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Service Commission

**EXHIBIT**

Exhibit No.:  
Issue(s):

DPC 5-NP  
Class Cost of Service/  
Rate Consolidation & Design  
Triumph Foods Adjustment  
Miscellaneous Fee Adjustments  
Meisenheimer/Rebuttal  
Public Counsel  
WR-2011-0337

Witness/Type of Exhibit:  
Sponsoring Party:  
Case No.:

**REBUTTAL TESTIMONY**

**OF**

**BARBARA A. MEISENHEIMER**

Submitted on Behalf of  
the Office of the Public Counsel

**MISSOURI AMERICAN WATER COMPANY**

Case No. WR-2011-0337

DPC Exhibit No. 5-NP  
Date 2-21-12 Reporter JC  
File No. WR-2011-0337

January 19, 2012

**NP**

**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.                        )

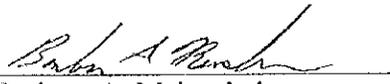
Case No. WR-2011-0337

**AFFIDAVIT OF BARBARA A. MEISENHEIMER**

STATE OF MISSOURI    )  
                                  ) ss  
COUNTY OF COLE     )

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

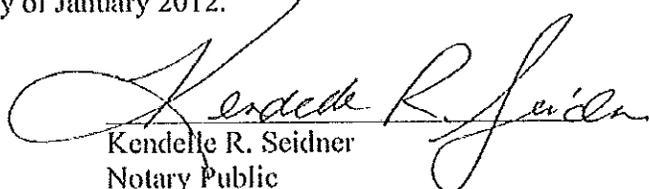
1. My name is Barbara A. Meisenheimer. I am a Chief Utility Economist for the Office of the Public Counsel.
2. Attached hereto and made a part hereof for all purposes is my rebuttal testimony.
3. I hereby swear and affirm that my statements contained in the attached affidavit are true and correct to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

  
\_\_\_\_\_  
Barbara A. Meisenheimer

Subscribed and sworn to me this 19<sup>th</sup> day of January 2012.



**KENDELLE R. SEIDNER**  
My Commission Expires  
February 4, 2015  
Cole County  
Commission #11004782

  
\_\_\_\_\_  
Kendelle R. Seidner  
Notary Public

My commission expires February 4, 2015..

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**REBUTTAL TESTIMONY  
OF  
BARBARA A. MEISENHEIMER**

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**MISSOURI AMERICAN WATER COMPANY  
CASE NO. WR-2011-0337**

8

**I. INTRODUCTION**

9 Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

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

12 Q. HAVE YOU TESTIFIED PREVIOUSLY IN THIS CASE?

13 A. Yes, I submitted direct testimony on the issues of district class cost of service and rate  
14 design for the Missouri American Water Company (MAWC or the Company) on  
15 December 12, 2011.

16 Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

17 A. The purpose of my rebuttal testimony is to present Office of the Public Counsel (OPC or  
18 Public Counsel)'s updated Class Cost of Service (CCOS) studies and rate design  
19 recommendations. I will also respond to the direct testimony of Dennis Williams, Dr.  
20 Karl McDermott and Peter J. Thakadiyil filed on behalf of the Company, James Busch  
21 filed on behalf of the Missouri Public Service Commission Staff (Staff), Michael P.  
22 Gorman of Brubaker & Associates, Inc. filed on behalf of the Missouri Industrial Energy  
23 Consumers (MIEC) and Donald Johnstone filed on behalf of AG Processing, Inc.

24 Q. PLEASE PROVIDE A SUMMARY OF YOUR TESTIMONY.

25 A. OPC recognizes that consistent with consideration of all relevant factors the Missouri  
26 Public Service Commission (Commission) has discretion in setting just and reasonable

1 rates. The increasing burden of large and regular rate increases and MAWC's acquisition  
2 of a number of small water utilities has increased the difficulty in balancing the relevant  
3 factors of cost of service and affordability. MAWC and to a lesser extent the Staff have  
4 proposed district rate consolidations to address administrative ease and to blend the rates  
5 of low-cost and high-cost districts. The Company proposal seeks full consolidation of its  
6 rates into a single tariff despite substantial differences in district cost and cost  
7 characteristics evidenced by its district cost of service studies and class cost of service  
8 studies. The Staff proposes partial consolidation based on operational considerations  
9 although its cost of service studies also recognizes substantial differences in the cost of  
10 service for the districts it proposes to consolidate. Other parties including MIEC, AG  
11 Processing and OPC have proposed an approach that retains cost based and primarily  
12 district specific pricing.

13 As I discussed in my direct testimony, OPC generally supports cost based rates  
14 and is willing to work toward more limited cost based district rate consolidation. As an  
15 alternative to the MAWC and Staff consolidation proposals, OPC recommends that if the  
16 Commission allows district rate consolidation, the Commission should focus on  
17 consolidating smaller districts with similar cost characteristics. The consolidation  
18 districts should move toward cost with phase-ins implemented to minimize consumer  
19 impacts.

1 OPC also encourages the Commission to the extent reasonable, to minimize the revenue  
2 requirement increase approved in this case. MAWC customers have faced regular and  
3 substantial increases in water rates. Increased water rates together with increases in the  
4 rates for other utility services and the impacts of the recent economic recession have  
5 burdened households. In customer comments and at public hearings, customers repeatedly  
6 described that they are challenged to make ends meet and encourage the Commission to  
7 closely scrutinize costs and minimize additional rate increases.

8 Finally, I will respond to the Company's proposed level of revenue associated  
9 with the Triumph Foods Contract.

10 **II. UPDATED CLASS COST OF SERVICE STUDY RESULTS AND RATE DESIGN**

11 Q. PLEASE EXPLAIN THE CHANGES YOU HAVE MADE TO THE CLASS COST OF  
12 SERVICE STUDIES FILED IN YOUR DIRECT TESTIMONY.

13 A. The CCOS studies that I filed in direct testimony were based on Company and Staff  
14 provided accounting data, demand data and billing determinants. The updated studies  
15 prepared for this testimony reflect updated accounting data received from the Staff.

16 Q. HAVE YOU UPDATED THE SCHEDULES AND TABLES THAT WERE  
17 SUBMITTED IN YOUR DIRECT TESTIMONY TO REFLECT YOUR UPDATED  
18 CCOS STUDIES?

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 Barbara A. Meisenheimer

A. Yes. The updated results of my study for each district are provided in Schedule BAM REB-1. The tables that follow reflect the resulting changes to the tables that appeared in my direct testimony. Table 1 illustrates each customer class's share of cost and the class's share of revenue if costs were based on an equalized rate of return:

**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 %	53.53%	28.54%	7.07%	8.83%		2.03%
	Revenue %	54.98%	27.58%	5.63%	8.62%		3.18%
Brunswick	Cost %	65.86%	26.22%	0.41%	3.78%	3.16%	0.56%
	Revenue %	64.42%	22.84%	0.77%	3.71%	4.53%	3.74%
Joplin	Cost %	47.76%	22.83%	17.99%	3.55%	4.11%	3.75%
	Revenue %	53.90%	21.80%	14.36%	3.23%	3.52%	3.20%
Mexico	Cost %	49.91%	12.73%	15.48%	7.25%	11.74%	2.88%
	Revenue %	49.83%	12.05%	15.94%	6.92%	11.33%	3.93%
Parkville	Cost %	68.87%	20.62%	0.68%	1.38%	4.73%	3.72%
	Revenue %	68.11%	22.22%	0.44%	1.47%	4.56%	3.20%
St. Joseph	Cost %	50.76%	18.19%	14.29%	3.75%	10.91%	2.09%
	Revenue %	52.11%	19.28%	13.10%	3.82%	10.32%	1.37%
Warren County	Cost %	98.96%	1.04%				
	Revenue %	98.77%	1.23%				
Warrensburg	Cost %	57.41%	16.20%	3.04%	11.39%	7.09%	4.88%
	Revenue %	55.19%	18.60%	3.04%	12.41%	7.57%	3.19%
St Louis	Cost %	93.16%	3.70%	1.52%			1.61%
	Revenue %	93.35%	3.77%	1.76%			1.12%

