Exhibit No.: _____
Issue(s): Class Cost of Service/
Single Tariff Pricing/
District Specific Pricing/
Rate Design
Witness/Type of Exhibit: Smith/Direct
Sponsoring Party: Public Counsel
Case Nos.: WR-2015-0301/SR-2015-0302

DIRECT TESTIMONY
OF
RALPH C. SMITH

Submitted on Behalf of
the Office of the Public Counsel

MISSOURI AMERICAN WATER COMPANY

Case Nos. WR-2015-0301/SR-2015-0302

January 20, 2016

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-2015-0301 Case No. SR-2015-0302

AFFIDAVIT OF RALPH C. SMITH

STATE OF MICHIGAN)
) ss
COUNTY OF WAYNE)

Ralph C. Smith, of lawful age and being first duly sworn, deposes and states:

1. My name is Ralph C. Smith. I am the Senior Regulatory Consultant with Larkin & Associates, PLLC, acting as consultants in this matter for the Office of the Public Counsel.

2. Attached hereto and made a part hereof for all purposes is my direct 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.

Ralph C. Smith
Senior Regulatory Consultant

Subscribed and sworn to me this 20th day of January 2016.

Notary Public

My Commission expires _____

HUGH LARKIN JR
NOTARY PUBLIC, STATE OF MI
COUNTY OF WAYNE
MY COMMISSION EXPIRES Sep 13, 2019
ACTING IN COUNTY OF

TABLE OF CONTENTS

DIRECT TESTIMONY
OF
RALPH C. SMITH

MISSOURI AMERICAN WATER COMPANY

CASE NOS. WR-2015-0301/SR-2015-0302

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

A. Ralph C. Smith. I am a Senior Regulatory Consultant at Larkin & Associates, PLLC, 15728 Farmington Road, Livonia, Michigan 48154.

Q. ARE YOU THE SAME RALPH SMITH WHO PREVIOUSLY SUBMITTED TESTIMONY REGARDING REVENUE REQUIREMENT IN THIS CASE?

A. Yes. I previously submitted testimony in this case on December 23, 2015, addressing Business Transformation and Income Taxes.

Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

A. The purpose of my testimony is to discuss the Class Cost of Service ("CCOS") studies filed by Missouri-American Water Company ("Company" or "MAWC") and to discuss Public Counsel's position on how the results of these studies should affect the rate design for customer classes within each district. I will also provide testimony on district specific pricing versus single tariff pricing.

Q. HAVE YOU PREPARED ANY SCHEDULES TO ACCOMPANY YOUR TESTIMONY?

A. Yes. Schedule RCS-10 presents a comparison of the Company's proposed level of investment and expenses on a per customer basis between each large water district. Schedule RCS-11 presents a comparison of the Company's proposed level of investment and expenses on a per residential customer basis between each large water district. Schedule RCS-12 presents a comparison of the Company's proposed level of investment and expenses on a per commercial customer basis between each large water district. Schedule RCS-13 presents a comparison of the Company's proposed level of investment and expenses on a per customer basis between each small water district.[1] Schedule RCS-14 presents a comparison of the Company's proposed level of investment and expenses on a per customer basis between each wastewater district. Schedule RCS-15 presents wastewater utility districts, the number of customers in each district, the counties in which each district is located, and where each district fits into Staff's proposed wastewater utility rate zones. Schedule RCS-16 presents an excerpt of "Consolidated Water Rates: Issues and Practices in Single-Tariff Pricing", a report authored by the EPA and NARUC in September 1999. Schedule RCS-17 presents the adjusted cost of service study results for MAWC's St. Louis Metro District, as well as the Revenues at present and proposed rates. Schedule RCS-18 presents the adjusted class cost of service study results for the St. Louis Metro water district. Schedule RCS-19 presents selected non-

[1] In some instances, for the small water districts, the Company's proposed level of investment and expenses are combined (e.g., Maplewood, Riverside and Stonebridge).

confidential material that is referenced in my testimony and schedules. Schedule RCS-20 presents a reconciliation to Staff's revenue requirement summarizing OPC adjustments that were used as input to the cost of service study model.

I. RATE DESIGN

Q. WHAT IS THE RELATIVE IMPORTANCE OF CCOS STUDY RESULTS IN DESIGNING RATES?

A. A CCOS study provides the Commission with a general guide as to the just and reasonable rate for the provision of service that corresponds to costs. In addition, other factors are also relevant considerations when determining the appropriate rate for service, including the value of service, affordability, rate impact, and rate continuity, etc. The determination as to the manner in which the results of a cost of service study and all the other factors are balanced in setting rates can only be determined on a case-by-case basis.

Q. HOW DOES PUBLIC COUNSEL ACCOMMODATE OTHER FACTORS SUCH AS AFFORDABILITY, RATE IMPACT, AND RATE CONTINUITY IN THE RATE DESIGN RECOMMENDATIONS THAT IT MAKES TO THE COMMISSION?

A. Generally, Public Counsel has recommended that the Commission adopt a rate design that balances movement toward cost of service with rate impact and affordability considerations. In cases where the existing revenue structure within a district differs

greatly from the class cost of service or where the district revenues differ greatly from district costs, a movement toward costs should be made.

Q. PLEASE PROVIDE SOME BACKGROUND ON PAST COMMISSION DECISIONS RELATED TO MISSOURI AMERICAN'S DISTRICT COST RECOVERY.

A. With respect to shifts between districts, the Commission decided in its Report and Order in Case No. WR-2000-281 to move away from single tariff pricing (a single company-wide tariff that would apply to each class) toward district specific pricing. The Commission approved additional movement toward district specific pricing in cases WR-2003-0500, WR-2007-216, WR-2008-0311, and WR-2011-0337. Although in most of these cases parties have reached agreement and offered joint proposals on district cost and rate design, these proceedings have been extremely contentious in part due to a long history of alleged subsidies between and within districts.

Q. DOES THE OPC SUPPORT THE COMMISSION'S PAST EFFORTS TO MOVE THIS COMPANY TOWARD DISTRICT SPECIFIC PRICING?

A. Yes. The Commission's efforts have merit from both an economic and public policy perspective. Moving each district's revenue closer to its district specific cost can work to reduce market distortions by reducing incentives for making excessive district specific investments. The decision to move toward district specific cost recovery also better reflected the sentiment received in public comments in prior MAWC rate cases indicating

that districts generally are willing to pay their own cost of service.[2] The Commission has not mandated that district specific cost recovery be achieved in all cases or within a specific timeframe. This flexibility has allowed for deviation from strict district specific cost recovery when reasonably necessary based on consideration of all relevant factors.

Q. DO YOU RECOMMEND THAT THE COMMISSION CONTINUE THIS APPROACH TO DETERMINING INTER-DISTRICT COSTS?

A. For the most part, yes.

Q. DID YOU REVIEW THE COST OF SERVICE STUDIES FILED BY MAWC FOR THE INTRA-DISTRICT COSTS OF SERVING CUSTOMER CLASSES WITH DIFFERING DEMAND CHARACTERISTICS?

A. Yes. I reviewed the class cost of service studies filed by MAWC for eight water districts served by the Company. I will refer to these districts as Brunswick, Jefferson City, Joplin, Mexico, Platte County, St Joseph, Warrensburg, and St. Louis Metro, which includes the previously distinct service areas of St. Louis County and St. Charles. In some cases the districts for which MAWC did not file a CCOS study serve only one customer class making a study that is designed to determine rates based on differences in cost characteristics between customer classes unnecessary.

Q. WERE THERE ANY OTHER DISTRICTS FOR WHICH MAWC DID NOT PERFORM A COST OF SERVICE STUDY?

[2] We note that Public comment hearings in the current MAWC rate case are scheduled but have not yet occurred.

A. According to response OPC 5048:

> The small water districts for which no cost of service study was performed include Anna Meadows, Maplewood, Riverside, Stone Bridge, Saddlebrooke, Emerald Point, Ozark Mountain, Lake Tanneycomo, Rankin Acres, White Branch, Spring Valley, Lakewood Manor, and Tri States.

II. SINGLE TARIFF OR DISTRICT SPECIFIC PRICING

Q. DESCRIBE SINGLE TARIFF PRICING.

A. Single-tariff pricing ("STP") in the provision of water or sewer service is defined as the use of a unified rate structure for multiple water or sewer systems that are owned and operated by a single utility, but that may or may not be physically interconnected. Under single-tariff pricing, all customers of the utility pay the same rate for service, even though the individual systems providing service may vary in terms of operating characteristics and costs.

Q. DESCRIBE DISTRICT SPECIFIC PRICING.

A. District Specific Pricing ("DSP") is defined as a rate structure where direct costs associated with a specific district are recovered from that district. Under DSP, common corporate costs are allocated throughout the system to each district for recovery in rates.

Q. WHAT FACTORS SHOULD THE COMMISSION CONSIDER IN DETERMINING IF RATES ARE JUST AND REASONABLE?

A. The cost of service and other factors such as the value of service, affordability, rate impact, and rate continuity are relevant factors in determining just and reasonable rates. An inherent difficulty in achieving just and reasonable rates under a single tariff pricing structure is that costs may not be similar for water utilities characterized by distinct, diverse, and non-interconnected systems.

Q. WHAT ARE THE PRIMARY BENEFITS ASSOCIATED WITH STP?

A. From a consumer perspective, a primary benefit of STP is that STP may mitigate the rate shock associated with a significant capital improvement in one rate district by spreading recovery of those costs to more customers. STP may also help to keep rates affordable for customers in high cost districts.

Q. WHAT ARE THE PRIMARY DIFFICULTIES ASSOCIATED WITH STP?

A. An inherent difficulty in achieving just and reasonable rates under a single tariff pricing structure is that costs may not be similar for water utilities characterized by distinct, diverse, and non-interconnected systems. MAWC's districts have substantially different characteristics including source of supply, processing and treatment requirements, and customer density and other distribution characteristics. STP may also create market distortions by increasing incentives for making excessive district specific investments.

Q. ARE YOU AWARE OF OTHER ARGUMENTS FOR AND AGAINST SINGLE-TARIFF PRICING FOR REGULATED WATER UTILITIES?

A. Yes. In a 1999 report titled "Consolidated Water Rates: Issues and Practices in Single-Tariff Pricing", the United States Environmental Protection Agency in cooperation with the National Association of Regulatory Utility Commissioners summarized the results of a 1996 survey of state commission staffs identifying arguments in favor and against single-tariff pricing. The cover page and summary of the Report are included in this testimony as Schedule RCS-16.

Q. WHAT IS PUBLIC COUNSEL'S GENERAL POSITION REGARDING STP AND DSP?

A. In general, Public Counsel supports the continuation of pricing that is based on district specific costs in cases where costs among districts differ substantially. In addition to aligning rates with costs, DSP seems to better reflect the sentiment received in past public comments indicating that customers are willing to pay for their own district's cost of service but are concerned about subsidizing other districts.

Q. IS PUBLIC COUNSEL WILLING TO CONSIDER SOME LEVEL OF RATE CONSOLIDATION?

A. Yes. Public Counsel is willing to consider some level of rate consolidation, where the consolidation gives reasonable weight to cost considerations as well as other relevant factors. Based on my initial review, MAWC's proposal for STP goes too far in consolidating rates for districts that exhibit substantially different costs.

Q. WHAT CRITERIA AND GUIDELINES DOES MR. HERBERT STATE THAT HE WAS INSTRUCTED TO USE FOR RATE DESIGN?

A. At Q/A 20 and 21 of his direct testimony, Mr. Herbert indicates that the rate design guidelines MAWC management discussed with him were as follows:

> (1) Develop rate schedules for three rate zones as a step toward a consolidated tariff pricing rate schedule applicable to all water customers State-wide; (2) propose uniform customer charges to recover the pro forma customer costs by meter size; (3) design volumetric rates for Rate A and Rate J for each rate zone and for Rate B for two rate zones so that proposed revenues by customer classification move toward or approximate the indicated cost of service; (4) design private fire line and private hydrant rates for two rate zones to recover the indicated cost of service; and (5) develop consolidated tariff rates for all wastewater service areas except for Arnold which has its own rate schedule.

Q. DO YOU AGREE WITH THESE GUIDELINES?

A. No, not entirely. I generally agree with the guidelines of MAWC's proposed revenue by customer class toward the approximate indicated cost of service. However, I disagree with MAWC's proposed consolidation of district pricing into three rate zones and generally disagree with MAWC's proposal for moving to consolidated tariff pricing state-wide.

Q. WHAT IS CONSOLIDATED TARIFF PRICING?

A. Consolidated tariff pricing ("CTP") is the use of the same rates for the utility service rendered by a water company regardless of the customer's location.

Q. WHAT FACTORS DOES MR. HERBERT CITE AS SUPPORTING MAWC'S PROPOSED MOVE TOWARD CONSOLIDATED TARIFF PRICING?

A. In Q/A 30 of his direct testimony, Mr. Herbert cites these factors as supporting consolidated rates:

> Consolidated rates are based on the long-term rate stability which results from a consolidated tariff, the operating characteristics of the tariff groups, the equivalent services offered, the cost of service on a district specific basis, and the principle of gradualism.

Q. IS THE PRINCIPLE OF GRADUALISM BEING ACHIEVED BY MAWC'S PROPOSED RATE CONSOLIDATION?

A. Not for some districts and some rates, which would experience large changes.

Q. IS THE COST OF SERVICE THE SAME FOR ALL OF THE SPECIFIC DISTRICTS THAT MAWC IS PROPOSING TO CONSOLIDATE?

A. No. For a number of the districts that MAWC proposes to consolidate, the cost of service appears to vary substantially.

Q. ARE THE OPERATING CHARACTERISTICS THE SAME FOR ALL OF THE DISTRICTS THAT MAWC PROPOSES TO CONSOLIDATE?

A. No. Operating characteristics, such as the source of water, the type of treatment, and the investment and operating costs per customer, can vary significantly between the districts.

Q. AT Q/A 34 OF HIS DIRECT TESTIMONY, MR. HERBERT COMPARES THE WATER UTILITY INDUSTRY TO THE ELECTRIC UTILITY INDUSTRY. PLEASE RESPOND.

A. Mr. Herbert states that:

> Charging one group of customers higher rates because they may be served by a newer plant whose original cost exceeds that of other plants (as a result of inflation) is not logical. The concepts previously discussed outweigh this consideration and justify the goal of moving toward a consolidated tariff. The electric industry reflects such concepts when it serves customers in geographically dispersed areas. A kilowatt-hour delivered in one area has the same price as a kilowatt-hour delivered in another area despite the fact that cost of service studies could be performed to identify differences in the cost of providing service to customer classes in different regions.

However, water and sewer utility service are distinguishable from electric utility service in a number of important respects. The electric system is interconnected whereas MAWC's water and sewer districts in Missouri are separated geographically and are generally not interconnected with each other. The treatment plants serving one district generally are not interconnected with and cannot serve other districts.

Second, a kWh of electricity delivered to a customer located anywhere in the state is essentially equivalent to a kWh of electricity delivered to a customer located in a different geographical location within the state. However, the same is not the case with water utility service. The sources of the water vary from wells to rivers. Water produced in St. Joseph or Joplin is not delivered to MAWC customers in St. Louis County, yet

MAWC is proposing to consolidate the utility rates in those districts (along with others) into a new rate zone one.

It is different for geographically separated non-interconnected water utility districts than for electric utility service, where systems are interconnected and electricity produced in one part of the state (or even outside of the state) can be delivered over long distances using the high voltage interconnected electric transmission systems. Thus, there are important differences between electric utility service in the one hand, and water and sewer utility service on the other. The fact that electric utilities may use consolidated tariff pricing is not a sufficient reason to impose CTP upon geographically separated, non-interconnected water utility districts where the source of water, operating characteristics, and cost of service between districts can vary significantly.

Q. IS ANOTHER WITNESS FOR OPC ALSO ADDRESSING MAWC'S REQUEST FOR CONSOLIDATION OF UTILITY DISTRICTS INTO RATE ZONES?

A. Yes. OPC witness Geoff Marke is addressing economic aspects of district specific tariff pricing for the water and sewer utility service provided by MAWC.

Q. HOW IS THE REMAINDER OF YOUR TESTIMONY ON DISTRICT SPECIFIC TESTIMONY ORGANIZED?

A. In the following sections of my testimony, I review each water utility district that MAWC is proposing to consolidate into each rate zone. I discuss the source of water and the cost of service, and the present and proposed rates that MAWC shows for each water district.

I present comparable per-customer information by district where available. I describe the analysis and conclusions concerning whether MAWC's proposed consolidated tariffs shall be adopted. Finally, I address MAWC's proposal to use consolidated tariff pricing for sewer utility districts.

Q. WHAT WATER DISTRICTS WERE COMBINED FOR RATE PURPOSES IN MAWC'S LAST RATE CASE?

A. The Order dated March 7, 2012 in MAWC's last rate case, WR-2011-0337, at pages 3-4, indicates that the following MAWC water districts were combined for rate purposes:

> With regard to the water districts, the signatories propose to combine Warren County with the St. Louis Metro District (St. Louis Metro) and to combine Loma Linda with the Joplin District (Joplin). The signatories further propose to maintain the following individual Districts: Mexico, Jefferson City, Warrensburg, Platte County, and St. Joseph. District 8, in their proposal, will consist of the following water systems: Brunswick, Lakewood Manor, Spring Valley, Ozark Mountain, Lake Taneycomo, White Branch, Rankin Acres, Riverside Estates, Roark and Lake Carmel/Maplewood. The systems included in District 8 will be grouped into four groups, with one group that consists of systems that are charged a flat rate (i.e. no commodity charge) while the other three groups are based on similar commodity charges within each group. Appendix A to the Agreement provides the rates and charges for each District.

Appendix A to the Settlement Agreement in Case No. WR-2011-0337 lists the following rate zones and districts:

Water Districts
Joplin
Jefferson City
Mexico
Platte County
St. Joseph
Saint Louis Metro - Rates A, B, D, J, K
Warrensburg
District 8
Brunswick
Spring Valley - Christian County
Lakewood Manor - Barry County
Ozark Mountain - Stone and Barry County
Lake Taneycomo Acres - Taney County
Maplewood - Lake Carmel
Riverside Estates - Taney County
Roark - Stone and Taney County
Warsaw - Whitebranch
Republic - Rankin Acres

Q. WHAT WATER DISTRICT CONSOLIDATION DOES MAWC PROPOSE IN THE CURRENT RATE CASE?

A. As described in the testimony of MAWC witness Herbert, the Company proposes consolidation of water districts into three rate zones, as follows:

Rate Zone 1	Rate Zone 2	Rate Zone 3
St. Louis Metro	Mexico	Brunswick
St. Joseph's	Jefferson City	Ozark Mountain
Joplin	Platte County	Lake Tanneycomo
Warrensburg		Rankin Acres
Maplewood		White Branch
Stonebridge		Spring Valley
Saddlebrooke		Lakewood Manor
Emerald Point		
Anna Meadows		
Tri-States		

A. Company Proposed Water Utility Rate Zone 1

Q. WHAT COST OF SERVICE AND REVENUE AT CURRENT AND PROPOSED RATES DOES MAWC PROPOSE FOR RATE ZONE 1?

A. For rate zone 1, MAWC shows the following cost of service and revenue at current and proposed rates as follows:

Line No.	Customer Classification	St. Louis Metro*	St. Joseph	Joplin	Warrensburg	Maplewood Riverside, Stonebridge, Saddlebrooke, Emerald Pointe	Anna Meadows	Tri States	Total
	(1)	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
	Rate Zone 1								
1	Residential		$ 496,100	$ (323,875)	$ 121,163				$ 293,388
2	Commercial		$ 309,861	$ 323,566	$ 140,064				$ 773,492
3	Industrial		$ 175,585	$ 447,223	$ 22,743				$ 645,550
4	Public Authority		$ 143,685	$ 48,209	$ 96,725				$ 288,619
5	Total Rate A	$ 1,157,482	$ 1,125,231	$ 495,123	$ 380,696	$ 207,384	$ (6,866)	$ 466,100	$ 3,825,149
6	Sales for Resale - Rate B	$ 716,558	$ (828,740)	$ (377,036)	$ 14,337				$ (474,881)
7	Rate J - Large Users	$ 1,419,088	$ (1,529,387)	$ (1,175,834)	$ (49,158)				$ (1,335,291)
8	Private Fire Service	$ (299,958)	$ (64,397)	$ 211,492	$ (26,678)				$ (179,540)
9	Public Fire Service	$ -	$ -	$ -	$ -				$ -
10	Total Sales	$ 2,993,169	$ (1,297,293)	$ (846,254)	$ 319,198	$ 207,384	$ (6,866)	$ 466,100	$ 1,835,438
11	Other Revenues	$ -	$ -	$ -	$ -	$ -		$ -	$ -
12	Total	$ 2,993,169	$ (1,297,293)	$ (846,254)	$ 319,198	$ 207,384	$ (6,866)	$ 466,100	$ 1,835,438

Notes and Source
Amounts calculated from MAWC's Cost of Service Study that was prepared by Company witness Paul R. Herbert

* For the St. Louis Metro district, Rate A is shown in total and not broken out between residential, commercial, industrial and public authority customer classifications

St. Louis Metro District

Q. WHAT SOURCES OF WATER ARE USED BY MAWC TO SUPPLY THE ST. LOUIS METRO DISTRICT?

A. In MAWC's 2014 Annual Water Quality Report, MAWC indicates that the sources of water to supply the St. Louis Metro District are 80% surface water from the Missouri River and nearly 20% from the Meramec River. Occasionally a small quantity of water is

purchased from the City of St. Louis Water Division, which uses the Missouri River as a source.

Q. WHAT COST OF SERVICE AND REVENUE AT CURRENT AND PROPOSED RATES DOES MAWC PROPOSE FOR THE ST. LOUIS METRO DISTRICT?

A. For the St. Louis Metro District, MAWC's proposed cost of service and revenue at current and proposed rates from mopsc w0218_attachment 8 - sch prh-1 cos-slm.xlsx of the Company's COSS workpapers are summarized below:

ST. LOUIS METRO DISTRICT

COMPARISON OF COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES
FOR THE TEST YEAR ENDED DECEMBER 31, 2014

Customer Classification	Cost of Service Amount (Schedule B)	Cost of Service Percent	Revenues, Present Rates Amount	Revenues, Present Rates Percent	Revenues, Proposed Rates Consolidated Pricing Amount	Revenues, Proposed Rates Consolidated Pricing Percent	Proposed Increase Amount	Proposed Increase Percent Increase
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Rate A - Res/Com/Ind/OPA	$ 209,097,492	94.2%	$ 166,637,144	93.4%	$ 210,254,974	93.6%	$ 43,617,830	26.2%
Rate B - Sales for Resale	2,703,797	1.2%	2,892,461	1.6%	3,420,355	1.5%	527,894	18.3%
Rate J - Manufacturing	7,000,296	3.2%	6,571,486	3.7%	8,419,384	3.7%	1,847,898	28.1%
Rate F - Private Fire	3,096,131	1.4%	2,312,409	1.3%	2,796,173	1.2%	483,764	20.9%
Rate E - Public Fire	-	0.0%	-	0.0%	-	0.0%	-	0.0%
Total Sales	221,897,717	100.0%	178,413,499	100.0%	224,890,886	100.0%	46,477,387	26.1%
Other Revenues*	6,350,401		6,350,400		$6,350,401		0.33	0.0%
Total	$ 228,248,118		$ 184,763,899		$ 231,241,287		$ 46,477,388	25.2%

* Includes Rate G and H Contract Sales.
** Includes revenue for Public Fire.

Q. IF THE COMPANY'S PROPOSED RATE FOR THE ST. LOUIS METRO DISTRICT WERE TO BE APPROVED, WOULD CUSTOMERS EXPERIENCE RATE INCREASES IN EXCESS OF 20 PERCENT?

A. Yes. The Rate A - Res/Com/Ind/OPA rate class will have an increase of 26.2%, the Rate B - Manufacturing rate class will have an increase of 28.1%, and the Rate F - Private Fire

rate class will have an increase of 23.8%. As summarized below, customers in the St. Louis Metro District would experience increases ranging from 20.3% to 124.8% if MAWC's proposed rates were to be approved:

St. Louis Metro							
	RATE A - 5/8" METERS				**RATE A - 6" METERS**		
	3,000 Gallons/Month				**25,000 Gallons/Month**		
30	Present Rate	$	24.75	250	Present Rate	$	265.36
30	Proposed - CTP		29.81	250	Proposed - CTP		577.61
	Percentage Change		20.4%		Percentage Change		117.7%
	5,000 Gallons/Month				**50,000 Gallons/Month**		
50	Present Rate	$	31.64	500	Present Rate	$	351.48
50	Proposed - CTP		38.08	500	Proposed - CTP		681.02
	Percentage Change		20.4%		Percentage Change		93.8%
	8,000 Gallons/Month				**100,000 Gallons/Month**		
80	Present Rate	$	41.98	1000	Present Rate	$	523.71
80	Proposed - CTP		50.49	1000	Proposed - CTP		887.83
	Percentage Change		20.3%		Percentage Change		69.5%
	RATE A - 1" METERS				**RATE J - 6" METERS**		
	5,000 Gallons/Month				**45,000 Gallons/Month**		
50	Present Rate	$	36.72	450.00	Present Rate	$	249.00
50	Proposed - CTP		52.28	450.00	Proposed - CTP		559.70
	Percentage Change		42.4%		Percentage Change		124.8%
	15,000 Gallons/Month			20,000.00	**2,000,000 Gallons/Month**		
150	Present Rate	$	71.17	20,000.00	Present Rate	$	3,279.64
150	Proposed - CTP		93.64	20,000.00	Proposed - CTP		4,274.20
	Percentage Change		31.6%		Percentage Change		30.3%
	30,000 Gallons/Month			40,000.00	**4,000,000 Gallons/Month**		
300	Present Rate	$	122.84	40,000.00	Present Rate	$	6,380.04
300	Proposed - CTP		155.69	40,000.00	Proposed - CTP		8,074.20
	Percentage Change		26.7%		Percentage Change		26.6%
	RATE A - 2" METERS						
	5,000 Gallons/Month						
50	Present Rate	$	55.17				
50	Proposed - CTP		103.58				
	Percentage Change		87.7%				
	15,000 Gallons/Month						
150	Present Rate	$	89.62				
150	Proposed - CTP		144.94				
	Percentage Change		61.7%				
	30,000 Gallons/Month						
300	Present Rate	$	141.29				
300	Proposed - CTP		206.99				
	Percentage Change		46.5%				

Q. WOULD THE REVENUES AT MAWC'S PROPOSED RATES BE SUFFICIENT TO COVER THE COST OF SERVICE THAT MAWC HAS CALCULATED FOR THE ST. LOUIS METRO DISTRICT?

A. Yes, the total revenues at MAWC's proposed rate would be sufficient to cover the cost of service that MAWC calculated for the St. Louis Metro District.

