433,198	1,302,081	
37 True-up plus add'l taxes	7,573,290	6,521,342	438,283	461,769	151,896	
38 Class COS with Staff Recommended ROR	148,612,125	131,866,842	6,502,293	6,259,663	3,983,327	
39 Potential Post True-up Class COS Percentage	100.00%	88.73%	4.38%	4.21%	2.68%	
40						
41 Required revenue to reach post true-up Class COS	18,075,378	14,050,912	619,439	812,969	2,592,058	

**Office of the Public Counsel  
MAWC Class Cost of Service Summary**

**Warrensburg**

**CLASS COST OF SERVICE SUMMARY:**

	TOTAL	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	OTHER PUBLIC AUTHORITY	SALES FOR RETAIL	PRIVATE FIRE SERVICE
1 O & M Expenses	1,358,020	715,091	191,182	24,712	137,120	115,230	41,446
2 Depreciation Expenses TOIT Def Tax Exp	690,209	334,712	100,239	11,969	69,215	54,428	30,738
3 Current Income Taxes	178,333	80,938	25,999	3,109	18,217	14,902	8,707
4 TOTAL Expenses and Taxes	2,226,562	1,130,741	317,420	39,791	224,552	184,560	80,891
5							
6 Spread of fire expenses & taxes to others	248,608	183,983	34,899	3,498	26,228		0
7 TOTAL Expenses and Taxes after Spread	2,226,562	1,314,723	352,320	43,288	250,780	184,560	80,891
8							
9 Current Revenue							
10 Rate Revenue	3,060,438	1,680,958	623,844	70,106	379,438	225,743	80,349
11 Other Revenue	78,447	46,790	12,085	1,573	8,604	7,103	2,291
12 Spread of fire revenue to others	0	0	0	0	0	0	0
13 TOTAL Current Revenues	3,138,885	1,727,748	635,929	71,679	388,042	232,846	82,640
14 Current Revenue Percentage	100.00%	55.04%	20.26%	2.28%	12.36%	7.42%	2.63%
15							
16 Net OPERATING INCOME	912,323	413,025	283,610	28,391	137,262	48,286	1,749
17							
18 TOTAL Rate Base	14,804,037	6,718,906	2,158,287	258,124	1,512,283	1,237,032	722,769
19							
20 Spread of fire rate base to others	2,196,635	1,625,624	308,362	30,904	231,744	0	0
21 TOTAL Rate Base after Spread	14,804,037	8,344,530	2,466,650	289,029	1,744,027	1,237,032	722,769
22							
23 Implicit Rate of Return (ROR)	6.16%	4.95%	11.50%	9.82%	7.87%	3.90%	0.24%
24							
25 Net Operating Income with Equalized ROR	912,323	514,245	152,011	17,812	107,479	76,234	44,542
26						#DIV/0!	
27 Class COS with Equalized ROR	(2,226,562)	(1,213,503)	(483,918)	(53,867)	(280,564)	(156,612)	(38,098)
28 Current Class COS Percentage	100.00%	54.50%	21.73%	2.42%	12.60%	7.03%	1.71%
29							
30 Net Operating Income with Equalized ROR	912,323	514,245	152,011	17,812	107,479	76,234	44,542
31 Revenue Neutral Shift to Equalize Class ROR	0	101,220	(131,598)	(10,579)	(29,784)	27,948	42,793
32 Revenue Increase/Decrease % of Current Revenue	0.00%	5.86%	-20.69%	-14.76%	-7.68%	12.00%	51.78%
33							
34 Staff Midpoint ROR	7.823%	7.823%	7.823%	7.823%	7.823%	7.823%	7.823%
35							
36 Net Operating Income with Recommended ROR	1,158,120	652,793	192,966	22,611	136,435	96,773	56,542
37 True-up plus add'l taxes	178,285	106,340	27,466	3,574	19,555	16,144	5,206
38 Class COS with Staff Recommended ROR	3,562,967	2,073,855	572,752	69,473	406,770	297,477	142,639
39 Potential Post True-up Class COS Percentage	100.00%	58.21%	16.08%	1.95%	11.42%	8.35%	4.00%
40							
41 Required revenue to reach post true-up Class COS	424,082	346,107	(63,177)	(2,205)	18,728	64,630	59,999