1 Table 2 illustrates the percentage change in rate revenue necessary to achieve an  
 2 equalized return:

3 **TABLE 2**

Revenue Neutral Shift to Equalize Current Rate of Return by Customer Class							
	TOTAL	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	OTHER PUBLIC AUTHORITY	SALES FOR RESALE	PRIVATE FIRE SERVICE
Jefferson City	Shift %	-2.65%	3.46%	25.67%	2.44%		-36.22%
Brunswick	Shift %	2.24%	14.83%	-46.49%	1.98%	-30.28%	-84.92%
Joplin	Shift %	-11.38%	4.71%	25.29%	10.09%	16.93%	17.42%
Mexico	Shift %	0.16%	5.65%	-2.86%	4.80%	3.63%	-26.70%
Parkville	Shift %	1.12%	-7.22%	56.78%	-6.23%	3.70%	16.19%
St. Joseph	Shift %	-2.59%	-5.66%	9.13%	-1.60%	5.74%	52.16%
Warren County	Shift %	0.19%	-15.49%				
Warrensburg	Shift %	4.01%	-12.94%	-0.03%	-8.19%	-6.39%	53.08%
		RES COM OPA Rate A & K	INDUSTRIAL Rate J	SALE FOR RESALE Rate B			PRIVATE FIRE Rate E & F
St Louis	Shift %	-0.20%	-1.79%	-13.48%			43.94%

4 Q. HAS PUBLIC COUNSEL'S PRELIMINARY INTRA-DISTRICT RATE DESIGN  
 5 RECOMMENDATION CHANGED?

6 A. No. I continue to recommend that the Commission move customer classes toward district  
 7 specific cost of service by first implementing a revenue neutral shift among classes and  
 8 second spreading any net increase or decrease in district revenue to the classes as an equal  
 9 percentage. I also recommend that the Commission cap class increases resulting from

1 revenue neutral shifts in order to mitigate the combined impact of a large district increase  
 2 coupled with interclass increases. For example, Table 3 illustrates the revenue neutral  
 3 shifts that would result from capping revenue neutral increases to 5% of a class's current  
 4 revenue:

5 **TABLE 3**

Proposed Maximum Revenue Neutral Shift by Customer Class							
	TOTAL	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	OTHER PUBLIC AUTHORITY	SALES FOR RESALE	PRIVATE FIRE SERVICE
Jefferson City	Shift %	-0.88%	1.73%	5.00%	1.22%		-11.99%
Brunswick	Shift %	1.12%	5.00%	-18.02%	0.99%	-11.74%	-32.92%
Joplin	Shift %	-2.46%	0.51%	5.00%	5.00%	5.00%	5.00%
Mexico	Shift %	0.08%	2.83%	-1.43%	2.40%	1.81%	-13.35%
Parkville	Shift %	0.56%	-2.75%	5.00%	-2.38%	1.85%	5.00%
St. Joseph	Shift %	-1.00%	-2.17%	4.56%	-0.62%	2.87%	5.00%
Warren County	Shift %	0.10%	-7.74%				
Warrensburg	Shift %	2.01%	-4.20%	-0.01%	-2.65%	-2.07%	5.00%
		RES COM OPA Rate A & K	INDUSTRIAL Rate J	SALE FOR RESALE Rate B			PRIVATE FIRE Rate E & F
St Louis	Shift %	-0.08%	-0.69%	-5.21%			5.00%

6 Under this recommendation, each customer class would be adjusted by no more than the  
 7 revenue neutral shown in Table 3 and then by the net percentage increase or decrease  
 8 approved by the Commission for the class's district.

1 Q. HAVE YOU DETERMINED AN AVERAGE LEVEL OF COSTS THAT COULD  
 2 REASONABLY BE RECOVERED IN THE CUSTOMER CHARGE?

3 A. Yes. Table 4 identifies an average level of costs for the Residential and Small  
 4 Commercial classes that could reasonably be recovered in the customer charge:

5 **TABLE 4**

Class Cost of Service Study Customer Charge Cost				
	RESIDENTIAL (Monthly)	RESIDENTIAL (Quarterly)	COMMERCIAL (Monthly)	COMMERCIAL (Quarterly)
Jefferson City	\$ 4.05	\$ 12.16	\$ 6.02	\$ 18.05
Brunswick	\$ 14.26	\$ 42.77	\$ 20.37	\$ 61.11
Joplin	\$ 7.31	\$ 21.92	\$ 11.05	\$ 33.14
Mexico	\$ 10.04	\$ 30.12	\$ 16.18	\$ 48.54
Parkville	\$ 9.62	\$ 28.87	\$ 17.94	\$ 53.83
St. Joseph	\$ 5.44	\$ 16.31	\$ 8.09	\$ 24.26
Warren County	\$ 4.45	\$ 13.34	\$ 4.20	\$ 12.61
Warrensburg	\$ 6.84	\$ 20.51	\$ 12.03	\$ 36.09
	RES COM OPA Rate A & K (Monthly)	RES COM OPA Rate A & K (Quarterly)		
St Louis	\$ 8.71	\$ 26.13		

1 **III. RESPONSE TO THE PARTIES**

2 Q. PLEASE RESPOND TO THE CLASS COST OF SERVICE AND RATE DESIGN  
3 TESTIMONY OF THE MISSOURI INDUSTRIAL ENERGY CONSUMERS.

4 A. I agree with much of Mr. Gorman's testimony. In response to Company witnesses Dennis  
5 Williams, Mr. Gorman points out that reducing administrative ease is not a reasonable  
6 basis for the district rate consolidation proposed by the Company and that adopting  
7 uniform pricing throughout the state has the potential to reduce efficiency by eroding the  
8 link between district cost and pricing. I also agree to the economic considerations Mr.  
9 Gorman cites in response to Dr. Karl McDermott. Mr. Gorman points out that MAWC's  
10 districts are not interconnected, lack a common cost structure and exhibit different  
11 investments and expenses resulting in dissimilar cost of service.

12 Q. IN DIRECT TESTIMONY, MR. JOHNSTONE MAKES A NUMBER OF  
13 OBSERVATIONS REGARDING DISTRICT COST AND PRICING  
14 CHARACTERISTICS. DO YOU AGREE WITH HIS OBSERVATIONS?

15 A. Yes. Mr. Johnstone points out that there are wide differences in audited costs between  
16 districts but no single factor explains all of the differences among the districts. This  
17 observation is consistent with the district cost per customer analysis presented in  
18 Schedule BAM DIR-3, Schedule BAM DIR-4 and Schedule BAM DIR-5 of my direct

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1 testimony and updated in Schedule BAM REB-3, Schedule BAM REB-4 and Schedule  
2 BAM REB-5 of this rebuttal testimony.

3 Q. DO YOU AGREE WITH MR. JOHNSTONE'S POLICY POSITION THAT  
4 VARIATION OF RATES FROM COSTS SHOULD BE LIMITED AND SUPPORTED  
5 BY EVIDENCE?