St. Louis Metro District		
Revenues at MAWC's proposed rates	$	231,241,287
Cost of Service	$	228,248,118
Sufficiency (Deficiency)	$	2,993,169

Joplin District

Q. WHAT SOURCES OF WATER ARE USED BY MAWC TO SUPPLY THE JOPLIN DISTRICT?

A. In MAWC's 2014 Annual Water Quality Report, MAWC indicates that the sources of water to supply the Joplin District are a combination of surface water and groundwater. The primary source is Shoal Creek, supplemented by a system of deep wells.

Q. WHAT COST OF SERVICE AND REVENUE AT CURRENT AND PROPOSED RATES DOES MAWC PROPOSE FOR THE JOPLIN DISTRICT?

A. For the Joplin District, MAWC's proposed cost of service and revenue at current and proposed rates from mopsc w0218_attachment 4 - sch prh-1 cos-jop.xlsx of the Company's COSS workpapers are summarized below:

MISSOURI-AMERICAN WATER COMPANY
JOPLIN DISTRICT

COMPARISON OF COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES
FOR THE TEST YEAR ENDED DECEMBER 31, 2014

Customer Classification	Cost of Service Amount (Schedule B)	Cost of Service Percent	Revenues, Present Rates Amount	Revenues, Present Rates Percent	Revenues, Proposed Rates Consolidated Pricing Amount	Revenues, Proposed Rates Consolidated Pricing Percent	Proposed Increase Amount	Proposed Increase Percent Increase
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Residential	$ 9,931,121	48.8%	$ 9,969,677	52.8%	$ 9,607,246	49.3%	$ (362,431)	-3.6%
Commercial	3,529,596	17.4%	3,553,293	18.8%	3,853,162	19.8%	299,869	8.4%
Industrial	1,756,485	8.6%	1,047,017	5.6%	2,203,708	11.3%	1,156,691	110.5%
Public Authority	358,845	1.8%	371,574	2.0%	407,054	2.1%	35,480	9.5%
Total Rate A	15,576,047	76.6%	14,941,561	79.2%	16,071,170	82.5%	1,129,609	7.6%
Sales for Resale - Rate B	1,026,902	5.1%	658,745	3.5%	649,866	3.3%	(8,879)	-1.3%
Rate J - Large Users	3,273,200	16.1%	2,428,659	12.9%	2,097,366	10.8%	(331,293)	-13.6%
Private Fire Service	445,340	2.2%	831,879	4.4%	656,832	3.4%	(175,047)	-21.0%
Public Fire Service	-	0.0%	-	0.0%	-	0.0%	-	-
Total Sales	20,321,488	100.0%	18,860,844	100.0%	19,475,234	100.0%	614,390	3.3%
Other Revenues	$ 265,146		$ 265,146		$ 265,146		-	0.0%
Total	$ 20,586,634		$ 19,125,990		$ 19,740,380		$ 614,390	3.2%

Q. IF THE COMPANY'S PROPOSED RATE FOR THE JOPLIN DISTRICT WERE TO BE APPROVED, WOULD SOME OF THE CUSTOMERS EXPERIENCE RATE INCREASES IN EXCESS OF 20 PERCENT?

A. Yes, it appears that the Industrial rate class would have an increase of approximately 110%.

Q. WOULD THE REVENUES AT MAWC'S PROPOSED RATES BE SUFFICIENT TO COVER THE COST OF SERVICE THAT MAWC HAS CALCULATED FOR THE JOPLIN DISTRICT?

A. No, the revenues at MAWC's proposed rates would be deficient by approximately $846,254 in recovering MAWC's calculated cost of service.

Joplin District		
Revenues at MAWC's proposed rates	$	19,740,380
Cost of Service	$	20,586,634
Sufficiency (Deficiency)	$	(846,254)

Failure of MAWC's proposed rates to cover MAWC's calculated cost of service for this district raises concerns about cross-subsidization.

St. Joseph District

Q. WHAT SOURCES OF WATER ARE USED BY MAWC TO SUPPLY THE ST. JOSEPH DISTRICT?

A. In MAWC's 2014 Annual Water Quality Report, MAWC indicates that the sources of water to supply the St. Joseph District are groundwater taken from numerous vertical wells and a horizontal collector well in the Missouri River alluvium.

Q. WHAT COST OF SERVICE AND REVENUE AT CURRENT AND PROPOSED RATES DOES MAWC PROPOSE FOR THE ST. JOSEPH DISTRICT?

A. For the St. Joseph District, MAWC's proposed cost of service and revenue at current and proposed rates from mopsc w0218_attachment 7 - sch prh-1 cos-sjo.xlsx of the Company's COSS workpapers are summarized below:

MISSOURI-AMERICAN WATER COMPANY
ST. JOSEPH DISTRICT

COMPARISON OF COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES
FOR THE TEST YEAR ENDED DECEMBER 31, 2014

Customer Classification	Cost of Service		Revenues, Present Rates		Revenues, Proposed Rates Consolidated Pricing		Proposed Increase	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent Increase
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Residential	$ 12,055,110	51.9%	$ 11,319,736	51.0%	$ 12,551,210	57.2%	$ 1,231,474	10.9%
Commercial	3,170,294	13.6%	3,345,893	15.1%	3,480,155	15.8%	134,262	4.0%
Industrial	841,937	3.6%	769,589	3.5%	1,017,522	4.6%	247,933	32.2%
Public Authority	466,501	2.0%	577,320	2.6%	610,186	2.8%	32,866	5.7%
Total - Rate A	16,533,842	71.1%	16,012,537	72.2%	17,659,073	80.4%	1,646,536	10.3%
Sales for Resale	2,576,896	11.1%	2,225,269	10.0%	1,748,156	8.0%	(477,113)	-21.4%
Rate J - Large Users	3,820,936	16.4%	3,621,157	16.3%	2,291,549	10.4%	(1,329,608)	-36.7%
Private Fire Service	331,624	1.4%	322,003	1.5%	267,227	1.2%	(54,776)	-17.0%
Public Fire Service	-	0.0%	-	0.0%	-	0.0%	-	-
Total Sales	23,263,298	100.0%	22,180,966	100.0%	21,966,005	100.0%	(214,961)	-1.0%
Other Revenues*	$ 694,373		$ 687,362		$ 694,373		7,011	1.0%
Total	$ 23,957,671		$ 22,868,328		$ 22,660,378		$ (207,950)	-0.9%

* Includes Contract Sales

Q. IF THE COMPANY'S PROPOSED RATE FOR THE ST. JOSEPH DISTRICT WERE TO BE APPROVED, WOULD CUSTOMERS EXPERIENCE RATE INCREASES IN EXCESS OF 20 PERCENT?

A. Yes. The Industrial rate class will have an increase of 32.2%, as shown above. As summarized below, customers in the St. Joseph District would experience changes in their expected water utility bills ranging from -50.8% to 92.7% if MAWC's proposed rates were to be approved:

	St. Joseph						
	RATE A - 5/8" METERS				**RATE A - 6" METERS**		
	3,000 Gallons/Month				**25,000 Gallons/Month**		
30	Present Rate	$	25.38	250	Present Rate	$	413.44
30	Proposed - CTP		29.81	250	Proposed - CTP		577.61
	Percentage Change		17.5%		Percentage Change		39.7%
	5,000 Gallons/Month				**50,000 Gallons/Month**		
50	Present Rate	$	35.21	500	Present Rate	$	536.49
50	Proposed - CTP		38.08	500	Proposed - CTP		681.02
	Percentage Change		8.2%		Percentage Change		26.9%
	8,000 Gallons/Month				**100,000 Gallons/Month**		
80	Present Rate	$	49.94	1000	Present Rate	$	782.57
80	Proposed - CTP		50.49	1000	Proposed - CTP		887.83
	Percentage Change		1.1%		Percentage Change		13.5%
	RATE A - 1" METERS				**RATE J - 6" METERS**		
	5,000 Gallons/Month				**45,000 Gallons/Month**		
50	Present Rate	$	43.88	450.00	Present Rate	$	290.40
50	Proposed - CTP		52.28	450.00	Proposed - CTP		559.70
	Percentage Change		19.1%		Percentage Change		92.7%
	15,000 Gallons/Month			20,000.00	**2,000,000 Gallons/Month**		
150	Present Rate	$	92.99	20,000.00	Present Rate	$	8,691.00
150	Proposed - CTP		93.64	20,000.00	Proposed - CTP		4,274.20
	Percentage Change		0.7%		Percentage Change		-50.8%
	30,000 Gallons/Month			40,000.00	**4,000,000 Gallons/Month**		
300	Present Rate	$	166.67	40,000.00	Present Rate	$	13,567.00
300	Proposed - CTP		155.69	40,000.00	Proposed - CTP		8,074.20
	Percentage Change		-6.6%		Percentage Change		-40.5%
	RATE A - 2" METERS						
	5,000 Gallons/Month						
50	Present Rate	$	75.34				
50	Proposed - CTP		103.58				
	Percentage Change		37.5%				
	15,000 Gallons/Month						
150	Present Rate	$	124.56				
150	Proposed - CTP		144.94				
	Percentage Change		16.4%				
	30,000 Gallons/Month						
300	Present Rate	$	198.38				
300	Proposed - CTP		206.99				
	Percentage Change		4.3%				

Q. WOULD THE REVENUES AT MAWC'S PROPOSED RATES BE SUFFICIENT TO COVER THE COST OF SERVICE THAT MAWC HAS CALCULTED FOR THE ST. JOSEPH DISTRICT?

A. No, the revenues at MAWC's proposed rates would be deficient by approximately $1,297,293.

St. Joseph District		
Revenues at MAWC's proposed rates	$	22,660,378
Cost of Service	$	23,957,671
Sufficiency (Deficiency)	$	(1,297,293)

Warrensburg District

Q. WHAT SOURCES OF WATER ARE USED BY MAWC TO SUPPLY THE WARRENSBURG DISTRICT?

A. In MAWC's 2014 Annual Water Quality Report, MAWC indicates that the source of water to supply the Warrensburg District is groundwater drawn from aquifers through deep wells.

Q. WHAT COST OF SERVICE AND REVENUE AT CURRENT AND PROPOSED RATES DOES MAWC PROPOSE FOR THE WARRENSBURG DISTRICT?

A. For the Warrensburg District, MAWC's proposed cost of service and revenue at current and proposed rates from mopsc w0218_attachment 10 - sch prh-1 cos-war.xlsx of the Company's COSS workpapers are summarized below:

MISSOURI-AMERICAN WATER COMPANY
WARRENSBURG DISTRICT

COMPARISON OF COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES
FOR THE TEST YEAR ENDED DECEMBER 31, 2014

Customer Classification	Cost of Service Amount (Schedule B)	Cost of Service Percent	Revenues, Present Rates Amount	Revenues, Present Rates Percent	Revenues, Proposed Rates Consolidated Pricing Amount	Revenues, Proposed Rates Consolidated Pricing Percent	Proposed Increase Amount	Proposed Increase Percent Increase
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Residential	$ 2,709,324	63.3%	$ 2,185,801	56.2%	$ 2,830,487	61.5%	$ 644,686	29.5%
Commercial	656,945	15.3%	687,595	17.7%	797,009	17.3%	109,414	15.9%
Industrial	44,527	1.0%	49,045	1.3%	67,270	1.5%	18,225	37.2%
Public Authority	346,912	8.1%	358,281	9.2%	443,637	9.6%	85,356	23.8%
Total - Rate A	3,757,707	87.7%	3,280,722	84.4%	4,138,403	89.9%	857,681	26.1%
Sales for Resale	189,325	4.4%	273,463	7.0%	203,662	4.4%	(69,801)	-25.5%
Rate J - Large Users	202,637	4.7%	204,977	5.3%	153,479	3.3%	(51,498)	-25.1%
Private Fire Service	138,127	3.2%	128,890	3.3%	111,449	2.4%	(17,441)	-13.5%
Public Fire Service	-	0.0%	-	0.0%	-	0.0%	-	-
Total Sales	4,287,796	100.0%	3,888,052	100.0%	4,606,993	100.0%	718,941	18.5%
Other Revenues	84,414		$84,414		$84,414		-	0.0%
Total	$ 4,372,210		$ 3,972,466		$ 4,691,407		$ 718,941	18.1%

Q. IF THE COMPANY'S PROPOSED RATE FOR THE WARRENSBURG DISTRICT WERE TO BE APPROVED, WOULD CUSTOMERS EXPERIENCE RATE INCREASES IN EXCESS OF 20 PERCENT?

A. Yes. The Residential rate class will have an increase of 29.5%, the Industrial rate class will have an increase of 37.2%, and the Public Authority rate class will have an increase of 23.8%. As summarized below, customers in the Warrensburg District would experience changes in their expected water utility bill ranging from -17.5% to 75.1% if MAWC's proposed rates were to be approved:

Warrensburg							
	RATE A - 5/8" METERS				**RATE A - 6" METERS**		
	3,000 Gallons/Month				**25,000 Gallons/Month**		
30	Present Rate	$	22.48	250	Present Rate	$	425.31
30	Proposed - CTP		29.81	250	Proposed - CTP		577.61
	Percentage Change		32.6%		Percentage Change		35.8%
	5,000 Gallons/Month				**50,000 Gallons/Month**		
50	Present Rate	$	29.65	500	Present Rate	$	531.06
50	Proposed - CTP		38.08	500	Proposed - CTP		681.02
	Percentage Change		28.4%		Percentage Change		28.2%
	8,000 Gallons/Month				**100,000 Gallons/Month**		
80	Present Rate	$	40.40	1000	Present Rate	$	742.56
80	Proposed - CTP		50.49	1000	Proposed - CTP		887.83
	Percentage Change		25.0%		Percentage Change		19.6%
	RATE A - 1" METERS				**RATE J - 6" METERS**		
	5,000 Gallons/Month				**45,000 Gallons/Month**		
50	Present Rate	$	39.20	450.00	Present Rate	$	319.56
50	Proposed - CTP		52.28	450.00	Proposed - CTP		559.70
	Percentage Change		33.4%		Percentage Change		75.1%
	15,000 Gallons/Month			20,000.00	**2,000,000 Gallons/Month**		
150	Present Rate	$	75.03	20,000.00	Present Rate	$	5,180.00
150	Proposed - CTP		93.64	20,000.00	Proposed - CTP		4,274.20
	Percentage Change		24.8%		Percentage Change		-17.5%
	30,000 Gallons/Month			40,000.00	**4,000,000 Gallons/Month**		
300	Present Rate	$	128.78	40,000.00	Present Rate	$	8,789.00
300	Proposed - CTP		155.69	40,000.00	Proposed - CTP		8,074.20
	Percentage Change		20.9%		Percentage Change		-8.1%
	RATE A - 2" METERS						
	5,000 Gallons/Month						
50	Present Rate	$	76.99				
50	Proposed - CTP		103.58				
	Percentage Change		34.5%				
	15,000 Gallons/Month						
150	Present Rate	$	119.29				
150	Proposed - CTP		144.94				
	Percentage Change		21.5%				
	30,000 Gallons/Month						
300	Present Rate	$	182.74				
300	Proposed - CTP		206.99				
	Percentage Change		13.3%				

Q. WOULD THE REVENUES AT MAWC'S PROPOSED RATES BE SUFFICIENT TO COVER THE COST OF SERVICE THAT MAWC HAS CALCULATED FOR THE WARRENSBURG DISTRICT?

A. Yes, the revenues at MAWC's proposed rate would be sufficient to cover the cost of service that MAWC calculated for the Warrensburg District.

Warrensburg District		
Revenues at MAWC's proposed rates	$	4,691,407
Cost of Service	$	4,372,210
Sufficiency (Deficiency)	$	319,198

Maplewood, Riverside, Stonebridge, and Saddlebrooke and Emerald Pointe Districts

Q. WHAT SOURCES OF WATER ARE USED BY MAWC TO SUPPLY THE MAPLEWOOD, RIVERSIDE, STONEBRIDGE, AND SADDLEBROOKE ("MRSS") AND EMERALD POINTE DISTRICTS?

A. In MAWC's 2014 Annual Water Quality Report, MAWC indicates that the source of water to supply the MRSS and Emerald Pointe Districts is groundwater wells.

Q. WHAT COST OF SERVICE AND REVENUE AT CURRENT AND PROPOSED RATES DOES MAWC PROPOSE FOR THE MRSS AND EMERALD POINTE DISTRICTS?

A. For the MRSS and Emerald Pointe Districts, MAWC's proposed cost of service and revenue at current and proposed rates from mopsc w0218_attachment 9 - sch prh-1 cos-small districts.xlsx of the Company's COSS workpapers are summarized below:

MISSOURI-AMERICAN WATER COMPANY
MAPLEWOOD/RIVERSIDE/STONEBRIDGE/SADDLEBROOKE, EMERALD POINTE WATER

COMPARISON OF COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES
FOR THE TEST YEAR ENDED DECEMBER 31, 2014

Customer Classification	Cost of Service Amount (Schedule B)	Cost of Service Percent	Revenues, Present Rates Amount	Revenues, Present Rates Percent	Revenues, Proposed Rates District Specific Pricing Amount	Revenues, Proposed Rates District Specific Pricing Percent	Proposed Increase Amount	Proposed Increase Percent Increase
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Rate A, Rate F	$ 772,347	100.0%	$ 749,680	100.0%	$ 979,731	100.0%	$ 230,051	30.7%
Total Sales	772,347	100.0%	749,680	100.0%	979,731	100.0%	230,051	30.7%
Other Revenues	11,782		11,782		11,782		-	0.0%
Total	$ 784,129		$ 761,462		$ 991,513		$ 230,051	30.2%

As shown above, the Rate A and Rate F will have an increase of 30.7%.

Q. IF THE COMPANY'S PROPOSED RATES FOR THE MRSS DISTRICT WERE TO BE APPROVED, WOULD CUSTOMERS EXPERIENCE RATE INCREASES IN EXCESS OF 20 PERCENT?

A. Yes. As summarized below, customers in the MRSS District would experience changes in their expected water utility bills ranging from -9.4% to 42.1% if MAWC's proposed rates were to be approved:

MRSS							
	RATE A - 5/8" METERS				**RATE A - 2" METERS**		
	3,000 Gallons/Month				**5,000 Gallons/Month**		
30	Present Rate		$ 29.17	50	Present Rate		$ 112.86
30	Proposed - CTP		29.81	50	Proposed - CTP		103.58
	Percentage Change		2.2%		Percentage Change		-8.2%
	5,000 Gallons/Month				**15,000 Gallons/Month**		
50	Present Rate		$ 33.91	150	Present Rate		$ 136.56
50	Proposed - CTP		38.08	150	Proposed - CTP		144.94
	Percentage Change		12.3%		Percentage Change		6.1%
	8,000 Gallons/Month				**30,000 Gallons/Month**		
80	Present Rate		$ 41.02	300	Present Rate		$ 172.11
80	Proposed - CTP		50.49	300	Proposed - CTP		206.99
	Percentage Change		23.1%		Percentage Change		20.3%
	RATE A - 1" METERS				**RATE A - 6" METERS**		
	5,000 Gallons/Month				**25,000 Gallons/Month**		
50	Present Rate		$ 50.33	250	Present Rate		$ 637.39
50	Proposed - CTP		52.28	250	Proposed - CTP		577.61
	Percentage Change		3.9%		Percentage Change		-9.4%
	15,000 Gallons/Month				**50,000 Gallons/Month**		
150	Present Rate		$ 74.03	500	Present Rate		$ 696.64
150	Proposed - CTP		93.64	500	Proposed - CTP		681.02
	Percentage Change		26.5%		Percentage Change		-2.2%
	30,000 Gallons/Month				**100,000 Gallons/Month**		
300	Present Rate		$ 109.58	1000	Present Rate		$ 815.14
300	Proposed - CTP		155.69	1000	Proposed - CTP		887.83
	Percentage Change		42.1%		Percentage Change		8.9%

Q. IF THE COMPANY'S PROPOSED RATES FOR THE EMERALD POINTE DISTRICT WERE TO BE APPROVED, WOULD CUSTOMERS EXPERIENCE RATE INCREASES IN EXCESS OF 20 PERCENT?

A. Yes. As summarized below, customers in the Emerald Pointe District would experience increases ranging from 26.2% to 232.5% if MAWC's proposed rates were to be approved:

Emerald Pointe							
	RATE A - 5/8" METERS				**RATE A - 2" METERS**		
	3,000 Gallons/Month				**5,000 Gallons/Month**		
30	Present Rate		$ 13.20	50	Present Rate		$ 82.08
30	Proposed - CTP		29.81	50	Proposed - CTP		103.58
	Percentage Change		125.8%		Percentage Change		26.2%
	5,000 Gallons/Month				**15,000 Gallons/Month**		
50	Present Rate		$ 14.62	150	Present Rate		$ 89.18
50	Proposed - CTP		38.08	150	Proposed - CTP		144.94
	Percentage Change		160.5%		Percentage Change		62.5%
	8,000 Gallons/Month				**30,000 Gallons/Month**		
80	Present Rate		$ 16.75	300	Present Rate		$ 99.83
80	Proposed - CTP		50.49	300	Proposed - CTP		206.99
	Percentage Change		201.4%		Percentage Change		107.3%
	RATE A - 1" METERS						
	5,000 Gallons/Month						
50	Present Rate		$ 29.07				
50	Proposed - CTP		52.28				
	Percentage Change		79.8%				
	15,000 Gallons/Month						
150	Present Rate		$ 36.17				
150	Proposed - CTP		93.64				
	Percentage Change		158.9%				
	30,000 Gallons/Month						
300	Present Rate		$ 46.82				
300	Proposed - CTP		155.69				
	Percentage Change		232.5%				

Q. WOULD THE REVENUES AT MAWC'S PROPOSED RATES BE SUFFICIENT TO COVER THE COST OF SERVICE THAT MAWC HAS CALCULATED FOR THE EMERALD POINTE AND MRSS DISTRICTS?

A. Yes, the revenues at MAWC's proposed rate would be sufficient to cover the cost of service that MAWC calculated for the Emerald Pointe and MRSS Districts.

MRSS and Emerald Pointe Districts		
Revenues at MAWC's proposed rates	$	991,513
Cost of Service	$	784,129
Sufficiency (Deficiency)	$	207,384

Anna Meadows District

Q. WHAT SOURCES OF WATER ARE USED BY MAWC TO SUPPLY THE ANNA MEADOWS DISTRICT?

A. MAWC's 2014 Annual Water Quality Report stated that Anna Meadows was acquired by MAWC in December 2014. The system was incorporated into Missouri American Water's East Central Missouri Operation, which serves approximately 49,000 customers in St. Charles, Warren and Jefferson Counties, Jefferson City and Mexico. In MAWC's Basic Water Quality Report, MAWC indicates that the source of water to supply the Anna Meadows District is a ground water source.

Q. WHAT COST OF SERVICE AND REVENUE AT CURRENT AND PROPOSED RATES DOES MAWC PROPOSE FOR THE ANNA MEADOWS DISTRICT?

A. For the Anna Meadows District, MAWC's proposed cost of service and revenue at current and proposed rates from mopsc w0218_attachment 9 - sch prh-1 cos-small districts.xlsx of the Company's COSS workpapers are summarized below:

MISSOURI-AMERICAN WATER COMPANY
ANNA MEADOWS WATER

COMPARISON OF COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES
FOR THE TEST YEAR ENDED DECEMBER 31, 2014

Customer Classification	Cost of Service Amount (Schedule B)	Cost of Service Percent	Revenues, Present Rates Amount	Revenues, Present Rates Percent	Revenues, Proposed Rates District Specific Pricing Amount	Revenues, Proposed Rates District Specific Pricing Percent	Proposed Increase Amount	Proposed Increase Percent Increase
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Rate A	$ 50,874	100.0%	$ 42,770	100.0%	$ 44,008	100.0%	$ 1,238	2.9%
Total Sales	50,874	100.0%	42,770	100.0%	44,008	100.0%	1,238	2.9%
Other Revenues							-	
Total	$ 50,874		$ 42,770		$ 44,008		$ 1,238	2.9%

Q. WOULD THE REVENUES AT MAWC'S PROPOSED RATES BE SUFFICIENT TO COVER THE COST OF SERVICE THAT MAWC HAS CALCULTED FOR THE ANNA MEADOWS DISTRICT?

A. No, the revenues at MAWC's proposed rates would be deficient by approximately $6,866.

Anna Meadows District	
Revenues at MAWC's proposed rates	$ 44,008
Cost of Service	$ 50,874
Sufficiency (Deficiency)	$ (6,866)

Tri-States District

Q. WHAT SOURCES OF WATER ARE USED BY MAWC TO SUPPLY THE TRI-STATES DISTRICT?

A. In MAWC's 2014 Annual Water Quality Report, MAWC indicates that the sources of water to supply the Tri-States District are groundwater wells.

Q. WHAT COST OF SERVICE AND REVENUE AT CURRENT AND PROPOSED RATES DOES MAWC PROPOSE FOR THE TRI-STATES DISTRICT?

A. For the Tri-States District, MAWC's proposed cost of service and revenue at current and proposed rates from mopsc w0218_attachment 9 - sch prh-1 cos-small districts.xlsx of the Company's COSS workpapers are summarized below:

MISSOURI-AMERICAN WATER COMPANY
TRI STATES

COMPARISON OF COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES
FOR THE TEST YEAR ENDED DECEMBER 31, 2014

	Cost of Service				Revenues, Proposed Rates		Proposed Increase	
Customer Classification	Amount (Schedule B)	Percent	Revenues, Present Rates Amount	Percent	District Specific Pricing Amount	Percent	Amount	Percent Increase
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Rate A	$ 1,351,806	100.0%	$ 1,027,298	100.0%	$ 1,817,906	100.0%	$ 790,608	77.0%
Total Sales	1,351,806	100.0%	1,027,298	100.0%	1,817,906	100.0%	790,608	77.0%
Other Revenues	70,460		70,460		70,460		-	0.0%
Total	$ 1,422,266		$ 1,097,758		$ 1,888,366		$ 790,608	72.0%

Q. IF THE COMPANY'S PROPOSED RATES FOR THE TRI-STATES DISTRICT WERE TO BE APPROVED, WOULD CUSTOMERS EXPERIENCE RATE INCREASES IN EXCESS OF 20 PERCENT?

