

MAWC 1

Exhibit No.:  
Issues: Service Company Charges  
Witness: Patrick L. Baryenbruch  
Exhibit Type: Rebuttal  
Sponsoring Party: Missouri-American Water  
Company  
Case No.: WR-2015-0301  
SR-2015-0302  
Date: February 11, 2016

**MISSOURI PUBLIC SERVICE COMMISSION**

**CASE NO. WR-2015-0301  
SR-2015-0302**

**REBUTTAL TESTIMONY**

**OF**

**PATRICK L. BARYENBRUCH**

**ON BEHALF OF**

**MISSOURI-AMERICAN WATER COMPANY**

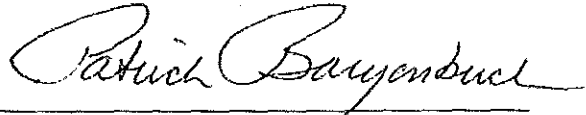
*MAWC* Exhibit No. 1  
Date 3-21-14 Reporter MT  
File No. WR-2015-0301

BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI

IN THE MATTER OF MISSOURI-AMERICAN )	
WATER COMPANY FOR AUTHORITY TO )	
FILE TARIFFS REFLECTING INCREASED )	CASE NO. WR-2015-0301
RATES FOR WATER AND SEWER )	CASE NO. SR-2015-0302
SERVICE )	

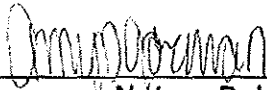
AFFIDAVIT OF PATRICK L. BARYENBRUCH

Patrick L. Baryenbruch, being first duly sworn, deposes and says that he is the witness who sponsors the accompanying testimony entitled "Rebuttal Testimony of Patrick L. Baryenbruch"; that said testimony and schedules were prepared by him and/or under his direction and supervision; that if inquiries were made as to the facts in said testimony and schedules, he would respond as therein set forth; and that the aforesaid testimony and schedules are true and correct to the best of his knowledge.



Patrick L. Baryenbruch

State of North Carolina  
County of Wake County  
SUBSCRIBED and sworn to  
Before me this 9<sup>th</sup> day of February 2016.



Notary Public

My commission expires: 4-28-2018

<b>AMY D GORMAN</b> Notary Public Durham Co., North Carolina My Commission Expires April 28, 2018
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**REBUTTAL TESTIMONY  
PATRICK L. BARYENBRUCH  
MISSOURI-AMERICAN WATER COMPANY  
CASE NO. WR-2015-0301  
SR-2015-0302**

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1           During my consulting career, I have performed consulting assignments for  
2           approximately 50 utilities and 10 public service commissions. I have participated  
3           as project manager, lead or staff consultant for 24 commission-ordered  
4           management and prudence audits of public utilities. Of these, I have been  
5           responsible for evaluating the area of affiliate charges and allocation of corporate  
6           expenses in the Commission-ordered audits of Connecticut Light and Power,  
7           Connecticut Natural Gas, General Water Corporation (Pennsylvania Operations),  
8           Philadelphia Suburban Water Company (now Aqua America) and Pacific Gas &  
9           Electric Company.

10           My firm has performed the commission-ordered audit of Southern California  
11           Edison's 2002, 2003, 2004 and 2005 transactions with its non-regulated affiliate  
12           companies.

13  
14   **Q.   WHAT ARE YOUR DUTIES AND RESPONSIBILITIES IN YOUR CURRENT**  
15   **POSITION?**

16   A.   I am the President of my own consulting practice, Baryenbruch & Company, LLC,  
17           which was established in 1985. In that capacity, I provide consulting services to  
18           utilities and their regulators.

19  
20   **Q.   WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY IN THIS CASE?**

21           I have been retained by Missouri-American Water Company ("MAWC" or  
22           "Company") to evaluate the services provided by American Water Service

1 Company, Inc. ("Service Company") to MAWC in support of the rebuttal  
2 testimony of MAWC Witness Tinsley and MAWC Witness Petry.

3  
4 **Q. HAVE YOU PREPARED ANY SCHEDULES TO ACCOMPANY YOUR**  
5 **REBUTTAL TESTIMONY?**

6 A. I am presenting the results of my study which evaluated the services provided by  
7 the Service Company (Service Company) during 2014 to MAWC. This study was  
8 undertaken in conjunction with MAWC's rate case and was performed by me or  
9 under my direct supervision and is accurate to the best of my knowledge and  
10 belief. The study is attached as Schedule PLB-1.

11  
12 **Q. WHAT WERE THE OBJECTIVES OF YOUR STUDY?**

13 A. This study was undertaken to answer four questions concerning the services  
14 provided by the Service Company to MAWC, each of which bears on the  
15 reasonableness of those charges as incurred during 2014. First, were the Service  
16 Company's charges to MAWC during 2014 reasonable? Second, was MAWC  
17 charged the lower of cost or market value for managerial and professional services  
18 provided by the Service Company during 2014? Third, were 2014 costs of the  
19 Service Company's customer accounts services, including those of the National  
20 Call Centers, comparable to those of other utilities? Fourth, are the services  
21 MAWC receives from the Service Company necessary?

1 **Q. WHAT CONCLUSIONS WERE YOU ABLE TO DRAW CONCERNING**  
2 **QUESTION NUMBER 1, WHETHER THE SERVICE COMPANY CHARGES TO**  
3 **MAWC WERE REASONABLE?**

4 A. The Service Company's 2014 cost per MAWC customer is reasonable compared  
5 to cost per customer for electric and combination electric/gas service companies.  
6 During 2014 MAWC was charged \$62 per customer for administrative and general  
7 (A&G)-related services provided by the Service Company. This compares to an  
8 average of \$108 per customer for service companies reporting to the Federal  
9 Energy Regulatory Commission (FERC). Only 5 of the 24 utility service  
10 companies that filed a FERC Form 60 for 2014 had a lower per-customer A&G  
11 cost than MAWC's charges from the Service Company.

12

13 **Q. WHAT CONCLUSIONS WERE YOU ABLE TO DRAW CONCERNING**  
14 **QUESTION NUMBER 2, WHETHER MAWC WAS CHARGED THE LOWER OF**  
15 **COST OR MARKET SERVICES PROVIDED BY THE SERVICE COMPANY?**

16 A. I was able to draw the following conclusions:

17 (1) MAWC was charged the lower of cost or market for managerial and  
18 professional services during 2014.

19 (2) On average, the hourly rates for outside service providers are 70% higher  
20 than the Service Company's hourly rates.

21 (3) The managerial and professional services provided by the Service  
22 Company are vital and could not be procured externally by MAWC without  
23 careful supervision on the part of MAWC. If these services were contracted

1 entirely to outside providers, MAWC would have to add at least three  
2 positions to manage activities of outside firms. These positions would be  
3 necessary to ensure the quality and timeliness of services provided.

4 (4) If all the managerial and professional services now provided by the Service  
5 Company had been outsourced during 2014, MAWC and its ratepayers  
6 would have incurred more than \$22 million in additional expenses. This  
7 amount includes the higher cost of outside providers and the cost of three  
8 MAWC positions needed to direct the outsourced work.

9 (5) This study's hourly rate comparison actually understates the cost  
10 advantages that accrue to MAWC from its use of the Service Company.  
11 Outside service providers generally bill for every hour worked. Service  
12 Company exempt personnel, on the other hand, charge a maximum of 8  
13 hours per day even when they work more hours. If all overtime hours of  
14 Service Company personnel were factored into the hourly rate calculation,  
15 the Service Company would have had an even greater annual dollar  
16 advantage than the \$22 million cited above.

17 (6) It would be difficult for MAWC to find local service providers with the same  
18 specialized water industry expertise as that possessed by the Service  
19 Company staff. Service Company personnel spend substantially all their  
20 time serving operating water companies. This specialization brings with it a  
21 unique knowledge of water utility operations and regulation that is most  
22 likely unavailable from local service providers.



1 (7) Service Company fees do not include any profit markup. Only its actual  
2 cost of service is being recovered from MAWC ratepayers.

3

4 **Q. WHAT CONCLUSIONS WERE YOU ABLE TO DRAW CONCERNING**  
5 **QUESTION NUMBER 3, WHETHER THE 2014 COSTS OF THE SERVICE**  
6 **COMPANY'S CUSTOMER ACCOUNT SERVICES, INCLUDING THOSE OF**  
7 **THE NATIONAL CALL CENTERS, WERE REASONABLE?**

8 A. The cost of the Service Company's customer accounts services, including those  
9 provided by the National Call Centers, is well below the average of the neighboring  
10 electric utility comparison group. As will be explained further herein, this group of  
11 companies provides a reasonable proxy group for comparison to a regulated utility  
12 of the size and scope of the Service Company and MAWC. During 2014, the cost  
13 of customer accounts services for MAWC customers was \$21.04 compared to the  
14 2014 average of \$33.14 for neighboring electric utilities. The highest comparison  
15 group per customer cost was \$49.90 and the lowest \$10.88.

16

17 **Q. WHAT CONCLUSIONS WERE YOU ABLE TO DRAW CONCERNING**  
18 **QUESTION NUMBER 4, WHETHER THE SERVICES MAWC RECEIVES**  
19 **FROM THE SERVICE COMPANY ARE NECESSARY?**

20 A. I was able to draw the following conclusions:  
21 (1) The services that the Service Company provides are necessary and would  
22 be required even if MAWC were a stand-alone water utility.

1           (2)    Furthermore, there is no redundancy or overlap in the services provided by  
2           the Service Company to MAWC.

3

4   **Q.    DOES THIS COMPLETE YOUR TESTIMONY?**

5   **A.    Yes.**

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**Market to Cost Comparison of Service Company Charges to  
Missouri American Water Company  
12 Months Ended December 31, 2014**

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February 2016



**Missouri American Water Company  
Market to Cost Comparison of Service Company Charges  
12 Months Ended December 31, 2014**

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## I – Introduction

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### **Purpose of This Study**

This study was undertaken to answer four questions concerning the services provided by American Water Works Service Company, Inc. (Service Company) to Missouri American Water Company (MAWC):

1. Were the Service Company's charges to MAWC during 2014 reasonable?
2. Was MAWC charged the lower of cost or market for managerial and professional services provided by the Service Company during 2014?
3. Were 2014 costs of the Service Company's customer accounts services, including those of the National Call Centers, comparable to those of other utilities?
4. Are the services MAWC receives from the Service Company necessary?

### **Study Results**

Concerning question 1, the following conclusion was reached:

- The Service Company's 2014 cost per MAWC customer is reasonable compared to cost per customer for electric and combination electric/gas service companies. During 2014 MAWC was charged \$62 per customer for administrative and general (A&G)-related services provided by the Service Company. This compares to an average of \$108 per customer for service companies reporting to the Federal Energy Regulatory Commission (FERC). Only 5 of the 24 utility service companies that filed a FERC Form 60 for 2014 had a lower per-customer A&G cost than MAWC's charges from the Service Company.

Concerning question 2, the following conclusions were drawn from this study:

- MAWC was charged the lower of cost or market for managerial and professional services during 2014.
- On average, the hourly rates for outside service providers are 70% higher than the Service Company's hourly rates.
- The managerial and professional services provided by the Service Company are vital and could not be procured externally by MAWC without careful supervision on the part of MAWC. If these services were contracted entirely to outside providers, MAWC would have to add at least three positions to manage activities of outside firms. These positions would be necessary to ensure the quality and timeliness of services provided.
- If all the managerial and professional services now provided by the Service Company had been outsourced during 2014, MAWC and its ratepayers would have incurred more than \$22 million in additional expenses. This amount includes the higher cost of outside providers and the cost of three MAWC positions needed to direct the outsourced work.
- This study's hourly rate comparison actually understates the cost advantages that accrue to MAWC from its use of the Service Company. Outside service providers generally bill for every hour worked. Service Company exempt personnel, on the other hand, charge a maximum of 8 hours per day even when they work more hours. If all overtime hours of Service Company personnel were factored into the hourly rate calculation, the Service

## I – Introduction

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Company would have had an even greater annual dollar advantage than the \$22 million cited above.

- It would be difficult for MAWC to find local service providers with the same specialized water industry expertise as that possessed by the Service Company staff. Service Company personnel spend substantially all their time serving operating water companies. This specialization brings with it a unique knowledge of water utility operations and regulation that is most likely unavailable from local service providers.
- Service Company fees do not include any profit markup. Only its actual cost of service is being recovered from MAWC ratepayers.

Concerning question 3, the following conclusion was reached:

- The cost of the Service Company's customer accounts services, including those provided by the National Call Centers, is well below the average of the neighboring electric utility comparison group. As will be explained further herein, this group of companies provides a reasonable proxy group for comparison to a regulated utility of the size and scope of the Service Company and MAWC. During 2014, the cost of customer accounts services for MAWC customers was \$21.04 compared to the 2014 average of \$33.14 for neighboring electric utilities. The highest comparison group per customer cost was \$49.90 and the lowest \$10.88.

Concerning question 4, the following conclusions were drawn:

- The services that the Service Company provides are necessary and would be required even if MAWC were a stand-alone water utility.
- Furthermore, there is no redundancy or overlap in the services provided by the Service Company to MAWC. For all of the services provided (Exhibit 13), there was only one entity primarily responsible for the service.