6 A. Yes. Like Mr. Johnstone, I am concerned about the lack of evidence supporting the  
7 Company's proposal for single tariff pricing. I agree with his conclusion that given the  
8 wide differences in audited costs, usages, and average rate levels, the Commission should  
9 be skeptical of any tariff consolidation proposal that does not address those differences.

10 Q. COMPANY WITNESSES WILLIAMS AND MCDERMOTT ARGUE THAT SINGLE  
11 TARIFF PRICING IS PREFERABLE TO DISTRICT SPECIFIC PRICING BASED ON  
12 ADMINISTRATIVE EASE AND ECONOMIC CONSIDERATIONS. HAVE YOU  
13 PREVIOUSLY ADDRESSED THE PROS AND CONS OF SINGLE TARIFF PRICING  
14 AND DISTRICT SPECIFIC PRICING?

15 A. Yes. In addition to this testimony, pages 11-16 of my direct testimony and Schedule BAM  
16 DIR-2 also address pros and cons related to single tariff and district specific pricing.

17 Q. DO YOU HAVE CONCERNS THAT THE STAFF'S PROPOSAL FOR REGIONAL  
18 CONSOLIDATION IS NOT SUPPORTED BY COST BASED EVIDENCE?

1 A. Yes. While the Staff did prepare consolidated district cost of service and consolidated  
2 district class cost of service studies, the Staff workpapers which included more detailed  
3 district specific cost of service and district specific class cost of service studies indicate  
4 substantial differences in costs for districts that the Staff proposes to consolidate.

5 Q. DOES THE STAFF'S TESTIMONY ADDRESS THE SUBSTANTIAL DIFFERENCES  
6 IN THE COSTS OF SERVING DISTRICTS THAT IT PROPOSES TO  
7 CONSOLIDATE?

8 A. No. The Staff assumes that regional consolidation will benefit all customers and is in the  
9 public interest. The Staff testimony does not explain how low cost districts will benefit  
10 from consolidation with high cost districts. In addition, since the Staff proposal appears to  
11 ignore cost differences between districts that it proposes to consolidate, it is unclear why  
12 regional consolidations would be preferable to statewide consolidation.

13 Q. IN SUPPORT OF THE STAFF PROPOSAL FOR REGIONAL CONSOLIDATION,  
14 STAFF WITNESS JAMES BUSCH IDENTIFIES FOUR REASONS SUPPORTING  
15 STAFF'S RECOMMENDED CONSOLIDATIONS. CAN THE SAME GOALS BE  
16 ACCOMPLISHED WITH COST BASED CONSOLIDATIONS?

17 A. Yes. Mr. Busch lists administrative ease in cost assignment, reduced resource costs in  
18 processing rate cases, mitigating rate shock by spreading the cost of infrastructure  
19 improvements over a larger customer base and encouraging large utilities to acquire small

1           troubled systems. Setting aside the issue of whether each of these goals is appropriate,  
2           each could be accomplished under a cost based rather than regional consolidation  
3           proposal.

4    Q.    IN SUPPORT OF THE STAFF PROPOSAL FOR REGIONAL CONSOLIDATION,  
5           STAFF WITNESS JAMES BUSCH IDENTIFIES SOURCE OF SUPPLY AND  
6           OPERATIONAL CHARACTERISTICS AS THE COST BASIS FOR THE STAFF  
7           PROPOSAL. TO DATE, HAVE THESE FACTORS RESULTED IN SIMILAR COSTS  
8           FOR THE DISTRICTS STAFF PROPOSES TO CONSOLIDATE?

9    A.    No. While the physical source of supply and some shared labor and management  
10           characteristics are certainly factors that drive costs, they are a few among many, the total  
11           result of which produce substantially different district costs.

12   Q.    IF THE COMMISSION DECIDES TO CONSOLIDATE SOME OF THE CURRENT  
13           DISTRICTS, WHAT CONSOLIDATIONS SEEM REASONABLE BASED ON YOUR  
14           REVIEW OF THE COST OF SERVING THE VARIOUS DISTRICTS?

15   A.    Except for Brunswick and Warren County which appear to be extremely high cost  
16           districts and Joplin which OPC believes was earmarked for consolidation with Loma  
17           Linda at the time MAWC was certified to serve Loma Linda, the rates for the original  
18           districts should be maintained on a district specific basis. This would result in retaining  
19           six of the original districts: St. Louis Metro, Warrensburg, St. Joseph, Jefferson City,

1 Parkville and Mexico. As discussed above, the seventh district would consist of  
2 consolidating Joplin and Loma Linda. With respect to the remaining newly acquired  
3 districts and Brunswick and Warren County, OPC would be willing to agree to  
4 consolidate them into three small districts. The first small district would include Roark,  
5 Maplewood/Lake Carmel, Riverside Estates, Rankin Acres and White Branch. The  
6 second small district would include Lake Taneycomo, Warren County and Spring Valley.  
7 The third small district would include, Ozark Mountain, Lakewood and Brunswick.

8 Q. ARE THESE SMALL DISTRICT GROUPINGS BASED ON YOUR ASSESSMENT  
9 THAT THE GROUPS TO BE CONSOLIDATED HAVE SIMILAR COSTS?

10 A. Yes. Based on the district specific Staff cost of service studies and billing unit data on  
11 the district gallons of use, I was able calculate and compare district cost per gallon for  
12 most of the small districts. I grouped districts for consolidation based on tiered costs. I  
13 assigned White Branch and Rankin Acres which have unmetered use to the lowest cost  
14 group under an assumption that there are significant cost savings associated with avoided  
15 meter investment and related expenses.

16 Q. WOULD IT ALSO BE APPROPRIATE FOR THE COMMISSION TO ADOPT  
17 PHASE-INS TO MINIMIZE THE COMBINED RATE IMPACT OF THE  
18 CONSOLIDATION AND THE REVENUE REQUIREMENT INCREASE?

1 A. Yes. for districts facing large increases i would recommend phase-ins of up to three years  
2 with carrying costs to be paid by the respective district to the company at a rate equal to  
3 the company's allowance for funds used during construction (afudc) rate.

4 Q. ARE YOU ALSO CONCERNED ABOUT STAFFS PROPOSAL TO SUBSIDIZE THE  
5 RATES OF THREE OF THE HYBRID SEWER OPERATIONS WITH WATER  
6 REVENUES FROM HYBRID WATER DISTRICT 1?

7 A. Yes. While analysts may reasonably disagree regarding the exact allocation of joint and  
8 common costs between districts and between services, the Staff makes no such arguments  
9 in support of subsidizing sewer rates with water revenues. This Staff proposal appears to  
10 be based only on Staff's desire to produce below cost sewer rates.

11 **IV. TRIUMPH FOODS**

12 Q. IN ITS CLASS COST OF SERVICE REPORT, THE STAFF INDICATES THAT IT  
13 HAS REVIEWED THE ST. JOSEPH DISTRICT TRIUMPH CONTRACT RATE AND  
14 PROPOSES NO CHANGES IN THIS CASE. PLEASE RESPOND TO THIS  
15 RECOMMENDATION.

16 A. I agree that the structure of the Triumph contract rates should not change as a result of  
17 this case. However, consistent with the Stipulation and Agreement in WR-2010-0131,  
18 the rate levels associated with the Triumph Foods contract should be updated for  
19 purposes of determining the St. Joseph revenue requirement.

1 Q. PLEASE DISCUSS THE NEED FOR AN ADJUSTMENT TO THE ST. JOSEPH  
2 DISTRICT REVENUE REQUIREMENT TO REFLECT CHANGE IN THE TRIUMPH  
3 FOODS CONTRACT RATE.