A. Yes. The above table shows the Rate A revenue increase to be 77%. As summarized below, customers in the Tri-States District would experience increases ranging from 50.1% to 178.7% if MAWC's proposed rates were to be approved:

	Tri States						
	RATE A - 5/8" METERS				**RATE A - 2" METERS**		
	3,000 Gallons/Month				**5,000 Gallons/Month**		
30	Present Rate		$ 16.78	50	Present Rate		$ 37.17
30	Proposed - CTP		29.81	50	Proposed - CTP		103.58
	Percentage Change		77.6%		Percentage Change		178.7%
	5,000 Gallons/Month				**15,000 Gallons/Month**		
50	Present Rate		$ 23.00	150	Present Rate		$ 68.27
50	Proposed - CTP		38.08	150	Proposed - CTP		144.94
	Percentage Change		65.6%		Percentage Change		112.3%
	8,000 Gallons/Month				**30,000 Gallons/Month**		
80	Present Rate		$ 32.33	300	Present Rate		$ 114.92
80	Proposed - CTP		50.49	300	Proposed - CTP		206.99
	Percentage Change		56.2%		Percentage Change		80.1%
	RATE A - 1" METERS				**RATE A - 6" METERS**		
	5,000 Gallons/Month				**25,000 Gallons/Month**		
50	Present Rate		$ 25.99	250	Present Rate		$ 234.30
50	Proposed - CTP		52.28	250	Proposed - CTP		577.61
	Percentage Change		101.2%		Percentage Change		146.5%
	15,000 Gallons/Month				**50,000 Gallons/Month**		
150	Present Rate		$ 57.09	500	Present Rate		$ 312.05
150	Proposed - CTP		93.64	500	Proposed - CTP		681.02
	Percentage Change		64.0%		Percentage Change		118.2%
	30,000 Gallons/Month				**100,000 Gallons/Month**		
300	Present Rate		$ 103.74	1000	Present Rate		$ 467.55
300	Proposed - CTP		155.69	1000	Proposed - CTP		887.83
	Percentage Change		50.1%		Percentage Change		89.9%

Q. WOULD THE REVENUES AT MAWC'S PROPOSED RATES BE SUFFICIENT TO COVER THE COST OF SERVICE THAT MAWC HAS CALCULATED FOR THE TRI-STATES DISTRICT?

A. Yes, the revenues at MAWC's proposed rate would be sufficient to cover the cost of service that MAWC calculated for the Tri-States District.

Tri-States District	
Revenues at MAWC's proposed rates	$ 1,888,366
Cost of Service	$ 1,422,266
Sufficiency (Deficiency)	$ 466,100

Other Considerations for Company's Proposed Consolidation of Districts into Proposed Rate Zone 1

Q. ARE ALL THE WATER DISTRICTS THAT MAWC PROPOSES TO CONSOLIDATE INTO RATE ZONE 1 INTERCONNECTED WITH EACH OTHER?

A. No, the water districts that MAWC proposes to consolidate into Rate Zone 1 are not interconnected with each other. However, there is an interconnection in the St. Louis Metro District, as described in the Company's response to OPC 5058 states that:

> The St. Louis Metro Districts of St. Louis County and St. Charles are interconnected via a 36" main. This main is supplied water from the St. Louis County Central Plant to the connection with the St. Charles system at Greens Bottom Rd.

Q. HOW GEOGRAPHICALLY DISBURSED ARE THE DISTRICTS THAT MAWC PROPOSES TO CONSOLIDATE INTO RATE ZONE 1?

A. The furthest distance between districts is approximately 305.2 miles, from St. Joseph district to St. Louis Metro district.

Q. IS THE COMPANY'S CALCULATED RESIDENTIAL COST OF SERVICE SIMILAR FOR ALL OF THE WATER DISTRICTS THAT IT PROPOSES TO CONSOLIDATE INTO RATE ZONE 1?

A. No. MAWC's calculated cost of service per residential customer is not similar for all of the water districts that it proposes to consolidate into Rate Zone 1.

Rate Zone 1	Cost of Service
St. Louis Metro	$ 2,331
Joplin	$ 1,530
St. Joseph	$ 1,263
Warrensburg	$ 1,136
Source: Schedule RCS-11	

As seen in the above table, although the St. Joseph and Warrensburg districts may have similar per residential customer costs of service (a difference of $127), the cost of service for the districts included in the proposed Rate Zone 1 ranges from $1,136 for Warrensburg to $2,331 for St. Louis Metro. This is a difference of $1,195. As stated previously in this testimony, cost of service information is not included for the Anna Meadows, Tri-State, and MRSS/Emerald Pointe Districts because a cost of service study was not performed for the small water districts.

Q. COULD CROSS SUBSIDIZATION RESULT FROM THE COMPANY'S PROPOSED CONSOLIDATION OF THOSE DISTRICTS INTO RATE ZONE 1?

A. Yes. As noted above, for some of the districts, the Company's proposed rates are below the Company's calculated cost of service. There may also be "rate shock" concerns presented for some rate and customer groups.

Q. SHOULD THE WATER DISTRICTS BE CONSOLIDATED INTO A RATE ZONE 1 AS PROPOSED BY MAWC?

A. No. The rates for these districts should remain on a district level. MAWC has not justified the consolidation of these districts into one rate zone at this time.

B. Company Proposed Water Utility Rate Zone 2

Q. WHAT COST OF SERVICE AND REVENUE AT CURRENT AND PROPOSED RATES DOES MAWC PROPOSE FOR RATE ZONE 2?

A. For rate zone 2, MAWC shows the following cost of service and revenue at current and proposed rates as follows:

		Mexico	Jefferson City	Platte County	Total
		(I)	(J)	(K)	(L)
	Rate Zone 2				
1	Residential	$ (356,829)	$ 12,415	$ (1,586,798)	$ (1,931,212)
2	Commercial	$ (6,738)	$ 412,247	$ (65,768)	$ 339,741
3	Industrial	$ 32,699	$ 15,680	$ (3,050)	$ 45,329
4	Public Authority	$ 11,729	$ 187,749	$ (5,274)	$ 194,203
5	Total Rate A	$ (319,139)	$ 628,091	$ (1,660,891)	$ (1,351,939)
6	Sales for Resale - Rate B	$ 101,289	$ -	$ 25,663	$ 126,952
7	Rate J - Large Users	$ (145,586)	$ 17,034	$ (180,148)	$ (308,700)
8	Private Fire Service	$ (62,319)	$ 51,865	$ (9,696)	$ (20,150)
9	Public Fire Service	$ -	$ -	$ -	$ -
10	Total Sales	$ (425,755)	$ 696,990	$ (1,825,072)	$ (1,553,837)
11	Other Revenues	$ -	$ -	$ -	$ -
12	Total	$ (425,755)	$ 696,990	$ (1,825,072)	$ (1,553,837)

Notes and Source
Amounts calculated from MAWC's Cost of Service Study that was prepared by Company witness Paul R. Herbert

Mexico District

Q. WHAT SOURCES OF WATER ARE USED BY MAWC TO SUPPLY THE MEXICO DISTRICT?

A. In MAWC's 2014 Annual Water Quality Report, MAWC indicates that the source of water to supply the Mexico District is groundwater drawn from the Roubidoux Formation through deep wells.

Q. WHAT COST OF SERVICE AND REVENUE AT CURRENT AND PROPOSED RATES DOES MAWC PROPOSE FOR THE MEXICO DISTRICT?

A. For the Mexico District, MAWC's proposed cost of service and revenue at current and proposed rates from mopsc w0218_attachment 5 - sch prh-1 cos-mex.xlsx of the Company's COSS workpapers are summarized below:

MISSOURI-AMERICAN WATER COMPANY
MEXICO DISTRICT

COMPARISON OF COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES
FOR THE TEST YEAR ENDED DECEMBER 31, 2014

Customer Classification	Cost of Service Amount (Schedule B)	Cost of Service Percent	Revenues, Present Rates Amount	Revenues, Present Rates Percent	Revenues, Proposed Rates Consolidated Pricing Amount	Revenues, Proposed Rates Consolidated Pricing Percent	Proposed Increase Amount	Proposed Increase Percent Increase
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Residential	$ 2,479,962	52.8%	$ 1,987,507	48.1%	$ 2,123,133	49.9%	$ 135,626	6.8%
Commercial	575,044	12.3%	473,597	11.4%	568,306	13.3%	94,709	20.0%
Industrial	105,665	2.3%	119,419	2.9%	138,364	3.2%	18,945	15.9%
Public Authority	297,566	6.3%	253,968	6.1%	309,295	7.3%	55,327	21.8%
Total - Rate A	3,458,237	73.7%	2,834,492	68.5%	3,139,098	73.7%	304,606	10.7%
Sales for Resale	421,438	9.0%	514,313	12.4%	522,727	12.3%	8,414	1.6%
Rate J - Large Users	630,452	13.4%	614,543	14.8%	484,865	11.4%	(129,678)	-21.1%
Private Fire Service	181,331	3.9%	178,655	4.3%	119,012	2.8%	(59,643)	-33.4%
Public Fire Service	-	0.0%	-	0.0%	-	0.0%	-	0.0%
Total Sales	4,691,458	100.0%	4,142,003	100.0%	4,265,702	100.2%	123,700	3.0%
Other Revenues	52,493		$52,493		$52,493		-	0.0%
Total	$ 4,743,951		$ 4,194,496		$ 4,318,195		$ 123,700	2.9%

Q. IF THE COMPANY'S PROPOSED RATE FOR THE MEXICO DISTRICT WERE TO BE APPROVED, WOULD CUSTOMERS EXPERIENCE RATE INCREASES IN EXCESS OF 20 PERCENT?

A. Yes. The Public Authority rate class will have an increase of 21.8%, as shown above. As summarized below, customers in the Mexico District would experience changes in their expected water utility bills ranging from -1.9% to 76.7% if MAWC's proposed rates were to be approved:

Mexico							
	RATE A - 5/8" METERS				**RATE A - 6" METERS**		
	3,000 Gallons/Month				**25,000 Gallons/Month**		
30	Present Rate	$	34.03	250	Present Rate	$	515.59
30	Proposed - CTP		36.90	250	Proposed - CTP		636.70
	Percentage Change		8.4%		Percentage Change		23.5%
	5,000 Gallons/Month				**50,000 Gallons/Month**		
50	Present Rate	$	47.81	500	Present Rate	$	667.42
50	Proposed - CTP		49.90	500	Proposed - CTP		799.20
	Percentage Change		4.4%		Percentage Change		19.7%
	8,000 Gallons/Month				**100,000 Gallons/Month**		
80	Present Rate	$	68.49	1000	Present Rate	$	971.09
80	Proposed - CTP		69.40	1000	Proposed - CTP		1,124.20
	Percentage Change		1.3%		Percentage Change		15.8%
	RATE A - 1" METERS				**RATE J - 6" METERS**		
	5,000 Gallons/Month				**45,000 Gallons/Month**		
50	Present Rate	$	58.67	450.00	Present Rate	$	363.75
50	Proposed - CTP		64.10	450.00	Proposed - CTP		642.86
	Percentage Change		9.3%		Percentage Change		76.7%
	15,000 Gallons/Month			20,000.00	**2,000,000 Gallons/Month**		
150	Present Rate	$	127.60	20,000.00	Present Rate	$	8,046.00
150	Proposed - CTP		129.10	20,000.00	Proposed - CTP		7,970.20
	Percentage Change		1.2%		Percentage Change		-0.9%
	30,000 Gallons/Month			40,000.00	**4,000,000 Gallons/Month**		
300	Present Rate	$	231.00	40,000.00	Present Rate	$	15,687.00
300	Proposed - CTP		226.60	40,000.00	Proposed - CTP		15,466.20
	Percentage Change		-1.9%		Percentage Change		-1.4%
	RATE A - 2" METERS						
	5,000 Gallons/Month						
50	Present Rate	$	93.93				
50	Proposed - CTP		115.40				
	Percentage Change		22.9%				
	15,000 Gallons/Month						
150	Present Rate	$	154.66				
150	Proposed - CTP		180.40				
	Percentage Change		16.6%				
	30,000 Gallons/Month						
300	Present Rate	$	245.76				
300	Proposed - CTP		277.90				
	Percentage Change		13.1%				

Q. WOULD THE REVENUES AT MAWC'S PROPOSED RATES BE SUFFICIENT TO COVER THE COST OF SERVICE THAT MAWC HAS CALCULATED FOR THE MEXICO DISTRICT?

A. No, the revenues at MAWC's proposed rates would be deficient by approximately $425,755.

Mexico District		
Revenues at MAWC's proposed rates	$	4,318,195
Cost of Service	$	4,743,951
Sufficiency (Deficiency)	$	(425,755)

Jefferson City District

Q. WHAT SOURCES OF WATER ARE USED BY MAWC TO SUPPLY THE JEFFERSON CITY DISTRICT?

A. In MAWC's 2014 Annual Water Quality Report, MAWC indicates that the source of water to supply the Jefferson City District is surface water from the Missouri River.

Q. WHAT COST OF SERVICE AND REVENUE AT CURRENT AND PROPOSED RATES DOES MAWC PROPOSE FOR THE JEFFERSON CITY DISTRICT?

A. For the Jefferson City District, MAWC's proposed cost of service and revenue at current and proposed rates from mopsc w0218_attachment 3 - sch prh-1 cos-jfc .xlsx of the Company's COSS workpapers are summarized below:

MISSOURI-AMERICAN WATER COMPANY
JEFFERSON CITY DISTRICT

COMPARISON OF COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES
FOR THE TEST YEAR ENDED DECEMBER 31, 2014

Customer Classification	Cost of Service Amount (Schedule B)	Cost of Service Percent	Revenues, Present Rates Amount	Revenues, Present Rates Percent	Revenues, Proposed Rates Consolidated Pricing Amount	Revenues, Proposed Rates Consolidated Pricing Percent	Proposed Increase Amount	Proposed Increase Percent Increase
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Residential	$ 4,832,155	56.6%	$ 4,461,036	53.8%	$ 4,844,570	52.6%	$ 383,533	8.6%
Commercial	1,950,185	22.8%	1,944,078	23.5%	2,362,432	25.6%	418,354	21.5%
Industrial	48,161	0.6%	46,182	0.6%	63,841	0.7%	17,659	38.2%
Public Authority	695,837	8.1%	683,509	8.3%	883,586	9.6%	200,077	29.3%
Total Rate A	7,526,337	88.1%	7,134,806	86.2%	8,154,429	88.5%	1,019,623	14.3%
Rate J - Large Users	871,552	10.2%	848,263	10.3%	888,587	9.6%	40,324	4.8%
Private Fire Service	140,958	1.7%	288,230	3.5%	192,823	2.1%	(95,407)	-33.1%
Public Fire Service	-	0.0%		0.0%	-	0.0%	-	0.0%
Total Sales	$ 8,538,848	100.0%	$ 8,271,298	100.0%	$ 9,235,838	100.2%	$ 964,540	11.7%
Other Revenues	93,832		93,832		93,832		-	0.0%
Total	$ 8,632,680		$ 8,365,131		$ 9,329,671		$ 964,540	11.5%

Q. IF THE COMPANY'S PROPOSED RATE FOR THE JEFFERSON CITY DISTRICT WERE TO BE APPROVED, WOULD CUSTOMERS EXPERIENCE RATE INCREASES IN EXCESS OF 20 PERCENT?

A. Yes. The Commercial rate class will have an increase of 21.5%, the Industrial rate class will have an increase of 38.2%, and the Public Authority rate class will have an increase of 29.3%, as shown above. As summarized below, customers in the Jefferson City District would experience changes in their expected water utility bills ranging from -3.7% to 262.1% if MAWC's proposed rates were to be approved:

Jefferson City							
	RATE A - 5/8" METERS				**RATE A - 6" METERS**		
	3,000 Gallons/Month				**25,000 Gallons/Month**		
30	Present Rate	$	34.44	250	Present Rate	$	320.47
30	Proposed - CTP		36.90	250	Proposed - CTP		636.70
	Percentage Change		7.1%		Percentage Change		98.7%
	5,000 Gallons/Month				**50,000 Gallons/Month**		
50	Present Rate	$	45.87	500	Present Rate	$	463.42
50	Proposed - CTP		49.90	500	Proposed - CTP		799.20
	Percentage Change		8.8%		Percentage Change		72.5%
	8,000 Gallons/Month				**100,000 Gallons/Month**		
80	Present Rate	$	63.01	1000	Present Rate	$	749.32
80	Proposed - CTP		69.40	1000	Proposed - CTP		1,124.20
	Percentage Change		10.1%		Percentage Change		50.0%
	RATE A - 1" METERS				**RATE J - 6" METERS**		
	5,000 Gallons/Month				**45,000 Gallons/Month**		
50	Present Rate	$	50.77	450.00	Present Rate	$	177.52
50	Proposed - CTP		64.10	450.00	Proposed - CTP		642.86
	Percentage Change		26.3%		Percentage Change		262.1%
	15,000 Gallons/Month			20,000.00	**2,000,000 Gallons/Month**		
150	Present Rate	$	107.91	20,000.00	Present Rate	$	8,275.09
150	Proposed - CTP		129.10	20,000.00	Proposed - CTP		7,970.20
	Percentage Change		19.6%		Percentage Change		-3.7%
	30,000 Gallons/Month			40,000.00	**4,000,000 Gallons/Month**		
300	Present Rate	$	193.62	40,000.00	Present Rate	$	15,927.09
300	Proposed - CTP		226.60	40,000.00	Proposed - CTP		15,466.20
	Percentage Change		17.0%		Percentage Change		-2.9%
	RATE A - 2" METERS						
	5,000 Gallons/Month						
50	Present Rate	$	68.76				
50	Proposed - CTP		115.40				
	Percentage Change		67.8%				
	15,000 Gallons/Month						
150	Present Rate	$	125.94				
150	Proposed - CTP		180.40				
	Percentage Change		43.2%				
	30,000 Gallons/Month						
300	Present Rate	$	211.71				
300	Proposed - CTP		277.90				
	Percentage Change		31.3%				

Q. WOULD THE REVENUES AT MAWC'S PROPOSED RATES BE SUFFICIENT TO COVER THE COST OF SERVICE THAT MAWC HAS CALCULATED FOR THE JEFFERSON CITY DISTRICT?

A. Yes, the revenues at MAWC's proposed rate would be sufficient to cover the cost of service that MAWC calculated for the Jefferson City Districts.

Jefferson City District		
Revenues at MAWC's proposed rates	$	9,329,671
Cost of Service	$	8,632,680
Sufficiency (Deficiency)	$	696,990

Platte County District

Q. WHAT SOURCES OF WATER ARE USED BY MAWC TO SUPPLY THE PLATTE COUNTY DISTRICT?

A. In MAWC's 2014 Annual Water Quality Report, MAWC indicates that the sources of water to supply the Platte County District are groundwater drawn from the alluvial aquifer through shallow wells. Also, metered connections allow treated surface water to be supplied from the Kansas City, Missouri Water Department.

Q. WHAT COST OF SERVICE AND REVENUE AT CURRENT AND PROPOSED RATES DOES MAWC PROPOSE FOR THE PLATTE COUNTY DISTRICT?

A. For the Platte County District, MAWC's proposed cost of service and revenue at current and proposed rates from mopsc w0218_attachment 6 - sch prh-1 cos-ptc.xlsx of the Company's COSS workpapers are summarized below:

MISSOURI-AMERICAN WATER COMPANY
PLATTE COUNTY WATER DISTRICT

COMPARISON OF COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES
FOR THE TEST YEAR ENDED DECEMBER 31, 2014

Customer Classification	Cost of Service Amount (Schedule B)	Cost of Service Percent	Revenues, Present Rates Amount	Revenues, Present Rates Percent	Revenues, Proposed Rates Consolidated Pricing Amount	Revenues, Proposed Rates Consolidated Pricing Percent	Proposed Increase Amount	Proposed Increase Percent Increase
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Residential	$ 5,502,950	69.3%	$ 4,205,541	65.2%	$ 3,916,152	64.1%	$ (289,389)	-6.9%
Commercial	1,207,737	15.2%	1,175,583	18.2%	1,141,969	18.7%	(33,614)	-2.9%
Industrial	21,484	0.3%	(55,897)	-0.9%	18,434	0.3%	74,331	-133.0%
Public Authority	101,213	1.3%	97,263	1.5%	95,939	1.6%	(1,324)	-1.4%
Total Rate A	6,833,385	86.1%	5,422,492	84.0%	5,172,494	84.7%	(249,998)	-4.6%
Sales for Resale - Rate B	256,251	3.2%	268,032	4.1%	281,914	4.6%	13,882	5.2%
Rate J - Large Industrial	697,771	8.8%	558,771	8.6%	$ 517,623	8.5%	(41,148)	-7.4%
Private Fire Service	148,630	1.9%	212,930	3.3%	138,934	2.3%	(73,996)	-34.8%
Public Fire Service	-	0.0%		0.0%	-	0.0%	-	0.0%
Total Sales	7,936,036	100.0%	6,462,224	100.0%	6,110,965	100.1%	(351,259)	-5.4%
Other Revenues	47,784		47,784		47,784		-	0.0%
Total	$ 7,983,820		$ 6,510,007		$ 6,158,748		$ (351,259)	-5.4%

Q. IF THE COMPANY'S PROPOSED RATE FOR THE PLATTE COUNTY DISTRICT WERE TO BE APPROVED, WOULD CUSTOMERS EXPERIENCE RATE INCREASES IN EXCESS OF 20 PERCENT?

A. Yes. As summarized below, customers in the Platte County District would experience changes in their expected water utility bills ranging from -22.3% to 52.5% if MAWC's proposed rates were to be approved:

Platte County							
	RATE A - 5/8" METERS				**RATE A - 6" METERS**		
	3,000 Gallons/Month				**25,000 Gallons/Month**		
30	Present Rate	$	38.79	250	Present Rate	$	615.81
30	Proposed - CTP		36.90	250	Proposed - CTP		636.70
	Percentage Change		-4.9%		Percentage Change		3.4%
	5,000 Gallons/Month				**50,000 Gallons/Month**		
50	Present Rate	$	54.34	500	Present Rate	$	810.14
50	Proposed - CTP		49.90	500	Proposed - CTP		799.20
	Percentage Change		-8.2%		Percentage Change		-1.4%
	8,000 Gallons/Month				**100,000 Gallons/Month**		
80	Present Rate	$	77.65	1000	Present Rate	$	1,198.79
80	Proposed - CTP		69.40	1000	Proposed - CTP		1,124.20
	Percentage Change		-10.6%		Percentage Change		-6.2%
	RATE A - 1" METERS				**RATE J - 6" METERS**		
	5,000 Gallons/Month				**45,000 Gallons/Month**		
50	Present Rate	$	66.93	450.00	Present Rate	$	421.48
50	Proposed - CTP		64.10	450.00	Proposed - CTP		642.86
	Percentage Change		-4.2%		Percentage Change		52.5%
	15,000 Gallons/Month			20,000.00	**2,000,000 Gallons/Month**		
150	Present Rate	$	144.66	20,000.00	Present Rate	$	10,262.00
150	Proposed - CTP		129.10	20,000.00	Proposed - CTP		7,970.20
	Percentage Change		-10.8%		Percentage Change		-22.3%
	30,000 Gallons/Month			40,000.00	**4,000,000 Gallons/Month**		
300	Present Rate	$	261.25	40,000.00	Present Rate	$	17,623.00
300	Proposed - CTP		226.60	40,000.00	Proposed - CTP		15,466.20
	Percentage Change		-13.3%		Percentage Change		-12.2%
	RATE A - 2" METERS						
	5,000 Gallons/Month						
50	Present Rate	$	112.52				
50	Proposed - CTP		115.40				
	Percentage Change		2.6%				
	15,000 Gallons/Month						
150	Present Rate	$	190.25				
150	Proposed - CTP		180.40				
	Percentage Change		-5.2%				
	30,000 Gallons/Month						
300	Present Rate	$	306.84				
300	Proposed - CTP		277.90				
	Percentage Change		-9.4%				

Q. WOULD THE REVENUES AT MAWC'S PROPOSED RATES BE SUFFICIENT TO COVER THE COST OF SERVICE THAT MAWC HAS CALCULATED FOR THE PLATTE COUNTY DISTRICT?

A. No, the revenues at MAWC's proposed rates would be deficient by approximately $1,825,072.

Platte County District		
Revenues at MAWC's proposed rates	$	6,158,748
Cost of Service	$	7,983,820
Sufficiency (Deficiency)	$	(1,825,072)

Other Considerations for Company's Proposed Consolidation of Districts into Proposed Rate Zone 2

Q. ARE ALL OF THE WATER DISTRICTS THAT MAWC PROPOSES TO CONSOLIDATE INTO RATE ZONE 2 INTERCONNECTED WITH EACH OTHER?

A. No, all of the water districts that MAWC proposes to consolidate into Rate Zone 2 are not interconnected with each other.

Q. HOW GEOGRAPHICALLY DISBURSED ARE THE DISTRICTS THAT MAWC PROPOSES TO CONSOLIDATE INTO RATE ZONE 2?

A. The furthest distance between districts is approximately 190.1 miles, from Platte County district to Mexico district.

Q. IS THE COMPANY'S CALCULATED RESIDENTIAL COST OF SERVICE SIMILAR FOR ALL OF THE WATER DISTRICTS THAT IT PROPOSES TO CONSOLIDATE INTO RATE ZONE 2?

A. No. There is an approximately $1,626 difference between the Platte County and Jefferson City districts.

Rate Zone 2	Cost of Service
Mexico	$ 2,058
Jefferson City	$ 1,451
Platte County	$ 3,077
Source: Schedule RCS-11	

Q. COULD CROSS SUBSIDIZATION RESULT FROM THE COMPANY'S PROPOSED CONSOLIDATION OF THOSE DISTRICTS INTO RATE ZONE 2?

A. Yes. As noted above, for some of the districts, the Company's proposed rates are below the Company's calculated cost of service. There may also be "rate shock" concerns presented for some rate and customer groups.

Q. SHOULD THE WATER DISTRICTS BE CONSOLIDATED INTO A RATE ZONE 2 AS PROPOSED BY MAWC?

A. No. The rates for these districts should remain on a district level. MAWC has not justified the consolidation of their districts into one rate zone at this time.

C. Company Proposed Water Utility Rate Zone 3

Q. WHAT COST OF SERVICE AND REVENUE AT CURRENT AND PROPOSED RATES DOES MAWC PROPOSE FOR RATE ZONE 3?

A. For rate zone 3, MAWC shows the following cost of service and revenue at current and proposed rates as follows:

		Brunswick (M)	Ozark Mountain & LTA (N)	Rankin Acres & Whitebranch (O)	Spring Valley & Lakewood Manor (P)	Total (Q)
	Rate Zone 3					
1	Residential	$ (151,243)				$ (151,243)
2	Commercial	$ (51,142)				$ (51,142)
3	Industrial	$ -				$ -
4	Public Authority	$ (4,687)				$ (4,687)
5	Total Rate A	$ (207,072)	$ (2,110)	$ 50,709	$ (17,399)	$ (207,072)
6	Sales for Resale - Rate B	$ (65,992)				$ (65,992)
7	Rate J - Large Users	$ -				$ -
8	Private Fire Service	$ (1,455)				$ (1,455)
9	Public Fire Service	$ -				$ -
10	Total Sales	$ (274,519)	$ (2,110)	$ 50,709	$ (17,399)	$ (243,319)
11	Other Revenues	$ -	$ -	$ -	$ -	$ -
12	Total	$ (274,519)	$ (2,110)	$ 50,709	$ (17,399)	$ (243,319)

Notes and Source
Amounts calculated from MAWC's Cost of Service Study that was prepared by Company witness Paul R. Herbert

Brunswick District

Q. WHAT SOURCES OF WATER ARE USED BY MAWC TO SUPPLY THE BRUNSWICK DISTRICT?

A. In MAWC's 2014 Annual Water Quality Report, MAWC indicates that the source of water to supply the Brunswick District is groundwater from alluvium wells bordering the Grand River.