## II – Background

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### Overview of American Water Works Service Company

American Water's Service Company exists to provide certain shared services to American Water subsidiaries. It follows a service company model used by many utility holding companies that own multiple regulated utilities. By consolidating executive and professional services into a single service company, utility holding companies are able to realize the following benefits for ratepayers:

- **Purchasing Economies** – Common expenses (e.g., insurance, chemicals, piping) can be procured on a much larger scale, thereby providing greater bargaining power for the combined entity compared to individual utility operating companies. A service company facilitates corporate-wide purchasing programs through its procurement and contract administration functions.
- **Operating Economies of Scale** – A service company is able to deliver services more efficiently because workloads can be balanced across more persons and facilities. For instance, American Water's Service Company is able to maintain one principal data center for the entire corporation. This is much more cost-efficient than each operating utility funding its own data center with large fixed hardware, software and staffing costs.
- **Continuity of Service** – Centralizing service company personnel who perform similar services facilitates job cross-training and sharing of knowledge and expertise. This makes it easier to deal with staff turnover and absences and to sustain high levels of service to operating utilities. An individual operating utility might experience considerable disruption if a key professional left and it were necessary to hire outside to fill the vacancy.
- **Maintenance of Corporate-Wide Standards** – Personnel in American Water's Service Company establish standards for many functions (e.g., engineering designs, operating procedures and maintenance practices). It is easier to ensure these standards are followed by every operating utility because their implementation is overseen by the Service Company.
- **Improved Governance** – American Water's Service Company provides another dimension of management and financial oversight that supplements local operating utility management. The Service Company facilitates standard planning and reporting, which helps ensure that operating utilities meet the requirements of their customers in a cost-effective manner.
- **Retention of Personnel** – A service company organization provides operating utility personnel with another career path beyond what may be available on a local level. These opportunities tend to improve employee retention.

American Water follows the model for other utility service companies in another important regard: Its services are provided to affiliate operating utilities, like MAWC, at cost. American Water's Service Company is not a profit-making entity. It assigns only its actual expenses to the American Water subsidiaries it services.

## II – Background

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The Service Company provides services to American Water operating companies from the following locations:

- Corporate Headquarters – Provides corporate governance and service functions, including executive management, audit, finance, external affairs and human resources. The corporate headquarters is located in Voorhees, New Jersey.
- Central Lab – The national trace substance laboratory is located in Belleville, Illinois, and performs testing for all American Water operating companies.
- Customer Service Centers – Provides customer call center and billing services from two locations: Alton, Illinois, and Pensacola, Florida.
- Customer Relations Centers – Provides customer relations and field resource coordination services from two locations: Belleville, Illinois and Wilkes Barre, Pennsylvania.
- Hershey Information Technology Services Center – American Water's principal data center, located in Hershey, Pennsylvania, supports the IT infrastructure required to run corporate and operating company business applications and communications systems.
- Haddon Heights Information Technology Services Center - American Water's data center, located in Haddon Heights, New Jersey, maintains data servers for back-up and disaster recovery.
- Woodcrest Office – The Woodcrest Office, located in Cherry Hill, New Jersey, provides individual operating companies with accounting, human resources and benefits and supply chain services. The Woodcrest office is American Water's main IT center for employees, provides software delivery and enhancements for SAP and non-SAP (legacy) systems, provides local on-site support as well as the ITS Service Desk for remote assistance for all employees using personal computers in the performance of their day to day activities, supports mission-critical systems such as SCADA as well as emerging technologies such as GIS and Mobility, and provides technical expertise in project governance and release management while ensuring compliance with all governmental regulations.
- Regional Offices – Regional offices provide operating companies with certain support services that can be performed more effectively on a regional basis because individual operating company/center workloads are not sufficient to warrant a full-time staff for these activities. At the same time, these services require closer proximity to operating companies served so they are not provided by the National Shared Services Center. Examples of regional office services include legal, communication, human resources and maintenance. Five divisional offices (MAD, CD, NED, MO and CA/HI) are also maintained by Regulatory Operations and share office space with local operating companies.



## II – Background

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### Service Company Accounting

Service Company maintains an accounting ledger for recording transactions (e.g., labor, expenses, overhead, capital and other assets, liabilities and equity) in a Service Company ledger separate from Affiliates' ledgers. Monthly financial statements are prepared that summarize month-to-date and year-to-date costs, budgets and prior year, with variances and explanations, by category and function. Accounting categories by transaction type are described below.

- **Service Company Labor:** The Service Company utilizes a system that tracks time and attendance. Employees electronically enter hours worked (including vacation, sick, FMLA, etc.) and accounting information (e.g., business unit; formula; pay type) and electronically submit the timesheet for approval. Submitted timesheets are electronically routed to authorized approvers. Time sheets require approval (of hours and accounting information such as formulas, etc.) by an authorized timesheet approver in the employee's home business unit.
- **Service Company Expenses:** Expenditures (i.e., standard invoices, purchase orders, electronic disbursements, Miscellaneous Invoices, Recurring Invoices, Recurring Vouchers, and p-cards) and journal entries require a preparer to enter accounting coding details (e.g., cost center, cost element and work breakdown structure) and a reviewer to approve the information in accordance with the corporate Delegation of Authority Policy. Expenditures are processed electronically and are automatically routed to the employee's supervisor for approval. Costs are posted many times daily, in detail, in the business unit selected. Journal entries are submitted as prepared to the appropriate reviewer and posted as approved.
- **Service Company Assets:** Service Company assets are procured directly by Service Company or through a capital leasing arrangement with Laurel Oak Properties (LOP). Service Company capitalizes these LOP leases as Non-Utility Plant assets in accordance with GAAP. Generally speaking, Service Company assets (including hardware, servers, laptops, desktops, servers, storage racks, furniture, laboratory and test equipment, security cameras, monitors, and leasehold improvements) are acquired through LOP via a capital lease. LOP, on behalf of the Service Company, will acquire the necessary materials and services to build the assets that are needed for the Company to meet its business needs.
- **Service Company Overhead:** Costs for support personnel (e.g., administrative assistants, mailroom clerks), rents, facility expenses, pension, medical insurance, taxes, general office supplies and other similar expenses are recorded in the ledger of the cost center responsible for incurring the charge. Overhead expenditures are posted using the labor and expense processes noted above, and are recorded, in detail, in the ledger of the cost center responsible for the charge using an overhead WBS element.

### Service Company Billing and Clearing

Service Company has developed a billing system which charges directly or allocates costs for services provided to Affiliates. Service Company billing is processed monthly and includes all Service Company costs charged to Affiliates using the Work Breakdown Structure (WBS) element selected for each transaction.

- **WBS element:** Every Service Company transaction (vouchers, journal entries, payroll batch, etc.) requires a WBS element within the account coding string. Each WBS element is configured in SAP with the following: Affiliate(s) to be charged, percent of charge to be billed to each Affiliate (total must equal 100%), receiving object (e.g.,

## II – Background

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Affiliate's cost center xx0000) for O&M costs or an Affiliate's WBS element for Capex Costs. WBS elements are configured in SAP with an end date (month/year) to prevent transactions from using an expired WBS during data input.

- **Affiliate Billing Process:** AW Service Company billing is a two-step process that first calculates allocations of transactions for all non-overhead WBS elements. The second step calculates overhead transaction allocations using the ratio of direct labor (Cost Element 5012000) allocations to Affiliates from the first step above multiplied by the pool of overhead expenses by physical location.
- **Bill Clearing Process:** Service Company billings are cleared through American Water Capital Corporation, Inc., (an Affiliate) monthly via an intercompany journal entry to GL Account 23120000 (Notes Payable – Associated Companies) posted on the last day of the month. Payments are estimated for each Affiliate using the prior month actual billing (current month estimate) with adjustment for prior month actual to estimate (previous month funding) true-up.

### III – Service Company Cost Comparison Approach

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#### Service Company Test Period Charges

During 2014 the Service Company billed MAWC a total of \$37.4 million, as shown in the table below. These charges were subjected to a market to cost comparison.

	2014
Management Fees - O&M	\$ 29,989,320
Management Fees - Capital	\$ 7,378,212
<b>Total AWSC Charges</b>	<b>\$ 37,367,531</b>

For purposes of comparing these charges to certain outside benchmarks, Service Company services were placed into two categories:

- Managerial and Professional Services – Includes such services as management, accounting, legal, human resources, information technology and engineering.
- Customer Accounts Services – Includes customer-related services, such as call center, credit, billing, collection and payment processing.

Total 2014 Service Company charges break down between management/professional services and customer account services as follows:

	2014	
	Amount	Hours
Management and Professional Services	\$ 31,447,086	210,410
Customer Account Services	\$ 5,920,446	163,977
<b>Total Service Company Charges</b>	<b>\$ 37,367,531</b>	<b>374,386</b>

#### Service Company Cost Comparison Approach

This study's first question—whether the Service Company 2014 charges were reasonable—was determined by comparing MAWC's A&G-related Service Company charges per customer to the same charges for utility companies that must file the Federal Energy Regulatory Commission (FERC) Form 60 – Annual Report of Service Companies.

The second question—whether the Service Company charges during 2014 were at the lower of cost or market—was evaluated by comparing the cost per hour for managerial and professional services provided by Service Company personnel to hourly billing rates that would be charged by outside providers of equivalent services. Service Company costs per hour were based on actual charges to MAWC during 2014. Outside providers' billing rates came from surveys or other information from professionals who could perform the services now provided by the Service Company.

### III – Service Company Cost Comparison Approach

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The third question—whether Service Company's 2014 customer account services charges, including National Call Center costs, were comparable to other utilities—was addressed by comparing MAWC's customer accounts services expenses to those of neighboring investor-owned electric utilities. This utility comparison group was selected because the cost of outside providers of customer accounts services is proprietary and not publicly available. Comparison to electric utilities is appropriate because all utilities, regardless of service type, must perform customer account services activities, including updating customer records for meter reads, printing and mailing bills, and the collection and processing of customer payments. Electric utility costs are available from the FERC Form 1; thus there is appropriate data transparency. The selection of electric utilities from Missouri and neighboring states provides a sufficiently sized comparison group.

The fourth question—the necessity of Service Company services—was investigated by defining the services provided to MAWC and determining if these services would be required if MAWC were a stand-alone utility.

## IV – Question 1 – Reasonableness of Service Company Charges

### Methodology

Utility service companies deliver a variety of services. Some support their regulated utility affiliate's operations-related functions (e.g., transmission, distribution). All utility service companies, however, provide A&G services to their affiliates. This is true because there are considerable economies of scale derived from centralizing the management of corporate A&G services such as information technology, finance and human resources. Because A&G-related services are consistently delivered by utility service companies, this study uses A&G charges per customer as the metric by which to test the reasonableness of affiliate charges.

### MAWC's Service Company A&G Cost per Customer

During 2014 MAWC was charged \$62 per customer by the Service Company for A&G-related services. The calculation of this amount, shown in the table below, starts with total Service Company charges and adjusts for capital and non-A&G function (e.g., engineering, operations and water quality) charges. These adjustments are necessary to develop a per-customer cost that can be compared to the cost of the utility service company comparison group.

	2014
Total Service Company charges	\$ 37,367,531
Less: Capital charges	\$ (7,378,212)
Less: Non-A&G function charges	
Engineering	\$ (545,163)
Operations	\$ (283,548)
Water Quality	\$ (135,883)
A&G-related charges	\$ 29,024,725
MAWC Customers	464,498
<b>A&amp;G Cost Per MAWC Customer</b>	<b>\$ 62</b>

### Comparison Group Cost Per Customer

Every centralized service company in a holding company system subject to regulation by the FERC must file a Form 60 in accordance with the Public Utility Holding Company Act of 2005, Section 1270, Section 390 of the Federal Power Act, and 18 Code of Federal Regulations paragraph 366.23. This report is designed to collect financial information from service companies that are subject to regulation by the FERC.

Charges to utility affiliates for the comparison group service companies were obtained from Schedule XVI – Analysis of Charges for Service Associate and Non-Associate Companies (p. 303 to 306) of each entity's FERC Form 60. Information from Form 60 schedule Account 457 – Analysis of Billing – Associate Companies was also used to isolate and eliminate charges to non-regulated affiliates from the cost pool used to calculate A&G expenses per regulated service customer.

For 2014, a Form 60 was filed by service companies associated with 24 utility holding companies. These service companies support utilities that provide regulated electric and, in some cases, gas service to retail customers.

#### IV – Question 1 – Reasonableness of Service Company Charges

FERC Form 60 shows service company charges to affiliates by FERC account. The table below shows a list of FERC A&G accounts and designates which correspond to services the Service Company provides to MAWC. Amounts in the designated FERC accounts are included in the calculation of service company A&G expenses per regulated customer.