4 A. On Page 6 of his Direct testimony, Company witness Peter Thakadiyil discusses the  
5 Company's adjustment for Triumph Foods associated with the contract rate change that  
6 occurred during the test year. "The Company is proposing to annualize the revenues  
7 based on the latest known rate. The Company has increased revenues by \$12,793 for  
8 Triumph Foods..." However, as a result of this case, consistent with the May 24, 2010,  
9 Stipulation and Agreement in WR-2010-0131 and resulting addendum to the Triumph  
10 Foods contract, MAWC will increase \*\*

11 \*\* the Triumph Foods contract rate. \*\*

12  
13  
14  
15 \*\* Any increases to the Triumph rate should be considered known and measurable  
16 changes for purposes of determining revenue requirement and result in an offset to rate  
17 increases required from other ratepayers in the St. Joseph district. Schedule BAM REB-2  
18 HC includes a copy of the Company response to Staff Data Request 0231 which  
19 quantifies MAWC's calculation of the current and proposed commodity rate component.

20 Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

21 A. Yes.

Office of the Public Counsel  
 MAWC Class Cost of Service Summary

**Brunswick District**

<b>CLASS COST OF SERVICE SUMMARY:</b>		<b>TOTAL</b>	<b>RESIDENTIAL</b>	<b>COMMERCIAL</b>	<b>INDUSTRIAL</b>	<b>OTHER PUBLIC AUTHORITY</b>	<b>SALES FOR RESALE</b>	<b>PRIVATE FIRE SERVICE</b>	<b>PUBLIC FIRE SERVICE</b>
1	O & M Expenses	567,496	314,488	127,584	1,714	18,464	16,049	5,284	83,913
2	Depreciation Expenses/TOIT Def Tax Exp	135,536	71,128	26,968	641	3,797	3,215	1,956	27,831
3	Current Income Taxes	0	0	0	0	0	0	0	0
4	<b>TOTAL Expenses and Taxes</b>	<b>703,032</b>	<b>385,616</b>	<b>154,552</b>	<b>2,355</b>	<b>22,261</b>	<b>19,264</b>	<b>7,239</b>	<b>111,744</b>
5									
6	Spread of fire expenses & taxes to others	111,744	85,824	21,320	2,053	2,548	0	0	(111,744)
7	<b>TOTAL Expenses and Taxes after Spread</b>	<b>703,032</b>	<b>471,440</b>	<b>175,872</b>	<b>4,408</b>	<b>24,809</b>	<b>19,264</b>	<b>7,239</b>	
8									
9	Current Revenue								
10	Rate Revenue	378,048.0	243,464.0	86,156.0	2,941.0	14,016.0	17,202.0	14,269.0	0.0
11	Other Revenue	6,223	4,077	1,598	29	228	196	95	0
12	Spread of fire revenue to others	0	0	0	0	0	0	0	0
13	<b>TOTAL Current Revenues</b>	<b>384,271</b>	<b>247,541</b>	<b>87,754</b>	<b>2,970</b>	<b>14,244</b>	<b>17,398</b>	<b>14,364</b>	<b>0</b>
14	<b>Current Revenue Percentage</b>	<b>100.00%</b>	<b>64.42%</b>	<b>22.84%</b>	<b>0.77%</b>	<b>3.71%</b>	<b>4.53%</b>	<b>3.74%</b>	<b>0.00%</b>
15									
16	Net OPERATING INCOME	(318,761)	(223,900)	(88,118)	(1,437)	(10,564)	(1,866)	7,125	0
17									
18	TOTAL Rate Base	2,070,583	1,044,149	394,927	9,358	55,682	46,339	32,953	487,176
19									
20	Spread of fire rate base to others	487,176	374,170	92,949	8,950	11,106	0	0	(487,176)
21	<b>TOTAL Rate Base after Spread</b>	<b>2,070,583</b>	<b>1,418,319</b>	<b>487,876</b>	<b>18,307</b>	<b>66,789</b>	<b>46,339</b>	<b>32,953</b>	
22									
23	Implicit Rate of Return (ROR)	-15.39%	-15.79%	-18.06%	-7.85%	-15.82%	-4.03%	21.62%	
24									
25	Net Operating Income with Equalized ROR	(318,761)	(218,347)	(75,107)	(2,818)	(10,282)	(7,134)	(5,073)	
26	Plus Current Taxes	-	0	0	0	0	0	0	
27	Class COS with Equalized ROR	384,271	253,094	100,765	1,589	14,527	12,130	2,166	
28	<b>Current Class COS Percentage</b>	<b>100.00%</b>	<b>65.86%</b>	<b>26.22%</b>	<b>0.41%</b>	<b>3.78%</b>	<b>3.16%</b>	<b>0.56%</b>	
29									
30	Net Operating Income with Equalized ROR	(318,761)	(218,347)	(75,107)	(2,818)	(10,282)	(7,134)	(5,073)	
31	Revenue Neutral Shift to Equalize Class ROR	0	5,553	13,011	(1,381)	282	(5,268)	(12,198)	
32	<b>Revenue Increase/Decrease % of Current Revenue</b>	<b>0.00%</b>	<b>2.24%</b>	<b>14.83%</b>	<b>-46.49%</b>	<b>1.98%</b>	<b>-30.28%</b>	<b>-84.92%</b>	

Office of the Public Counsel  
 MAWC Class Cost of Service Summary

St. Louis Metro District

CLASS COST OF SERVICE SUMMARY:		TOTAL	RATE A & K	RATE J	RATE B		PRIVATE FIRE SERVICE	PUBLIC FIRE SERVICE
1	O & M Expenses	88,566,351	78,632,793	4,556,648	2,134,918		976,205	2,265,787
2	Depreciation Expenses/TOIT Def Tax Exp	40,259,877	35,151,070	968,997	304,284		853,436	2,982,089
3	Current Income Taxes	5,427,575	4,766,554	112,274	29,762		114,488	404,497
4	TOTAL Expenses and Taxes	134,253,803	118,550,417	5,637,920	2,468,964		1,944,130	5,652,373
5								
6	Spread of fire expenses & taxes to others	5,652,373	5,617,627	34,746	0		0	(5,652,373)
7	TOTAL Expenses and Taxes after Spread	134,253,803	124,168,044	5,672,665	2,468,964		1,944,130	
8								
9	Current Revenue							
10	Rate Revenue	172,974,288	152,668,931	6,379,992	2,996,664	0	0	1,934,785
11	Other Revenue	5,279,616	4,794,881	288,084	135,977		60,674	0
12	Spread of fire revenue to others	8,993,916	8,938,630	55,286	0		0	0
13	TOTAL Current Revenues	178,253,905	166,402,442	6,723,362	3,132,641		1,995,459	0
14	Current Revenue Percentage	100.00%	93.35%	3.77%	1.76%		1.12%	0.00%
15								
16	Net OPERATING INCOME	44,000,102	42,234,398	1,050,697	663,677		51,329	0
17								
18	TOTAL Rate Base	555,551,395	487,891,111	11,492,090	3,046,404		11,718,642	41,403,148
19								
20	Spread of fire rate base to others	41,403,148	41,148,640	254,508	0		0	(41,403,148)
21	TOTAL Rate Base after Spread	555,551,395	529,039,751	11,746,598	3,046,404		11,718,642	
22								
23	Implicit Rate of Return (ROR)	7.92%	7.98%	8.94%	21.79%		0.44%	
24								
25	Net Operating Income with Equalized ROR	44,000,102	41,900,359	930,340	241,278		928,126	
26								
27	Class COS with Equalized ROR	178,253,905	166,068,403	6,603,005	2,710,242		2,872,255	
28	Current Class COS Percentage	100.00%	93.16%	3.70%	1.52%		1.61%	
29								
30	Net Operating Income with Equalized ROR	44,000,102	41,900,359	930,340	241,278		928,126	
31	Revenue Neutral Shift to Equalize Class ROR	0	(334,039)	(120,357)	(422,400)		876,796	
32	Revenue Increase/Decrease % of Current Revenue	0.00%	-0.20%	-1.79%	-13.48%		43.94%	