Q. WHAT COST OF SERVICE AND REVENUE AT CURRENT AND PROPOSED RATES DOES MAWC PROPOSE FOR THE BRUNSWICK DISTRICT?

A. For the Brunswick District, MAWC's proposed cost of service and revenue at current and proposed rates from mopsc w0218_attachment 2 - sch prh-1 cos-bru.xlsx of the Company's COSS workpapers are summarized below:

MISSOURI-AMERICAN WATER COMPANY
BRUNSWICK DISTRICT

COMPARISON OF COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES
FOR THE TEST YEAR ENDED DECEMBER 31, 2014

Customer Classification	Cost of Service Amount $	Cost of Service Percent	Revenues, Present Rates Amount	Revenues, Present Rates Percent	Revenues, Proposed Rates Consolidated Pricing Amount	Revenues, Proposed Rates Consolidated Pricing Percent	Proposed Increase Amount	Proposed Increase Percent Increase
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Residential	$ 309,295	50.4%	$ 194,954	50.9%	$ 158,052	46.5%	$ (36,902)	-18.9%
Commercial	124,318	20.2%	80,651	21.0%	73,176	21.5%	(7,475)	-9.3%
Public Authority	12,532	2.0%	9,773	2.5%	7,845	2.3%	(1,928)	-19.7%
Total Rate A	446,145	72.6%	285,378	74.4%	239,073	70.3%	(46,305)	-16.2%
Sales for Resale	164,857	26.8%	91,578	23.9%	98,865	29.0%	7,287	8.0%
Private Fire Service	3,954	0.6%	6,557	1.7%	2,499	0.7%	(4,058)	-61.9%
Public Fire Service	-	0.0%	-	0.0%	-	0.0%	-	0.0%
Total Sales	614,956	100.0%	383,513	100.0%	340,437	100.0%	(89,381)	-23.3%
Other Revenues	4,820		4,820		4,820		-	0.0%
Total	$ 619,776		$ 388,333		$ 345,257		$ (43,076)	-11.1%

Q. IF THE COMPANY'S PROPOSED RATE FOR THE BRUNSWICK DISTRICT WERE TO BE APPROVED, WOULD CUSTOMERS EXPERIENCE RATE INCREASES IN EXCESS OF 20 PERCENT?

A. Yes. As summarized below, customers in the Brunswick District would experience changes in their expected water utility bills ranging from -36.0% to 20.9% if MAWC's proposed rates were to be approved:

Brunswick							
	RATE A - 5/8" METERS				**RATE A - 6" METERS**		
	3,000 Gallons/Month				**25,000 Gallons/Month**		
30	Present Rate	$	54.61	250	Present Rate	$	823.14
30	Proposed - CTP		44.40	250	Proposed - CTP		699.20
	Percentage Change		-18.7%		Percentage Change		-15.1%
	5,000 Gallons/Month				**50,000 Gallons/Month**		
50	Present Rate	$	76.31	500	Present Rate	$	1,068.14
50	Proposed - CTP		62.40	500	Proposed - CTP		924.20
	Percentage Change		-18.2%		Percentage Change		-13.5%
	8,000 Gallons/Month				**100,000 Gallons/Month**		
80	Present Rate	$	108.86	1000	Present Rate	$	1,558.14
80	Proposed - CTP		89.40	1000	Proposed - CTP		1,374.20
	Percentage Change		-17.9%		Percentage Change		-11.8%
	RATE A - 1" METERS				**RATE J - 6" METERS**		
	5,000 Gallons/Month				**45,000 Gallons/Month**		
50	Present Rate	$	92.73	450.00	Present Rate	$	578.14
50	Proposed - CTP		76.60	450.00	Proposed - CTP		699.20
	Percentage Change		-17.4%		Percentage Change		20.9%
	15,000 Gallons/Month			20,000.00	**2,000,000 Gallons/Month**		
150	Present Rate	$	201.23	20,000.00	Present Rate	$	16,368.00
150	Proposed - CTP		166.60	20,000.00	Proposed - CTP		10,474.20
	Percentage Change		-17.2%		Percentage Change		-36.0%
	30,000 Gallons/Month			40,000.00	**4,000,000 Gallons/Month**		
300	Present Rate	$	363.98	40,000.00	Present Rate	$	31,368.00
300	Proposed - CTP		301.60	40,000.00	Proposed - CTP		20,474.20
	Percentage Change		-17.1%		Percentage Change		-34.7%
	RATE A - 2" METERS						
	5,000 Gallons/Month						
50	Present Rate	$	150.01				
50	Proposed - CTP		127.90				
	Percentage Change		-14.7%				
	15,000 Gallons/Month						
150	Present Rate	$	248.01				
150	Proposed - CTP		217.90				
	Percentage Change		-12.1%				
	30,000 Gallons/Month						
300	Present Rate	$	395.01				
300	Proposed - CTP		352.90				
	Percentage Change		-10.7%				

Q. WOULD THE REVENUES AT MAWC'S PROPOSED RATES BE SUFFICIENT TO COVER THE COST OF SERVICE THAT MAWC HAS CALCULATED FOR THE BRUNSWICK DISTRICT?

A. No, the revenues at MAWC's proposed rates would be deficient by approximately $274,519.

Brunswick District		
Revenues at MAWC's proposed rates	$	345,257
Cost of Service	$	619,776
Sufficiency (Deficiency)	$	(274,519)

Ozark Mountain/Lake Tanneycomo District

Q. WHAT SOURCES OF WATER ARE USED BY MAWC TO SUPPLY THE OZARK MOUNTAIN/LAKE TANNEYCOMO DISTRICT?

A. In MAWC's 2014 Annual Water Quality Report, MAWC indicates that the sources of water to supply the Ozark Mountain/Lake Tanneycomo District are groundwater wells.

Q. WHAT COST OF SERVICE AND REVENUE AT CURRENT AND PROPOSED RATES DOES MAWC PROPOSE FOR THE OZARK MOUNTAIN/LAKE TANNEYCOMO DISTRICT?

A. For the Ozark Mountain/Lake Tanneycomo District, MAWC's proposed cost of service and revenue at current and proposed rates from mopsc w0218_attachment 9 - sch prh-1 cos-small districts .xlsx of the Company's COSS workpapers are summarized below:

MISSOURI-AMERICAN WATER COMPANY
OZARK MOUNTAIN/ LAKE TANNEYCOMO

COMPARISON OF COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES
FOR THE TEST YEAR ENDED DECEMBER 31, 2014

Customer Classification	Cost of Service Amount (Schedule B)	Cost of Service Percent	Revenues, Present Rates Amount	Revenues, Present Rates Percent	Revenues, Proposed Rates District Specific Pricing Amount	Revenues, Proposed Rates District Specific Pricing Percent	Proposed Increase Amount	Proposed Increase Percent Increase
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Rate A	$ 248,370	100.0%	$ 266,281	100.0%	$ 246,260	100.0%	$ (20,021)	-7.5%
Total Sales	248,370	100.0%	266,281	100.0%	246,260	100.0%	(20,021)	-7.5%
Other Revenues	1,786		1,786		1,786		-	0.0%
Total	$ 250,156		$ 268,067		$ 248,046		$ (20,021)	-7.5%

Q. WOULD THE REVENUES AT MAWC'S PROPOSED RATES BE SUFFICIENT TO COVER THE COST OF SERVICE THAT MAWC HAS CALCULATED FOR THE OZARK MOUNTAIN/LAKE TANNEYCOMO DISTRICT?

A. No, the revenues at MAWC's proposed rates would be deficient by approximately $2,110.

Ozark Mountain and Lake Tanneycomo District		
Revenues at MAWC's proposed rates	$	248,046
Cost of Service	$	250,156
Sufficiency (Deficiency)	$	(2,110)

Rankin Acres/White Branch District

Q. WHAT SOURCES OF WATER ARE USED BY MAWC TO SUPPLY THE RANKIN ACRES/WHITE BRANCH DISTRICT?

A. In MAWC's 2014 Annual Water Quality Report, MAWC indicates that the sources of water to supply the Rankin Acres/White Branch District are groundwater wells.

Q. WHAT COST OF SERVICE AND REVENUE AT CURRENT AND PROPOSED RATES DOES MAWC PROPOSE FOR THE RANKIN ACRES/WHITE BRANCH DISTRICT?

A. For the Rankin Acres/White Branch District, MAWC's proposed cost of service and revenue at current and proposed rates from mopsc w0218_attachment 9 - sch prh-1 cos-small districts.xlsx of the Company's COSS workpapers are summarized below:

MISSOURI-AMERICAN WATER COMPANY
RANKIN ACRES/WHITE BRANCH

COMPARISON OF COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES
FOR THE TEST YEAR ENDED DECEMBER 31, 2014

Customer Classification	Cost of Service Amount (Schedule B)	Cost of Service Percent	Revenues, Present Rates Amount	Revenues, Present Rates Percent	Revenues, Proposed Rates District Specific Pricing Amount	Revenues, Proposed Rates District Specific Pricing Percent	Proposed Increase Amount	Proposed Increase Percent Increase
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Rate A	$ 92,954	100.0%	$ 149,223	100.0%	$ 143,663	100.0%	$ (5,560)	-3.7%
Total Sales	92,954	100.0%	149,223	100.0%	143,663	100.0%	(5,560)	-3.7%
Other Revenues	695		695		695		-	0.0%
Total	$ 93,649		$ 149,918		$ 144,358		$ (5,560)	-3.7%

Q. WOULD THE REVENUES AT MAWC'S PROPOSED RATES BE SUFFICIENT TO COVER THE COST OF SERVICE THAT MAWC HAS CALCULATED FOR THE RANKIN ACRES/WHITE BRANCH DISTRICT?

A. Yes, the revenues at MAWC's proposed rate would be sufficient to cover the cost of service that MAWC calculated for the Rankin Acres/White Branch District.

Rankin/White Branch District	
Revenues at MAWC's proposed rates	$ 144,358
Cost of Service	$ 93,649
Sufficiency (Deficiency)	$ 50,709

Spring Valley/Lakewood Manor District

Q. WHAT SOURCES OF WATER ARE USED BY MAWC TO SUPPLY THE SPRING VALLEY/LAKEWOOD MANOR DISTRICT?

A. In MAWC's 2014 Annual Water Quality Report, MAWC indicates that the water to supply the Spring Valley District is purchased from the City of Ozark, which uses numerous groundwater wells. The source of the water to supply the Lakewood Manor District is a groundwater well.

Q. WHAT COST OF SERVICE AND REVENUE AT CURRENT AND PROPOSED RATES DOES MAWC PROPOSE FOR THE SPRING VALLEY/LAKEWOOD MANOR DISTRICT?

A. For the Spring Valley/Lakewood Manor District, MAWC's proposed cost of service and revenue at current and proposed rates from mopsc w0218_attachment 9 - sch prh-1 cos-small districts.xlsx of the Company's COSS workpapers are summarized below:

MISSOURI-AMERICAN WATER COMPANY
SPRING VALLEY/ LAKEWOOD MANOR

COMPARISON OF COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES
FOR THE TEST YEAR ENDED DECEMBER 31, 2014

	Cost of Service				Revenues, Proposed Rates		Proposed Increase	
Customer Classification	Amount (Schedule B)	Percent	Revenues, Present Rates Amount	Percent	District Specific Pricing Amount	Percent	Amount	Percent Increase
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Rate A	$ 88,241	100.0%	$ 87,146	100.0%	$ 70,842	100.0%	$ (16,304)	-18.7%
Total Sales	88,241	100.0%	87,146	100.0%	70,842	100.0%	(16,304)	-18.7%
Other Revenues	939		939		939		-	0.0%
Total	$ 89,180		$ 88,085		$ 71,781		$ (16,304)	-18.5%

Q. WOULD THE REVENUES AT MAWC'S PROPOSED RATES BE SUFFICIENT TO COVER THE COST OF SERVICE THAT MAWC HAS CALCULATED FOR THE SPRING VALLEY/LAKEWOOD MANOR DISTRICT?

A. No, the revenues at MAWC's proposed rates would be deficient by approximately $17,399.

Spring Valley/Lakewood Manor District		
Revenues at MAWC's proposed rates	$	71,781
Cost of Service	$	89,180
Sufficiency (Deficiency)	$	(17,399)

D. Other Considerations for Company's Proposed Consolidation of Water Districts into Proposed Rate Zones 3

Q. ARE ALL OF THE WATER DISTRICTS THAT MAWC PROPOSES TO CONSOLIDATE INTO RATE ZONE 3 INTERCONNECTED WITH EACH OTHER?

A. No, all of the water districts that MAWC proposes to consolidate into Rate Zone 3 are not interconnected with each other.

Q. HOW GEOGRAPHICALLY DISBURSED ARE THE DISTRICTS THAT MAWC PROPOSES TO CONSOLIDATE INTO RATE ZONE 3?

A. The furthest distance between districts is approximately 284.7 miles, from Brunswick district to Spring Valley district.

Q. IS THE COMPANY'S CALCULATED COST OF SERVICE PER RESIDENTIAL CUSTOMER SIMILAR FOR ALL OF THE WATER DISTRICTS THAT IT PROPOSES TO CONSOLIDATE INTO RATE ZONE 3?

A. Illustrated in the table below, Brunswick District's cost of service per customer is $2,339.

Rate Zone 3	Cost of Service
Brunswick	$ 2,339
Source: Schedule RCS-11	

As stated previously in this testimony, cost of service information is not included for the Ozark Mountain/Lake Tanneycomo, Rankin Acres/White Branch, and Spring Valley/Lakewood Manor Districts because a cost of service study was not performed for the small water districts, so a comparison could not be conducted.

Q. COULD CROSS SUBSIDIZATION RESULT FROM THE COMPANY'S PROPOSED CONSOLIDATION OF THOSE DISTRICTS INTO RATE ZONE 3?

A. Yes. As noted above, for some of the districts, the Company's proposed rates are below the Company's calculated cost of service. There may also be "rate shock" concerns presented for some rate and customer groups.

Q. SHOULD THE WATER DISTRICTS BE CONSOLIDATED INTO A RATE ZONE 3 AS PROPOSED BY MAWC?

A. No. The rates for these districts should remain on a district level. MAWC has not justified the consolidation of their districts into one rate zone at this time.

Q. WHAT EVIDENCE HAVE YOU REVIEWED THAT LEADS TO YOUR CONCLUSION THAT MAWC'S PROPOSAL FOR STP GOES TOO FAR IN CONSOLIDATING RATES FOR DISTRICTS THAT EXHIBIT SUBSTANTIALLY DIFFERENT COSTS?

A. I compared the cost of investments and expenses on both a district basis and customer class basis. First, using Staff accounting data on net plant, key expense categories, and district customer counts including Residential, Commercial, Industrial, and Public Authority customers, I compared a per customer level of investment and expenses between districts. The district cost comparison is shown in Schedule RCS-10. The results suggest that on a per customer basis there is substantial variation between districts in the levels of investment and key expenses. In some cases the highest district investment and expense levels were 4 to 6 times those of the lowest district investment and expense levels.

To evaluate whether differences existed for particular customer classes across districts, I used results from district specific CCOS studies provided in the Company's workpapers for 8 districts to compare the per customer costs for the Residential Class across districts. Similarly, I compared the per customer costs for the Commercial Class across districts. While I do not necessarily agree with the Company's specific CCOS methods or allocations, I used the Company CCOS study results in the comparison to illustrate that the Company's own calculations produce substantially different costs across districts. It is also important to note that for the St. Louis Metro District, Rate A shown in the

comparison reflects blended costs for Residential, Commercial, and Public Authority customers. The district cost comparison for the Residential Class is shown in Schedule RCS-11. The district cost comparison for the Commercial Class is shown in Schedule RCS-12. For both the Residential Class and Commercial classes, the results indicate significant differences in the level of investment and key expenses between districts. In some cases the highest district investment and expense levels were 3 to 6 times those of the lowest district investment and expense levels.

Q. WHAT EVIDENCE MIGHT PERSUADE PUBLIC COUNSEL TO SUPPORT A MORE LIMITED RATE CONSOLIDATION PROPOSAL?

A. Based on my review of the district data, it appears that there is some correlation between the number of customers in a district and the investment and expenses per customer so consolidating districts of similar size might be more reasonable than STP. Evidence of converging costs would also increase Public Counsel's support for consolidating the rates for certain districts.

E. Rate Zones for Wastewater Utility Service

Q. WHAT HAS THE COMPANY PROPOSED FOR RATE ZONE GROUPING FOR ITS WASTEWATER UTILITY DISTRICTS?

A. MAWC witness Herbert states at Q/A 41 of his direct testimony that MAWC is proposing two rate zones: one for the Arnold district and one consolidated tariff for all of

the remaining wastewater utility districts. He indicates that, because the customer base is primarily residential, MAWC did not perform cost of service studies for wastewater.

Q. WHY DID THE COMPANY PROPOSE TO KEEP THE ARNOLD DISTRICT SEPARATE?

A. At Q/A 42 of Mr. Herbert's direct testimony, he states that:

> Placing Arnold on the consolidated tariff would have generated more revenue than their costs. Arnold's proposed rates reflect a 25.35% increase to their existing minimum and volumetric charges as well as their flat rate charge.

Q. DO YOU AGREE WITH MAWC'S PROPOSAL TO KEEP THE ARNOLD WASTWATER DISTRICT RATES SEPARATE, I.E., TO KEEP THE ARNOLD DISTRICT IN ITS OWN RATE ZONE?

A. Yes.

Q. DO YOU AGREE WITH MAWC'S PROPOSAL TO CONSOLIDATE ALL OF THE OTHER WASTEWATER DISTRICTS INTO A SINGLE RATE ZONE?

A. No. I do not agree with MAWC's proposal to consolidate all of the other wastewater districts into a single rate zone.

There is a substantial geographical distance between a number of MAWC's wastewater districts, the systems are not interconnected, and the investment and operating expenses for the districts vary significantly on a per-customer basis. MAWC's proposed

consolidation thus might achieve administrative efficiency but raises concerns about cross-subsidization.

Q. WHAT IS SHOWN IN SCHEDULE RCS-14?

A. This shows the net utility plant, rate base, and O&M expense for each of MAWC's wastewater utility service areas on a per-customer basis. As shown, per-customer use varies significantly among the wastewater utility service areas.

Q. HOW DO THE PER-CUSTOMER AMOUNTS COMPARE BY SYSTEM?

A. As illustrated on Schedule RCS-14 attached to this testimony, the per-customer amounts vary significantly throughout the twelve wastewater systems. Total rate base per-customer ranges from $215 for Platte County to $5,029 for Warren County. O&M Expense per-customer ranges from $113 for Anna Meadows to $894 for Ozark Meadows.

Q. WHAT IS OPC'S RECOMMENDATION CONCERNING THE COMPANY'S REQUEST FOR CONSOLIDATING WASTEWATER UTILITY DISTRICTS INTO A COMBINED RATE ZONE?

A. OPC's recommendation is to keep the MAWC wastewater districts separated, due to the lack of interconnectedness, substantial variations in cost, geographical distance, and concerns regarding potential cross-subsidization. However, if the Commission is inclined to consolidate MAWC's wastewater utilities into groupings that have combined rates, OPC believes there may be merit in the Staff-proposed grouping, as described below.

Q. HAVE YOU REVIEWED STAFF'S RECOMMENDED RATE ZONE GROUPING FOR MAWC'S WASTEWATER UTILITY DISTRICTS?

A. Yes. Staff proposes to combine MAWC's wastewater districts into five rate zones, as presented on page 99 of Staff's Cost of Service Report. Staff's witness James Busch describes the following wastewater rate zones as follows:

- District One: City of Arnold;
- District Two: Platte County;
- District Three: Cedar Hill, Incline Village (Warren County), Anna Meadows, and Meramec;
- District Four: Jefferson City (Cole-Callaway Counties) Area including Lake Carmel, Maplewood, and Ozark Meadows; and
- District Five: Stonebridge, Saddlebrooke, and Emerald Pointe.

Q. IS THERE MERIT IN STAFF'S PROPOSED RATE ZONES FOR THE MAWC UTILITIES?

A. Yes, I believe there is substantial merit to keeping the rates for the Arnold district and Platte County separate at this time, as reflected in Staff's proposed wastewater utility rate zones 1 and 2. Staff has indicated that it will be presenting the reasons for its proposed wastewater rate zones in its January 20, 2016 testimony filing. Not having seen that yet, I am reserving judgment, but based on current information, there could be merit in Staff's proposed groupings with one potential exception.

Q. WHAT IS SHOWN ON SCHEDULE RCS-15?

A. Schedule RCS-15, page 1, shows the twelve MAWC wastewater utility districts, the number of customers in each district, the counties in which each district is located, and where each district fits into Staff's proposed wastewater utility rate zones. Schedule RCS-15, page 2, also contains a color-coded map to help evaluate the geographic proximity of the MAWC wastewater districts.

Q. DO YOU HAVE ANY RECOMMENDATIONS BASED ON THE INFORMATION SHOWN ON SCHEDULE RCS-15?

A. Yes. Based on geographic proximity, it appears that it may be appropriate to include Maplewood in rate zone 3 rather than in Staff's wastewater rate zone 4.

Q. IF THE MAPLEWOOD DISTRICT WAS INCLUDED IN WASTEWATER UTILITY RATE ZONE 3, APPROXIMATELY WHAT NUMBER OF CUSTOMERS WOULD BE IN EACH WASTEWATER UTILITY RATE ZONE?

A. The following chart summarizes the approximate number of customers by wastewater utility rate zone per the Staff's proposal, and with the Maplewood customers being included in rate zone 3:

Number of Customers - Wastewater Utility Service

	As Proposed By Staff	If Maplewood is is included in Group 3*
Rate Group 1	6,928	6,928
Rate Group 2	101	101
Rate Group 3	1,853	2,220
Rate Group 4	1,747	1,380
Rate Group 5	1,145	1,145
Total	11,774	11,774

*Such groupings may be appppropriate based on geographic proximity.

III. COST OF SERVICE STUDY - ST. LOUIS METRO DISTRICT

Q. ARE YOU PRESENTING A COST OF SERVICE STUDY FOR ANY OF THE MAWC WATER DISTRICTS?

A. Yes. Schedule RCS-17 attached to my testimony presents the adjusted cost of service study results for MAWC's St. Louis Metro District, as well as the Revenues at present and proposed rates. The format and presentation of Schedule RCS-17 is similar to the Schedule A comparison of the cost of service with revenues under present and proposed rates that were included with MAWC witness Herbert's direct testimony. On Schedule RCS-17, the revenues at proposed rates are based on the district specific cost of service study results. The development of water rates for MAWC by district is consistent with the OPC's recommendations that the existing water districts be maintained separately for ratemaking purposes and MAWC's proposal to consolidate disparate water districts into three rate zones be rejected. The St. Louis Metro district was chosen as the focus for

OPC's cost of service study because it is MAWC's largest water district by revenue, rate base, and number of customers.

Q. OTHER THAN THE INFORMATION THAT IS NOW SHOWN ON SCHEDULE RCS-17, HAD THE OPC, UP TO THIS POINT, DEVELOPED A SEPARATE REVENUE REQUIREMENT FOR THE ST. LOUIS METRO DISTRICT?

A. No, not as such. The OPC witnesses have recommended various adjustments; however, the adjustments had not been compiled into a total revenue requirement recommendation from OPC for MAWC in total, for MAWC's water utility operations in total, or for each MAWC water district.

Q. WHAT INFORMATION THEN DID YOU USE IN PREPARING THE ADJUSTED COST OF SERVICE STUDY FOR THE ST. LOUIS METRO DISTRICT?

A. I started with the St. Louis Metro district cost of service study that had been prepared by MAWC, specifically with MAWC's Excel files for that COSS. After discussions with OPC, and because OPC had not presented comprehensive revenue requirement recommendations in its prefiled December 23, 2015 direct testimony, I utilized the Staff adjusted rate base and operating expenses, and reflected the OPC's specific recommended adjustments as incremental adjustments to the Staff adjusted amounts.

Q. ARE YOUR ADJUSTED CLASS COST OF SERVICE STUDY RESULTS PRESENTED ON A SCHEDULE?

A. Yes, the adjusted class cost of service study results for the St. Louis Metro water district are presented on Schedule RCS-18.

Q. IS THE PRESENTATION AND FORMAT ON YOUR SCHEDULE RCS-18 SIMILAR TO CERTAIN SCHEDULES IN MAWC'S FILING?

A. Yes. The format and presentation of Schedule RCS-18 is similar to the Schedule B class cost of service study results that were included with MAWC witness Herbert's direct testimony.

Q. WHAT IS THE SOURCE FOR THE COST OF SERVICE AMOUNTS THAT ARE SHOWN ON SCHEDULE RCS-17, IN COLUMN 2?

A. Those Cost of Service results on Schedule RCS-17, in column 2, come from the adjusted cost of service study that is contained in Schedule RCS-18.

Q. WHAT IS THE SOURCE OF THE AMOUNTS FOR REVENUE AT PRESENT RATES SHOWN ON SCHEDULE RCS-17, IN COLUMN 4?

A. The amounts for Revenue at Present Rates shown on Schedule RCS-17, in column 4, are based on the information provided by MAWC in response to data request MoPSC W0218, Attachment B, with the exception of the Rate A revenues, which reflect the impact of a usage normalization adjustment that has been recommended by OPC witness Lena Mantle. To reflect the impact of Ms. Mantle's recommendation on the St. Louis Metro water district revenue at present rates, I have added approximately $6.7 million to

the amount of present rate revenues for this district that was shown on MAWC's response to MoPSC W0218, Attachment B.

Q. IN RECONCILING THE AMOUNTS FOR REVENUE AT PRESENT RATES FOR THE ST. LOUIS METRO WATER DISTRICT BETWEEN THE MAWC, STAFF, AND OPC RECOMMENDATIONS, DID YOU NOTICE CERTAIN ITEMS THAT MAY REQUIRE FURTHER INVESTIGATION?

A. Yes. In reconciling the amounts for Revenue at Present and Proposed Rates for the St. Louis Metro water district between the Staff and OPC recommendations, as shown on Schedule RCS-20, we noted that Staff had calculated a revenue deficiency of $12.062 million and added an amount of $9.114 million for an “Allowance for Known and Measurable Changes/True Up Estimate” to bring the total revenue deficiency to $21.176 million. At this time, OPC has not reflected a similar adjustment.

Q. WERE THERE SOME OTHER SMALLER DIFFERENCES WITH REVENUE AMOUNTS NOTED WITH MAWC FOR THE ST. LOUIS METRO DISTRICT?

A. Yes. We noted that the MAWC Excel workpaper for the district was described as "St. Louis Metro / Anna Meadows Water" and included $42,770 of revenue at present rates for Anna Meadows Water. We also noted a $16,178 amount for revenue at present rates for Rate K. Those amounts were apparently not included in the St. Louis Metro revenue at present rate amounts that were listed in MAWC's Response to MoPSC W2018, Attachment B, and have not been included on Schedule RCS-17. Additionally, consistent with the OPC's recommendation that rates continue to be developed using the presently

existing water districts, the Anna Meadows revenue requirement and cost of service should be developed separately from the St. Louis Metro water district.