FERC Account	Included in Cost Calculation
901 - Supervision	X
902 - Meter reading expenses	
903 - Customer records and collection expenses	X
904 - Uncollectible accounts	
905 - Miscellaneous customer accounts expenses	X
907 - Supervision	
908 - Customer assistance expenses	
909 - Informational And Instructional Advertising Expenses	
910 - Miscellaneous Customer Service And Informational Exp	X
911 - Supervision	
912 - Demonstrating and Selling Expenses	
913 - Advertising Expenses	
916 - Miscellaneous Sales Expenses	
920 - Administrative and General Salaries	X
921 - Office Supplies and Expenses	X
923 - Outside Services Employed	X
924 - Property Insurance	X
925 - Injuries and Damages	
926 - Employee Pensions and Benefits	X
928 - Regulatory Commission Expenses	
930.1 - General Advertising Expenses	
930.2 - Miscellaneous General Expenses	X
931 - Rents	X
935 - Maintenance of Structures and Equipment	X

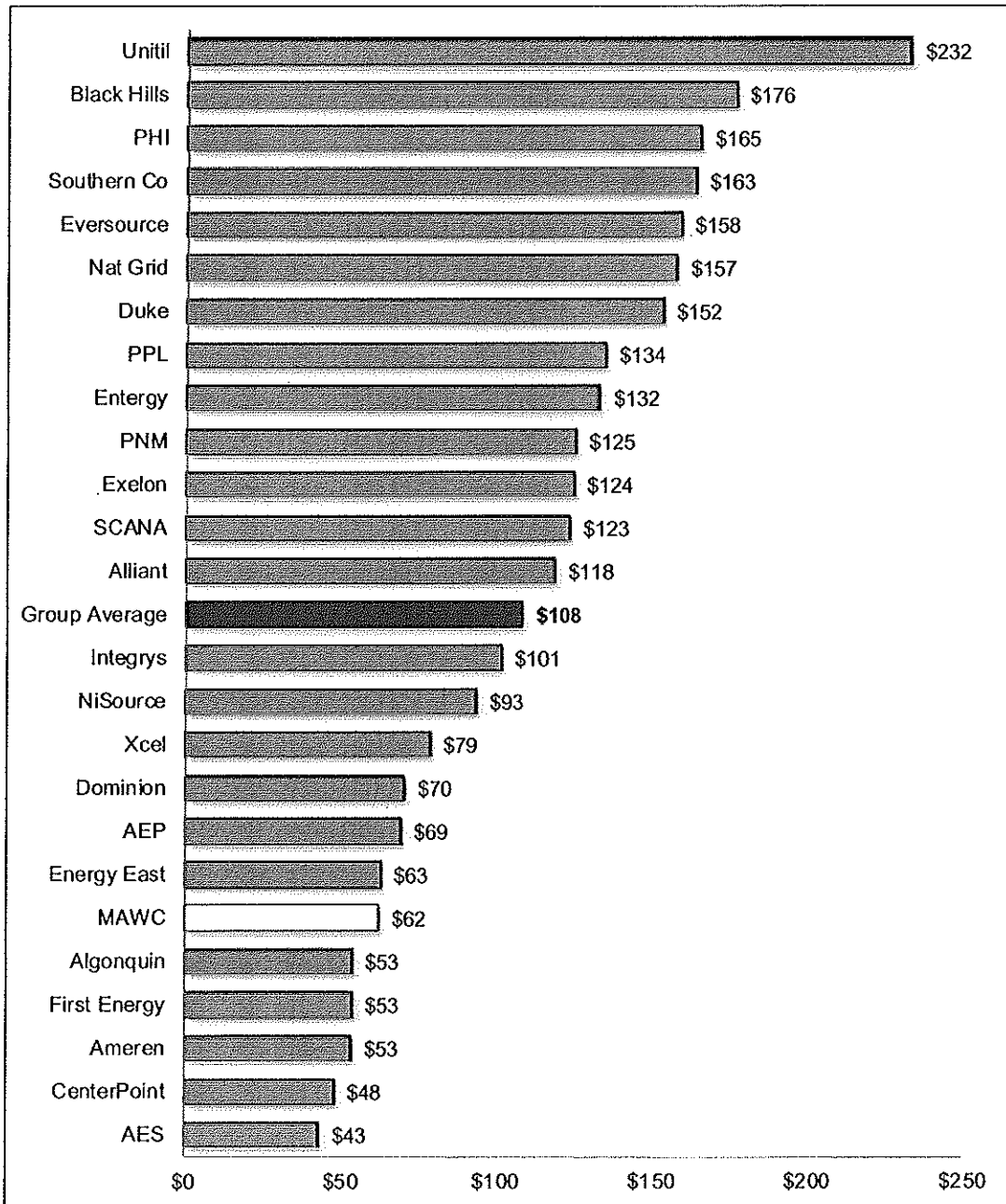
The A&G expenses per regulated utility customer for the 24 utility companies that filed a Form 60 for 2014 are calculated in Exhibit 1 (page 11).

Exhibit 1 (page 12) shows MAWC's 2014 Service Company cost per customer of \$62 to be considerably lower than the average of \$108 per customer for the comparison group service companies. Only 5 of 24 comparison group service companies had a lower per customer A&G cost than MAWC's charges from the Service Company. Based on this result, it is possible to conclude that the Service Company's 2014 charges to MAWC were reasonable.

Missouri American Water Company  
Calculation of 2014 Service Company A&G Expenses Per Customer

Utility Company	2014 Regulated		Cost per Customer
	Retail Service Company A&G Expenses	Regulated Retail Customers	
AEP	\$366,217,981	5,300,000	\$ 69
AES	\$47,179,170	1,100,000	\$ 43
Algonquin	\$20,417,324	382,000	\$ 53
Alliant	\$166,839,678	1,412,258	\$ 118
Ameren	\$175,670,442	3,300,000	\$ 53
Black Hills	\$130,528,322	742,896	\$ 176
CenterPoint	\$270,013,027	5,666,980	\$ 48
Dominion	\$267,125,964	3,800,000	\$ 70
Duke	\$1,188,590,645	7,800,000	\$ 152
Energy East	\$151,960,009	2,426,000	\$ 63
Entergy	\$396,681,235	2,996,000	\$ 132
Eversource	\$594,005,313	3,755,000	\$ 158
Exelon	\$968,292,855	7,800,000	\$ 124
FirstEnergy	\$320,924,738	6,008,000	\$ 53
Integrus	\$222,847,080	2,205,000	\$ 101
Nat Grid	\$1,082,848,311	6,900,000	\$ 157
NiSource	\$337,721,731	3,620,378	\$ 93
PHI	\$323,833,431	1,967,000	\$ 165
PNM	\$94,009,450	753,070	\$ 125
PPL	\$357,358,733	2,661,000	\$ 134
SCANA	\$190,243,709	1,547,000	\$ 123
Southern Co	\$733,081,757	4,500,000	\$ 163
Unitil	\$39,604,542	170,500	\$ 232
Xcel	\$431,788,464	5,500,000	\$ 79
<b>Total</b>	<b>\$8,877,783,910</b>	<b>82,313,082</b>	<b>\$ 108</b>

**Missouri American Water Company  
Comparison of Service Company A&G Expenses Per Customer**





## V – Question 2 – Provision of Services at the Lower of Cost or Market

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### Methodology

The lower-of-cost-or-market comparison is accomplished by comparing the cost per hour for Service Company managerial and professional services to those of outside service providers to whom these duties could be assigned. Based on the nature of the Service Company services, it was determined that the following outside providers could perform the categories of services indicated below:

- Management Consultants – executive and administrative management, risk management, human resources and communications services
- Attorneys – legal services
- Certified Public Accountants – accounting, financial and rates and revenues services
- IT Professionals – information technology services
- Professional Engineers – engineering, operations and water quality services.

The services provided by the Belleville lab are assumed to be transferable to professional engineers for purposes of this cost comparison. This was done for two reasons. First, there is no readily available survey of hourly billing rates for testing services such as those performed by Belleville. Second, Belleville personnel have similar scientific educational backgrounds as Service Company engineering personnel. Thus, it is appropriate to compare the hourly rates of Belleville services to those of outside engineering firms.

Service Company's hourly rate were calculated for each of the five outside service provider categories, based on the dollars and hours charged to MAWC during 2014. Hourly billing rates for outside service providers were developed using third party surveys or directly from information furnished by outside providers themselves.

It should be noted that by using the Service Company's hours charged MAWC during 2014, its hourly rates are actually overstated because some Service Company personnel charge a maximum of 8 hours per day even when they work more. Outside service providers generally bill for every hour worked. If all overtime hours of Service Company personnel had been factored into the hourly rate calculation, Service Company hourly rates would have been lower.

The last step in the lower-of-cost-or-market comparison was to compare the Service Company's average cost per hour to the average cost per hour for outside providers.

### Service Company Hourly Rates

Exhibit 3 (page 15) details the assignment of 2014 management and professional Service Company charges by outsider provider category. Exhibit 4 (page 16) shows the same assignment for Service Company management and professional hours charged to MAWC during 2014.

Certain adjustments to these dollar amounts were necessary to calculate Service Company hourly rates that are directly comparable to those of outside providers. Adjustments were made to the following 2014 test period non-labor Service Company charges:

- Contract Services – 2014 Service Company charges to MAWC include expenses associated with the use of outside professional firms to perform certain corporate-wide

## V – Question 2 – Provision of Services at the Lower of Cost or Market

services (e.g., legal, financial audit, actuarial services). These professional fees are excluded from the Service Company hourly rate calculation because the related services have effectively been out-sourced already.

- **Travel Expenses** – In general, client-related travel expenses incurred by outside service providers are not recovered through their hourly billing rates. Rather, actual out-of-pocket travel expenses are billed to clients in addition to fees for professional services. Thus, it is appropriate to remove these Service Company charges from the hourly rate calculation.
- **Information Technology Infrastructure Expenses** – Included in 2014 Service Company charges to MAWC are leases, maintenance fees and depreciation related to American Water's enterprise computing and network infrastructure and corporate business applications. An outside provider that would take over operation of this infrastructure would recover these expenses over and above the labor necessary to operate the data center.
- **Non-Service Related Expenses** – These are corporate expenses such current and deferred income tax expense, line of credit fees and board expenses. These are not related to the provision of services by Service Company personnel and have been excluded.

Exhibit 5 (page 17) shows how contract services, travel expenses, information technology infrastructure and non-service-related Service Company charges are assigned to the four outside provider categories.

Based on the assignment of expenses and hours shown in Exhibits 2 and 3 and the excludable items shown in Exhibit 4, the Service Company's equivalent costs per hour for 2014 are calculated below.

	Management Attorney	Contract Consultant	Public Accountant	IT Professional	Professional Engineer	Total
Total management, professional & technical services charges	\$ 1,512,205	\$ 7,060,413	\$ 5,136,780	\$ 16,066,211	\$ 1,671,476	\$ 31,447,086
Less: Exclusions						
Contract services	\$ 289,408	\$ 1,050,434	\$ 603,876	\$ 4,708,786	\$ 17,171	\$ 6,649,675
Travel expenses	\$ 5,308	\$ 73,126	\$ 21,911	\$ 30,551	\$ 25,114	\$ 156,009
IT infrastructure expenses	\$ 2,601	\$ 82,609	\$ 6,901	\$ 4,853,458	\$ 9,624	\$ 4,955,193
Non-service related expenses	\$ 270,203	\$ 224,900	\$ 305,821	\$ 377,859	\$ 96,107	\$ 1,274,890
Total Exclusions	\$ 547,519	\$ 1,431,069	\$ 938,510	\$ 9,970,654	\$ 148,016	\$ 13,035,768
Net Service-Related Charges	\$ 964,686	\$ 5,629,344	\$ 4,198,271	\$ 6,095,557	\$ 1,523,460	\$ 18,411,318
Total Hours (B)	5,303	67,985	57,251	63,348	16,523	210,410
Average Hourly Rate (A / B)	\$ 182	\$ 83	\$ 73	\$ 96	\$ 92	

**Missouri American Water Company  
Analysis of 2014 Service Company Charges by Location and Function**

Location	Function	2014 Service Company Charges					Total
		Attorney	Management Consultant	Certified Public Accountant	R-Professional	Professional Engineer	
Belleville Lab	Water Quality					\$ 139,161	\$ 139,161
Call Center	Human Resources		\$ 89,785				\$ 89,785
Corporate	Accounting			\$ 1,715,887			\$ 1,715,887
	Administration		\$ 1,600,390				\$ 1,600,390
	Audit			\$ 407,174			\$ 407,174
	Business Development		\$ 262,137				\$ 262,137
	Business Transformation		\$ 1,239,992				\$ 1,239,992
	Communications		\$ 383,376				\$ 383,376
	Engineering					\$ 1,242,254	\$ 1,242,254
	External Affairs		\$ 288,004				\$ 288,004
	Finance			\$ 1,389,559			\$ 1,389,559
	Human Resources		\$ 1,300,250				\$ 1,300,250
	Information Technology				\$ 256,881		\$ 256,881
	Legal	\$ 987,702					\$ 987,702
	Operations					\$ 289,662	\$ 289,662
	Procurement			\$ 632,197			\$ 632,197
	Rates & Regulatory			\$ 148,536			\$ 148,536
	Risk Management		\$ 460,024				\$ 460,024
Division Offices	Administration		\$ 516,064				\$ 516,064
	Business Development		\$ 352,621				\$ 352,621
	Engineering					\$ 399	\$ 399
	External Affairs		\$ 284,030				\$ 284,030
	Finance			\$ 409,768			\$ 409,768
	Human Resources		\$ 283,740				\$ 283,740
	Legal	\$ 524,503					\$ 524,503
	Rates & Revenue			\$ 433,659			\$ 433,659
Information Technology	Information Technology				\$ 15,809,330		\$ 15,809,330
<b>Total Dollars Charged</b>		<b>\$ 1,512,205</b>	<b>\$ 7,060,413</b>	<b>\$ 5,136,780</b>	<b>\$ 16,066,211</b>	<b>\$ 1,671,476</b>	<b>\$ 31,447,086</b>

**Missouri American Water Company  
Analysis of 2014 Service Company Hours by Location and Function**

		2014 Service Company Hours					
Location	Function	Attorney	Management Consultant	Certified Public Accountant	IT Professional	Professional Engineer	Total
Belleville Lab	Water Quality					1,373	1,373
Call Center	Human Resources		1,193				1,193
Corporate	Accounting			23,364			23,364
	Administration		7,469				7,469
	Audit			2,735			2,735
	Business Development		1,400				1,400
	Business Transformation		27,813				27,813
	Communications		2,271				2,271
	Engineering					14,842	14,842
	External Affairs		452				452
	Finance			13,715			13,715
	Human Resources		12,353				12,353
	Information Technology				3,574		3,574
	Legal	2,532					2,532
	Operations					308	308
	Procurement			8,704			8,704
	Rates & Regulatory			477			477
	Risk Management		6,030				6,030
Division Offices	Administration		707				707
	Business Development		2,950				2,950
	Engineering						-
	External Affairs		2,817				2,817
	Finance			4,097			4,097
	Human Resources		2,531				2,531
	Legal	2,771					2,771
	Rates & Revenue			4,158			4,158
Information Technology	Information Technology				59,774		59,774
<b>Total Hours Charged</b>		<b>5,303</b>	<b>67,985</b>	<b>57,251</b>	<b>63,348</b>	<b>16,523</b>	<b>210,410</b>