Office of the Public Counsel  
 MAWC Class Cost of Service Summary

Warrensburg 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	1,747,384	881,436	254,556	52,692	187,002	130,406	65,539	175,752
2	Depreciation Expenses TOIT Def Tax Exp	992,767	454,298	141,991	28,406	102,570	66,453	56,236	142,813
3	Current Income Taxes	88,242	38,525	12,378	2,508	9,153	6,033	5,320	14,325
4	TOTAL Expenses and Taxes	2,828,393	1,374,259	408,926	83,606	298,724	202,892	127,095	332,890
5									
6	Spread of fire expenses & taxes to others	332,890	259,754	47,703	2,824	22,609		0	(332,890)
7	TOTAL Expenses and Taxes after Spread	2,828,393	1,634,014	456,629	86,430	321,333	202,892	127,095	
8									
9	Current Revenue								
10	Rate Revenue	3,634,103	2,004,091	679,479	109,814	451,564	274,117	115,038	0
11	Other Revenue	148,712	83,685	24,305	5,094	17,707	12,350	5,572	0
12	Spread of fire revenue to others	0	0	0	0	0	0	0	0
13	TOTAL Current Revenues	3,782,815	2,087,776	703,784	114,908	469,271	286,467	120,610	0
14	Current Revenue Percentage	100.00%	55.19%	18.60%	3.04%	12.41%	7.57%	3.19%	0.00%
15									
16	Net OPERATING INCOME	954,422	453,762	247,155	28,478	147,938	83,575	(6,485)	0
17									
18	TOTAL Rate Base	13,151,077	5,741,570	1,844,800	373,794	1,364,056	899,158	792,825	2,134,873
19									
20	Spread of fire rate base to others	2,134,873	1,665,845	305,926	18,108	144,994	0	0	(2,134,873)
21	TOTAL Rate Base after Spread	13,151,077	7,407,416	2,150,726	391,902	1,509,049	899,158	792,825	
22									
23	Implicit Rate of Return (ROR)	7.26%	6.13%	11.49%	7.27%	9.80%	9.29%	-0.82%	
24									
25	Net Operating Income with Equalized RC	954,422	537,583	156,086	28,442	109,517	65,255	57,538	
26									
27	Class COS with Equalized ROR	3,782,815	2,171,597	612,715	114,872	430,850	268,147	184,634	
28	Current Class COS Percentage	100.00%	57.41%	16.20%	3.04%	11.39%	7.09%	4.88%	
29									
30	Net Operating Income with Equalized ROR	954,422	537,583	156,086	28,442	109,517	65,255	57,538	
31	Revenue Neutral Shift to Equalize Class ROR	0	83,821	(91,069)	(36)	(38,421)	(18,319)	64,024	
32	Revenue Increase/Decrease % of Current Revenue	0.00%	4.01%	-12.94%	-0.03%	-8.19%	-6.39%	53.08%	

Office of the Public Counsel  
 MAWC Class Cost of Service Summary

Jefferson City 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	4,138,190	2,037,734	1,143,928	305,034	343,878		59,825	247,792
2	Depreciation Expenses TOIT Def Tax Exp	1,226,815	511,476	302,613	76,906	94,887		41,477	199,456
3	Current Income Taxes	202,655	83,068	49,076	12,345	15,384		7,301	35,481
4	TOTAL Expenses and Taxes	5,567,660	2,632,278	1,495,617	394,285	454,148		108,603	482,729
5									
6	Spread of fire expenses & taxes to others	482,729	347,652	95,587	2,069	37,421		0	(482,729)
7	TOTAL Expenses and Taxes after Spread	5,567,660	2,979,931	1,591,204	396,354	491,569		108,603	
8									
9	Current Revenue								
10	Rate Revenue	5,688,328	3,132,723	1,566,089	316,898	490,086		182,532	0
11	Other Revenue	152,687	78,890	45,020	11,906	13,673		3,198	0
12	Spread of fire revenue to others	0	0	0	0	0		0	0
13	TOTAL Current Revenues	5,841,015	3,211,613	1,611,109	328,804	503,759		185,730	0
14	Current Revenue Percentage	100.00%	54.98%	27.58%	5.63%	8.62%		3.18%	0.00%
15									
16	Net OPERATING INCOME	273,355	231,682	19,906	(67,550)	12,190		77,127	0
17									
18	TOTAL Rate Base	16,302,234	6,682,250	3,947,849	993,079	1,237,499		587,322	2,854,234
19									
20	Spread of fire rate base to others	2,854,234	2,055,565	565,178	12,232	221,260		0	(2,854,234)
21	TOTAL Rate Base after Spread	16,302,234	8,737,815	4,513,027	1,005,311	1,458,759		587,322	
22									
23	Implicit Rate of Return (ROR)	1.68%	2.65%	0.44%	-6.72%	0.84%		13.13%	
24									
25	Net Operating Income with Equalized ROR	273,355	146,515	75,674	16,857	24,460		9,848	
26									
27	Class COS with Equalized ROR	5,841,015	3,126,446	1,666,878	413,211	516,029		118,451	
28	Current Class COS Percentage	100.00%	53.53%	28.54%	7.07%	8.83%		2.03%	
29									
30	Net Operating Income with Equalized ROR	273,355	146,515	75,674	16,857	24,460		9,848	
31	Revenue Neutral Shift to Equalize Class ROR	0	(85,167)	55,769	84,407	12,270		(67,279)	
32	Revenue Increase/Decrease % of Current Revenue	0.00%	-2.65%	3.46%	25.67%	2.44%		-36.22%	