Q. HOW WERE THE REVENUES AT PROPOSED RATES AND THE AMOUNTS OF PROPOSED REVENUE INCREASES (OR DECREASES) ON SCHEDULE RCS-17 DERIVED?

A. On Schedule RCS-17, the Revenues at Proposed Rates in column 6 are based on the results of the adjusted class cost of service study, which are summarized in column 2. The Proposed Revenue increases (or decreases) in column 8 are based on the differences between the amounts of Revenues at Present Rates (from column 4) and the Revenues at Proposed Rates (from column 6).

Q. WHAT IS SHOWN IN SCHEDULE RCS-18?

A. As noted above, Schedule RCS-18 presents the adjusted class cost of service study results for the St. Louis Metro water district. These results are presented in a format similar to Schedule B from MAWC witness Herbert's direct testimony filing.

Q. HOW WAS THE RATE BASE DEVELOPED FOR USE IN SCHEDULE RCS-18?

A. The rate base developed for use in Schedule RCS-18 by starting with Staff's adjusted rate base for the St. Louis Metro water district. Adjustments were reflected for the differences between OPC and Staff on three rate base adjustments that were addressed in the OPC testimony. The OPC rate base adjustments are for materials and supplies, prepayments, and for deferred costs associated with a tank painting tracker.

Q. WHAT RETURN WAS APPLIED TO THE ADJUSTED RATE BASE?

A. An overall weighted cost of capital of 7.24% was used based on the recommendation of OPC witness Michael Gorman, which includes his recommended 9.0% return on equity.

Q. HOW WERE THE ADJUSTED OPERATING EXPENSES DEVELOPED?

A. The Staff adjusted results for the St. Louis Metro water district were used as the starting point. Information was obtained from the OPC to identify the OPC recommended adjustments to operating expenses and to reflect those impacts as incremental changes to the Staff adjusted expenses.

Q. YOU MENTIONED THAT STAFF AND OPC HAD DIFFERENT ADJUSTMENTS TO REVENUE AT PRESENT RATES FOR THE ST. LOUIS METRO WATER DISTRICT BASED ON DIFFERENT LEVELS OF WATER SALES. WHAT TYPES OF OPERATING EXPENSES COULD BE IMPACTED BY ADJUSTMENTS TO LEVELS OF WATER SALES AND THE RELATED REVENUES?

A. Based on my experience, adjustments to levels of water sales and the related revenues could impact expenses such as power and chemical expense which may vary directly with the quantity of water, as well as expenses, such as uncollectibles, that may be impacted by the level of revenue.

Q. WERE EXPENSES ON SCHEDULE RCS-18 ALSO ADJUSTED FOR THE IMPACT OF DIFFERENT LEVELS OF WATER SALES?

A. Not at this time. OPC advised us that it had not made an adjustment to operating expenses based on the adjusted level of water sales being recommended by OPC witness Mantle. To the extent that Staff's adjusted expenses were impacted by the Staff's proposed water sales levels, adjustments may be needed to reflect those expense impacts. We were working with OPC (and through OPC with Staff) to ascertain if there were such impacts. At this time, such adjustments have not been identified. If needed, presumably such adjustments can be incorporated at a later stage in this proceeding.

Q. DO THE ADJUSTED OPERATING EXPENSES THAT YOU USED REFLECT THE STAFF RECOMMENDATIONS FOR DEPRECIATION EXPENSE?

A. Yes. Staff adjusted depreciation expenses for the St. Louis Metro water district were used.

Q. DID YOU CONFIRM THAT STAFF'S RECOMMENDED DEPRECIATION RATE FOR THE BUSINESS TRANSFORMATION INITIAL INVESTMENT WAS GENERALLY CONSISTENT WITH OPC'S RECOMMENDATION FOR THAT, SPECIFICALLY THAT THE CURRENT DEPRECIATION RATE OF 5% BASED ON AN EXPECTED AVERAGE SERVICE LIFE OF 20 YEARS SHOULD CONTINUE TO BE USED?

A. Yes. It was confirmed that Staff's recommended depreciation rate for the BT initial investment in account 391.4 is 5% based on an average life of 20 years. Because of the general consistency between that Staff depreciation rate recommendation and the OPC's recommendation that a 20-year life, and 5% annual depreciation rate, should be used for

the BT investment, no further adjustments to depreciation expense in the COSS model to reflect the OPC recommendation were deemed to be needed.

Q. HOW DID YOU ALLOCATE THE ADJUSTMENT TO FEDERAL INCOME TAX EXPENSE RELATED TO THE SECTION 199 DOMESTIC PRODUCTION ACTIVITIES DEDUCTION TO THE ST. LOUIS METRO WATER DISTRICT?

A. The allocation of that adjustment is based on the ratio of estimated taxable income at proposed rates for the St. Louis Metro water district to the total MAWC water taxable income.

Q. PLEASE SUMMARIZE THE RESULTS OF THE ADJUSTED COST OF SERVICE STUDY AND REVENUE AT PRESENT AND PROPOSED RATES FOR THE ST. LOUIS WATER DISTRICT.

A. As shown on Schedule RCS-17, with OPC's adjustments, the MAWC St. Louis Water has revenue at present rates of approximately $191.43 million. When compared with the adjusted cost of service of $200.279 million, the result is a revenue increase of approximately $8.85 million. That compares with a revenue increase of $43.484 million for the St. Louis Metro District requested by MAWC.[3] The related revenue increases (or decrease) to Rates A, B, J, F, and E are shown on Schedule RCS-17 in column 8, and the percentage impacts versus revenues at present rates are shown in column 9.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

[3] See, e.g., Schedule RCS-20.

A. Yes.

Missouri American Water Company
District Comparison of Rate Base and Expenses Per Water Customer

Case No. WR-2015-0301

Line No.	Description	Brunswick	Jefferson City	Joplin	Mexico	Platte County	St. Joseph	St. Louis Metro	Warrensburg
1	**Gas Plant - Net**	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
2	Source of Supply	$ 512	$ 748	$ 485	$ 329	$ 49	$ 360	$ 16	$ 126
3	Pumping	$ 543	$ 594	$ 269	$ 256	$ 290	$ 311	$ 97	$ 131
4	Water Treatment Plant	$ 835	$ 330	$ 1,218	$ 1,199	$ 416	$ 912	$ 262	$ 362
5	Transmission & Distribution	$ 3,210	$ 1,716	$ 2,915	$ 3,106	$ 6,350	$ 1,570	$ 3,049	$ 2,255
6	Total Rate Base	$ 4,373	$ 2,683	$ 3,071	$ 3,979	$ 4,466	$ 2,484	$ 2,452	$ 1,888
	Expenses								
7	Source of Supply	$ 20	$ 4	$ 22	$ 48	$ 92	$ 3	$ 4	$ 20
8	Pumping	$ 113	$ 25	$ 43	$ 16	$ 27	$ 49	$ 33	$ 6
9	Water Treatment Plant	$ 159	$ 67	$ 40	$ 29	$ 47	$ 49	$ 34	$ 6
10	Transmission & Distribution	$ 115	$ 38	$ 30	$ 45	$ 76	$ 37	$ 49	$ 50
11	Customer Accounts	$ 35	$ 30	$ 29	$ 30	$ 32	$ 27	$ 19	$ 23
12	Administrative & General	$ 244	$ 161	$ 184	$ 158	$ 183	$ 137	$ 134	$ 120
13	Total O&M Expense	$ 686	$ 325	$ 348	$ 326	$ 456	$ 302	$ 273	$ 226
14	Total Depreciation & Amortization Expense	$ 239	$ 109	$ 125	$ 137	$ 177	$ 111	$ 89	$ 88

Notes and Source:
Amounts calculated using data from MAWC filing Schedules CAS-3, CAS-4 and CAS-5

Missouri American Water Company
Comparison of Rate Base and Expenses Per Residential Water Customer

Case No. WR-2015-0301

Line No.	Description	Brunswick	Jefferson City	Joplin	Mexico	Platte County	St. Joseph	St. Louis Metro*	Warrensburg
	RESIDENTIAL	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
	Rate Base								
1	Utility Plant in Service	$ 2,805	$ 1,673	$ 1,815	$ 2,400	$ 3,712	$ 1,529	$ 2,773	$ 1,403
2	Other Rate Base Elements	$ (589)	$ (287)	$ (351)	$ (416)	$ (756)	$ (322)	$ (524)	$ (322)
3	Total Original Cost Measure of Value	$ 2,216	$ 1,386	$ 1,464	$ 1,984	$ 2,955	$ 1,207	$ 2,249	$ 1,081
	Expenses								
5	Source of Supply	$ 9	$ 2	$ 9	$ 21	$ 55	$ 1	$ 4	$ 11
6	Pumping	$ 41	$ 13	$ 16	$ 6	$ 18	$ 19	$ 31	$ 3
7	Water Treatment	$ 63	$ 37	$ 16	$ 12	$ 31	$ 19	$ 32	$ 3
8	Transmission & Distribution	$ 46	$ 19	$ 18	$ 16	$ 44	$ 20	$ 46	$ 27
9	Customer Accounts	$ 34	$ 29	$ 29	$ 30	$ 32	$ 27	$ 19	$ 23
10	Administrative & General	$ 107	$ 110	$ 112	$ 89	$ 134	$ 78	$ 129	$ 81
11	Total O&M Expenses	$ 301	$ 210	$ 200	$ 174	$ 314	$ 164	$ 260	$ 149
12	Total Depreciation & Amortization Expense	$ 123	$ 65	$ 66	$ 74	$ 122	$ 56	$ 82	$ 55

Notes and Source:

Amounts above calculated using data from the noted districts' Class Cost of Service studies

* St. Louis Metro reflects blended costs for the residential, commercial, industrial and other public authority customer classfications

Missouri American Water Company
Comparison of Rate Base and Expenses Per Commercial Water Customer

Case No. WR-2015-0301

Line No.	Description	Brunswick	Jefferson City	Joplin	Mexico	Platte County	St. Joseph	St. Louis Metro*	Warrensburg
	COMMERCIAL	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
	Rate Base								
1	Utility Plant in Service	$ 6,008	$ 5,043	$ 6,064	$ 6,094	$ 10,141	$ 4,936	$ 2,773	$ 4,207
2	Other Rate Base Elements	$ (1,259)	$ (877)	$ (1,186)	$ (1,058)	$ (2,067)	$ (1,043)	$ (524)	$ (969)
3	Total Original Cost Measure of Value	$ 4,749	$ 4,166	$ 4,878	$ 5,036	$ 8,074	$ 3,893	$ 2,249	$ 3,239
	Expenses								
5	Source of Supply	$ 21	$ 8	$ 37	$ 65	$ 219	$ 5	$ 4	$ 43
6	Pumping	$ 110	$ 51	$ 69	$ 21	$ 57	$ 76	$ 31	$ 12
7	Water Treatment	$ 166	$ 134	$ 66	$ 38	$ 101	$ 78	$ 32	$ 12
8	Transmission & Distribution	$ 124	$ 55	$ 46	$ 49	$ 138	$ 57	$ 46	$ 81
9	Customer Accounts	$ 35	$ 29	$ 29	$ 30	$ 31	$ 27	$ 19	$ 23
10	Administrative & General	$ 251	$ 244	$ 269	$ 185	$ 294	$ 196	$ 129	$ 188
11	Total O&M Expenses	$ 708	$ 521	$ 516	$ 389	$ 839	$ 440	$ 260	$ 359
12	Total Depreciation & Amortization Expense	$ 258	$ 182	$ 195	$ 175	$ 314	$ 168	$ 82	$ 150

Notes and Source

Amounts above calculated using data from the noted districts' Class Cost of Service studies

* St. Louis Metro reflects blended costs for the residential, commercial, industrial and other public authority customer classfications

Missouri American Water Company
Small Water District Comparison of Rate Base and O&M Expense Per Customer

Case No. WR-2015-0301

Line No.	Description	Anna Meadows	Emerald Pointe	Maplewood/ Riverside/ Stonebridge	Ozark Mountain/ Lake Tannycomo	Rankin Acres	Saddlebrook	Spring Valley/ Lakewood Manor	Tri States	Whitebranch
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
	Gas Plant - Net									
1	Source of Supply	$ 1,480	$ 219	$ 150	$ 318	$ (60)	$ 905	$ 236	$ 123	$ 457
2	Pumping	$ 727	$ 6	$ (23)	$ 189	$ 256	$ 490	$ (10)	$ 70	$ 145
3	Water Treatment Plant	$ 4	$ 3	$ 57	$ 825	$ 5	$ 76	$ 4	$ 20	$ 4
4	Transmission & Distribution	$ 2,443	$ 561	$ 1,449	$ 1,272	$ 169	$ 18,043	$ 747	$ 440	$ 935
5	Total Rate Base	$ 3,952	$ 390	$ 1,046	$ 1,864	$ 499	$ 3,447	$ 858	$ 910	$ 1,278
	Expenses									
6	O&M Expense	$ 38	$ 100	$ 229	$ 194	$ 268	$ 739	$ 497	$ 253	$ 218

Notes and Source:
Amounts calculated using data from MAWC filing Schedules CAS-3, CAS-4 and CAS-5

Missouri American Water Company
Wastewater District Comparison of Rate Base and O&M Expense Per Customer

Case No. WR-2015-0301

Line No.	Description	Anna Meadows	Cedar Hill	Emerald Pointe	Jefferson City	Maplewood	Meramec	Ozark Meadows	Platte County	Saddlebrooke	Stonebridge	Warren County	Arnold
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)
	District Comparison of Rate Base Per Customer												
1	Net Utility Plant	$ 3,167	$ 3,828	$ 2,770	$ 3,587	$ 2,536	$ 2,319	$ 3,642	$ 514	$ 17,956	$ 4,230	$ 6,671	$ 2,945
2	Total Rate Base	$ 2,461	$ 1,888	$ 2,863	$ 2,209	$ 1,783	$ 942	$ 1,843	$ 215	$ 1,422	$ 2,055	$ 5,029	$ 2,136
	Expenses												
6	O&M Expense	$ 113	$ 506	$ 297	$ 595	$ 199	$ 254	$ 894	$ 766	$ 160	$ 482	$ 561	$ 226

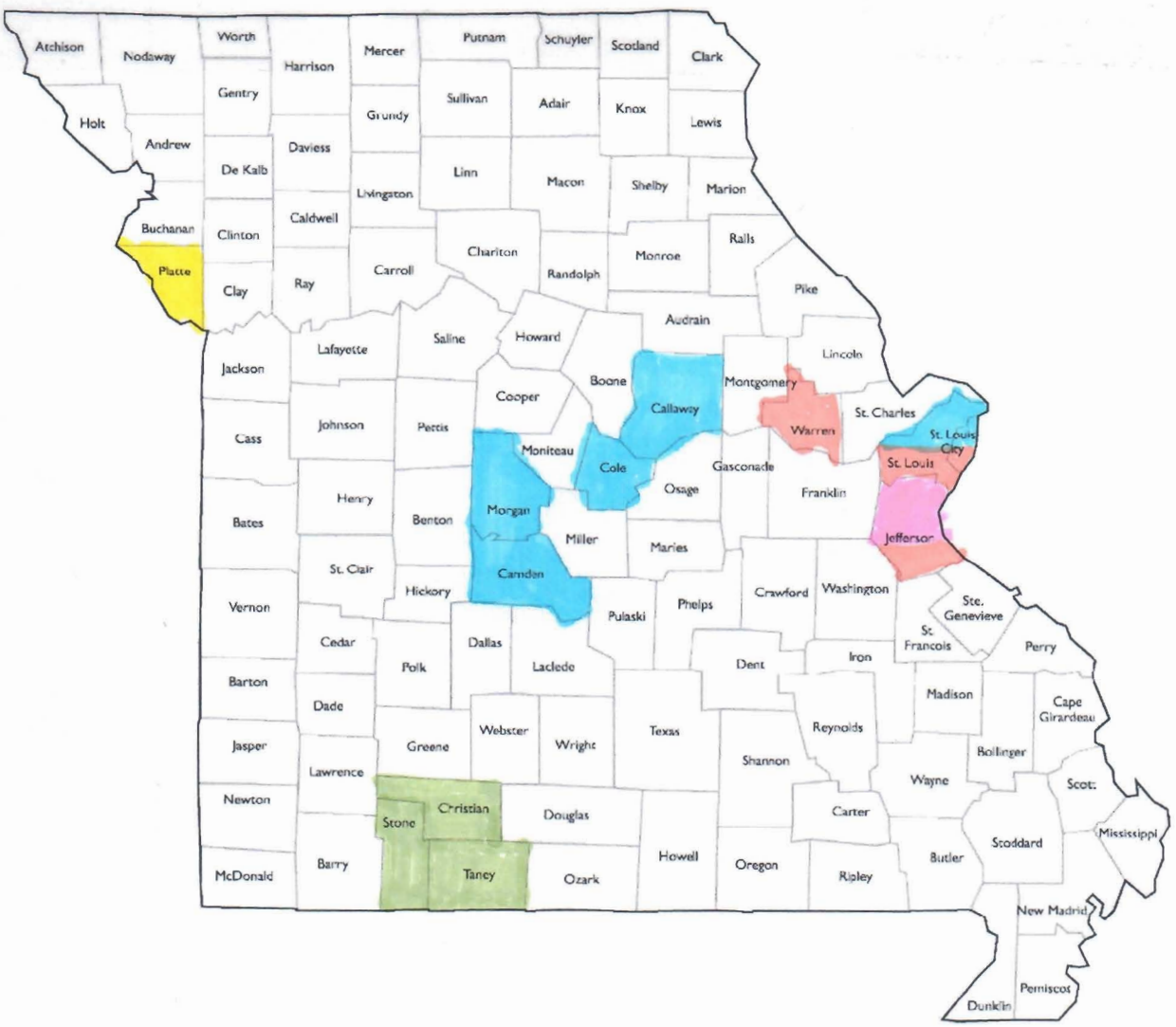
Notes and Source:
Amounts calculated using data from MAWC filing Schedules CAS-3, CAS-4 and CAS-5

Missouri American Water Company
Summary of Wastewater Districts, Customer Count and Location

Case No. WR-2015-0301

Line No.	Description		Anna Meadows	Cedar Hill	Emerald Pointe	Jefferson City	Maplewood	Meramec	Ozark Meadows	Platte County	Saddlebrooke	Stonebridge	Warren County	Arnold
1	Number of Residential Customers*		97	672	348	1,348	363	608	25	101	87	620	411	6,390
2	Number of Commercial Customers*		-	63	26	7	4	-	-	-	-	64	2	526
3	Number of Other Public Authority Customers*		-	-	-	-	-	-	-	-	-	-	-	12
4	Total Customers		97	735	374	1,355	367	608	25	101	87	684	413	6,928
5		County	Warren	Jefferson	Taney/Stone	Callaway/ Cole	St. Louis	St. Louis	Morgan/ Camden	Platte	Taney/Christian	Taney/Stone	Warren	Jefferson
6	Staff Group 1													X
7	Staff Group 2									X				
8	Staff Group 3		X	X			? (1)	X					X	
9	Staff Group 4					X	X (1)		X					
10	Staff Group 5				X						X	X		

Notes:
(1) Possibly put Maplewood into Group 3 based on geographic proximity.
* Anna Meadows and Arnold customer counts are based on September 2015 per the Company's response to Staff data request 0239. Others are as of December 31, 2014, end of test year.


Atchison
Nodaway
Worth
Harrison
Mercer
Putnam
Schuyler
Scotland
Clark
Gentry
Sullivan
Adair
Knox
Lewis
Holt
Andrew
Grundy
Daviess
De Kalb
Linn
Macon
Shelby
Marion
Buchanan
Clinton
Caldwell
Livingston
Chariton
Monroe
Ralls
Platte
Clay
Ray
Carroll
Randolph
Pike
Audrain
Howard
Saline
Lafayette
Lincoln
Jackson
Cooper
Boone
Montgomery
Callaway
Warren
St. Charles
St. Louis City
Cass
Johnson
Pettis
Moniteau
Cole
Gasconade
St. Louis
Osage
Franklin
Henry
Bates
Benton
Morgan
Miller
Maries
Jefferson
St. Clair
Camden
Hickory
Vernon
Pulaski
Phelps
Crawford
Washington
Ste. Genevieve
St. Francois
Perry
Cedar
Polk
Dallas
Laclede
Dent
Iron
Barton
Dade
Madison
Cape Girardeau
Jasper
Greene
Webster
Wright
Texas
Reynolds
Shannon
Bollinger
Lawrence
Wayne
Scot:
Newton
Christian
Stone
Douglas
Carter
Mississippi
Stoddard
Barry
Howell
Oregon
Butler
McDonald
Taney
Ozark
Ripley
New Madrid
Pemiscot
Dunklin

United States Environmental Protection Agency | Office of Water Washington, DC 20460 | EPA September 1999

CONSOLIDATED WATER RATES: Issues and Practices in Single-Tariff Pricing

September 1999

A Joint Publication of the
U.S. Environmental Protection Agency and
the National Association of Regulatory
Utility Commissioners

Consolidated Water Rates: Summary

Purpose

Consolidated rates or single-tariff pricing is the use of a unified rate structure for multiple water (or other) utility systems that are owned and operated by a single utility, but that may or may not be contiguous or physically interconnected. The purpose of this report is to provide policymakers and other stakeholders with an overview of consolidated ratemaking and an appreciation of the complex trade-offs involve in its implementation.

The report provides a review of historical, theoretical, and practical issues related to consolidated ratemaking, implementation data, and key decisions by the state public utility commissions. A detailed survey of state public utility commission staff regarding single-tariff pricing is presented. General commission policies are summarized, along with citations of specific regulatory decisions concerning single-tariff pricing.

How Consolidated Pricing Works

Under consolidated pricing, all customers of the corporate utility pay the same rate for the same service, even though the individual systems providing service may vary in terms of operating characteristics and stand-alone costs. In many respects, consolidated rates are the conceptual opposite of "zonal" or spatially differentiated rates.

Single-tariff pricing is used by many investor-owned water utilities, with the approval of state regulators, but it also can be implemented by publicly owned utilities. Single-tariff pricing can be an incentive for larger water utilities to acquire small water systems that lack capacity because it makes it possible to spread costs over a larger service population and maintain more stable and affordable rates for customers of some smaller and more expensive systems. Single-tariff pricing can be used by publicly owned or nonprofit water utilities that operate satellite systems, but few examples are readily available.

Unfortunately, the literature on utility ratemaking, which leans heavily toward the conditions and experiences of the energy and telecommunications industries, yields little theoretical insight or empirical evidence on the implications of single-tariff pricing. Much of the understanding of this issue is derived from case-specific regulatory proceedings. However, an analysis of historical and theoretical perspectives suggests that single-tariff pricing is not necessarily inconsistent with the prevailing principles of ratemaking.

The Tradeoffs

Single-tariff pricing is a provocative issue precisely because of the tradeoffs involved in its application, including possible tradeoffs among different types of efficiency. Single-tariff pricing might lessen some kinds of efficiency (such as those related to spatial allocation of costs and price signals to customers), while improving other kinds of

efficiency (such as those related to management and innovation). Of particular importance, but hardest to gauge, is whether single-tariff pricing and related restructuring can lead to long-run efficiency improvements in the water industry. Water utilities and policymakers must consider and weigh the evidence and trade-offs prior to implementing or approving single-tariff pricing.

A variety of theoretical and practical arguments in favor and against the use of single-tariff pricing can be made. Single-tariff pricing tends to stabilize rates and revenues, mitigate rate shock, and make rates more affordable for the customers of the smallest and more expensive systems. While achieving certain capacity-development, affordability, and operation efficiency goals, however, single-tariff pricing also might trade a degree of economic efficiency by ignoring spatial differences in costs and diluting price signals. A 1996 survey of commission staff members identified several arguments in favor of and against single-tariff pricing were identified.

Summary of Select Arguments in Favor and Against Single-Tariff Pricing

Select Arguments in Favor of Single-Tariff Pricing	Select Arguments Against Single-Tariff Pricing
❒ Mitigates rate shock to utility customers (17)	❒ Conflicts with cost-of-service principles (14)
❒ Lowers administrative costs to the utilities (16)	❒ Provides subsidies to high-cost customers (12)
❒ Provides incentives for utility regionalization and consolidation (15)	❒ Not acceptable to all affected customers (10)
❒ Physical interconnection is not considered a prerequisite (13)	❒ Considered inappropriate without physical interconnection (8)
❒ Addresses small-system viability issues (13)	❒ Distorts price signals to customers (7)
❒ Improves service affordability for customers (12)	❒ Fails to account for variations in customer contributions (6)
❒ Provides ratemaking treatment similar to that for other utilities (10)	❒ Justification has not been adequate in a specific case (or cases) (6)
❒ Facilitates compliance with drinking water standards (9)	❒ Discourages efficient water use and conservation (4)
❒ Overall benefits outweigh overall costs (9)	❒ Encourages growth and development in high-cost areas (4)
❒ Promotes universal service for utility customers (8)	❒ Undermines economic efficiency (3)
❒ Lowers administrative cost to the commission (8)	❒ Provides unnecessary incentives to utilities (2)
❒ Promotes ratepayer equity on a regional basis (6)	❒ Not acceptable to other agencies or governments (2)
❒ Encourages investment in the water supply infrastructure (5)	❒ Insufficient statutory or regulatory basis or precedents (2)
❒ Promotes regional economic development (3)	❒ Overall costs outweigh overall benefits (2)
❒ Encourages further private involvement in the water sector (2)	❒ Encourages overinvestment in infrastructure (1)
❒ Other: Can be consistent with cost-of-service principles (1) and found to be in the public interest (1)	

Source: Author's construct. See Tables E3 and E4. Numbers in parentheses represent number of mentions (out of 21 applicable survey responses).

State Commission Policies

The public utility commissions have provide the central forum in which single-tariff pricing has been evaluated. Single-tariff pricing is a relevant regulatory policy issue only for the thirty (30) state public utility commissions with jurisdiction for multi-system utilities. Given this context, a clear majority of affected state commissions have allowed regulated water utilities to implement single-tariff pricing (22 state commissions).

Based on the commission survey and subsequent updates, single-tariff pricing is generally accepted in eight (8) states. A few states (such as Connecticut, Pennsylvania, and Texas) have recognized single-tariff pricing as a policy tool. Staff members at seventeen (17) commissions characterized the policies of their commissions as "case-by-case," indicating that the single-tariff pricing must be justified for every specific application (even when the policy is "generally accepted"). Numerous exemplary decisions can be cited.