**Missouri American Water Company  
Analysis of 2014 Service Company Charges Excludable from the Hourly Rate Calculation**

Charges By Function	Exclusions From Hourly Rate Calculation				
	Contract Services	Travel Expenses	IT Infrastructure	Non-Services-Related Items	Total
Accounting	\$ 358,583	\$ 3,089	\$ 1,981	\$ 99,259	\$ 462,913
Administration	\$ 130,174	\$ 31,837	\$ 729	\$ 163,771	\$ 326,511
Audit	\$ 161,874	\$ 1,218	\$ 329	\$ 8,966	\$ 172,387
Business Development	\$ 22,811	\$ 9,863	\$ 90	\$ 53,724	\$ 86,489
Business Transformation	\$ 399,969	\$ 4,207	\$ 67,115	\$ (22,441)	\$ 448,849
Communications	\$ 120,433	\$ 904	\$ 508	\$ (12,088)	\$ 109,758
Engineering	\$ 36,880	\$ 23,320	\$ 9,617	\$ 44,844	\$ 114,661
External Affairs	\$ 90,083	\$ 5,569	\$ 155		\$ 95,807
Finance	\$ 72,043	\$ 8,859	\$ 2,890	\$ 162,540	\$ 246,332
Human Resources	\$ 263,813	\$ 12,275	\$ 6,511	\$ 29,912	\$ 312,511
Information Technology	\$ 4,708,786	\$ 30,551	\$ 4,853,458	\$ 377,859	\$ 9,970,654
Legal	\$ 269,408	\$ 5,308	\$ 2,601	\$ 270,203	\$ 547,519
Operations	\$ 2	\$ 1,653		\$ 4,068	\$ 5,722
Procurement	\$ 3,323	\$ 3,624	\$ 62	\$ 22,472	\$ 29,481
Rates & Regulatory	\$ 8,053	\$ 5,119	\$ 1,638	\$ 12,585	\$ 27,396
Risk Management	\$ 23,152	\$ 8,470	\$ 7,501	\$ 12,022	\$ 51,144
Water Quality	\$ (19,711)	\$ 141	\$ 7	\$ 47,196	\$ 27,633
<b>Total</b>	<b>\$ 6,649,675</b>	<b>\$ 156,009</b>	<b>\$ 4,955,193</b>	<b>\$ 1,274,890</b>	<b>\$ 13,035,768</b>

Outside Service Provider Category
Certified Public Accountant
Management Consultant
Certified Public Accountant
Management Consultant
Management Consultant
Professional Engineer
Management Consultant
Certified Public Accountant
Management Consultant
IT Professional
Attorney
Professional Engineer
Certified Public Accountant
Certified Public Accountant
Management Consultant
Professional Engineer

Recap By Outside Provider	Exclusions From Hourly Rate Calculation				
	Contract Services	Travel Expenses	IT Infrastructure	Non-Services-Related Items	Total
Attorney	\$ 269,408	\$ 5,308	\$ 2,601	\$ 270,203	\$ 547,519
Management Consultant	\$ 1,050,434	\$ 73,126	\$ 82,609	\$ 224,900	\$ 1,431,069
Certified Public Accountant	\$ 603,876	\$ 21,911	\$ 6,901	\$ 305,821	\$ 938,510
IT Professional	\$ 4,708,786	\$ 30,551	\$ 4,853,458	\$ 377,859	\$ 9,970,654
Professional Engineer	\$ 17,171	\$ 25,114	\$ 9,624	\$ 96,107	\$ 148,016
<b>Total</b>	<b>\$ 6,649,675</b>	<b>\$ 156,009</b>	<b>\$ 4,955,193</b>	<b>\$ 1,274,890</b>	<b>\$ 13,035,768</b>

## V – Question 2 – Provision of Services at the Lower of Cost or Market

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### Outside Service Provider Hourly Rates

The next step in the lower-of-cost-or-market comparison was to obtain the average billing rates for outside service providers. The source of this information and the determination of the average rates are described in the paragraphs that follow.

It should be noted that professionals working for three of the five outside provider categories may be licensed to practice by state regulatory bodies. However, not every professional working for these firms is licensed. For instance, among US certified public accounting firms, only more experienced staff are predominantly CPAs (see table below). Some Service Company employees also have professional licenses. Thus, it is valid to compare the Service Company's hourly rates to those of the outside professional service providers included in this study.

Position	US Average
Partners/Owners	98%
Directors (11+ years experience)	87%
Managers (6-10 years experience)	79%
Sr Associates (4-5 years experience)	50%
Associates (1-3 years experience)	22%
New Professionals	10%

Source: AICPA's National PCPS/TSCPA Management of an Accounting Practice Survey (2010)

### Attorneys

The Missouri State Bar does not survey its members as to their hourly billing rates. In addition, publicly available billing rate information could not be found for Missouri attorneys. Therefore, an estimate of Missouri attorney rates was developed from a 2014 billing rate survey from National Law Journal. As shown in Exhibit 6 (pages 20-22), data from this survey has been adjusted for cost of living differences between each law firm's location and St. Louis, Missouri. The National Law Review Billing survey data is as of December 31, 2014.

### Management Consultants

The cost per hour for management consultants was developed from a 2015 survey performed by the Association of Management Consulting Firms—an industry trade organization. The survey includes rates that were in effect during 2014 for firms throughout the United States. Consultants typically do not limit their practice to any one region and must travel to a client's location. Thus, in this case the U.S. national average is appropriate for comparison.

The first step in the calculation, presented in Exhibit 7 (page 23), was to determine an average rate by consultant position level. From these rates, a single weighted average hourly rate was calculated based upon the percent of time that is typically applied to a consulting assignment by each consultant position level.

## V – Question 2 – Provision of Services at the Lower of Cost or Market

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### **Certified Public Accountants**

The average hourly rate for Missouri CPAs was developed from a 2014 survey performed by the American Institute of Certified Public Accountants (AICPA). The Missouri version of this survey was used to develop hourly rates for member firms in Missouri.

As shown in Exhibit 8 (page 24), a weighted average hourly rate was developed based on a set of accountant positions and a percent of time that is typically applied to an accounting assignment. This survey includes rate information in effect during 2013. Thus, the calculated average rate was escalated to June 30, 2014—the midpoint of 2014.

### **Information Technology Professionals**

The average hourly rate for information technology consultants and contractors was developed from IT industry hourly billing rate data gathered by Baryenbruch & Company, LLC. As shown in Exhibit 9 (page 25), that data was compiled and a weighted average was calculated based on a percent of time that is typically applied to an IT consulting assignment based on Baryenbruch & Company's experience.

### **Professional Engineers**

The Company provided hourly rate information for outside engineering firms that could have been used by MAWC in 2014. As presented in Exhibit 10 (page 26), an average rate was developed for each engineering position level. Then, using a typical percentage mix of project time by engineering position, a weighted average cost per hour was calculated.

Missouri American Water Company  
Estimated Billing Rates for Missouri Attorneys

2014 Hourly Billing Rates		Weighted Average Rate Calculation					Cost of Living (COL) Adjustment			(A x B)				
Firm Name	Location	2014 Avg Billing Rates		0.25		0.75		(A)			(B)			
		Partner	Associate	Partner	Associate	Partner	Associate	Weighted Average	Law Firm City		MAWC - St. Louis, Mo	COL Adjustment	Adjusted Rate	
Adams and Reese	New Orleans, LA	\$ 420	\$ 270	\$ 105	\$ 203	\$ 308		98.2	92.7	94.4%	\$ 290			
Akerman	Miami, FL	\$ 535	\$ 305	\$ 134	\$ 229	\$ 363		107.2	92.7	86.5%	\$ 313			
Akin Gump Strauss Hauer & Feld	Washington, DC	\$ 785	\$ 525	\$ 196	\$ 384	\$ 590		141.6	92.7	65.5%	\$ 386			
Alston & Bird	Atlanta, GA	\$ 675	\$ 425	\$ 169	\$ 319	\$ 488		93.5	92.7	99.1%	\$ 483			
Andrews Kurth	Houston, TX	\$ 890	\$ 670	\$ 223	\$ 503	\$ 725		99.0	92.7	93.7%	\$ 679			
Archer & Greiner	Haddonfield, NJ	\$ 400	\$ 245	\$ 100	\$ 184	\$ 284		121.2	92.7	76.5%	\$ 217			
Arent Fox	Washington, DC	\$ 650	\$ 395	\$ 163	\$ 296	\$ 458		141.6	92.7	85.5%	\$ 300			
Arnold & Porter	Washington, DC	\$ 815	\$ 500	\$ 204	\$ 375	\$ 579		141.6	92.7	85.5%	\$ 379			
Arnstein & Lehr	Chicago, IL	\$ 485	\$ 250	\$ 116	\$ 188	\$ 304		117.4	92.7	78.9%	\$ 240			
Baker & Hostetler	Cleveland, OH	\$ 448	\$ 272	\$ 112	\$ 204	\$ 316		98.2	92.7	94.4%	\$ 299			
Baker & McKenzie	Chicago, IL	\$ 755	\$ 395	\$ 189	\$ 296	\$ 485		117.4	92.7	78.9%	\$ 383			
Baker, Donelson, Bearman, Caldwell	Memphis, TN	\$ 400	\$ 295	\$ 100	\$ 221	\$ 321		84.9	92.7	109.2%	\$ 351			
Ballard Spahr	Philadelphia, PA	\$ 475	\$ 315	\$ 119	\$ 236	\$ 355		121.2	92.7	76.5%	\$ 272			
Barnes & Thornburg	Indianapolis, IN	\$ 480	\$ 320	\$ 120	\$ 240	\$ 360		91.1	92.7	101.8%	\$ 366			
Benesch, Friedlander, Coplan & Aronoff	Cleveland, OH	\$ 455	\$ 280	\$ 114	\$ 210	\$ 324		98.2	92.7	94.4%	\$ 306			
Best Best & Krieger	Riverside, CA	\$ 455	\$ 280	\$ 114	\$ 210	\$ 324		112.0	92.7	82.8%	\$ 268			
Bingham McCutchen	Boston, MA	\$ 795	\$ 450	\$ 199	\$ 338	\$ 536		140.1	92.7	66.2%	\$ 355			
Blank Rome	Philadelphia, PA	\$ 640	\$ 350	\$ 160	\$ 293	\$ 423		121.2	92.7	76.5%	\$ 323			
Bond, Schoeneck & King	Syracuse, NY	\$ 355	\$ 225	\$ 89	\$ 169	\$ 258		104.5	92.7	88.7%	\$ 228			
Bowles Rice	Charleston, WV	\$ 230	\$ 135	\$ 58	\$ 101	\$ 159		93.7	92.7	98.9%	\$ 157			
Bracewell & Giuliani	Houston, TX	\$ 760	\$ 440	\$ 190	\$ 330	\$ 520		99.0	92.7	93.7%	\$ 487			
Bradley Arant Boult Cummings	Birmingham, AL	\$ 430	\$ 260	\$ 108	\$ 195	\$ 303		85.9	92.7	107.9%	\$ 326			
Brownstein Hyatt Farber Schrock	Denver, CO	\$ 520	\$ 305	\$ 130	\$ 229	\$ 358		104.0	92.7	89.1%	\$ 320			
Bryan Cave	St. Louis, MO	\$ 620	\$ 405	\$ 155	\$ 304	\$ 459		94.4	92.7	88.2%	\$ 450			
Buchalter Nemer	Los Angeles, CA	\$ 605	\$ 365	\$ 151	\$ 274	\$ 425		131.0	92.7	70.7%	\$ 301			
Burr & Forman	Birmingham, AL	\$ 371	\$ 241	\$ 93	\$ 181	\$ 274		85.9	92.7	107.9%	\$ 295			
Cadwalader, Wickersham & Taft	New York, NY	\$ 930	\$ 605	\$ 233	\$ 454	\$ 686		221.3	92.7	41.9%	\$ 287			
Cole, Scholtz, Meisel, Forman & Leonard	Hackensack, NJ	\$ 653	\$ 302	\$ 163	\$ 227	\$ 390		133.0	92.7	69.7%	\$ 272			
Connell Foley	Roseland, NJ	\$ 425	\$ 265	\$ 106	\$ 199	\$ 305		128.4	92.7	72.2%	\$ 220			
Cooley	Palo Alto, CA	\$ 820	\$ 515	\$ 205	\$ 386	\$ 591		159.9	92.7	58.0%	\$ 343			
Covington & Burling	Washington, DC	\$ 780	\$ 415	\$ 195	\$ 311	\$ 506		141.6	92.7	65.5%	\$ 331			
Cozen O'Connor	Philadelphia, PA	\$ 570	\$ 355	\$ 143	\$ 268	\$ 409		121.2	92.7	76.5%	\$ 313			
Curtis, Mallet-Prevost, Colt & Mosie	New York, NY	\$ 800	\$ 480	\$ 200	\$ 360	\$ 560		221.3	92.7	41.9%	\$ 235			
Davis Graham & Stubbs	Denver, CO	\$ 435	\$ 255	\$ 109	\$ 191	\$ 300		104.0	92.7	89.1%	\$ 267			
Davis Polk & Wardwell	New York, NY	\$ 975	\$ 615	\$ 244	\$ 461	\$ 705		221.3	92.7	41.9%	\$ 295			
Debevoise & Plimpton	New York, NY	\$ 1,055	\$ 490	\$ 284	\$ 368	\$ 631		221.3	92.7	41.9%	\$ 264			
Dechert	New York, NY	\$ 900	\$ 530	\$ 225	\$ 398	\$ 623		221.3	92.7	41.9%	\$ 261			
Dentons	New York, NY	\$ 700	\$ 425	\$ 175	\$ 319	\$ 494		221.3	92.7	41.9%	\$ 207			
Dickstein Shapiro	Washington, DC	\$ 750	\$ 475	\$ 188	\$ 356	\$ 544		141.6	92.7	65.5%	\$ 356			
Dinsmore & Shohl	Cincinnati, OH	\$ 411	\$ 238	\$ 103	\$ 179	\$ 281		91.8	92.7	101.0%	\$ 284			
DLA Piper	New York, NY	\$ 765	\$ 510	\$ 191	\$ 383	\$ 574		221.3	92.7	41.9%	\$ 240			
Dorsey & Whitney	Minneapolis, MN	\$ 435	\$ 315	\$ 109	\$ 236	\$ 345		110.3	92.7	84.0%	\$ 280			
Duane Morris	Philadelphia, PA	\$ 589	\$ 373	\$ 147	\$ 280	\$ 427		121.2	92.7	76.5%	\$ 327			
Edwards Wildman Palmer	Boston, MA	\$ 535	\$ 325	\$ 134	\$ 244	\$ 378		140.1	92.7	66.2%	\$ 250			
Faegre Baker Daniels	Minneapolis, MN	\$ 455	\$ 260	\$ 114	\$ 195	\$ 309		110.3	92.7	84.0%	\$ 259			
Foley & Lardner	Milwaukee, WI	\$ 600	\$ 335	\$ 150	\$ 251	\$ 401		101.7	92.7	91.2%	\$ 366			
Foley Hoag	Boston, MA	\$ 670	\$ 325	\$ 168	\$ 244	\$ 411		140.1	92.7	66.2%	\$ 272			
Fox Rothschild	Philadelphia, PA	\$ 530	\$ 310	\$ 133	\$ 233	\$ 365		121.2	92.7	76.5%	\$ 279			
Fried, Frank, Harris, Shriver & Jacobson	New York, NY	\$ 1,000	\$ 595	\$ 250	\$ 446	\$ 696		221.3	92.7	41.9%	\$ 292			