Office of the Public Counsel  
 MAWC Class Cost of Service Summary

**Joplin District**

<b>CLASS COST OF SERVICE SUMMARY:</b>		<b>TOTAL</b>	<b>RESIDENTIAL</b>	<b>COMMERCIAL</b>	<b>INDUSTRIAL</b>	<b>OTHER PUBLIC AUTHORITY</b>	<b>SALES FOR RESALE</b>	<b>PRIVATE FIRE SERVICE</b>	<b>PUBLIC FIRE SERVICE</b>
1	O & M Expenses	8,226,213	3,730,463	1,743,677	1,606,689	268,630	381,366	186,308	309,079
2	Depreciation Expenses TOIT Def Tax Exp	2,636,296	1,101,703	570,690	468,004	88,858	106,222	119,598	181,222
3	Current Income Taxes	2,572,076	1,035,105	575,560	413,376	91,398	91,621	132,031	232,984
4	<b>TOTAL Expenses and Taxes</b>	<b>13,434,585</b>	<b>5,867,271</b>	<b>2,889,928</b>	<b>2,488,069</b>	<b>448,885</b>	<b>579,209</b>	<b>437,937</b>	<b>723,286</b>
5									
6	Spread of fire expenses & taxes to others	723,286	568,351	123,969	13,438	17,529		0	(723,286)
7	<b>TOTAL Expenses and Taxes after Spread</b>	<b>13,434,585</b>	<b>6,435,622</b>	<b>3,013,896</b>	<b>2,501,507</b>	<b>466,414</b>	<b>579,209</b>	<b>437,937</b>	
8									
9	Current Revenue								
10	Rate Revenue	17,706,656	9,581,409	3,860,865	2,507,111	570,633	614,973	571,665	0
11	Other Revenue	515,423	239,721	111,740	110,026	17,125	26,231	10,579	0
12	Spread of fire revenue to others	0	0	0	0	0	0	0	0
13	<b>TOTAL Current Revenues</b>	<b>18,222,079</b>	<b>9,821,130</b>	<b>3,972,605</b>	<b>2,617,137</b>	<b>587,758</b>	<b>641,204</b>	<b>582,244</b>	<b>0</b>
14	Current Revenue Percentage	100.00%	53.90%	21.80%	14.36%	3.23%	3.52%	3.20%	0.00%
15									
16	Net OPERATING INCOME	4,787,494	3,385,508	958,709	115,630	121,345	61,994	144,307	0
17									
18	TOTAL Rate Base	70,371,021	28,320,086	15,747,115	11,309,811	2,500,613	2,506,712	3,612,325	6,374,359
19									
20	Spread of fire rate base to others	6,374,359	5,008,908	1,092,542	118,428	154,482	0	0	(6,374,359)
21	<b>TOTAL Rate Base after Spread</b>	<b>70,371,021</b>	<b>33,328,994</b>	<b>16,839,657</b>	<b>11,428,239</b>	<b>2,655,094</b>	<b>2,506,712</b>	<b>3,612,325</b>	
22									
23	Implicit Rate of Return (ROR)	6.80%	10.16%	5.69%	1.01%	4.57%	2.47%	3.99%	
24									
25	Net Operating Income with Equalized ROR	4,787,494	2,267,444	1,145,639	777,488	180,632	170,537	245,754	
26									
27	Class COS with Equalized ROR	18,222,079	8,703,066	4,159,535	3,278,995	647,046	749,746	683,691	
28	Current Class COS Percentage	100.00%	47.76%	22.83%	17.99%	3.55%	4.11%	3.75%	
29									
30	Net Operating Income with Equalized ROR	4,787,494	2,267,444	1,145,639	777,488	180,632	170,537	245,754	
31	Revenue Neutral Shift to Equalize Class ROR	(0)	(1,118,064)	186,929	661,858	59,287	108,543	101,447	
32	<b>Revenue Increase/Decrease % of Current Revenue</b>	<b>0.00%</b>	<b>-11.38%</b>	<b>4.71%</b>	<b>25.29%</b>	<b>10.09%</b>	<b>16.93%</b>	<b>17.42%</b>	

Office of the Public Counsel  
 MAWC Class Cost of Service Summary

Mexico 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	1,761,125	808,952	209,744	289,950	122,510	222,686	29,718	77,564
2	Depreciation Expenses TOIT Def Tax Exp	914,280	402,856	108,700	129,365	62,862	99,086	36,404	75,006
3	Current Income Taxes	8,197	3,540	963	1,155	561	892	338	749
4	TOTAL Expenses and Taxes	2,683,602	1,215,348	319,407	420,471	185,934	322,664	66,460	153,318
5									
6	Spread of fire expenses & taxes to others	153,318	120,134	20,342	4,761	8,082		0	(153,318)
7	TOTAL Expenses and Taxes after Spread	2,683,602	1,335,482	339,749	425,231	194,016	322,664	66,460	
8									
9	Current Revenue								
10	Rate Revenue	3,505,157	1,747,507	422,182	557,960	242,344	396,088	139,076	0
11	Other Revenue	55,002	26,395	6,892	9,537	4,023	7,287	867	0
12	Spread of fire revenue to others	0	0	0	0	0	0	0	0
13	TOTAL Current Revenues	3,560,159	1,773,902	429,074	567,497	246,367	403,375	139,943	0
14	Current Revenue Percentage	100.00%	49.83%	12.05%	15.94%	6.92%	11.33%	3.93%	0.00%
15									
16	Net OPERATING INCOME	876,557	438,420	89,325	142,266	52,352	80,711	73,483	0
17									
18	TOTAL Rate Base	16,343,809	7,058,499	1,919,685	2,303,904	1,117,938	1,777,668	673,422	1,492,693
19									
20	Spread of fire rate base to others	1,492,693	1,169,611	198,048	46,349	78,685	0	0	(1,492,693)
21	TOTAL Rate Base after Spread	16,343,809	8,228,110	2,117,733	2,350,253	1,196,622	1,777,668	673,422	
22									
23	Implicit Rate of Return (ROR)	5.36%	5.33%	4.22%	6.05%	4.37%	4.54%	10.91%	
24									
25	Net Operating Income with Equalized ROR	876,557	441,293	113,579	126,050	64,178	95,341	36,117	
26									
27	Class COS with Equalized ROR	3,560,159	1,776,775	453,328	551,281	258,193	418,004	102,578	
28	Current Class COS Percentage	100.00%	49.91%	12.73%	15.48%	7.25%	11.74%	2.88%	
29									
30	Net Operating Income with Equalized ROR	876,557	441,293	113,579	126,050	64,178	95,341	36,117	
31	Revenue Neutral Shift to Equalize Class ROR	(0)	2,873	24,254	(16,217)	11,826	14,630	(37,366)	
32	Revenue Increase/Decrease % of Current Revenue	0.00%	0.16%	5.65%	-2.86%	4.80%	3.63%	-26.70%	

Office of the Public Counsel  
 MAWC Class Cost of Service Summary

Parkville District

<b>CLASS COST OF SERVICE SUMMARY:</b>		<b>TOTAL</b>	<b>RESIDENTIAL</b>	<b>COMMERCIAL</b>	<b>INDUSTRIAL</b>	<b>OTHER PUBLIC AUTHORITY</b>	<b>SALES FOR RESALE</b>	<b>PRIVATE FIRE SERVICE</b>	<b>PUBLIC FIRE SERVICE</b>
1	O & M Expenses	1,965,681	1,276,496	396,453	8,505	23,670	114,686	34,039	111,832
2	Depreciation Expenses TOIT Def Tax Exp	1,940,716	1,072,618	333,142	14,931	21,982	78,575	93,095	326,374
3	Current Income Taxes	12,235	6,562	2,090	90	135	503	613	2,241
4	<b>TOTAL Expenses and Taxes</b>	<b>3,918,632</b>	<b>2,355,676</b>	<b>731,686</b>	<b>23,526</b>	<b>45,787</b>	<b>193,764</b>	<b>127,747</b>	<b>440,447</b>
5									
6	Spread of fire expenses & taxes to others	440,447	351,594	79,526	1,638	7,689		0	(440,447)
7	<b>TOTAL Expenses and Taxes after Spread</b>	<b>3,918,632</b>	<b>2,707,270</b>	<b>811,212</b>	<b>25,164</b>	<b>53,476</b>	<b>193,764</b>	<b>127,747</b>	
8									
9	Current Revenue								
10	Rate Revenue	5,258,503	3,581,300	1,169,163	22,902	77,490	239,017	168,631	0
11	Other Revenue	48,668	33,312	10,350	283	637	2,872	1,214	0
12	Spread of fire revenue to others	0	0	0	0	0	0	0	0
13	<b>TOTAL Current Revenues</b>	<b>5,307,171</b>	<b>3,614,612</b>	<b>1,179,513</b>	<b>23,185</b>	<b>78,127</b>	<b>241,889</b>	<b>169,845</b>	<b>0</b>
14	Current Revenue Percentage	100.00%	68.11%	22.22%	0.44%	1.47%	4.56%	3.20%	0.00%
15									
16	Net OPERATING INCOME	1,388,539	907,342	368,301	(1,979)	24,651	48,126	42,098	0
17									
18	TOTAL Rate Base	23,829,347	12,781,360	4,070,791	175,722	263,305	979,505	1,194,309	4,364,355
19									
20	Spread of fire rate base to others	4,364,355	3,483,917	788,017	16,235	76,188	0	0	(4,364,355)
21	<b>TOTAL Rate Base after Spread</b>	<b>23,829,347</b>	<b>16,265,276</b>	<b>4,858,808</b>	<b>191,957</b>	<b>339,492</b>	<b>979,505</b>	<b>1,194,309</b>	
22									
23	Implicit Rate of Return (ROR)	5.83%	5.58%	7.58%	-1.03%	7.26%	4.91%	3.52%	
24									
25	Net Operating Income with Equalized ROR	1,388,539	947,780	283,123	11,185	19,782	57,076	69,593	
26									
27	Class COS with Equalized ROR	5,307,171	3,655,050	1,094,335	36,349	73,258	250,839	197,340	
28	Current Class COS Percentage	100.00%	68.87%	20.62%	0.68%	1.38%	4.73%	3.72%	
29									
30	Net Operating Income with Equalized ROR	1,388,539	947,780	283,123	11,185	19,782	57,076	69,593	
31	Revenue Neutral Shift to Equalize Class ROR	(0)	40,438	(85,178)	13,164	(4,869)	8,950	27,495	
32	<b>Revenue Increase/Decrease % of Current Revenue</b>	<b>0.00%</b>	<b>1.12%</b>	<b>-7.22%</b>	<b>56.78%</b>	<b>-6.23%</b>	<b>3.70%</b>	<b>16.19%</b>	