Summary of State Public Utility Commission Policies on Single-Tariff Pricing for Water Utilities

Commission Policy	State Commissions	
Generally Accepted (8)	Connecticut	Pennsylvania
	Missouri	South Carolina
	North Carolina	Texas
	Oregon	Washington
Case-By-Case (17)	Single-Tariff Pricing Has Been Approved (14)	
	Arizona	New Hampshire (d) (f)
	Delaware (a)	New York
	Florida	New Jersey (e) (f)
	Idaho (not an issue)	Ohio
	Illinois	Vermont
	Indiana (b) (f)	Virginia
	Massachusetts (c) (f)	West Virginia
	Single-Tariff Pricing Has Not Been Approved (3)	
	California (g)	
	Maryland (not an issue)	
	Mississippi (not an issue)	
Never Considered (5)	Iowa	Maine
	Kentucky	Wisconsin
	Louisiana	
Not Applicable – No Multi-System Water Utilities (15)	Alabama	Nevada
	Alaska	New Mexico
	Arkansas	Oklahoma
	Colorado	Rhode Island
	Hawaii	Tennessee
	Kansas	Utah
	Montana	Wyoming
	Nebraska	
No Jurisdiction for Water Utilities (6)	Georgia	North Dakota
	Michigan	South Dakota
	Minnesota	Washington, D.C.

Source: Author's construct. See Table 12 for notes.

Guide for Readers

1. Introduction. The introductory section defines consolidated ratemaking, discusses general advantages and disadvantages of this approach, and provides the policy and regulatory context in which rate consolidation is considered.

2. Background. This section contemplates single-tariff pricing in light of an historical perspective and the prevailing economic regulatory literature. The concept of spatially differentiated pricing (or "zonal rates") also is considered.

3. Spatial Pricing and Ratemaking Theory. Principles of ratemaking and tradeoffs among efficiency, equity, and other policy goals, are considered. Goals unique to the water industry are identified. The section also contrasts pricing in theory with pricing in practice.

4. Structural Issues in the Water Industry. This section identifies ways in which pricing policies will shape the structural character of the water industry and the future of small water systems.

5. Cost Profile of the Water Industry. This section considers the cost profile of the water industry, including the relevance of economies of scale, the challenge of maintaining affordable water service for consumers, and the means to enhancing water system capacity.

6. Examples of Single Tariff Pricing. Numerical illustrations of rate consolidation are provided here, including examples from two recent cases in Indiana and New Hampshire.

7. Public Utility Commission Role. The role of the state public utility commissions is reviewed in this section, with an emphasis on how commission policies will affect the structure of the industry through consolidation.

8. Commission Survey. Results of a 1996 survey of commission staff members are presented. Based on a database derived from the survey, this section also identifies the characteristics of utilities that have implemented consolidated rates.

9. Arguments in Favor and Against Rate Consolidation. Commission staff views about the advantages and disadvantages of single-tariff pricing are presented.

10. Commission Policies on Rate Consolidation. This final section summarizes commission policies on rate consolidation and provides an overview of several key cases, including regulatory decisions from West Virginia, Pennsylvania, Massachusetts, Florida, Illinois, New Jersey, Missouri, Indiana, New York, and Connecticut. This section also considers legal challenges to the authority of regulators to approve consolidated rates.

MISSOURI-AMERICAN WATER COMPANY
ST. LOUIS METRO DISTRICT

COMPARISON OF COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES
FOR THE TEST YEAR ENDED DECEMBER 31, 2014

Customer Classification	Cost of Service Amount (Schedule RCS-18)	Cost of Service Percent	Revenues, Present Rates Amount	Revenues, Present Rates Percent	Revenues, Proposed Rates District Pricing Amount	Revenues, Proposed Rates District Pricing Percent	Proposed Increase Amount	Proposed Increase Percent Increase
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Rate A - Res/Com/Ind/OPA	$ 182,362,465	94.0%	$ 173,303,197 [a]	93.6%	$ 182,362,465 [c]	94.1%	$ 9,059,268	5.2%
Rate B - Sales for Resale	2,524,953	1.3%	2,892,461 [b]	1.6%	$ 2,524,953 [c]	1.3%	(367,508)	-12.7%
Rate J - Manufacturing	6,490,820	3.3%	6,571,486 [b]	3.6%	$ 6,490,820 [c]	3.3%	(80,666)	-1.2%
Rate F - Private Fire	2,550,660	1.3%	2,312,409 [b]	1.2%	$ 2,550,660 [c]	1.3%	238,251	10.3%
Rate E - Public Fire	-	0.0%	-	0.0%	-	0.0%	-	0.0%
Total Sales	193,928,898	99.9%	185,079,553	100.0%	193,928,898	100.0%	8,849,346	4.8%
Other Revenues*	6,350,401		6,350,400 [b]		$6,350,401		0.33	0.0%
Total	$ 200,279,299		$ 191,429,953 [d]		$ 200,279,300		$ 8,849,347	4.6%

Notes and Source

* Includes Rate G and H Contract Sales.

	Amount		
[a] MAWC Rate A Revenues	$ 166,637,144	[b]	
OPC Adjustment	$ 6,666,053		Amount from workpaper using information provided by OPC witness Lena Mantle
OPC Adjusted Rate A Revenues	$ 173,303,197		

[b] MAWC revenues from MoPSC W0218 Attachment 8, column (4)

[c] District pricing is based on the adjusted cost of service study results in column (2), which are utilized as the basis for OPC's proposed revenues

[d] Total revenues in column (4) do not include $16,178 Rate K revenues, and Anna Meadows revenue of $42,770 are excluded.

MISSOURI-AMERICAN WATER COMPANY
ST. LOUIS METRO DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2014, ALLOCATED TO CUSTOMER CLASSIFICATIONS

Line No.	Account	Factor Ref.	Cost of Service per MAWC	Cost of Service per Staff	Incremental OPC Adjustments	Other Adjustments	Cost of Service	Res/Com/Ind/OPA Rate A	Sales for Resale Rate B	Large Industrial Rate J	Fire Protection Rate F	Fire Protection Rate E
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	OPERATION AND MAINTENANCE EXPENSES											
	SOURCE OF SUPPLY EXPENSES											
1	Super & Eng Oper SS	2	$ -	$ 190			$ 190	$ 173	$ 5	$ 12	$ 0	$ 0
2	Labor & Exp Oper SS	2	$ 151,450	$ 146,121			$ 146,121	132,692	4,223	9,089	88	29
3	Purchased Water	1	$ 390,672	$ 405,516			$ 405,516	351,217	14,923	38,646	527	203
4	TOTAL SS EXPENSE - OPERATION		542,122	551,827	0	0	551,827	484,082	19,151	47,746	615	232
5	Misc Exp Oper SS	2	$ -	$ 702			$ 702	637	20	44	0	0
6	Misc Exp Oper SS	2	$ 448,332	$ 486,581			$ 486,581	441,864	14,062	30,265	292	97
7	Rents Oper SS	2	$ 2,603	$ 2,603			$ 2,603	2,364	75	162	2	1
8	Lake, River & Oth Maint SS - Labor	2	$ 18	$ 251			$ 251	228	7	16	0	0
9	Wells & Springs Maint SS - Labor	2	$ 65	$ 2			$ 2	2	0	0	0	0
10	Infilt Gall & Tunnels Maint SS - Labor	2	$ 414	$ 311			$ 311	282	9	19	0	0
11	Supply Mains Maint SS - Labor	2	$ 104	$ 2			$ 2	2	0	0	0	0
12	Misc Plant Maint SS - Labor	2	$ 252,865	$ 295,242			$ 295,242	268,109	8,532	18,364	177	59
13	Misc Plant Maint SS	2	$ 6,956	$ 6,848			$ 6,848	6,219	198	426	4	1
14	TOTAL SS EXPENSE - MAINTENANCE		711,358	792,542	0	0	792,542	719,707	22,904	49,296	476	159
	TOTAL SS EXPENSE		$ 1,253,480	1,344,369	0	0	1,344,369	1,203,790	42,056	97,042	1,090	391
	POWER AND PUMPING EXPENSES											
15	Super & Eng Oper P	3	$ -	$ 18,950			$ 18,950	16,581	529	1,135	165	540
16	Fuel for Power Prod	1	$ 10,243	$ 11,111			$ 11,111	9,623	409	1,059	14	6
17	Labor & Exp Oper Pwr Prod - Labor	3	$ 664	$ (1)			$ (1)	(1)	(0)	(0)	(0)	(0)
18	Purch Fuel/Power for Pump	1	$ 8,468,645	$ 9,186,390			$ 9,186,390	7,956,332	338,059	875,463	11,942	4,593
19	Labor & Exp Oper Pump - Labor	3	$ 1,745,507	$ 917,022			$ 917,022	802,394	25,585	54,930	7,978	26,135
20	Misc Exp Oper P	3	$ 2,158	$ 2,158			$ 2,158	1,888	60	129	19	62
21	Rents Oper P	3	$ 1,683	$ 1,683			$ 1,683	1,473	47	101	15	48
22	TOTAL PUMPING EXPENSE - OPERATION		10,228,899	10,137,313	0	0	10,137,313	8,788,291	364,689	932,817	20,133	31,383
23	Super & Eng Maint P	3	$ 29,506	$ 22,842			$ 22,842	19,987	637	1,368	199	651
24	Struct & Improve Maint P - Labor	3	$ 694,311	$ 299,719			$ 299,719	262,254	8,362	17,953	2,608	8,542
25	Struct & Improve Maint P	3	$ 71,690				$ -	0	0	0	0	0
26	Pump Equip Maint P - Labor	3	$ 42,920	$ 203,712			$ 203,712	178,248	5,684	12,202	1,772	5,806
27	Pump Equip Maint P	3	$ 11,857	$ 11,655			$ 11,655	10,198	325	698	101	332
28	TOTAL PUMPING EXPENSES - MAINTENANCE		850,284	537,928	0	0	537,928	470,687	15,008	32,222	4,680	15,331
29	**TOTAL PUMPING EXPENSES**		11,079,183	10,675,241	0	0	10,675,241	9,258,978	379,697	965,038	24,813	46,714
	WATER TREATMENT											
30	Super & Eng Oper WT	2	$ 69,401	$ 67,904			$ 67,904	61,664	1,962	4,224	41	14
31	Chemicals	1	$ 7,419,482	$ 8,560,528			$ 8,560,528	7,414,273	315,027	815,818	11,129	4,280
32	Labor & Exp Oper WT - Labor	2	$ 1,286,730	$ 2,458,737			$ 2,458,737	2,232,779	71,057	152,933	1,475	492
33	Labor & Exp Oper WT	2	$ 199,129	$ 197,524			$ 197,524	179,372	5,708	12,286	119	40
34	Misc Exp Oper WT	1	$ 102,227	$ 1,200			$ 1,200	1,039	44	114	2	1
35	Misc Exp Oper WT	2	$ 29,508				$ -	0	0	0	0	0
36	Rents Oper WT	2	$ 10,157	$ 39,002			$ 39,002	35,418	1,127	2,426	23	8
37	TOTAL WT EXPENSE - OPERATION		9,116,634	11,324,895	0	0	$ 11,324,895	9,924,545	394,927	987,802	12,788	4,833
							$ -					
38	Super & Eng Maint WT	2	$ 1,613,443	$ 1,470,331			$ 1,470,331	1,335,208	42,493	91,455	882	294
39	WT Equip Maint WT - Labor	2	$ 2,987	$ 537			$ 537	488	16	33	0	0
40	WT Equip Maint WT	2	$ 542,382	$ 595,164			$ 595,164	540,468	17,200	37,019	357	119
41	TOTAL WT EXPENSE - MAINTENANCE		2,158,812	2,066,032	0	0	2,066,032	1,876,164	59,708	128,507	1,240	413
42	**TOTAL WT EXPENSE**		11,275,446	13,390,927	0	0	13,390,927	11,800,708	454,635	1,116,309	14,028	5,247

MISSOURI-AMERICAN WATER COMPANY
ST. LOUIS METRO DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2014, ALLOCATED TO CUSTOMER CLASSIFICATIONS

Line No.	Account	Factor Ref.	Cost of Service per MAWC	Cost of Service per Staff	Incremental OPC Adjustments	Other Adjustments	Cost of Service	Res/Com/Ind/OPA Rate A	Sales for Resale Rate B	Large Industrial Rate J	Fire Protection Rate F	Fire Protection Rate E
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	TRANSMISSION AND DISTRIBUTION EXPENSES											
43	Super & Eng Oper TD	10	$ 532,432	$ 152,909			$ 152,909	141,525	572	2,206	4,258	4,347
44	Storage Facilty Exp - Labor	5	$ 48,575	$ 5,236			$ 5,236	4,236	149	302	124	425
45	TD Lines Exp - Labor	6	$ 1,448,255	$ 1,458,409			$ 1,458,409	1,328,611	9,334	27,710	21,147	71,608
46	TD Lines Exp	6	$ 43,719				$ -	0	0	0	0	0
47	Meter Expense - Labor	8	$ 665,032	$ 610,657			$ 610,657	595,330	0	7,267	8,061	0
48	Meter Expense	8	$ 4,556	$ 4,556			$ 4,556	4,442	0	54	60	0
49	Customer Install Exp - Labor	9	$ 674,665	$ 454,864			$ 454,864	412,471	0	1,228	41,165	0
50	Misc Exp Oper TD - Labor	10	$ 2,131,681	$ 1,922,299			$ 1,922,299	1,779,186	7,194	27,738	53,531	54,650
51	Misc Exp Oper TD	10	$ 781,087	$ 778,600			$ 778,600	720,634	2,914	11,235	21,682	22,135
52	Rents Oper TD	10	$ 53,538	$ 53,538			$ 53,538	49,552	200	773	1,491	1,522
53	TOTAL T & D EXPENSE OPERATION		6,383,540	5,441,068	0	0	5,441,068	5,035,986	20,363	78,512	151,518	154,688
54	Super & Eng Maint TD	11	$ 47,109	$ 19,620			$ 19,620	16,685	102	316	388	2,129
55	Contract Svc-Eng Maint	11	$ 458				$ -	0	0	0	0	0
56	Struct & Improve Maint TD - Labor	11	$ 26,630	$ 166			$ 166	141	1	3	3	18
57	Dist Res Stand Maint TD - Labor	5	$ 1,406	$ 530			$ 530	429	15	31	13	43
58	TD Main Maint TD - Labor	6	$ 214,728	$ 62,407			$ 62,407	56,853	399	1,186	905	3,064
59	TD Main Maint TD	6	$ 4,911,363	$ 3,683,375			$ 3,683,375	3,355,555	23,574	69,984	53,409	180,854
60	Services Maint TD - Labor	9	$ 229,646	$ 386,726			$ 386,726	350,683	0	1,044	34,999	0
61	Services Maint TD	9	$ 448	$ 440			$ 440	399	0	1	40	0
62	Meters Maint TD - Labor	8	$ 209,156	$ 169,222			$ 169,222	164,975	0	2,014	2,234	0
63	Hydrants Maint TD - Labor	7	$ 293,107	$ 317,567			$ 317,567	0	0	0	0	317,567
64	Misc Plant Maint TD - Labor	11	$ 1,475,326	$ 1,434,848			$ 1,434,848	1,220,195	7,461	23,101	28,410	155,681
65	Mat and Sup Maint TD	11	$ 2,295,991	$ 2,045,596			$ 2,045,596	1,739,575	10,637	32,934	40,503	221,947
66	TOTAL T & D EXPENSE - MAINTENANCE		9,705,368	8,120,497	0	0	8,120,497	6,905,488	42,189	130,613	160,903	881,303
67	**TOTAL T & D EXPENSE**		16,088,907	13,561,565	0	0	13,561,565	11,941,474	62,553	209,125	312,422	1,035,991
	CUSTOMER ACCOUNTS											
68	Supervision CA	12	$ 27,081	$ 36,590			$ 36,590	35,470	0	33	1,087	0
69	Meter Reading Exp CA - Labor	13	$ 1,220,279	$ 1,530,384			$ 1,530,384	1,529,772	0	612	0	0
70	Meter Reading Exp CA	13	$ 2,682	$ 2,681			$ 2,681	2,680	0	1	0	0
71	Cust Rec & Collection CA - Labor	12	$ 561,079	$ 678,750			$ 678,750	657,980	0	611	20,159	0
72	Cust Rec & Collection CA	12	$ 1,873,076	$ 1,872,222	$ (39,149)		$ 1,833,073	1,776,981	0	1,650	54,442	0
73	Uncollectible Accts	12	$ 2,526,935	$ 2,433,561			$ 2,433,561	2,359,094	0	2,190	72,277	0
74	Misc Cust Accts Exp CA - Labor	12	$ 3,415	$ (8)			$ (8)	(8)	0	(0)	(0)	0
75	Misc Cust Accts Exp CA	12	$ 10,725	$ 10,566			$ 10,566	10,243	0	10	314	0
76	Cust Serv & Info Exp CA	12	$ 64	$ 171			$ 171	166	0	0	5	0
77	**TOTAL CUSTOMER ACCOUNTING EXPENSE**		6,225,335	6,564,917	(39,149)	0	6,525,768	6,372,378	0	5,107	148,283	0
	ADMINISTRATIVE AND GENERAL EXPENSES											
78	Salaries AG	14	$ 6,143,844	$ 4,385,363	$ 52,495 [a]		$ 4,437,858	4,033,856	43,915	107,406	77,450	175,231
79	Other Supplies & Exp AG	14	$ 1,361,753	$ 1,316,063	$ (14,214)		$ 1,301,849	1,183,335	12,883	31,508	22,720	51,404
80	Mgmt Fees-Admin	14	$ 18,109,147				$ -	0	0	0	0	0
81	Mgmt Fees-Customer Service	12	$ 3,326,703				$ -	0	0	0	0	0
82	Mgmt Fees-Belleville Lab	2	$ 104,435				$ -	0	0	0	0	0
83	Mgmt Fees- Employee	16	$ 1,126,651				$ -	0	0	0	0	0
84	Outside Services AG	14	$ 1,164,557	$ 23,751,461	$ 200,000 [a]		$ 23,951,461	21,771,030	237,015	579,678	418,005	945,734
85	Outside Services AG	14	$ -	$ (4,628,995)			$ (4,628,995)	(4,207,593)	(45,807)	(112,032)	(80,786)	(182,778)
86	Ins Gen Liab Oper AG	14	$ 2,576,615	$ 3,132,861	$ (154,395)		$ 2,978,466	2,707,320	29,474	72,085	51,981	117,606
87	Ins Work Comp AG	16	$ 897,953				$ -	0	0	0	0	0
88	Ins Other Oper AG	14	$ 223,460				$ -	0	0	0	0	0
89	Insurance Vehicle	14	$ 110,270				$ -	0	0	0	0	0
90	Injuries & Damages	16	$ 33,278	$ 33,853			$ 33,853	30,499	407	969	539	1,440
91	Employee Pension & Benefits	16	$ 6,500,734	$ 7,897,642	$ 4,361		$ 7,902,003	7,119,000	94,914	226,159	125,901	336,030

MISSOURI-AMERICAN WATER COMPANY
ST. LOUIS METRO DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2014, ALLOCATED TO CUSTOMER CLASSIFICATIONS

Line No.	Account	Factor Ref.	Cost of Service per MAWC	Cost of Service per Staff	Incremental OPC Adjustments	Other Adjustments	Cost of Service	Res/Com/Ind/OPA Rate A	Sales for Resale Rate B	Large Industrial Rate J	Fire Protection Rate F	Fire Protection Rate E
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
92	Reg Commision Exp	19	$ 570,911	$ 16,690	$ 113,348		$ 130,038	114,398	1,693	4,256	1,710	7,980
93	Rents AG	14	$ 172,042	$ 145,255	$ (100,041)		$ 45,214	41,098	447	1,094	789	1,785
94	Goodwill Advertising Exp	14	$ 13,919	$ 453	$ 25		$ 478	434	5	12	8	19
95	Misc Exp AG	14	$ 1,230,844	$ 912,428	$ (264,833)		$ 647,595	588,641	6,408	15,673	11,302	25,571
96	Research & Development	14	$ 65,583	$ 63,305			$ 63,305	57,542	626	1,532	1,105	2,500
97	TOTAL A & G OPERATIONS		43,732,698	37,026,379	(163,254)	0	36,863,125	33,439,561	381,980	928,339	630,724	1,482,521
98	General Plant Maint AG - Labor	14	$ (657)	$ 275,986			$ 275,986	250,862	2,731	6,679	4,817	10,897
99	Maint Exp ARO/Net Neg Sal AG	14	$ -				$ -	0	0	0	0	0
100	General Plant Maint AG	14	$ 536,551	$ 509,365			$ 509,365	462,995	5,040	12,328	8,890	20,112
101	TOTAL A & G EXPENSE - MAINTENANCE		535,894	785,351	0	0	785,351	713,856	7,772	19,007	13,706	31,010
102	**TOTAL A & G EXPENSE**		44,268,592	37,811,730	(163,254)	0	37,648,476	34,153,417	389,751	947,347	644,430	1,513,531
103	**Total Operation & Maintenance Expenses**		90,190,943	83,348,749	(202,403)	0	83,146,346	74,730,745	1,328,692	3,339,968	1,145,067	2,601,873
[a]	Approximate impact of customer service portion of AIP which Staff removed but OPC did not											
	DEPRECIATION EXPENSE											
104	Struct & Imp SS	2	$ 137,846	$ 195,358			$ 195,358	177,405	5,646	12,151	117	39
105	Struct & Imp P	3	$ 85,435	$ 197,521			$ 197,521	172,831	5,511	11,832	1,718	5,629
106	Struct & Imp Pumps (STL)	3	$ 199,810				$ -	0	0	0	0	0
107	Struct & Imp Pump Boosters	3	$ 150,950				$ -	0	0	0	0	0
108	Struct & Imp WT	2	$ 193,065	$ 129,761			$ 129,761	117,836	3,750	8,071	78	26
109	Struct & Imp WT Nth Plt (ST	2	$ 227,493	$ 152,901			$ 152,901	138,849	4,419	9,510	92	31
110	Struct & Imp WT Ctrl Plt 1	2	$ 60,458	$ 40,634			$ 40,634	36,900	1,174	2,527	24	8
111	Struct & Imp WT Ctrl Plt 3	2	$ 536,321	$ 360,467			$ 360,467	327,340	10,418	22,421	216	72
112	Struct & Imp WT Sth Plt (ST	2	$ 190,036	$ 127,725			$ 127,725	115,987	3,691	7,945	77	26
113	Struct & Imp WT Meramec (ST	2	$ 255,635	$ 171,815			$ 171,815	156,025	4,965	10,687	103	34
114	Struct & Imp TD	6	$ 87,407	$ 140,951			$ 140,951	128,407	902	2,678	2,044	6,921
115	Struct & Imp TD Spec Cross	6	$ 3,984	$ 6,425			$ 6,425	5,853	41	122	93	315
116	Struct & Imp AG	14	$ 135,075	$ 144,727			$ 144,727	131,552	1,432	3,503	2,526	5,715
117	Struct & Imp Offices	14	$ 82,031	$ 80,750			$ 80,750	73,399	799	1,954	1,409	3,188
118	Gen Structures HVAC	14	$ 28,841	$ 5,053			$ 5,053	4,593	50	122	88	200
119	Struct & Imp Leasehold	14	$ 181	$ 329			$ 329	299	3	8	6	13
120	Struct & Imp Store,Shop,Gar	14	$ 16,468	$ 10,977			$ 10,977	9,978	109	266	192	433
121	Struct & Imp Misc	14	$ 35,981	$ 23,985			$ 23,985	21,801	237	580	419	947
122	Wells & Springs	2	$ 834	$ 326			$ 326	296	9	20	0	0
123	Supply Mains	2	$ 17	$ 21			$ 21	19	1	1	0	0
124	Supply Mains Nth Plt (STL)	2	$ 4,021	$ 4,961			$ 4,961	4,505	143	309	3	1
125	Supply Mains Ctrl Plt (STL)	2	$ 58,503	$ 72,176			$ 72,176	65,543	2,086	4,489	43	14
126	Supply Mains Sth Plt (STL)	2	$ 6,604	$ 8,147			$ 8,147	7,399	235	507	5	2
127	Supply Mains Meramec Plt (S	2	$ 18,965	$ 23,397			$ 23,397	21,247	676	1,455	14	5
128	Power Generation Equip	3	$ 42,040				$ -	0	0	0	0	0
129	Pump Equip Electric	3	$ 274,487	$ 411,363			$ 411,363	359,943	11,477	24,641	3,579	11,724
130	Pump Equip Elec Pre46 (STL)	3	$ 16,609	$ 24,891			$ 24,891	21,780	694	1,491	217	709
131	Pump Equip Elec Post46 (STL	3	$ 519,473	$ 778,514			$ 778,514	681,200	21,721	46,633	6,773	22,188
132	Pump Equip Elec Boosters Po	3	$ 26,707	$ 40,025			$ 40,025	35,022	1,117	2,397	348	1,141
133	Pump Equip Diesel Ctrl Plt	3	$ 36,245	$ 54,038			$ 54,038	47,283	1,508	3,237	470	1,540
134	Pump Equip Hydraulic	3	$ 4,901	$ 7,380			$ 7,380	6,458	206	442	64	210
135	Pump Equip Other	3	$ 4,158	$ 22,752			$ 22,752	19,908	635	1,363	198	648
136	Pump Equip WT	3	$ 11,979	$ 95,992			$ 95,992	83,993	2,678	5,750	835	2,736
137	Pump Equip TD	3	$ 56				$ -	0	0	0	0	0
138	WT Equip Non-Media	2	$ 474,986	$ 492,827			$ 492,827	447,536	14,243	30,654	296	99
139	WT Equip Non-Med North (STL	2	$ 193,239	$ 200,497			$ 200,497	182,071	5,794	12,471	120	40
140	WT Equip Non Media Ctrl 1 &	2	$ 59,333	$ 61,562			$ 61,562	55,904	1,779	3,829	37	12
141	WT Equip Non Media Ctrl 3 (	2	$ 526,771	$ 546,557			$ 546,557	496,328	15,795	33,996	328	109
142	WT Equip Non Media Sth (STL	2	$ 168,510	$ 174,839			$ 174,839	158,772	5,053	10,875	105	35

MISSOURI-AMERICAN WATER COMPANY
ST. LOUIS METRO DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2014, ALLOCATED TO CUSTOMER CLASSIFICATIONS