Missouri American Water Company  
Estimated Billing Rates for Missouri Attorneys

2014 Hourly Billing Rates		Weighted Average Rate Calculation					Cost of Living (COL) Adjustment			Adjusted Rate		
Firm Name	Location	2014 Avg Billing Rates		0.25		0.75		(A)			(B)	
		Partner	Associate	Partner	Associate	Partner	Associate	Weighted Average	Law Firm City			MAWC - St. Louis, Mo
Frost Brown Todd	Cincinnati, OH	\$ 387	\$ 234	\$ 97	\$ 176	\$ 272		91.8	92.7	101.0%	\$ 275	
Gardero Wynne Sewell	Dallas, TX	\$ 635	\$ 303	\$ 159	\$ 227	\$ 386		95.7	92.7	96.8%	\$ 374	
Gibbons	Newark, NJ	\$ 560	\$ 360	\$ 140	\$ 270	\$ 410		128.4	92.7	72.2%	\$ 296	
Gibson, Dunn & Crutcher	New York, NY	\$ 980	\$ 580	\$ 245	\$ 443	\$ 688		221.3	92.7	41.9%	\$ 288	
Gordon Rees Scully Mansukhani	San Diego, CA	\$ 420	\$ 300	\$ 105	\$ 225	\$ 330		129.2	92.7	71.7%	\$ 237	
Greenberg Traurig	New York, NY	\$ 763	\$ 470	\$ 191	\$ 353	\$ 543		221.3	92.7	41.9%	\$ 228	
Harris Beach	Rochester, NY	\$ 348	\$ 230	\$ 87	\$ 173	\$ 260		99.9	92.7	92.8%	\$ 241	
Harter Secrest & Emery	Rochester, NY	\$ 385	\$ 250	\$ 96	\$ 188	\$ 284		99.9	92.7	92.8%	\$ 263	
Haynes and Boone	Dallas, TX	\$ 670	\$ 405	\$ 168	\$ 304	\$ 471		95.7	92.7	96.8%	\$ 456	
Holland & Hart	Denver, CO	\$ 442	\$ 277	\$ 111	\$ 208	\$ 318		104.0	92.7	99.1%	\$ 284	
Holland & Knight	Washington, DC	\$ 625	\$ 340	\$ 156	\$ 255	\$ 411		141.6	92.7	65.5%	\$ 269	
Honigman Miller Schwartz and Cohn	Detroit, MI	\$ 390	\$ 220	\$ 98	\$ 165	\$ 263		96.1	92.7	96.4%	\$ 253	
Hughes Hubbard & Reed	New York, NY	\$ 890	\$ 555	\$ 223	\$ 416	\$ 639		221.3	92.7	41.9%	\$ 268	
Husch Blackwell	St. Louis, MO	\$ 449	\$ 275	\$ 112	\$ 206	\$ 319		94.4	92.7	98.2%	\$ 313	
Ico Miller	Indianapolis, IN	\$ 450	\$ 270	\$ 113	\$ 203	\$ 315		91.1	92.7	101.8%	\$ 321	
Irell & Manella	Los Angeles, CA	\$ 890	\$ 535	\$ 223	\$ 401	\$ 624		131.0	92.7	70.7%	\$ 441	
Jackson Kelly	Charleston, WV	\$ 345	\$ 243	\$ 86	\$ 182	\$ 269		93.7	92.7	98.9%	\$ 266	
Jackson Lewis	Los Angeles, CA	\$ 380	\$ 290	\$ 95	\$ 218	\$ 313		131.0	92.7	70.7%	\$ 221	
Jackson Walker	Dallas, TX	\$ 622	\$ 335	\$ 156	\$ 251	\$ 407		95.7	92.7	96.8%	\$ 394	
Jenner & Block	Chicago, IL	\$ 745	\$ 465	\$ 186	\$ 349	\$ 535		117.4	92.7	78.9%	\$ 422	
Jones Day	New York, NY	\$ 745	\$ 435	\$ 186	\$ 326	\$ 513		221.3	92.7	41.9%	\$ 215	
Jones Walker	New Orleans, LA	\$ 385	\$ 225	\$ 96	\$ 169	\$ 265		98.2	92.7	94.4%	\$ 250	
Kasowitz, Benson, Torres & Friedman	New York, NY	\$ 835	\$ 340	\$ 209	\$ 255	\$ 464		221.3	92.7	41.9%	\$ 194	
Katten Muchin Rosenman	Chicago, IL	\$ 615	\$ 455	\$ 154	\$ 341	\$ 495		117.4	92.7	78.9%	\$ 391	
Kaye Scholer	New York, NY	\$ 860	\$ 597	\$ 215	\$ 448	\$ 663		221.3	92.7	41.9%	\$ 278	
Kolley Drye & Warren	New York, NY	\$ 640	\$ 430	\$ 160	\$ 323	\$ 483		221.3	92.7	41.9%	\$ 202	
Kilpatrick Townsend & Stockton	Atlanta, GA	\$ 550	\$ 385	\$ 138	\$ 289	\$ 426		93.5	92.7	99.1%	\$ 422	
King & Spalding	Atlanta, GA	\$ 775	\$ 460	\$ 194	\$ 345	\$ 539		93.5	92.7	99.1%	\$ 534	
Kirkland & Ellis	Chicago, IL	\$ 825	\$ 540	\$ 206	\$ 405	\$ 611		117.4	92.7	78.9%	\$ 483	
Knobbe Martens Olson & Bear	Irvine, CA	\$ 575	\$ 360	\$ 144	\$ 270	\$ 414		140.7	92.7	65.9%	\$ 273	
Kramer Levin Natialis & Frankel	New York, NY	\$ 921	\$ 675	\$ 230	\$ 506	\$ 737		221.3	92.7	41.9%	\$ 309	
Lane Powell	Seattle, WA	\$ 516	\$ 331	\$ 129	\$ 248	\$ 377		117.5	92.7	78.9%	\$ 298	
Latham & Watkins	New York, NY	\$ 990	\$ 605	\$ 248	\$ 454	\$ 701		221.3	92.7	41.9%	\$ 294	
Lathrop & Gage	Kansas City, MO	\$ 420	\$ 250	\$ 105	\$ 188	\$ 293		89.5	92.7	103.6%	\$ 303	
Lewis Roca Rothgerber	Phoenix, AZ	\$ 505	\$ 400	\$ 126	\$ 300	\$ 426		97.3	92.7	95.3%	\$ 406	
Lindquist & Vennum	Minneapolis, MN	\$ 520	\$ 365	\$ 130	\$ 274	\$ 404		110.3	92.7	84.0%	\$ 339	
Littler Mendelson	San Francisco, CA	\$ 550	\$ 250	\$ 138	\$ 218	\$ 355		159.9	92.7	58.0%	\$ 206	
Lowenstein Sandler	Roseland, NJ	\$ 765	\$ 450	\$ 191	\$ 338	\$ 529		128.4	92.7	72.2%	\$ 382	
McCarter & English	Newark, NJ	\$ 530	\$ 300	\$ 133	\$ 225	\$ 358		128.4	92.7	72.2%	\$ 258	
McElroy, Deutsch, Mulvaney & Carpenter	Morrisstown, NJ	\$ 445	\$ 295	\$ 111	\$ 221	\$ 333		133.0	92.7	69.7%	\$ 232	
McGuire Woods	Richmond, VA	\$ 595	\$ 360	\$ 145	\$ 270	\$ 419		99.7	92.7	93.0%	\$ 389	
McKenna Long & Aldridge	Atlanta, GA	\$ 530	\$ 395	\$ 133	\$ 296	\$ 429		93.5	92.7	99.1%	\$ 425	
Michael, Best & Friedrich	Milwaukee, WI	\$ 445	\$ 283	\$ 111	\$ 212	\$ 324		101.7	92.7	91.2%	\$ 295	
Miles & Stockbridge	Baltimore, MD	\$ 478	\$ 290	\$ 120	\$ 219	\$ 337		111.3	92.7	83.3%	\$ 281	
Moore & Van Allen	Charlotte, NC	\$ 490	\$ 280	\$ 123	\$ 210	\$ 333		96.1	92.7	96.4%	\$ 321	
Morgan, Lewis & Bockius	Philadelphia, PA	\$ 620	\$ 390	\$ 155	\$ 293	\$ 448		121.2	92.7	76.5%	\$ 342	
Morrison & Foerster	San Francisco, CA	\$ 865	\$ 525	\$ 216	\$ 394	\$ 610		159.9	92.7	58.0%	\$ 354	
Neilsen Mullins	Columbia, SC	\$ 444	\$ 271	\$ 111	\$ 203	\$ 314		95.7	92.7	96.8%	\$ 304	
Nixon Peabody	Boston, MA	\$ 520	\$ 300	\$ 130	\$ 225	\$ 355		140.1	92.7	66.2%	\$ 235	