Office of the Public Counsel  
 MAWC Class Cost of Service Summary

St. Joseph 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	10,541,730	5,162,573	1,791,720	1,451,157	368,590	1,212,938	146,212	408,539
2	Depreciation Expenses/TOIT Def Tax Exp	5,833,453	2,502,638	1,031,785	853,091	217,744	616,764	159,192	452,240
3	Current Income Taxes	0	0	0	0	0	0	0	0
4	TOTAL Expenses and Taxes	16,375,183	7,665,211	2,823,505	2,304,248	586,334	1,829,703	305,404	860,779
5									
6	Spread of fire expenses & taxes to others	860,779	708,662	118,860	14,552	18,704	0	0	(860,779)
7	TOTAL Expenses and Taxes after Spread	16,375,183	8,373,873	2,942,365	2,318,800	605,038	1,829,703	305,404	
8									
9	Current Revenue								
10	Rate Revenue	19,473,592	10,187,047	3,775,043	2,524,884	744,619	1,976,317	265,682	0
11	Other Revenue	1,454,182	718,837	260,293	216,522	53,927	182,921	21,682	0
12	Spread of industrial discount to others	0	0	0	0	0	0	0	0
13	TOTAL Current Revenues	20,927,774	10,905,884	4,035,336	2,741,406	798,546	2,159,238	287,364	0
14	Current Revenue Percentage	100.00%	52.11%	19.28%	15.10%	3.82%	10.32%	1.37%	0.00%
15									
16	Net OPERATING INCOME	4,552,591	2,532,010	1,092,971	422,606	193,509	329,535	(18,040)	0
17									
18	TOTAL Rate Base	80,510,889	34,143,306	14,348,160	11,782,202	3,047,338	8,019,971	2,331,672	6,838,239
19									
20	Spread of fire rate base to others	6,838,239	5,629,790	944,254	115,606	148,589	0	0	(6,838,239)
21	TOTAL Rate Base after Spread	80,510,889	39,773,096	15,292,414	11,897,808	3,195,927	8,019,971	2,331,672	
22									
23	Implicit Rate of Return (ROR)	5.65%	6.37%	7.15%	3.55%	6.05%	4.11%	-0.77%	
24									
25	Net Operating Income with Equalized ROR	4,552,591	2,249,020	864,729	672,777	180,718	453,499	131,847	
26									
27	Class COS with Equalized ROR	20,927,774	10,622,894	3,807,094	2,991,577	785,756	2,283,202	437,251	
28	Current Class COS Percentage	100.00%	50.76%	18.19%	14.29%	3.75%	10.91%	2.09%	
29									
30	Net Operating Income with Equalized ROR	4,552,591	2,249,020	864,729	672,777	180,718	453,499	131,847	
31	Revenue Neutral Shift to Equalize Class ROR	(0)	(282,990)	(228,242)	250,171	(12,791)	123,964	149,887	
32	Revenue Increase/Decrease % of Current Revenue	0.00%	-2.59%	-5.66%	9.13%	-1.60%	5.74%	52.16%	

Office of the Public Counsel  
 MAWC Class Cost of Service Summary

Warren County

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	312,286	222,489	2,864					86,934
2	Depreciation Expenses TOIT Def Tax Exp	62,607	50,990	692					10,926
3	Current Income Taxes	0	0	0					0
4	<b>TOTAL Expenses and Taxes</b>	<b>374,893</b>	<b>273,478</b>	<b>3,555</b>					<b>97,860</b>
5									
6	Spread of fire expenses & taxes to others	97,860	97,430	430					(97,860)
7	<b>TOTAL Expenses and Taxes after Spread</b>	<b>374,893</b>	<b>370,908</b>	<b>3,985</b>					
8									
9	Current Revenue								
10	Rate Revenue	334,880.0	330,754.0	4,126.0					0.0
11	Other Revenue	2,826	2,790	36					0
12	Spread of fire revenue to others	0	0	0					0
13	<b>TOTAL Current Revenues</b>	<b>337,706</b>	<b>333,544</b>	<b>4,162</b>					<b>0</b>
14	<b>Current Revenue Percentage</b>	<b>100.00%</b>	<b>98.77%</b>	<b>1.23%</b>					<b>0.00%</b>
15									
16	Net OPERATING INCOME	(37,187)	(37,364)	177					0
17									
18	TOTAL Rate Base	1,310,513	1,019,286	15,252					275,976
19									
20	Spread of fire rate base to others	275,976	274,763	1,212					(275,976)
21	<b>TOTAL Rate Base after Spread</b>	<b>1,310,513</b>	<b>1,294,049</b>	<b>16,464</b>					
22									
23	Implicit Rate of Return (ROR)	-2.84%	-2.89%	1.08%					
24									
25	Net Operating Income with Equalized ROR	(37,187)	(36,720)	(467)					
26	Plus Current Taxes	-	-	0					
27	Class COS with Equalized ROR	337,706	334,188	3,518					
28	<b>Current Class COS Percentage</b>	<b>100.00%</b>	<b>98.96%</b>	<b>1.04%</b>					
29									
30	Net Operating Income with Equalized ROR	(37,187)	(36,720)	(467)					
31	Revenue Neutral Shift to Equalize Class ROR	(0)	645	(645)					
32	<b>Revenue Increase/Decrease % of Current Revenue</b>	<b>0.00%</b>	<b>0.19%</b>	<b>-15.49%</b>					

**SCHEDULE BAM REB 2**

**HAS BEEN DEEMED**

**HIGHLY CONFIDENTIAL**

### Dirstrict Comparison of Rate Base and Expenses Per Customer

WATER PLANT - NET	Brunswick	Jefferson City	Joplin	Mexico	Parisville	St. Joseph	St. Louis Metro	Warrensburg	Warren County
Source of Supply	546	34	522	335	56	369	15	130	1,422
Pumping	278	212	415	260	317	282	78	139	370
Water Treatment Plant	324	334	1,002	1,218	484	1,091	190	436	55
Transmission & Distribution	5,156	1,390	2,506	2,133	5,026	1,300	1,969	2,004	1,296
<b>Total Rate Base</b>	<b>4,830</b>	<b>1,511</b>	<b>2,922</b>	<b>3,358</b>	<b>4,198</b>	<b>2,520</b>	<b>1,529</b>	<b>1,816</b>	<b>2,961</b>