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	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
143	WT Equip Non Media Mer (STL	2	$ 286,838	$ 297,612			$ 297,612	270,261	8,601	18,511	179	60
144	WT Equip Filter Media	2	$ 72,745	$ 75,477			$ 75,477	68,541	2,181	4,695	45	15
145	Dist Reservoirs & Standpipe	5	$ 35,632	$ 321,934			$ 321,934	260,477	9,143	18,543	7,630	26,141
146	Elevated Tanks & Standpipes	5	$ 69,686				$ -	0	0	0	0	0
147	Ground Level Facilities	5	$ 168,177				$ -	0	0	0	0	0
148	Below Ground Facilities	5	$ 271				$ -	0	0	0	0	0
149	TD Mains Not Classified by	6	$ 1,029,339	$ 226,071			$ 226,071	205,951	1,447	4,295	3,278	11,100
150	TD Mains 4" & Less	4	$ 16,770	$ 16,375			$ 16,375	15,094	0	110	267	904
151	TD Mains 6 to 8"	4	$ 302,167	$ 326,320			$ 326,320	300,802	0	2,186	5,319	18,013
152	TD Mains 10 to 16"	3	$ 350,153	$ 344,567			$ 344,567	301,496	9,613	20,640	2,998	9,820
153	TD Mains 18" & Grtr	3	$ 250,473	$ 246,477			$ 246,477	215,667	6,877	14,764	2,144	7,025
154	TD Mains AC 4" (STL)	4	$ 34,240	$ 33,433			$ 33,433	30,818	0	224	545	1,845
155	TD Mains CI <10" 1900-28	4	$ 37,274				$ -	0	0	0	0	0
156	TD Mains CI <10" 1929-56	4	$ 168,288				$ -	0	0	0	0	0
157	TD Mains CI <10" 1957-93	4	$ 700,924				$ -	0	0	0	0	0
158	TD Mains CI 12" (STL)	3	$ 188,178	$ 185,176			$ 185,176	162,029	5,166	11,092	1,611	5,278
159	TD Mains CI 16" (STL)	3	$ 278,129	$ 273,692			$ 273,692	239,480	7,636	16,394	2,381	7,800
160	TD Mains DI 6-8" (STL)	4	$ 2,916,823	$ 3,149,974			$ 3,149,974	2,903,646	0	21,105	51,345	173,879
161	TD Mains DI 12" (STL)	3	$ 1,410,655	$ 1,388,149			$ 1,388,149	1,214,631	38,729	83,150	12,077	39,562
162	TD Mains DI 16" & >(STL)	3	$ 2,075,553	$ 2,042,439			$ 2,042,439	1,787,135	56,984	122,342	17,769	58,210
163	TD Mains Galve 1" (STL)	4	$ 13,598	$ 13,277			$ 13,277	12,239	0	89	216	733
164	TD Mains LJ 20" (STL)	3	$ 63,990	$ 62,969			$ 62,969	55,098	1,757	3,772	548	1,795
165	TD Mains PL 6-8in (STL)	4	$ 2,686,063	$ 2,900,769			$ 2,900,769	2,673,929	0	19,435	47,283	160,122
166	TD Mains PL 12in (STL)	3	$ 154,191	$ 151,731			$ 151,731	132,765	4,233	9,089	1,320	4,324
167	TD Mains DI 4in (STL) "	4	$ 46,018	$ 44,933			$ 44,933	41,419	0	301	732	2,480
168	TD Mains DI 10in (STL) "	3	$ 2,440	$ 2,401			$ 2,401	2,101	67	144	21	68
169	Fire Mains	7	$ 5,265	$ 5,299			$ 5,299	0	0	0	0	5,299
170	Services	9	$ 249,937	$ 269,307			$ 269,307	244,208	0	727	24,372	0
171	Meters Bronze Case	8	$ 204,954	$ 214,958			$ 214,958	209,563	0	2,558	2,837	0
172	Meters Plastic Case	8	$ 15,371	$ 37,627			$ 37,627	36,683	0	448	497	0
173	Meters Other	8	$ 1,734,888	$ 1,470,190			$ 1,470,190	1,433,288	0	17,495	19,407	0
174	Meters Other-Rem Rdr Unts	8	$ 104,788	$ 88,800			$ 88,800	86,571	0	1,057	1,172	0
175	Meter Installations	8	$ 170,406	$ 154,371			$ 154,371	150,496	0	1,837	2,038	0
176	Meter Installation Other	8	$ 273,879	$ 248,107			$ 248,107	241,880	0	2,952	3,275	0
177	Meter Vaults	8	$ 1,876				$ -	0	0	0	0	0
178	Hydrants	7	$ 1,199,982	$ 1,210,497			$ 1,210,497	0	0	0	0	1,210,497
179	Office Furniture & Equip	14	$ 39,073	$ 30,275			$ 30,275	27,519	300	733	528	1,195
180	Comp & Periph Equip	14	$ 1,647,952	$ 627,338			$ 627,338	570,228	6,208	15,183	10,948	24,771
181	Other P/E - CPS	14	$ 36,464	$ 27,567			$ 27,567	25,057	273	667	481	1,088
182	Computer Software	14	$ 591,227	$ 282,958			$ 282,958	257,199	2,800	6,848	4,938	11,173
183	Comp Software Mainframe	14	$ 2,430,305	$ 1,163,130			$ 1,163,130	1,057,244	11,510	28,150	20,299	45,927
184	Comp Software Mainframe - CIS	12	$ 1,243,070	$ 594,926			$ 594,926	576,722	0	535	17,669	0
185	Comp Software Other	14	$ 3,287	$ 1,573			$ 1,573	1,430	16	38	27	62
186	Data Handling Equipment	14	$ 974				$ -	0	0	0	0	0
187	Other Office Equipment	14	$ 5,096	$ 1,620			$ 1,620	1,473	16	39	28	64
188	Trans Equip Lt Duty Trks	14	$ 252,008	$ 763,194			$ 763,194	693,716	7,552	18,471	13,319	30,135
189	Trans Equip Other	14	$ 206,990	$ 307,247			$ 307,247	279,277	3,040	7,436	5,362	12,132
190	Stores Equipment	14	$ 51,175	$ 18,579			$ 18,579	16,888	184	450	324	734
191	Tools,Shop,Garage Equip	14	$ 208,000	$ 120,751			$ 120,751	109,759	1,195	2,922	2,107	4,768
192	Tools,Shop,Garage Equip Oth	14	$ 94,576	$ 54,905			$ 54,905	49,906	543	1,329	958	2,168
193	Laboratory Equipment	2	$ 62,387	$ 27,695			$ 27,695	25,150	800	1,723	17	6
194	Laboratory Equip Other	2	$ 4,497	$ 1,996			$ 1,996	1,813	58	124	1	0
195	Power Operated Equipment	14	$ 32,243	$ 65,762			$ 65,762	59,775	651	1,592	1,148	2,597
196	Comm Equip Non-Telephone	14	$ 143,754	$ 76,458			$ 76,458	69,498	757	1,850	1,334	3,019
197	Remote Control & Instr	14	$ 101,977	$ 54,239			$ 54,239	49,301	537	1,313	947	2,142
198	Comm Equip Telephone	14	$ 1,992	$ 1,955			$ 1,955	1,777	19	47	34	77
199	Misc Equipment	14	$ 166,035	$ 94,347			$ 94,347	85,758	934	2,283	1,647	3,725
200	Other Tangible Property	17	$ 3,101				$ -	0	0	0	0	0
201	**Total Depreciation Expense**		29,521,599	24,929,093	$ -	$ -	24,929,093	21,570,016	318,825	768,628	316,061	1,955,563

MISSOURI-AMERICAN WATER COMPANY
ST. LOUIS METRO DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2014, ALLOCATED TO CUSTOMER CLASSIFICATIONS

Line No.	Account	Factor Ref.	Cost of Service per MAWC	Cost of Service per Staff	Incremental OPC Adjustments	Other Adjustments	Cost of Service	Res/Com/Ind/OPA Rate A	Sales for Resale Rate B	Large Industrial Rate J	Fire Protection Rate F	Fire Protection Rate E
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
202	Amort-Other UP	18	$ 121,654	$ 63,396			$ 63,396	54,882	653	1,667	805	5,389
203	Amort-UPAA	2	$ 204,612	$ 106,627			$ 106,627	96,828	3,082	6,632	64	21
204	Amort-Property Losses	2	$ 121,130	$ 63,123			$ 63,123	57,322	1,824	3,926	38	13
							$ -					
							$ -					
	Taxes Other Than Income						$ -					
205	Utility Reg Assessment Fee	19	$ 1,792,650	$ 1,634,064	$ 91,552		$ 1,725,616	1,518,077	22,468	56,475	22,696	105,901
206	Property Taxes	18	$ 9,187,232	$ 8,591,983			$ 8,591,983	7,438,080	88,497	225,969	109,118	730,319
207	Payroll Taxes	16	$ 1,604,292	$ 1,511,683	$ (76,418)		$ 1,435,265	1,293,046	17,239	41,078	22,868	61,034
208	Other Taxes & Licenses	14	$ (24,339)	$ (273,477)			$ (273,477)	(248,581)	(2,706)	(6,619)	(4,773)	(10,798)
209	Gross Receipts Tax	19	$ -	$ (56)			$ (56)	(49)	(1)	(2)	(1)	(3)
210	**Total Taxes, Other Than Income**		12,559,835	11,464,197	15,134	0	11,479,331	10,000,572	125,497	316,902	149,909	886,451
211	**Income Taxes**	18	$ 28,928,453	$ 25,669,939	$ 247,934		$ 25,917,873	22,437,102	266,954	681,640	329,157	2,203,019
							$ -					
212	**Utility Income Available for Return**	18	$ 66,599,892	$ 54,925,311	$ (351,800)		$ 54,573,511	47,244,288	562,107	1,435,283	693,084	4,638,748
213	**Total Cost of Service**		228,248,118	200,570,435	(291,136)	0	200,279,299	176,191,756	2,607,635	6,554,647	2,634,184	12,291,078
214	**Less: Other Water Revenues**	19	$ 2,792,893	$ 2,792,893			$ 2,792,893	2,456,992	36,363	91,404	36,734	171,399
215	**Contract Sales**	19	$ 3,557,508	$ 3,557,508			$ 3,557,508	3,129,647	46,319	116,428	46,790	218,323
216	**Total Other Water Revenues**		6,350,401	6,350,401	0	0	6,350,401	5,586,640	82,682	207,833	83,524	389,722
217	**Total Cost of Service Related to Sales of Water**		$ 221,897,717	$ 194,220,034	$ (291,136)	$ -	$ 193,928,898	$ 170,605,116	$ 2,524,953	$ 6,346,814	$ 2,550,660	$ 11,901,355
218	Reallocation of Public Fire	20	$ -	$ -	$ -	$ -	0	11,757,349	0	144,006	0	(11,901,355)
	Total		$ 221,897,717	$ 194,220,034	$ (291,136)	$ -	$ 193,928,898	$ 182,362,465	$ 2,524,953	$ 6,490,820	$ 2,550,660	$ -
	Rate Base											
219	Organization	17	$ 197,742	$ 170,390			$ 170,390	$ 147,410	$ 1,749	$ 4,461	$ 2,145	$ 14,624
220	Franchises	17	$ 12,572	$ 12,573			$ 12,573	10,877	129	329	158	1,079
221	Land & Ld Rights SS	2	$ 82,872	$ 82,872			$ 82,872	75,256	2,395	5,155	50	17
222	Land & Ld Rights P	3	$ 285,553	$ 285,553			$ 285,553	249,859	7,967	17,105	2,484	8,138
223	Land & Ld Rights WT	2	$ 1,872,125	$ 1,872,125			$ 1,872,125	1,700,077	54,104	116,446	1,123	374
224	Land & Ld Rights TD	7	$ 4,355,135	$ 4,355,571			$ 4,355,571	0	0	0	0	4,355,571
225	Land & Land Rights AG	14	$ 116	$ 116			$ 116	105	1	3	2	5
226	Struct & Imp SS	2	$ 3,012,376	$ 4,399,715			$ 4,399,715	3,995,381	127,152	273,662	2,640	880
227	Struct & Imp P	3	$ 1,224,756	$ 1,248,570			$ 1,248,570	1,092,498	34,835	74,789	10,863	35,584
228	Struct & Imp Pumps (STL)	3	$ 2,864,377	$ 2,920,071			$ 2,920,071	2,555,062	81,470	174,912	25,405	83,222
229	Struct & Imp Pump Boosters	3	$ 2,163,933	$ 2,206,008			$ 2,206,008	1,930,257	61,548	132,140	19,192	62,871
230	Struct & Imp WT	2	$ 4,984,661	$ 4,297,535			$ 4,297,535	3,902,591	124,199	267,307	2,579	860
231	Struct & Imp WT Nth Plt (ST	2	$ 5,873,542	$ 5,063,886			$ 5,063,886	4,598,515	146,346	314,974	3,038	1,013
232	Struct & Imp WT Ctrl Plt 1	2	$ 1,560,931	$ 1,345,760			$ 1,345,760	1,222,084	38,892	83,706	807	269
233	Struct & Imp WT Ctrl Plt 3	2	$ 13,847,051	$ 11,938,262			$ 11,938,262	10,841,136	345,016	742,560	7,163	2,388

MISSOURI-AMERICAN WATER COMPANY
ST. LOUIS METRO DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2014, ALLOCATED TO CUSTOMER CLASSIFICATIONS

Line No.	Account	Factor Ref.	Cost of Service per MAWC	Cost of Service per Staff	Incremental OPC Adjustments	Other Adjustments	Cost of Service	Res/Com/Ind/OPA Rate A	Sales for Resale Rate B	Large Industrial Rate J	Fire Protection Rate F	Fire Protection Rate E
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
234	Struct & Imp WT Sth Plt (ST	2	$ 4,906,456	$ 4,230,111			$ 4,230,111	3,841,364	122,250	263,113	2,538	846
235	Struct & Imp WT Meramec (ST	2	$ 6,600,120	$ 5,690,306			$ 5,690,306	5,167,367	164,450	353,937	3,414	1,138
236	Struct & Imp TD	6	$ 1,789,886	$ 1,899,117			$ 1,899,117	1,730,095	12,154	36,083	27,537	93,247
237	Struct & Imp TD Spec Cross	6	$ 81,575	$ 86,553			$ 86,553	78,850	554	1,645	1,255	4,250
238	Struct & Imp AG	6	$ 5,941,519	$ 5,456,761			$ 5,456,761	4,971,109	34,923	103,678	79,123	267,927
239	Struct & Imp Offices	14	$ 3,190,629	$ 2,645,352			$ 2,645,352	2,404,531	26,177	64,023	46,167	104,453
240	Gen Structures HVAC	14	$ 1,382,053	$ 181,689			$ 181,689	165,149	1,798	4,397	3,171	7,174
241	Struct & Imp Leasehold	14	$ 4,520	$ (2,532)			$ (2,532)	(2,301)	(25)	(61)	(44)	(100)
242	Struct & Imp Store,Shop,Gar	14	$ 376,788	$ 271,069			$ 271,069	246,392	2,682	6,560	4,731	10,703
243	Struct & Imp Misc	14	$ 924,570	$ 665,155			$ 665,155	604,602	6,582	16,098	11,608	26,264
244	Wells & Springs	2	$ 22,268	$ 16,594			$ 16,594	15,069	480	1,032	10	3
245	Supply Mains	2	$ 423	$ 430			$ 430	390	12	27	0	0
246	Supply Mains Nth Plt (STL)	2	$ 97,176	$ 98,832			$ 98,832	89,749	2,856	6,147	59	20
247	Supply Mains Ctrl Plt (STL)	2	$ 1,413,820	$ 1,437,917			$ 1,437,917	1,305,772	41,556	89,438	863	288
248	Supply Mains Sth Plt (STL)	2	$ 159,604	$ 162,324			$ 162,324	147,406	4,691	10,097	97	32
249	Supply Mains Meramec Plt (S	2	$ 458,314	$ 466,126			$ 466,126	423,289	13,471	28,993	280	93
250	Power Generation Equip	2	$ 1,138,717	$ 892,995			$ 892,995	810,929	25,808	55,544	536	179
251	Pump Equip Electric	3	$ 7,581,263	$ 9,086,304			$ 9,086,304	7,950,516	253,508	544,270	79,051	258,960
252	Pump Equip Elec Pre46 (STL)	3	$ 458,737	$ 549,806			$ 549,806	481,080	15,340	32,933	4,783	15,669
253	Pump Equip Elec Post46 (STL	3	$ 14,347,720	$ 17,196,046			$ 17,196,046	15,046,540	479,770	1,030,043	149,606	490,087
254	Pump Equip Elec Boosters Po	3	$ 737,653	$ 884,092			$ 884,092	773,581	24,666	52,957	7,692	25,197
255	Pump Equip Diesel Ctrl Plt	3	$ 237,558	$ 420,265			$ 420,265	367,732	11,725	25,174	3,656	11,978
256	Pump Equip Hydraulic	3	$ 223,836	$ 249,546			$ 249,546	218,353	6,962	14,948	2,171	7,112
257	Pump Equip Other	3	$ 51,969	$ 708,981			$ 708,981	620,358	19,781	42,468	6,168	20,206
258	Pump Equip WT	3	$ 630,484	$ 2,804,059			$ 2,804,059	2,453,552	78,233	167,963	24,395	79,916
259	Pump Equip TD	3	$ 2,964	$ -			$ -	0	0	0	0	0
260	WT Equip Non-Media	2	$ 12,575,736	$ 9,482,341			$ 9,482,341	8,610,914	274,040	589,802	5,689	1,896
261	WT Equip Non-Med North (STL	2	$ 5,116,204	$ 3,857,714			$ 3,857,714	3,503,190	111,488	239,950	2,315	772
262	WT Equip Non Media Ctrl 1 &	2	$ 1,570,893	$ 1,184,483			$ 1,184,483	1,075,629	34,232	73,675	711	237
263	WT Equip Non Media Ctrl 3 (	2	$ 13,946,794	$ 10,516,145			$ 10,516,145	9,549,712	303,917	654,104	6,310	2,103
264	WT Equip Non Media Sth (STL	2	$ 4,461,470	$ 3,364,033			$ 3,364,033	3,054,878	97,221	209,243	2,018	673
265	WT Equip Non Media Mer (STL	2	$ 7,594,328	$ 5,726,266			$ 5,726,266	5,200,022	165,489	356,174	3,436	1,145
266	WT Equip Filter Media	2	$ 1,925,987	$ 1,452,230			$ 1,452,230	1,318,771	41,969	90,329	871	290
267	Dist Reservoirs & Standpipe	5	$ 859,582	$ 5,963,671			$ 5,963,671	4,825,206	169,368	343,507	141,339	484,250
268	Elevated Tanks & Standpipes	5	$ 1,681,094	$ -			$ -	0	0	0	0	0
269	Ground Level Facilities	5	$ 4,057,052	$ -			$ -	0	0	0	0	0
270	Below Ground Facilities	5	$ 6,535	$ -			$ -	0	0	0	0	0
271	TD Mains Not Classified by	6	$ 56,239,939	$ (6,001,456)			$ (6,001,456)	(5,467,326)	(38,409)	(114,028)	(87,021)	(294,671)
272	TD Mains 4" & Less	4	$ 783,285	$ 1,002,684			$ 1,002,684	924,274	0	6,718	16,344	55,348
273	TD Mains 6 to 8"	4	$ 13,402,199	$ 19,883,797			$ 19,883,797	18,328,884	0	133,221	324,106	1,097,586
274	TD Mains 10 to 16"	3	$ 14,822,267	$ 19,239,517			$ 19,239,517	16,834,577	536,783	1,152,447	167,384	548,326
275	TD Mains 18" & Grtr	3	$ 10,602,742	$ 10,814,235			$ 10,814,235	9,462,455	301,717	647,773	94,084	308,206
276	TD Mains AC 4" (STL)	4	$ 1,599,285	$ 1,602,538			$ 1,602,538	1,477,219	0	10,737	26,121	88,460
277	TD Mains CI <10" 1900-28	4	$ 1,653,244	$ (459,713)			$ (459,713)	(423,764)	0	(3,080)	(7,493)	(25,376)
278	TD Mains CI <10" 1929-56	4	$ 7,464,159	$ (2,075,540)			$ (2,075,540)	(1,913,233)	0	(13,906)	(33,831)	(114,570)
279	TD Mains CI <10" 1957-93	4	$ 31,088,480	$ (8,644,695)			$ (8,644,695)	(7,968,680)	0	(57,919)	(140,909)	(477,187)
280	TD Mains CI 12" (STL)	3	$ 7,965,750	$ 8,124,642			$ 8,124,642	7,109,062	226,678	486,666	70,684	231,552
281	TD Mains CI 16" (STL)	3	$ 11,773,451	$ 12,008,296			$ 12,008,296	10,507,259	335,031	719,297	104,472	342,236
282	TD Mains DI 6-8" (STL)	4	$ 241,075,432	$ 290,629,561			$ 290,629,561	267,902,330	0	1,947,218	4,737,262	16,042,752
283	TD Mains DI 12" (STL)	3	$ 59,714,248	$ 60,905,366			$ 60,905,366	53,292,195	1,699,260	3,648,231	529,877	1,735,803
284	TD Mains DI 16" & >(STL)	3	$ 87,859,927	$ 89,612,465			$ 89,612,465	78,410,907	2,500,188	5,367,787	779,628	2,553,955
285	TD Mains Galve 1" (STL)	4	$ 635,134	$ 636,426			$ 636,426	586,657	0	4,264	10,374	35,131
286	TD Mains LJ 20" (STL)	3	$ 2,708,744	$ 2,762,775			$ 2,762,775	2,417,428	77,081	165,490	24,036	78,739
287	TD Mains PL 6-8in (STL)	4	$ 119,136,522	$ 143,625,565			$ 143,625,565	132,394,046	0	962,291	2,341,097	7,928,131
288	TD Mains PL 12in (STL)	3	$ 6,527,046	$ 6,657,241			$ 6,657,241	5,825,086	185,737	398,769	57,918	189,731
289	TD Mains DI 4in (STL)	4	$ 2,149,401	$ 2,153,772			$ 2,153,772	1,985,347	0	14,430	35,106	118,888
290	TD Mains DI 10in (STL) "	3	$ 103,286	$ 105,346			$ 105,346	92,178	2,939	6,310	917	3,002
291	Fire Mains	7	$ 265,873	$ 267,640			$ 267,640	0	0	0	0	267,640

MISSOURI-AMERICAN WATER COMPANY
ST. LOUIS METRO DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2014, ALLOCATED TO CUSTOMER CLASSIFICATIONS

Line No.	Account	Factor Ref.	Cost of Service per MAWC	Cost of Service per Staff	Incremental OPC Adjustments	Other Adjustments	Cost of Service	Res/Com/Ind/OPA Rate A	Sales for Resale Rate B	Large Industrial Rate J	Fire Protection Rate F	Fire Protection Rate E
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
292	Services	9	$ 5,026,533	$ 4,894,945			$ 4,894,945	4,438,736	0	13,216	442,993	0
293	Meters Bronze Case	8	$ 6,394,260	$ 7,957,296			$ 7,957,296	7,757,568	0	94,692	105,036	0
294	Meters Plastic Case	8	$ 556,158	$ 1,542,016			$ 1,542,016	1,503,311	0	18,350	20,355	0
295	Meters Other	8	$ 56,548,008	$ 47,589,746			$ 47,589,746	46,395,243	0	566,318	628,185	0
296	Meters Other-Rem Rdr Unts	8	$ 3,411,143	$ 2,870,754			$ 2,870,754	2,798,698	0	34,162	37,894	0
297	Meter Installations	8	$ 2,860,291	$ 2,914,288			$ 2,914,288	2,841,139	0	34,680	38,469	0
298	Meter Installation Other	8	$ 4,597,093	$ 4,683,877			$ 4,683,877	4,566,312	0	55,738	61,827	0
299	Meter Vaults	8	$ 73,484	$ -			$ -	0	0	0	0	0
300	Hydrants	7	$ 42,811,802	$ 43,041,961			$ 43,041,961	0	0	0	0	43,041,961
301	Other P/E CPS	14	$ 626,409	$ 1,147,885			$ 1,147,885	1,043,387	11,359	27,781	20,033	45,325
302	Office Furniture & Equip	14	$ 432,417	$ 440,418			$ 440,418	400,324	4,358	10,659	7,686	17,390
303	Comp & Periph Equip	14	$ 6,346,325	$ 2,354,090			$ 2,354,090	2,139,784	23,295	56,974	41,084	92,952
304	Computer Software	14	$ 3,414,038	$ 3,373,098			$ 3,373,098	3,066,026	33,379	81,636	58,868	133,188
305	Comp Software Mainframe	14	$ 18,080,316	$ 17,863,502			$ 17,863,502	16,237,291	176,770	432,336	311,757	705,348
306	Comp Software Mainframe - CIS	12	$ 9,247,852	$ 9,136,954			$ 9,136,954	8,857,364	0	8,223	271,368	0
307	Comp Software Personal	14	$ 24,451	$ 24,158			$ 24,158	21,959	239	585	422	954
308	Data Handling Equipment	14	$ 14,606	$ -			$ -	0	0	0	0	0
309	Other Office Equipment	14	$ 13,452	$ 22,081			$ 22,081	20,071	219	534	385	872
310	Trans Equip Lt Duty Trks	14	$ 4,037,252	$ 430,832			$ 430,832	391,611	4,263	10,427	7,519	17,012
311	Trans Equip Hvy Duty Trks	14	$ (17,223)	$ 476,329			$ 476,329	432,966	4,714	11,528	8,313	18,808
312	Trans Equip Autos	14	$ (692,803)	$ (632,717)			$ (632,717)	(575,117)	(6,261)	(15,313)	(11,042)	(24,983)
313	Trans Equip Other	14	$ 2,927,594	$ 5,039,350			$ 5,039,350	4,580,591	49,867	121,963	87,948	198,981
314	Stores Equipment	14	$ 746,882	$ 417,665			$ 417,665	379,643	4,133	10,108	7,289	16,492
315	Tools,Shop,Garage Equip	14	$ 1,735,642	$ 1,470,778			$ 1,470,778	1,336,885	14,554	35,596	25,668	58,074
316	Tools,Shop,Garage Equip Oth	14	$ 901,308	$ 763,766			$ 763,766	694,236	7,558	18,485	13,329	30,158
317	Laboratory Equipment	2	$ 174,988	$ 277,670			$ 277,670	252,153	8,025	17,271	167	56
318	Laboratory Equip Other	2	$ 24,521	$ 38,910			$ 38,910	35,334	1,124	2,420	23	8
319	Power Operated Equipment	14	$ (7,272)	$ 14,649			$ 14,649	13,315	145	355	256	578
320	Comm Equip Non-Telephone	14	$ 631,380	$ 366,618			$ 366,618	333,243	3,628	8,873	6,398	14,476
321	Remote Control & Instr	14	$ 1,528,886	$ 887,765			$ 887,765	806,947	8,785	21,486	15,493	35,054
322	Comm Equip Telephone	14	$ 6,129	$ 6,678			$ 6,678	6,070	66	162	117	264
323	Misc Equipment	14	$ 1,704,098	$ 1,145,713			$ 1,145,713	1,041,413	11,338	27,729	19,995	45,239
324	Other Tangible Property	17	$ 318,223	$ (226)			$ (226)	(196)	(2)	(6)	(3)	(19)
325	Incentive Compensation Capitalization Adj.	14	$ -	$ (638,475)			$ (638,475)	$ (580,351)	$ (6,318)	(15,452)	(11,143)	(25,210)
326	**Total Utility Plant in Service**		1,000,962,699	950,616,622	0	0	950,616,622	822,383,764	9,756,174	24,890,074	11,966,049	81,620,561
	Other Rate Base Items											
	Add:											
327	Other Utility Plant Adjustments	17	$ -	$ -			$ -	0	0	0	0	0
328	Cash Working Capital	15	$ 9,661,000	$ 6,166,218			$ 6,166,218	5,542,292	98,566	247,767	84,925	192,667
329	Materials and Supplies	14	$ 4,063,350	$ 3,862,951	$ 56,896		$ 3,919,847	3,563,002	38,789	94,869	68,410	154,777
330	Prepayments	14	$ 1,549,642	$ 1,402,925	$ 121,158		$ 1,524,083	1,385,337	15,082	36,886	26,599	60,179
331	OPEB's Contributed to External Fund	16					$ -	0	0	0	0	0
332	Pension / OPEB Tracker	16	$ 11,202,607	$ 11,202,663			$ 11,202,663	10,092,601	134,559	320,625	178,489	476,389
333	Regulatory Deferrals	17					$ -	0	0	0	0	0
334	Tank Painting Tracker	5	$ 1,135,785	$ 553,955	$ 372,736		$ 926,691	749,786	26,318	53,377	21,963	75,247
335	Less: Accumulated Amortization	17					$ -	0	0	0	0	0
336	Accumulated Deferred ITC (3%)	17					$ -	0	0	0	0	0
337	Deferred Income Taxes	17	$ (206,910,588)	$ (210,675,685)			$ (210,675,685)	(182,262,917)	(2,162,112)	(5,515,859)	(2,652,604)	(18,082,194)
338	Pensions	16	$ (10,459,961)	$ (9,902,668)			$ (9,902,668)	(8,921,421)	(118,944)	(283,418)	(157,777)	(421,107)
339	Total Other Rate Base Elements		(189,758,165)	(197,389,641)	550,790	0	(196,838,851)	(169,851,320)	(1,967,742)	(5,045,753)	(2,429,995)	(17,544,041)
340	**Total Original Cost Measure of Value**		$ 811,204,534	$ 753,226,981	$ 550,790	$ -	$ 753,777,771	$ 652,532,445	$ 7,788,432	$ 19,844,322	$ 9,536,054	$ 64,076,519