### Missouri American Water Company Estimated Billing Rates for Missouri Attorneys

2014 Hourly Billing Rates		Weighted Average Rate Calculation					Cost of Living (COL) Adjustment			(A x B) Adjusted Rate
		2014 Avg Billing Rates		0.25	0.75	(A)	COL Indices		(B)	
		Partner	Associate	Partner	Associate	Weighted Average	Law Firm City	MAWC - St. Louis, Mo	COL Adjustment	
Norris McLaughlin & Marcus	Bridgewater, NJ	\$ 495	\$ 275	\$ 124	\$ 206	\$ 330	122.2	92.7	75.8%	\$ 250
Norton Rose Fulbright	Houston, TX	\$ 775	\$ 400	\$ 184	\$ 300	\$ 494	89.0	92.7	93.7%	\$ 463
Nossaman	Los Angeles, CA	\$ 579	\$ 340	\$ 145	\$ 255	\$ 400	131.0	92.7	70.7%	\$ 283
Nutter McClennen & Fish	Boston, MA	\$ 575	\$ 375	\$ 144	\$ 281	\$ 425	140.1	92.7	66.2%	\$ 281
Ogletree Deakins	Atlanta, GA	\$ 360	\$ 260	\$ 90	\$ 195	\$ 285	93.5	92.7	99.1%	\$ 282
Orrick Herrington & Sutcliffe	New York, NY	\$ 845	\$ 560	\$ 211	\$ 420	\$ 631	221.3	92.7	41.9%	\$ 264
Paul Hastings	New York, NY	\$ 815	\$ 540	\$ 204	\$ 405	\$ 609	221.3	92.7	41.9%	\$ 255
Paul, Weiss, Rifkind, Wharton & Garrison	New York, NY	\$ 1,040	\$ 878	\$ 260	\$ 508	\$ 769	221.3	92.7	41.9%	\$ 322
Pepper Hamilton	Philadelphia, PA	\$ 845	\$ 390	\$ 161	\$ 293	\$ 454	121.2	92.7	76.5%	\$ 347
Perkins Coie	Seattle, WA	\$ 615	\$ 425	\$ 154	\$ 319	\$ 473	117.5	92.7	78.9%	\$ 373
Pillsbury Winthrop Shaw Pittman	Washington, DC	\$ 865	\$ 520	\$ 216	\$ 390	\$ 608	141.6	92.7	65.5%	\$ 397
Polzinelli	Kansas City, MO	\$ 435	\$ 279	\$ 109	\$ 209	\$ 318	89.5	92.7	103.6%	\$ 330
Proskauer Rose	New York, NY	\$ 880	\$ 465	\$ 220	\$ 346	\$ 569	221.3	92.7	41.9%	\$ 238
Quarles & Brady	Milwaukee, WI	\$ 519	\$ 335	\$ 130	\$ 251	\$ 381	101.7	92.7	91.2%	\$ 347
Quinn Emanuel Urquhart & Sullivan	New York, NY	\$ 915	\$ 410	\$ 229	\$ 308	\$ 536	221.3	92.7	41.9%	\$ 225
Reed Smith	Pittsburgh, PA	\$ 737	\$ 420	\$ 184	\$ 315	\$ 499	92.2	92.7	100.5%	\$ 502
Richards, Layton & Finger	Wilmington, DE	\$ 678	\$ 414	\$ 170	\$ 311	\$ 480	108.4	92.7	85.5%	\$ 411
Riker Danzig Scherer Hyland & Perrotti	Morristown, NJ	\$ 455	\$ 250	\$ 114	\$ 188	\$ 301	133.0	92.7	69.7%	\$ 210
Robinson & Cole	Hartford, CT	\$ 500	\$ 300	\$ 125	\$ 225	\$ 350	122.5	92.7	75.7%	\$ 265
Rutan & Tucker	Costa Mesa, CA	\$ 490	\$ 320	\$ 123	\$ 240	\$ 363	140.7	92.7	65.9%	\$ 239
Saul Ewing	Philadelphia, PA	\$ 546	\$ 344	\$ 137	\$ 258	\$ 395	121.2	92.7	76.5%	\$ 302
Sedgwick	San Francisco, CA	\$ 425	\$ 325	\$ 108	\$ 244	\$ 350	159.9	92.7	58.0%	\$ 203
Seward & Kissel	New York, NY	\$ 735	\$ 400	\$ 184	\$ 300	\$ 484	221.3	92.7	41.9%	\$ 203
Seyfarth Shaw	Chicago, IL	\$ 810	\$ 365	\$ 153	\$ 274	\$ 426	117.4	92.7	78.9%	\$ 336
Sheppard Mullin Richter & Hampton	Los Angeles, CA	\$ 685	\$ 415	\$ 171	\$ 311	\$ 483	131.0	92.7	70.7%	\$ 341
Shumaker Loop & Kendrick	Toledo, OH	\$ 413	\$ 258	\$ 103	\$ 192	\$ 295	93.5	92.7	99.1%	\$ 293
Shutts & Bowen	Miami, FL	\$ 430	\$ 260	\$ 108	\$ 195	\$ 303	107.2	92.7	86.5%	\$ 262
Skadden, Arps, Slate, Meagher & Flom	New York, NY	\$ 1,035	\$ 620	\$ 259	\$ 485	\$ 724	221.3	92.7	41.9%	\$ 303
Snell & Wimer	Phoenix, AZ	\$ 525	\$ 280	\$ 131	\$ 210	\$ 341	97.3	92.7	95.3%	\$ 325
Squire Patton Boggs	Washington, DC	\$ 655	\$ 355	\$ 184	\$ 288	\$ 430	141.6	92.7	65.5%	\$ 282
Sterne, Kossler, Goldstein & Fox	Washington, DC	\$ 577	\$ 348	\$ 144	\$ 260	\$ 404	141.6	92.7	65.5%	\$ 264
Stoel Rives	Portland, OR	\$ 492	\$ 287	\$ 123	\$ 215	\$ 338	119.1	92.7	77.8%	\$ 283
Strasburger & Price	Dallas, TX	\$ 435	\$ 270	\$ 109	\$ 203	\$ 311	95.7	92.7	98.8%	\$ 301
Stroock & Stroock & Lavan	New York, NY	\$ 980	\$ 549	\$ 240	\$ 412	\$ 652	221.3	92.7	41.9%	\$ 273
Taft Stettinius & Hollister	Cincinnati, OH	\$ 415	\$ 285	\$ 104	\$ 214	\$ 318	91.8	92.7	101.0%	\$ 321
Thompson & Knight	Dallas, TX	\$ 535	\$ 370	\$ 134	\$ 278	\$ 411	95.7	92.7	98.8%	\$ 398
Thompson Coburn	St. Louis, MO	\$ 440	\$ 270	\$ 110	\$ 203	\$ 313	94.4	92.7	98.2%	\$ 307
Trotman Sanders	Atlanta, GA	\$ 620	\$ 340	\$ 155	\$ 255	\$ 410	93.5	92.7	99.1%	\$ 406
Venable	Washington, DC	\$ 680	\$ 430	\$ 185	\$ 323	\$ 488	141.6	92.7	65.5%	\$ 319
Vinson & Elkins	Houston, TX	\$ 600	\$ 390	\$ 150	\$ 293	\$ 443	89.0	92.7	93.7%	\$ 415
Waller Lansden Dortch & Davis	Nashville, TN	\$ 480	\$ 245	\$ 115	\$ 184	\$ 299	86.3	92.7	107.4%	\$ 321
Well, Gotshal & Manges	New York, NY	\$ 930	\$ 600	\$ 233	\$ 450	\$ 683	221.3	92.7	41.9%	\$ 286
White & Case	New York, NY	\$ 875	\$ 525	\$ 219	\$ 394	\$ 613	221.3	92.7	41.9%	\$ 257
Wiley Rein	Washington, DC	\$ 665	\$ 445	\$ 166	\$ 334	\$ 500	141.6	92.7	65.5%	\$ 327
Williams Mullen	Richmond, VA	\$ 385	\$ 295	\$ 96	\$ 221	\$ 318	99.7	92.7	93.0%	\$ 295
Willkie Farr & Gallagher	New York, NY	\$ 950	\$ 580	\$ 238	\$ 435	\$ 673	221.3	92.7	41.9%	\$ 282
Wimer Cutler Pickering Hale and Dorr	Washington, DC	\$ 905	\$ 290	\$ 226	\$ 218	\$ 444	141.6	92.7	65.5%	\$ 291
Winston & Strawn	Chicago, IL	\$ 800	\$ 520	\$ 200	\$ 380	\$ 580	117.4	92.7	78.9%	\$ 488
Wolff & Samson	West Orange, NJ	\$ 400	\$ 340	\$ 100	\$ 255	\$ 355	128.4	92.7	72.2%	\$ 258
<b>Overall 2014 Average Hourly Billing Rate</b>										<b>\$ 311</b>

**Missouri American Water Company**  
Billing Rates of U.S. Management Consultants

Survey billing rates in effect in 2014 (Note A)						
A. Calculation of Average Hourly Billing Rate by Consultant Position						
	<b>Average Hourly Rates (Note A)</b>					
	Entry-Level Consultant	Associate Consultant	Senior Consultant	Junior Partner	Senior Partner	
Average	\$ 151	\$ 218	\$ 273	\$ 310	\$ 358	
B. Calculation of Overall Average Hourly Billing Rate Based on a Typical Distribution of Time on an Engagement						
	Entry-Level Consultant	Associate Consultant	Senior Consultant	Junior Partner	Senior Partner	
Average Hourly Billing Rate (from above)	\$ 151	\$ 218	\$ 273	\$ 310	\$ 358	
Percent of Consulting Assignment	30%	30%	20%	10%	10%	Weighted Average
	\$ 45	\$ 65	\$ 55	\$ 31	\$ 36	<b>\$ 232</b>
<b>Average Hourly Billing Rate For Management Consultants During 2014</b>						
					<b>\$ 232</b>	

Note A: Source is "Operating Ratios For Management Consulting Firms, 2015 Edition," Association of Management Consulting Firms

**Missouri American Water Company**  
**Billing Rates of Missouri Certified Public Accountants**

<b>A. Calculation of Average Hourly Billing Rate by Public Accounting Position</b> Survey billing rates were those in effect in 2013 (Note A)																													
<b>Average Hourly Billing Rate (Note A)</b>																													
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;"></td> <td style="width: 15%; text-align: center;">Staff Accountant</td> <td style="width: 15%; text-align: center;">Senior Accountant</td> <td style="width: 15%; text-align: center;">Director/ Manager</td> <td style="width: 15%; text-align: center;">Partner</td> <td style="width: 10%;"></td> </tr> <tr> <td style="padding: 5px;">Average Hourly Billing Rate by CPA Firm Position</td> <td style="text-align: center; padding: 5px;">\$ 92</td> <td style="text-align: center; padding: 5px;">\$ 121</td> <td style="text-align: center; padding: 5px;">\$ 166</td> <td style="text-align: center; padding: 5px;">\$ 226</td> <td></td> </tr> <tr> <td style="padding: 5px;">Percent of Accounting Assignment</td> <td style="text-align: center; padding: 5px;">30%</td> <td style="text-align: center; padding: 5px;">30%</td> <td style="text-align: center; padding: 5px;">20%</td> <td style="text-align: center; padding: 5px;">20%</td> <td style="text-align: center; padding: 5px;">Weighted Average</td> </tr> <tr> <td></td> <td style="text-align: center; padding: 5px;">\$ 27</td> <td style="text-align: center; padding: 5px;">\$ 36</td> <td style="text-align: center; padding: 5px;">\$ 33</td> <td style="text-align: center; padding: 5px;">\$ 45</td> <td style="text-align: center; padding: 5px;"><b>\$ 142</b></td> </tr> </table>							Staff Accountant	Senior Accountant	Director/ Manager	Partner		Average Hourly Billing Rate by CPA Firm Position	\$ 92	\$ 121	\$ 166	\$ 226		Percent of Accounting Assignment	30%	30%	20%	20%	Weighted Average		\$ 27	\$ 36	\$ 33	\$ 45	<b>\$ 142</b>
	Staff Accountant	Senior Accountant	Director/ Manager	Partner																									
Average Hourly Billing Rate by CPA Firm Position	\$ 92	\$ 121	\$ 166	\$ 226																									
Percent of Accounting Assignment	30%	30%	20%	20%	Weighted Average																								
	\$ 27	\$ 36	\$ 33	\$ 45	<b>\$ 142</b>																								
<u>Escalation to Test Period Midpoint (June 30, 2014)</u>																													
					233.1																								
					238.3																								
					2.3%																								
Average Hourly Billing Rate For Management Consultants At June 30, 2014					<b>\$ 145</b>																								

Note A: Source is AICPA's 2014 National PCPS/TSCPA Management of an Accounting Practice Survey (Missouri edition)

Note B: Source is U.S. Bureau of Labor Statistics (<http://data.bls.gov/cgi-bin/surveymost>)

**Missouri American Water Company  
Billing Rates of Information Technology Professionals**

A. Calculation of Average Hourly Billing Rate by Information Technology Position  
Survey billing rates were those in effect in 2014 (Note A)

		Average Hourly Billing Rate (Note A)					
		Contractor Positions		Consultant Positions			
			Senior				
		Contractor	Contractor	Associate	Manager	Partner	
Average Hourly Billing Rate by IT Position Category		\$ 95	\$ 155	\$ 245	\$ 345	\$ 435	
Percent of IT Assignment		30%	30%	20%	10%	10%	Weighted Average
		\$ 29	\$ 47	\$ 49	\$ 35	\$ 44	\$ 202
Average Hourly Billing Rate For IT Professionals During 2014							\$ 202

Note A: Source is Baryenbruch & Company, LLC

Missouri American Water Company  
Billing Rates of Missouri Engineers

A. Calculation of Average 2014 Hourly Rate by Engineer Position				
Firm	Average Hourly Billing Rates			
	Technician Senior Technician	Engineer Design Engineer Project Engineer	Project Manager Sr. Mgr. Engineer	Officer Principal Engineer
Firm #1	\$85	\$98	\$154	\$190
Firm #2	\$124	\$117	\$163	\$209
Firm #3	\$85	\$91	\$168	\$200
Firm #4	\$76	\$121	\$172	\$225
Firm #5	\$120	\$163	\$211	\$219
Firm #6	\$67	\$84	\$148	\$193
Firm #7	\$55	\$95	\$150	na
Firm #8	\$82	\$94	\$130	\$184

B. Calculation of Overall Average Engineering Hourly Billing Rate					
	Technician	Engineer	Project Manager	Officer	Weighted Average
	Senior Technician	Design Engineer Project Engineer	Sr. Mgr. Engineer	Principal Engineer	
Average Hourly Billing Rate (From Above)	\$87	\$108	\$162	\$203	
Typical Percent of Time on an Engineering Assignment	30%	35%	25%	10%	
	\$26	\$38	\$40	\$20	<b>\$124</b>

Source: Information provided by Missouri American Water Company

V – Question 2 – Provision of Services at the Lower of Cost or Market

**Service Company versus Outside Provider Cost Comparison**

As shown in the table below, Service Company costs per hour are considerably lower than those of outside providers.

Service Provider	12 Months Ended December 31, 2014		
	Service Company	Outside Provider	Difference-- Service Co. Greater(Less) Than Outside
Attorney	\$ 195	\$ 311	\$ (116)
Management Consultant	\$ 82	\$ 232	\$ (150)
Certified Public Accountant	\$ 72	\$ 145	\$ (73)
IT Professional	\$ 97	\$ 202	\$ (105)
Professional Engineer	\$ 93	\$ 124	\$ (31)

Based on these cost-per-hour differentials and the number of managerial and professional services hours billed to MAWC during 2014, outside service providers would have cost \$22,155,964 more than the Service Company (see table below). Thus, on average, outside providers' hourly rates are 70% higher than those of the Service Company (\$22,155,964 / \$31,447,086).