EXPENSES	Brunswick	Jefferson City	Joplin	Mexico	Parisville	St. Joseph	St. Louis Metro	Warrensburg	Warren County
Source of Supply	28	2	19	45	59	2	4	25	17
Pumping	119	24	51	19	21	41	26	2	0
Water Treatment	81	72	39	24	47	58	35	5	11
Transmission & Distribution	269	29	41	43	54	41	38	60	404
Customer Accounts	29	24	21	25	21	22	17	18	18
Administrative and General	321	236	193	208	147	165	125	140	265
<b>Total Operational and Maintenance Expenses</b>	<b>1,343</b>	<b>386</b>	<b>343</b>	<b>363</b>	<b>349</b>	<b>329</b>	<b>245</b>	<b>250</b>	<b>715</b>
<b>Total Depreciation and Amortization Expense</b>	<b>214</b>	<b>54</b>	<b>107</b>	<b>105</b>	<b>135</b>	<b>90</b>	<b>55</b>	<b>69</b>	<b>93</b>

**District Comparison of Rate Base and Expenses Per Customer**

<b>WATER PLANT - NET</b>	<u>Lake Tanevcom</u>	<u>Lakewood</u>	<u>Loma Linda</u>	<u>Maplewood</u>	<u>Ozark Mountain</u>	<u>Rankin Acres</u>	<u>Riverside Estates</u>	<u>Rosark</u>	<u>Spring Valley</u>	<u>White Ranch</u>
Source of Supply	183	432	114	100	397	44	549	101	257	470
Pumping	173	-90	309	-22	44	112	-3	-91	-35	168
Water Treatment Plant	32	0	9	15	10	1	1	18	0	1
Transmission & Distribution	965	2,514	840	840	1,470	186	574	2,191	227	947
<b>Total Rate Base</b>	<b>1,338</b>	<b>3,011</b>	<b>742</b>	<b>549</b>	<b>1,443</b>	<b>487</b>	<b>851</b>	<b>1,712</b>	<b>499</b>	<b>1,562</b>

<b>EXPENSES</b>	<u>Lake Tanevcom</u>	<u>Lakewood</u>	<u>Loma Linda</u>	<u>Maplewood</u>	<u>Ozark Mountain</u>	<u>Rankin Acres</u>	<u>Riverside Estates</u>	<u>Rosark</u>	<u>Spring Valley</u>	<u>White Ranch</u>
Source of Supply	11	3	10	0	4	5	2	2	188	1
Pumping	1	1	0	0	1	1	1	0	1	0
Water Treatment	120	68	177	53	83	42	80	221	50	81
Transmission & Distribution	143	559	37	96	150	147	67	38	17	113
Customer Accounts	53	65	7	49	40	15	51	0	65	43
Administrative and General	417	469	67	369	398	220	344	79	390	417
<b>Total Operational and Maintenance Expenses</b>	<b>745</b>	<b>962</b>	<b>297</b>	<b>567</b>	<b>677</b>	<b>429</b>	<b>545</b>	<b>339</b>	<b>710</b>	<b>660</b>
<b>Total Depreciation and Amortization Expense</b>	<b>49</b>	<b>91</b>	<b>31</b>	<b>23</b>	<b>59</b>	<b>16</b>	<b>28</b>	<b>62</b>	<b>20</b>	<b>54</b>

**Comparison of Rate Base and Expenses Per Residential Customer  
 (Based on Company CCOS Study Results)**

<b>RATE BASE</b>	<b>Brunswick</b>	<b>Jefferson City</b>	<b>Joplin</b>	<b>Mexico</b>	<b>Parkville</b>	<b>St. Joseph</b>	<b>Warrensburg</b>	<b>Warren County</b>	<b>St. Louis Metro Rate A</b>
Utility Plant in Service	3,445	1,557	1,687	1,977	5,498	1,360	1,179	2,526	1,752
Other Rate Base Elements	-365	-115	-196	-198	-423	-152	-154	-244	-205
<b>Total Original Cost Measure of Value</b>	<b>3,082</b>	<b>1,442</b>	<b>1,491</b>	<b>1,779</b>	<b>5,075</b>	<b>1,209</b>	<b>1,025</b>	<b>2,282</b>	<b>1,548</b>
<b>EXPENSES</b>	<b>Brunswick</b>	<b>Jefferson City</b>	<b>Joplin</b>	<b>Mexico</b>	<b>Parkville</b>	<b>St. Joseph</b>	<b>Warrensburg</b>	<b>Warren County</b>	<b>St. Louis Metro</b>
Source of Supply	21	1	8	21	40	1	13	18	4
Pumping	78	13	14	8	16	18	1	0	25
Water Treatment	73	40	17	13	34	18	3	8	34
Transmission & Distribution	33	15	24	15	28	22	31	74	37
Customer Accounts	35	25	23	27	24	25	19	10	19
Administrative and General	316	127	108	105	115	100	90	86	137
<b>Total Operational and Maintenance Expenses</b>	<b>556</b>	<b>221</b>	<b>195</b>	<b>189</b>	<b>257</b>	<b>184</b>	<b>157</b>	<b>196</b>	<b>256</b>
<b>Total Depreciation and Amortization Expense</b>	<b>144</b>	<b>42</b>	<b>55</b>	<b>57</b>	<b>166</b>	<b>43</b>	<b>41</b>	<b>71</b>	<b>54</b>

**Comparison of Rate Base and Expenses Per Commercial Customer  
 (Based on Company CCOS Study Results)**

<b>RATE BASE</b>	<b>Brunswick</b>	<b>Jefferson City</b>	<b>Johns</b>	<b>Mexico</b>	<b>Parkville</b>	<b>St. Joseph</b>	<b>Warrensburg</b>	<b>Warren County</b>	<b>St. Louis Metro Rate A</b>
Utility Plant in Service	7,156	4,883	5,393	5,382	9,717	4,967	3,973	7,387	1,752
Other Rate Base Elements	-742	-376	-661	-547	-1,186	-579	-530	-677	-205
<b>Total Original Cost Measure of Value</b>	<b>6,414</b>	<b>4,507</b>	<b>4,732</b>	<b>4,835</b>	<b>8,531</b>	<b>4,388</b>	<b>3,443</b>	<b>6,710</b>	<b>1,547</b>

<b>EXPENSES</b>	<b>Brunswick</b>	<b>Jefferson City</b>	<b>Johns</b>	<b>Mexico</b>	<b>Parkville</b>	<b>St. Joseph</b>	<b>Warrensburg</b>	<b>Warren County</b>	<b>St. Louis Metro</b>
Source of Supply	51	3	31	69	153	4	55	49	4
Pumping	195	49	54	28	53	78	4	0	25
Water Treatment	183	143	65	46	110	80	12	30	34
Transmission & Distribution	78	39	62	47	90	68	96	432	37
Customer Accounts	35	25	23	27	24	25	19	10	19
Administrative and General	690	279	251	225	254	229	219	383	137
<b>Total Operational and Maintenance Expenses</b>	<b>1,232</b>	<b>539</b>	<b>486</b>	<b>443</b>	<b>684</b>	<b>484</b>	<b>405</b>	<b>903</b>	<b>256</b>
<b>Total Depreciation and Amortization Expense</b>	<b>506</b>	<b>125</b>	<b>165</b>	<b>149</b>	<b>447</b>	<b>147</b>	<b>130</b>	<b>218</b>	<b>54</b>