Missouri American Water Company
Case No. WR-2015-0301/SR-2015-0302
Copies of Non-Confidential Material Referenced in the
Direct Testimony and Schedules of
Ralph C. Smith

Document	Subject	Confidential	No. of Pages	Page No.
OPC 5048	Listing of each small water district for which a cost of service study was not performed; explanation of which of the small water districts the Company is proposing to consolidate rates; Rate A for the small water districts is comprised of residential and commercial customers; provision of revenues at current rates and revenues at proposed rates for each category of customer that comprise Rate A; Explanation of how the cost of service amounts were derived; explanation of why Rate F was included for some districts and not others.	No	2	2 - 3
OPC 5058	Identification and description of which of the Company's water districts are interconnected with each other.	No	1	4
MoPSC 0239	Excerpts of monthly customer totals for each class in each district from 2001 through September 2015.	No	8	
	Total Pages Including Content Page		12	

DATA INFORMATION REQUEST
Missouri-American Water Company
WR-2015-0301 / WR-2015-0302

Requested From: Tim Luft
Date Requested: 12/2/15

Information Requested:

Refer to the Direct Testimony of Company witness Herbert and Schedule No. PRH-1. On page 4 (lines 14-16) of his testimony, Mr. Herbert stated that class cost of service studies (CCOS) were not prepared for the small water districts since there is only one customer classification in those smaller districts.

a. Please list each district for which no cost of service study was performed.

b. Please identify and explain fully and in detail, which of the small water districts the Company is proposing to consolidate rates.

c. Referring to Schedule No. PRH-1 at pages SWD-1 through SWD-6, for each of the small water districts, please confirm that, similar to the larger districts, Rate A is comprised of residential, commercial, industrial and public authority customers. If not confirmed, explain fully why not.

d. If the answer to the preceding part is "confirmed", for each small water district listed on pages SWD-1 through SWD-6 of Schedule No. PRH-1, please provide a breakout of (1) the cost of service (column 2) for each category of customers that comprise Rate A; (2) the revenues at current rates (column 3) for each category of customers that comprise Rate A; and (3) the revenues at proposed rates (column 4) for each category of customers that comprise Rate A.

e. Since there was no CCOS prepared for the small water districts, for each small water district listed on pages SWD-1 through SWD-6 of Schedule No. PRH-1, please quantify and explain fully and in detail how the cost of service amounts were derived. Show detailed calculations.

f. Referring to page SWD-2 of Schedule No. PRH-1, for the Maplewood, Riverside, Stonebridge, Saddlebrooke and Emerald Point small water districts, please explain fully and in detail why, in addition to Rate A, Rate F was also listed under the Customer Classification column when it was not included for any of the other small water districts.

Requested By: Jere Buckman – Office of Public Counsel – jere.buckman@ded.mo.gov

Information Provided:

a. The small water districts for which no cost of service study was performed include Anna Meadows, Maplewood, Riverside, Stone Bridge, Saddlebrooke, Emerald Point, Ozark Mountain, Lake Tanneycomo, Rankin Acres, White Branch, Spring Valley, Lakewood Manor, and Tri States.

b. As stated on page 12 of Mr. Herbert's testimony, the Company is proposing to include all the small water districts in the consolidation of rates. Anna Meadows, Maplewood, Riverside, Stonebridge, Saddlebrooke, Emerald Point, and Tri States would be consolidated into Zone 1 rates. Rankin Acres, White Branch, Ozark Mountain, Lake Tanneycomo, Spring Valley, and Lakewood Manor would be consolidated into Zone 3 rates.

c. The small water districts only serve residential and small commercial customers. Therefore, Rate A would only include the residential and commercial classes for these water districts.

d. For Item (1) The cost of service for each category of customers that comprise Rate A has not been prepared as described in Mr. Herbert's testimony; for Items (2) the revenues at current rates (column 3) for each category of customers that comprise Rate A; and (3) the revenues at proposed rates (column 4) for each category of customers that comprise Rate A, see Schedule CAS-11 for each district.

e. On page 4 (lines 14-16) of his testimony, when Mr. Herbert stated that class cost of service studies (CCOS) were not prepared for the small water districts, he meant that the total cost of service or revenue requirements for each of the small districts were not allocated by customer class. Mr. Herbert did not mean to suggest that revenue requirements were not developed for these districts. Please see Company Schedule CAS-2 for the calculation of the revenue requirements or income statement for each district.

f. Rate F is the Private Fire rate. Only the combined Maplewood, Riverside, Stonebridge, Saddlebrooke and Emerald Point small water district has private fire customers (only $1,098 in proposed revenue). The other small districts do not have private fire customers.

Responsible Witness: Paul Herbert

DATA INFORMATION REQUEST
Missouri-American Water Company
WR-2015-0301 / WR-2015-0302

Requested From: Tim Luft
Date Requested: 12/2/15

Information Requested:

Please identify which of the Company's water districts are interconnected with each other and describe the form of interconnection.

Requested By: Jere Buckman – Office of Public Counsel – jere.buckman@ded.mo.gov

Information Provided:

The St. Louis Metro Districts of St. Louis County and St. Charles are interconnected via a 36" main. This main is supplied water from the St. Louis County Central Plant to the connection with the St. Charles system at Greens Bottom Rd.

Missouri Public Service Commission

Respond Data Request

Data Request No.	0239
Company Name	Missouri-American Water Company-(Water)
Case/Tracking No.	WR-2015-0301
Date Requested	10/22/2015
Issue	Revenue - Booked and Billed Sales
Requested From	Jeanne Tinsley
Requested By	Kevin Thompson
Brief Description	Monthly Customer Counts per Class per District
Description	In an Excel spreadsheet, please provide monthly customer totals for each class in each district from 2001 to the present. Please consider this request to be an ongoing request. Data Request submitted by Jim Busch (jim.busch@psc.mo.gov).
Response	See MoPSC W0239_Attachment.
Objections	NA

The attached information provided to **Missouri Public Service Commission** Staff in response to the above data information request is accurate and complete, and contains no material misrepresentations or omissions, based upon present facts of which the undersigned has knowledge, information or belief. The undersigned agrees to immediately inform the **Missouri Public Service Commission** if, during the pendency of Case No. **WR-2015-0301** before the Commission, any matters are discovered which would materially affect the accuracy or completeness of the attached information. If these data are voluminous, please (1) identify the relevant documents and their location (2) make arrangements with requestor to have documents available for inspection in the **Missouri-American Water Company-(Water)** office, or other location mutually agreeable. Where identification of a document is requested, briefly describe the document (e.g. book, letter, memorandum, report) and state the following information as applicable for the particular document: name, title number, author, date of publication and publisher, addresses, date written, and the name and address of the person(s) having possession of the document. As used in this data request the term "document(s)" includes publication of any format, workpapers, letters, memoranda, notes, reports, analyses, computer analyses, test results, studies or data, recordings, transcriptions and printed, typed or written materials of every kind in your possession, custody or control or within your knowledge. The pronoun "you" or "your" refers to **Missouri-American Water Company-(Water)** and its employees, contractors, agents or others employed by or acting in its behalf.

Security :	Public
Rationale :	NA

Residential Customer Counts
2015

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
St. Louis County	313,341	313,353	313,580	313,534	313,491	313,625	313,565	313,859	313,932			
St. Joseph	28,386	28,383	28,418	28,493	28,476	28,503	28,483	28,416	28,389			
Platte Co (Parkville)	5,398	5,410	5,431	5,443	5,438	5,450	5,472	5,476	5,484			
Warrensburg	6,666	6,667	6,681	6,677	6,584	6,544	6,577	6,637	6,644			
Brunswick	329	328	332	337	335	336	337	339	341			
St. Charles	29,714	29,724	29,750	29,805	29,819	29,852	29,856	29,865	29,884			
Mexico	4,272	4,272	4,293	4,297	4,289	4,305	4,297	4,305	4,294			
Joplin	20,611	20,646	20,749	20,764	20,746	20,779	20,782	20,781	20,859			
Jefferson City	8,987	8,992	9,008	9,029	9,031	9,031	9,031	9,031	9,033			
Rankin Acres	86	86	86	86	86	86	86	86	86			
Spring Valley/Lake Manor	133	130	133	130	132	133	132	132	130			
Ozark Mountain / LTA	488	486	487	495	498	501	501	502	501			
Whitebranch	134	134	135	136	137	137	136	135	135			
Stonebridge/Maplewood/Riverside	1,278	1,279	1,282	1,288	1,301	1,303	1,306	1,305	1,305			
Saddlebrooke	88	88	89	91	93	93	93	93	91			
Tri-States	2,910	2,894	2,888	2,903	2,952	2,958	2,972	2,980	2,986			
Emerald Pointe	348	349	347	348	353	358	356	358	361			
Anna Meadows	77	77	79	79	85	85	87	91	97			
Platte Co WW (Parkville)	101	99	98	99	98	99	100	100	99			
Cedar Hill WW	672	670	676	683	685	684	686	685	687			
Warren County WW	408	411	414	420	419	422	421	419	420			
Ozark Meadows WW	26	26	26	26	25	26	25	25	25			
Maplewood WW	364	362	362	362	363	365	365	363	364			
Jefferson City WW	1,349	1,351	1,352	1,353	1,351	1,357	1,358	1,357	1,357			
Stonebridge WW	622	626	630	635	639	639	641	643	641			
Meramec WW	608	605	602	605	607	607	606	607	609			
Saddlebrooke WW	87	87	87	90	90	90	90	90	88			
Emerald Pointe WW	348	349	347	348	353	358	356	358	361			
Anna Meadows WW	77	77	79	79	85	85	87	91	97			
Arnold WW	-	-	-	-	-	-	6,485	6,382	6,390			
Total	427,908	427,961	428,441	428,635	428,561	428,811	435,289	435,511	435,690	-	-	-

Residential Customer Counts
2014

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
St. Louis County	314,167	314,148	314,225	313,710	313,658	313,555	313,505	313,594	313,819	313,671	313,472	313,418
St. Joseph	28,727	28,747	28,684	28,638	28,581	28,574	28,556	28,510	28,466	28,464	28,381	28,395
Platte Co (Parkville)	5,271	5,282	5,295	5,309	5,315	5,335	5,348	5,365	5,380	5,371	5,379	5,394
Warrensburg	6,667	6,683	6,653	6,640	6,573	6,538	6,567	6,618	6,595	6,621	6,631	6,644
Brunswick	325	327	325	326	335	338	343	340	343	341	335	332
St. Charles	29,541	29,559	29,576	29,616	29,657	29,679	29,714	29,731	29,742	29,741	29,694	29,686
Mexico	4,254	4,259	4,277	4,277	4,280	4,287	4,278	4,293	4,270	4,274	4,269	4,275
Joplin	20,485	20,502	20,438	20,376	20,458	20,535	20,587	20,631	20,647	20,657	20,613	20,608
Jefferson City	8,998	8,991	8,992	8,976	9,003	9,022	9,015	9,009	9,014	9,008	8,994	8,981
Rankin Acres	87	85	85	86	86	86	86	85	85	86	86	86
Spring Valley/Lake Manor	133	131	132	131	131	134	135	135	135	135	136	132
Ozark Mountain / LTA	484	485	485	493	497	497	499	499	499	498	494	489
Whitebranch	130	130	134	137	138	139	140	140	138	137	136	134
Stonebridge/Maplewood/Riverside	1,271	1,272	1,272	1,274	1,276	1,280	1,284	1,285	1,286	1,284	1,276	1,274
Saddlebrooke	84	84	86	88	89	89	91	89	90	90	87	88
Tri-States	2,837	2,823	2,873	2,916	2,941	2,974	3,014	2,981	2,959	2,960	2,946	2,923
Emerald Pointe	-	-	-	345	350	348	351	357	356	349	351	349
Platte Co WW (Parkville)	101	101	101	101	101	101	101	101	101	101	101	101
Cedar Hill WW	658	660	663	664	661	669	670	668	674	672	668	672
Warren County WW	407	408	414	416	416	413	415	412	410	413	411	411
Ozark Meadows WW	23	22	22	22	22	23	23	23	23	24	25	25
Maplewood WW	364	363	362	361	360	361	362	364	364	361	360	363
Jefferson City WW	1,346	1,355	1,354	1,356	1,351	1,352	1,348	1,352	1,350	1,350	1,347	1,348
Stonebridge WW	619	621	623	627	627	627	630	627	631	630	625	620
Meramec WW	613	614	614	611	609	610	608	608	609	607	608	608
Saddlebrooke WW	84	84	86	88	89	89	91	91	90	90	87	87
Emerald Pointe WW	-	-	-	343	349	347	350	356	355	348	350	348
Total	427,676	427,736	427,771	427,927	427,953	428,002	428,111	428,264	428,431	428,283	427,862	427,791

Commercial Customer Counts
2015

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
St. Louis County	16,560	16,569	16,577	16,599	16,609	16,614	16,624	16,641	16,646			
St. Joseph	2,643	2,637	2,637	2,663	2,672	2,678	2,677	2,668	2,660			
Platte Co (Parkville)	454	453	453	454	454	458	456	456	456			
Warrensburg	625	623	623	624	669	665	666	665	667			
Brunswick	64	63	64	65	65	64	64	63	62			
St. Charles	681	680	682	690	690	691	692	693	696			
Mexico	426	426	427	428	429	428	429	426	430			
Joplin	2,555	2,556	2,558	2,570	2,569	2,575	2,584	2,578	2,577			
Jefferson City	1,389	1,390	1,391	1,400	1,411	1,413	1,408	1,416	1,415			
Spring Valley/Lake Manor	1	1	1	1	1	1	1	1	1			
Stonebridge/Maplewood/Riverside	77	77	77	78	96	106	107	108	108			
Saddlebrooke	-	-	-	2	2	2	2	2	2			
Tri-States	390	388	390	390	389	393	391	391	393			
Emerald Pointe	84	84	83	82	92	96	98	97	99			
Cedar Hill WW	62	62	62	61	61	61	60	60	60			
Warren County WW	2	2	2	2	2	2	2	2	2			
Maplewood WW	4	4	4	4	4	4	4	4	4			
Jefferson City WW	7	7	8	8	8	8	8	7	7			
Stonebridge WW	64	64	64	64	64	64	64	64	64			
Meramec WW	-	-	-	-	-	-	-	1	1			
Saddlebrooke WW	-	-	-	1	1	1	1	1	1			
Emerald Pointe WW	26	26	26	26	26	26	26	26	26			
Arnold WW	-	-	-	-	-	-	521	555	526			
Total	26,114	26,112	26,129	26,212	26,314	26,350	26,885	26,925	26,903	-	-	-

Commercial Customer Counts
2014

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
St. Louis County	16,646	16,630	16,632	16,599	16,581	16,562	16,572	16,570	16,586	16,572	16,589	16,567
St. Joseph	2,672	2,670	2,658	2,675	2,672	2,685	2,691	2,696	2,697	2,674	2,652	2,643
Platte Co (Parkville)	440	439	439	439	448	453	452	453	454	453	452	454
Warrensburg	611	611	610	610	612	629	629	631	631	628	629	626
Brunswick	66	66	66	66	64	64	64	65	65	65	65	65
St. Charles	682	681	682	680	685	688	689	691	691	686	686	686
Mexico	425	425	428	428	430	431	428	426	425	430	431	429
Joplin	2,542	2,538	2,530	2,532	2,544	2,557	2,561	2,561	2,572	2,570	2,549	2,544
Jefferson City	1,404	1,403	1,400	1,406	1,416	1,421	1,418	1,413	1,413	1,405	1,398	1,391
Spring Valley/Lake Manor	-	-	-	-	-	-	-	-	1	1	1	1
Stonebridge/Maplewood/Riverside	91	86	86	86	105	109	109	109	91	91	81	77
Saddlebrooke	-	-	-	1	1	1	2	2	2	2	2	-
Tri-States	374	371	393	392	396	396	400	400	397	398	395	393
Emerald Pointe	-	-	-	73	76	79	82	90	91	93	87	85
Cedar Hill WW	62	62	62	62	61	63	63	65	64	64	64	63
Warren County WW	2	2	2	2	2	2	2	2	2	2	2	2
Maplewood WW	4	4	4	4	4	4	4	4	4	4	4	4
Jefferson City WW	7	7	7	7	7	7	7	7	7	7	7	7
Stonebridge WW	62	62	62	62	63	63	63	63	63	63	64	64
Meramec WW	-	-	-	-	-	-	-	-	-	-	-	-
Saddlebrooke WW	-	-	-	-	-	-	-	-	1	1	-	-
Emerald Pointe WW	-	-	-	26	26	26	26	26	26	26	26	26
Total	26,090	26,057	26,061	26,150	26,193	26,240	26,262	26,274	26,283	26,235	26,184	26,127

Industrial Customer Counts
2015

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
St. Louis County	122	121	120	120	120	120	120	120	119			
St. Joseph	87	87	88	88	88	88	88	88	88			
Platte Co (Parkville)	8	9	8	8	8	8	8	8	8			
Warrensburg	15	15	15	15	15	15	15	15	15			
Mexico	13	13	13	13	13	13	13	13	13			
Joplin	51	51	51	51	51	51	51	51	51			
Jefferson City	12	12	12	12	12	12	12	12	12			
Total	308	308	307	307	307	307	307	307	306	-	-	-

2014

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
St. Louis County	119	119	119	119	119	119	119	119	120	122	122	122
St. Joseph	88	87	87	86	86	86	87	87	88	88	88	87
Platte Co (Parkville)	9	9	9	9	9	9	9	9	8	8	8	8
Warrensburg	15	15	15	15	15	15	15	15	15	15	15	15
Mexico	13	13	13	13	13	13	13	13	13	13	13	13
Joplin	52	52	52	53	53	53	52	52	52	52	52	51
Jefferson City	12	12	12	12	12	12	12	12	12	12	12	12
Total	308	307	307	307	307	307	307	307	308	310	310	308

Other Public Authority Customer Counts

2015

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
St. Louis County	760	760	762	766	766	764	765	766	766			
St. Joseph	186	186	194	208	207	207	209	208	208			
Platte Co (Parkville)	40	40	40	39	39	39	39	39	39			
Warrensburg	166	165	165	166	165	165	165	165	165			
Brunswick	7	7	7	9	9	9	9	9	9			
St. Charles	78	78	77	77	77	77	77	77	77			
Mexico	86	86	94	103	103	102	103	103	103			
Joplin	149	149	149	149	149	149	149	149	149			
Jefferson City	286	286	288	288	288	289	291	293	293			
Arnold WW	-	-	-	-	-	-	24	21	12			
Total	1,758	1,757	1,776	1,805	1,803	1,801	1,831	1,830	1,821	-	-	-

2014

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
St. Louis County	753	752	753	755	757	758	760	759	766	760	760	760
St. Joseph	189	185	194	209	210	211	211	210	210	194	188	188
Platte Co (Parkville)	40	40	40	40	40	40	40	40	40	40	40	40
Warrensburg	166	166	164	167	167	168	168	169	168	168	168	167
Brunswick	8	8	8	8	9	9	9	9	9	9	7	7
St. Charles	78	78	78	78	78	78	77	77	77	77	78	78
Mexico	87	86	86	102	102	102	102	102	102	91	86	86
Joplin	146	146	145	147	149	145	143	148	148	148	149	148
Jefferson City	290	286	288	288	291	293	294	294	295	295	296	296
Total	1,757	1,747	1,756	1,794	1,803	1,804	1,804	1,808	1,815	1,782	1,772	1,770

Other Water Utilities Customer Counts

2015

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
St. Louis County	6	6	6	6	6	6	6	6	6			
St. Joseph	10	10	10	10	10	10	10	10	10			
Platte Co (Parkville)	3	3	3	3	3	3	3	3	3			
Warrensburg	2	2	2	2	2	2	2	2	2			
Brunswick	1	1	1	1	1	1	1	1	1			
Mexico	2	2	2	2	2	2	2	2	2			
Joplin	4	4	4	4	4	4	4	4	4			
Total	28	28	28	28	28	28	28	28	28	-	-	-

2014

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
St. Louis County	6	6	6	6	6	6	6	6	6	6	6	6
St. Joseph	10	10	10	10	10	10	10	10	10	10	10	10
Platte Co (Parkville)	3	3	3	3	3	3	3	3	3	3	3	3
Warrensburg	2	2	2	2	2	2	2	2	2	2	2	2
Brunswick	1	1	1	1	1	1	1	1	1	1	1	1
Mexico	2	2	2	2	2	2	2	2	2	2	2	2
Joplin	4	4	4	4	4	4	4	4	4	4	4	4
Total	28	28	28	28	28	28	28	28	28	28	28	28

Missouri-American Water Company
St. Louis Metro Water District
Calculation of Revenue Deficiency (Sufficiency)
Income Statement Reconciliation
Test Year Ended December 31, 2014

Line No.	Description	Reference	Per Company (A)	Per Staff (B)	Per OPC (C)	Difference Staff and OPC (D)
	Revenue Requirement Reconcilation					
1	Adjusted rate base		$ 811,204,531	$ 753,226,981	$ 753,777,771	$ 550,790
2	Rate of return		8.2100%	7.29%	7.24%	
3	Net operating income required		$ 66,599,892	$ 54,925,311	$ 54,573,511	$ (351,800)
4	Adjusted net operating income		$ 40,105,318	$ 48,622,387	$ 49,949,424	$ 1,327,037
5	Net operating income deficiency		$ 26,494,574	$ 6,302,924	$ 4,624,087	$ (1,678,837)
6	Gross revenue conversion factor		1.641250	1.91375	1.913750	
7	Revenue deficiency (Sufficiency)		$ 43,484,220	$ 12,062,221	$ 8,849,347	$ (3,212,874)
8	Staff Allowance for Known and Measureable Changes/True Up Estimate			$ 9,114,051		
9	Total Staff Revenue deficiency			$ 21,176,272		

	INCOME STATEMENT RECONCILIATION Description	Per Staff Amount (E)	Per OPC Amount (F)	Difference (G)	OPC Revenue Increase (H)	Revenue Proposed Rates (I)
10	Operating Revenue at Present Rates	$ 188,508,214	$ 191,429,953	$ 2,921,739	$ 8,849,347	$ 200,279,299
	Less Expenses:					
11	Source of Supply Expense	$ 1,344,369	1,344,369	0		
12	Pumping Expense	$ 10,675,241	10,675,241	0		
13	Water Treatment Expense	$ 13,390,927	13,390,927	0		
14	Transmission and Distribution Expnese	$ 13,561,565	13,561,565	0		
15	Customer Accounts and Customer Service Expense	$ 6,564,917	6,525,768	(39,149)		
16	A&G Expense	$ 37,811,730	$ 37,648,476	(163,254)		
17	Depreciation Expnese	$ 24,929,093	$ 24,929,093	0		
18	Amortization Expense	$ 233,146	$ 233,146	0		
19	Other Operating Expenses	$ 11,464,197	$ 11,479,331	15,134		
20	Total Operating Expenses	$ 119,975,185	$ 119,787,916	$ (187,269)		
21	Net Income Before Income Taxes	$ 68,533,029	$ 71,642,037	$ 3,109,008		
	Less Income Taxes:	\				
22	Current Income Taxes	$ 11,659,392	$ 13,441,363	$ 1,781,971		
23	Deferred Income Taxes	$ 8,251,250	$ 8,251,250	$ -		
24	Total Income Taxes	$ 19,910,642	$ 21,692,613	$ 1,781,971		
25	Utility Income Available for Return - Present Rates	$ 48,622,387	$ 49,949,424	$ 1,327,037		
	Utility Income For Return at Proposed Rates					
26	Rate Base	$ 753,226,981	$ 753,777,771	$ 550,790		
27	Rate of Return	7.29%	7.24%			
28	Required Return	$ 54,925,311	$ 54,573,511	$ (351,800)	To COSS line 212	
29	Difference Increase in Operating Income Needed	$ 6,302,924	$ 4,624,087	$ (1,678,837)		
30	Revenue Increase Including Income Tax Gross Up	$ 12,062,221	$ 8,849,347	$ (3,212,874)		
	Income Taxes:					
31	At Present Rates					
32	Current Income Taxes	$ 11,659,392	$ 13,441,363	$ 1,781,971		
33	Deferred Income Taxes	$ 8,251,250	$ 8,251,250	$ -		
34	Income Tax Adjustment to get to Revenue Requirement	$ 5,759,297	$ 4,225,260	$ (1,534,037)		
35	Total Income Taxes at Proposed Rates	$ 25,669,939	$ 25,917,873	$ 247,934	To COSS line 211	
	OPC Income Tax Gross Up Adjustment to get Required Operating Income					
36	Increase in Operating Income Needed		$ 4,624,087			
37	Derived Staff Income Tax Gross Up Factor	0.913750031	$ 4,225,260	Derived Income Taxes on Revenue Deficiency		
	Inputs to COSS for Return and Income Taxes					
38	Required Return		$ 54,573,511	COSS line 212		
39	Total Income Tax Input to COSS line		$ 25,917,873	COSS line 211		