Service Provider	12 Months Ended December 31, 2014		
	Hourly Rate Difference-- Service Co. Greater(Less) Than Outside	Service Company Hours Charged	Dollar Difference
Attorney	\$ (116)	5,303	\$ (615,141)
Management Consultant	\$ (150)	67,985	\$ (10,197,779)
Certified Public Accountant	\$ (73)	57,251	\$ (4,179,320)
IT Professional	\$ (105)	63,348	\$ (6,651,516)
Professional Engineer	\$ (31)	16,523	\$ (512,209)
Service Company Less Than Outside Providers			\$ (22,155,964)

It should be noted that the cost differential associated with using outside providers is even greater because exempt Service Company personnel do not charge more than 8 hours per day even when they work more. Outside providers generally charge clients for all hours worked. Thus, MAWC would have been charged by outside providers for overtime worked by Service Company personnel who are not paid for that time.

If MAWC were to use outside service providers rather than the Service Company for managerial and professional services, it would incur other additional expenses besides those associated with higher hourly rates. Managing outside firms who would perform more than 200,000 hours of work (around 140 full-time equivalents at 1,500 "billable" hours per FTE per year) would add a significant workload to the existing MAWC management team. Thus, it would be necessary for MAWC to add at least three positions to supervise the outside firms and ensure they delivered quality and timely services. The individuals who would fill these positions would need a good understanding of each profession being managed. The persons must also have management experience and the authority necessary to give them credibility with the outside firms. As

## V – Question 2 – Provision of Services at the Lower of Cost or Market

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calculated in the table below, these positions would add more than \$447,000 per year to MAWC's personnel expenses.

### Cost of Adding 3 Professional Positions To MAWC's Staff

	<u>Total</u>
New Positions' Salary	\$ 100,000
Benefits (at 49%)	\$ 49,000
Office Expenses (15%)	\$ 15,000
Total Cost per Position	\$ 149,000
Number of Positions Required	<u>3</u>
Total Cost of Added MAWC Staff	\$ 447,000

Thus, the total effect on the ratepayers of MAWC of contracting all services now provided by Service Company would be an increase in their costs of \$22,602,964 (\$22,155,964 + \$447,000). Based on the results of this comparison, it is possible to conclude that the Service Company charged MAWC at the lower of cost or market for services provided during 2014.



## VI - Question 3 - Reasonableness of Customer Accounts Services Costs

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### Background

Customer Accounts Services involve the processes that occur from the time meter-read data is recorded in the customer information system through the printing and mailing of bills, concluding with the collection and processing of customer payments. Customer Accounts Services are accomplished by the following utility functions:

- Customer Call Center Operations – customer calls/contact, credit, order taking/disposition, bill collection efforts and outage calls
- Customer Call Center Maintenance – support of phone banks, voice recognition units, call center software applications and telecommunications
- Customer billing – bill printing, stuffing and mailing
- Remittance processing – processing customer payments received in the mail
- Bill payment centers – processing customer payments at locations where customers can pay their bills in person

Neighboring electric utility cost information comes from the FERC Form 1 that each utility subject to FERC regulation must file. FERC's chart of accounts is defined in Chapter 18, Part 101 of the Code of Federal Regulations. FERC accounts that contain expenses related to customer accounts services are Account 903 Customer Accounts Expense – Records and Collection Expense and Account 905 Customer Accounts Expense – Miscellaneous Customer Accounts Expense. Exhibit 11 provides FERC's definition of the type of expenses that should be recorded in these accounts.

In addition to the charges in these FERC accounts, labor-related overheads charged to the following FERC accounts must be added to the labor components of Accounts 903 and 905:

- Account 926 Employee Pension and Benefits
- Account 408 Taxes Other Than Income (employer's portion of FICA)

### Comparison Group

Electric utilities included in the comparison group are shown in the table below. These are companies whose FERC Form 1 reports show amounts for accounts 903 and 905.

Missouri	<ul style="list-style-type: none"> <li>• Ameren Missouri</li> <li>• Empire District Electric</li> </ul>	<ul style="list-style-type: none"> <li>• Kansas City Power &amp; Light (L&amp;P)</li> <li>• Kansas City Power &amp; Light (MPS)</li> </ul>
Illinois	<ul style="list-style-type: none"> <li>• Ameren Illinois</li> <li>• Commonwealth Edison</li> </ul>	<ul style="list-style-type: none"> <li>• MidAmerica Energy</li> </ul>
Kentucky	<ul style="list-style-type: none"> <li>• Duke Energy Kentucky</li> <li>• Kentucky Power</li> </ul>	<ul style="list-style-type: none"> <li>• Kentucky Utilities</li> <li>• Louisville Gas &amp; Electric</li> </ul>
Tennessee	<ul style="list-style-type: none"> <li>• Kingsport Power</li> </ul>	
Arkansas	<ul style="list-style-type: none"> <li>• Entergy Arkansas</li> <li>• Empire District Electric</li> </ul>	<ul style="list-style-type: none"> <li>• Oklahoma Gas &amp; Electric</li> </ul>
Oklahoma	<ul style="list-style-type: none"> <li>• Empire District Electric</li> <li>• Oklahoma Gas &amp; Electric</li> </ul>	<ul style="list-style-type: none"> <li>• Public Service Company of Oklahoma</li> </ul>
Kansas	<ul style="list-style-type: none"> <li>• Empire District Electric</li> <li>• Kansas City Power &amp; Light</li> </ul>	<ul style="list-style-type: none"> <li>• Kansas Gas &amp; Electric</li> <li>• Westar Energy</li> </ul>
Nebraska	<ul style="list-style-type: none"> <li>• No investor-owned utilities</li> </ul>	
Iowa	<ul style="list-style-type: none"> <li>• Interstate Power &amp; Light</li> </ul>	<ul style="list-style-type: none"> <li>• MidAmerica Energy</li> </ul>

Missouri American Water Company  
FERC Account Descriptions

**903 – Customer Records and Collection Expenses**

This account shall include the cost of labor, materials used and expenses incurred in work on customer applications, contracts, orders, credit investigations, billing and accounting, collections and complaints.

Labor

1. Receiving, preparing, recording and handling routine orders for service, disconnections, transfers or meter tests initiated by the customer, excluding the cost of carrying out such orders, which is chargeable to the account appropriate for the work called for by such orders.
2. Investigations of customers' credit and keeping of records pertaining thereto, including records of uncollectible accounts written off.
3. Receiving, refunding or applying customer deposits and maintaining customer deposit, line extension, and other miscellaneous records.
4. Checking consumption shown by meter readers' reports where incidental to preparation of billing data.
5. Preparing address plates and addressing bills and delinquent notices.
6. Preparing billing data.
7. Operating billing and bookkeeping machines.
8. Verifying billing records with contracts or rate schedules.
9. Preparing bills for delivery, and mailing or delivering bills.
10. Collecting revenues, including collection from prepayment meters unless incidental to meter reading operations.
11. Balancing collections, preparing collections for deposit, and preparing cash reports.
12. Posting collections and other credits or charges to customer accounts and extending unpaid balances.
13. Balancing customer accounts and controls.
14. Preparing, mailing, or delivering delinquent notices and preparing reports of delinquent accounts.
15. Final meter reading of delinquent accounts when done by collectors incidental to regular activities.
16. Disconnecting and reconnecting services because of nonpayment of bills.
17. Receiving, recording, and handling of inquiries, complaints, and requests for investigations from customers, including preparation of necessary orders, but excluding the cost of carrying out such orders, which is chargeable to the account appropriate for the work called for by such orders.
18. Statistical and tabulating work on customer accounts and revenues, but not including special analyses for sales department, rate department, or other general purposes, unless incidental to regular customer accounting routines.
19. Preparing and periodically rewriting meter reading sheets.
20. Determining consumption and computing estimated or average consumption when performed by employees other than those engaged in reading meters.

Materials and expenses

21. Address plates and supplies.
22. Cash overages and shortages.
23. Commissions or fees to others for collecting.
24. Payments to credit organizations for investigations and reports.
25. Postage.
26. Transportation expenses, including transportation of customer bills and meter books under centralized billing procedure.
27. Transportation, meals, and incidental expenses.
28. Bank charges, exchange, and other fees for cashing and depositing customers' checks.
29. Forms for recording orders for services, removals, etc.
30. Rent of mechanical equipment.

Missouri American Water Company  
FERC Account Descriptions

**905 – Miscellaneous Customer Accounts Expenses**

This account shall include the cost of labor, materials used and expenses incurred not provided for in other accounts.

Labor

1. General clerical and stenographic work.
2. Miscellaneous labor.

Materials and expenses

3. Communication service.
4. Miscellaneous office supplies and expenses and stationery and printing other than those specifically provided for in accounts 902 and 903.

## VI - Question 3 - Reasonableness of Customer Accounts Services Costs

### MAWC's Cost per Customer

As calculated below, MAWC's customer accounts services expense per customer was \$21.04 for 2014. The cost pool used to calculate this average includes charges for Service Company services (e.g., call center, billing, payment processing) and postage and forms expenses, which are incurred directly by MAWC. It was necessary to adjust the Service Company's National Call Center charges because electric utilities experience an average of 2.50 calls per customer compared to American Water's 1.33 calls per customer. Thus, National Call Center expenses had to be increased, for comparison purposes, to reflect its costs if it had 2.50 calls per customer.

Missouri American Water Company		Service Co	Adjustment Fewer Calls For	Adjusted
Cost Component		Charges	Water Cos. (A)	
<b>Service Company</b>				
Call Centers	Call processing, order processing, credit, bill collection	\$ 5,920,446	\$ 1,633,180	\$ 7,553,625
Service Company	Customer payment processing			\$ 332,728 (B)
Operating Company	Postage & forms			\$ 1,888,528
			Cost Pool Total	\$ 9,774,881
			Total Customers	464,498
<b>2014 Cost Per Missouri American Customer</b>				<b>\$ 21.04</b>

Note A: Adjustment for American Water's fewer calls per customer. This adjustment is necessary because water utilities experience fewer calls per customer than do electric utilities.

Call handling expenses		\$ 1,843,357
Electric utility industry's avg calls/customer	2.50	
American Water's avg calls/customer	1.33	
Percent different	89%	89%
Total Adjustment		\$ 1,633,180

Note B: Estimated customer payment processing expenses

Number of customer bills	2,911,003
Bank charge per item	\$ 0.1143
Total estimated annual expense	\$ 332,728

### Electric Utility Group Cost per Customer

Exhibit 12 (pages 34-37) shows the calculation of customer accounts expense per customer for 2014 for the electric utility comparison group. All of the underlying data was taken from the utilities' FERC Form 1.

## VI - Question 3 - Reasonableness of Customer Accounts Services Costs

### Summary of Results

As shown in the table below, MAWC's cost per customer is well below than the 2014 average cost of the neighboring electric utility comparison group. It can be concluded that MAWC's 2014 customer accounts expenses, including those of the Alton and Pensacola Call Centers, assigned by the Service Company to MAWC are comparable to those of other utilities.

Customer Account Services Expenses Per Customer	
Interstate Power & Light	\$ 10.88
Ameren Missouri	\$ 12.17
Louisville Gas & Electric	\$ 16.42
Westar Energy	\$ 20.74
<b>Missouri American Water</b>	<b>\$ 21.04</b>
Ameren Illinois	\$ 21.39
MidAmerica Energy	\$ 25.93
Oklahoma Gas & Electric	\$ 26.99
Kingsport Power	\$ 28.36
Public Service of Oklahoma	\$ 30.96
Kentucky Power	\$ 32.65
<b>Comparison Group Average</b>	<b>\$ 33.14</b>
Kansas Gas & Electric	\$ 34.80
KCP&L Missouri	\$ 34.84
KCP&L	\$ 35.32
Empire District Electric	\$ 35.96
Kentucky Utilities	\$ 36.80
Duke Energy Kentucky	\$ 38.24
Entergy Arkansas	\$ 38.94
Commonwealth Edison	\$ 49.90

Missouri American Water Company  
Comparison Group 2014 Customer Accounts Expense Per Customer

	Missouri				Illinois		
	Ameren Missouri	Empire District Electric	KCP&L	KCP&L Missouri	Ameren Illinois	Commonwealth Edison	MdAmerica Energy
<b>Customer Account Management Cost Pool</b>							
FERC Account Balances:							
Account 903 - Customer Records & Collection (page 322, line 161)	\$ 13,058,588	\$ 4,287,531	\$ 13,313,420	\$ 7,912,058	\$ 23,625,821	\$ 151,177,914	\$ 16,446,731
Account 905 - Misc Customer Accounts (page 322, line 163)	\$ 105,191	\$ 197,249	\$ 1,468,977	\$ 197,761	\$ 240,035	\$ 6,100	\$ 265,723
Subtotal	\$ 13,163,779	\$ 4,484,780	\$ 14,782,397	\$ 8,109,819	\$ 23,865,856	\$ 151,184,014	\$ 16,712,454
Add: Employee Benefits & Employer FICA (not included in above amounts)							
Account 926 - Employee Pension & Benefits <b>Note A</b>	\$ 1,094,815	\$ 1,328,520	\$ 3,286,811	\$ 2,512,132	\$ 1,563,961	\$ 35,567,165	\$ 1,626,042
Account 408 - Taxes Other Than Income (Employer's Portion of FICA) <b>Note B</b>	\$ 342,975	\$ 247,222	\$ 564,958	\$ 406,296	\$ 729,225	\$ 6,862,754	\$ 992,541
<b>Total Cost Pool</b>	\$ 14,601,569	\$ 6,060,522	\$ 18,634,166	\$ 11,028,247	\$ 26,159,042	\$ 193,613,932	\$ 19,331,037
Total Customers (page 304, line 43)	1,200,003	168,553	527,648	316,583	1,223,176	3,880,172	745,568
<b>Customer Account Services Expense per Customer</b>	\$ 12.17	\$ 35.96	\$ 35.32	\$ 34.84	\$ 21.39	\$ 49.90	\$ 25.93
<b>Note A: Calc of Pension &amp; Benefits Pertaining to Cust Acct Svcs</b>							
Account 926 - Employee Pension & Benefits (page 323, line 187)	\$ 88,197,403	\$ 20,670,955	\$ 76,625,030	\$ 29,989,590	\$ 39,705,354	\$ 145,776,279	\$ 28,030,629
Total O&M Payroll (page 355, line 65)	\$ 361,173,544	\$ 50,282,752	\$ 172,167,296	\$ 63,402,893	\$ 242,004,463	\$ 367,683,885	\$ 223,859,775
Benefits as Percent of Payroll	24.4%	41.1%	44.5%	47.3%	16.4%	39.6%	12.5%
Payroll Applicable to Customer Account Services							
Total Payroll Charged to Customer Accounts Function							
Electric (page 354, line 7)	\$ 8,012,032	\$ 4,595,008	\$ 9,427,251	\$ 7,843,373	\$ 16,039,522	\$ 122,236,944	\$ 16,528,128
Percent Applicable to Customer Accounts Services (903 and 905):							
Account 903 - Customer Records & Collection (page 322, line 161)	\$ 13,058,588	\$ 4,287,531	\$ 13,313,420	\$ 7,912,058	\$ 23,625,821	\$ 151,177,914	\$ 16,446,731
Account 905 - Misc Customer Accounts (page 322, line 163)	\$ 105,191	\$ 197,249	\$ 1,468,977	\$ 197,761	\$ 240,035	\$ 6,100	\$ 265,723
Subtotal - Total Charges Applicable to Customer Accounts Services	\$ 13,163,779	\$ 4,484,780	\$ 14,782,397	\$ 8,109,819	\$ 23,865,856	\$ 151,184,014	\$ 16,712,454
Account 902 - Meter Reading Expenses (page 322, line 160)	\$ 10,360,821	\$ 1,891,993	\$ 4,087,748	\$ 3,866,766	\$ 16,291,789	\$ 54,817,957	\$ 4,577,611
Total Charges Applicable to Customer Accounts Svcs & Meter Reading	\$ 23,524,600	\$ 6,376,773	\$ 18,870,145	\$ 11,976,585	\$ 40,157,645	\$ 206,001,971	\$ 21,290,065
Percent Applicable to Customer Accounts Services (903 and 905)	58.0%	70.3%	78.3%	67.7%	59.4%	73.4%	78.5%
Customer Account Services Portion of Total Payroll	\$ 4,483,333	\$ 3,231,666	\$ 7,385,071	\$ 5,311,058	\$ 9,532,355	\$ 89,709,199	\$ 12,974,389
Pension & Benefits Pertaining to Customer Accounts Services	\$ 1,094,815	\$ 1,328,520	\$ 3,286,811	\$ 2,512,132	\$ 1,563,961	\$ 35,567,165	\$ 1,626,042
<b>Note B: Calculation of Employer's FICA Pertaining to Customer Acct Svcs</b>							
Customer Account Services Portion of Total Payroll	\$ 4,483,333	\$ 3,231,666	\$ 7,385,071	\$ 5,311,058	\$ 9,532,355	\$ 89,709,199	\$ 12,974,389
Employer's Portion of FICA (6.20%) and Medicare (1.45%)	7.65%	7.65%	7.65%	7.65%	7.65%	7.65%	7.65%
Estimated Employer's Portion of FICA	\$ 342,975	\$ 247,222	\$ 564,958	\$ 406,296	\$ 729,225	\$ 6,862,754	\$ 992,541

Missouri American Water Company  
Comparison Group 2014 Customer Accounts Expense Per Customer

	Duke Energy Kentucky	Kentucky Power	Kentucky Utilities	Louisville G&E	Entergy Arkansas	Empire District Electric	Oklahoma G&E
<b>Customer Account Management Cost Pool</b>							
FERC Account Balances:							
Account 903 - Customer Records & Collection (page 322, line 161)	\$ 4,689,485	\$ 5,299,254	\$ 16,703,361	\$ 5,552,011	\$ 22,734,877		
Account 905 - Misc Customer Accounts (page 322, line 163)	\$ 542	\$ 25,042	\$ 132,257	\$ 25,257	\$ 33,948		
Subtotal	\$ 4,690,027	\$ 5,324,296	\$ 16,835,618	\$ 5,577,268	\$ 22,768,825		
Add: Employee Benefits & Employer FICA (not included in above amounts)							
Account 926 - Employee Pension & Benefits <b>Note A</b>	\$ 393,036	\$ 164,008	\$ 2,436,488	\$ 749,893	\$ 4,316,454		
Account 408 - Taxes Other Than Income (Employer's Portion of FICA) <b>Note B</b>	\$ 189,591	\$ 94,638	\$ 684,241	\$ 209,195	\$ 214,869		
<b>Total Cost Pool</b>	\$ 5,271,654	\$ 5,582,942	\$ 19,956,346	\$ 6,536,356	\$ 27,300,148		
Total Customers (page 304, line 43)	137,869	171,011	542,227	398,042	701,092		
<b>Customer Account Services Expense per Customer</b>	\$ 38.24	\$ 32.65	\$ 36.80	\$ 16.42	\$ 38.94	see Missouri	see Oklahoma
<b>Note A: Calc of Pension &amp; Benefits Pertaining to Cust Acct Svcs</b>							
Account 926 - Employee Pension & Benefits (page 323, line 187)	\$ 5,657,013	\$ 4,874,031	\$ 28,105,099	\$ 26,025,764	\$ 69,499,452		
Total O&M Payroll (page 355, line 65)	\$ 35,482,598	\$ 36,764,319	\$ 103,173,575	\$ 94,905,891	\$ 45,223,709		
Benefits as Percent of Payroll	15.9%	13.3%	27.2%	27.4%	153.7%		
Payroll Applicable to Customer Account Services							
Total Payroll Charged to Customer Accounts Function Electric (page 354, line 7)	\$ 2,796,243	\$ 1,376,666	\$ 11,610,950	\$ 3,900,855	\$ 3,630,614		
Percent Applicable to Customer Accounts Services (903 and 905):							
Account 903 - Customer Records & Collection (page 322, line 161)	\$ 4,689,485	\$ 5,299,254	\$ 16,703,361	\$ 5,552,011	\$ 22,734,877		
Account 905 - Misc Customer Accounts (page 322, line 163)	\$ 542	\$ 25,042	\$ 132,257	\$ 25,257	\$ 33,948		
Subtotal - Total Charges Applicable to Customer Accounts Services	\$ 4,690,027	\$ 5,324,296	\$ 16,835,618	\$ 5,577,268	\$ 22,768,825		
Account 902 - Meter Reading Expenses (page 322, line 150)	\$ 629,704	\$ 600,684	\$ 5,019,304	\$ 2,378,891	\$ 6,662,430		
Total Charges Applicable to Customer Accounts Svcs & Meter Reading	\$ 5,319,731	\$ 5,924,980	\$ 21,854,922	\$ 7,956,159	\$ 29,431,255		
Percent Applicable to Customer Accounts Services (903 and 905)	88.2%	88.9%	77.0%	70.1%	77.4%		
Customer Account Services Portion of Total Payroll	\$ 2,465,248	\$ 1,237,097	\$ 8,944,325	\$ 2,734,570	\$ 2,808,742		
Pension & Benefits Pertaining to Customer Accounts Services	\$ 393,036	\$ 164,008	\$ 2,436,488	\$ 749,893	\$ 4,316,454		
<b>Note B: Calculation of Employer's FICA Pertaining to Customer Acct Svcs</b>							
Customer Account Services Portion of Total Payroll	\$ 2,465,248	\$ 1,237,097	\$ 8,944,325	\$ 2,734,570	\$ 2,808,742		
Employer's Portion of FICA (6.20%) and Medicare (1.45%)	7.65%	7.65%	7.65%	7.65%	7.65%		
Estimated Employer's Portion of FICA	\$ 189,591	\$ 94,638	\$ 684,241	\$ 209,195	\$ 214,869		

**Missouri American Water Company  
Comparison Group 2014 Customer Accounts Expense Per Customer**

	Oklahoma		Missouri				
	Empire District Electric	Oklahoma G&E	PS of Oklahoma	Empire District Electric	KCP&L	Kansas G&E	Westar Energy
<b>Customer Account Management Cost Pool</b>							
FERC Account Balances:							
Account 903 - Customer Records & Collection (page 322, line 161)		\$ 16,708,829	\$ 15,692,901			\$ 7,344,459	\$ 5,949,740
Account 905 - Misc Customer Accounts (page 322, line 163)		\$ 1,290,332	\$ 40,966			\$ 450	\$ 3,897
Subtotal		\$ 17,999,161	\$ 15,733,867			\$ 7,344,909	\$ 5,953,637
Add: Employee Benefits & Employer FICA (not included in above amounts)							
Account 926 - Employee Pension & Benefits <span style="float:right">Note A</span>		\$ 3,106,518	\$ 746,268			\$ 3,431,656	\$ 1,434,145
Account 408 - Taxes Other Than Income (Employer's Portion of FICA) <span style="float:right">Note B</span>		\$ 789,507	\$ 274,819			\$ 410,976	\$ 377,352
<b>Total Cost Pool</b>		<b>\$ 21,895,186</b>	<b>\$ 16,754,954</b>			<b>\$ 11,187,540</b>	<b>\$ 7,765,134</b>
Total Customers (page 304, line 43)		811,190	541,107			321,501	374,472
<b>Customer Account Services Expense per Customer</b>	<b>see Missouri</b>	<b>\$ 26.99</b>	<b>\$ 30.96</b>	<b>see Missouri</b>	<b>see Missouri</b>	<b>\$ 34.80</b>	<b>\$ 20.74</b>
<b>Note A: Calc of Pension &amp; Benefits Pertaining to Cust Acct Svcs</b>							
Account 926 - Employee Pension & Benefits (page 323, line 187)		\$ 45,813,923	\$ 12,070,759			\$ 36,601,678	\$ 26,406,738
Total O&M Payroll (page 355, line 65)		\$ 152,201,306	\$ 58,106,528			\$ 57,299,629	\$ 90,825,267
Benefits as Percent of Payroll		30.1%	20.8%			63.9%	29.1%
Payroll Applicable to Customer Account Services							
Total Payroll Charged to Customer Accounts Function							
Electric (page 354, line 7)		\$ 10,464,915	\$ 4,444,387			\$ 7,322,454	\$ 7,086,661
Percent Applicable to Customer Accounts Services (903 and 905):							
Account 903 - Customer Records & Collection (page 322, line 161)		\$ 16,708,829	\$ 15,692,901			\$ 7,344,459	\$ 5,949,740
Account 905 - Misc Customer Accounts (page 322, line 163)		\$ 1,290,332	\$ 40,966			\$ 450	\$ 3,897
Subtotal - Total Charges Applicable to Customer Accounts Services		\$ 17,999,161	\$ 15,733,867			\$ 7,344,909	\$ 5,953,637
Account 902 - Meter Reading Expenses (page 322, line 160)		\$ 252,114	\$ 3,731,478			\$ 2,666,346	\$ 2,599,786
Total Charges Applicable to Customer Accounts Svcs & Meter Reading		\$ 18,251,275	\$ 19,465,345			\$ 10,011,255	\$ 8,553,403
Percent Applicable to Customer Accounts Services (903 and 905)		98.6%	80.8%			73.4%	69.6%
Customer Account Services Portion of Total Payroll		\$ 10,320,358	\$ 3,592,405			\$ 5,372,229	\$ 4,932,704
Pension & Benefits Pertaining to Customer Accounts Services		\$ 3,106,518	\$ 746,268			\$ 3,431,656	\$ 1,434,145
<b>Note B: Calculation of Employer's FICA Pertaining to Customer Acct Svcs</b>							
Customer Account Services Portion of Total Payroll		\$ 10,320,358	\$ 3,592,405			\$ 5,372,229	\$ 4,932,704
Employer's Portion of FICA (6.20%) and Medicare (1.45%)		7.65%	7.65%			7.65%	7.65%
Estimated Employer's Portion of FICA		\$ 789,507	\$ 274,819			\$ 410,976	\$ 377,352



**Missouri American Water Company  
Comparison Group 2014 Customer Accounts Expense Per Customer**

	Company		Group Average
	Kingsport Power	Interstate P&L	
<b>Customer Account Services Cost Pool</b>			
FERC Account Balances:			
Account 903 - Customer Records & Collection (page 322, line 161)	\$ 1,274,952	\$ 5,012,971	\$ 336,784,903
Account 905 - Misc Customer Accounts (page 322, line 163)	\$ 3,038	\$ 30,279	\$ 4,067,044
Subtotal	\$ 1,277,990	\$ 5,043,250	\$ 340,851,947
Add: Employee Benefits & Employer FICA (not included in above amounts)			
Account 926 - Employee Pension & Benefits <b>Note A</b>	\$ 38,028	\$ 508,668	\$ 64,304,607
Account 408 - Taxes Other Than Income (Employer's Portion of FICA) <b>Note B</b>	\$ 24,030	\$ 207,191	\$ 13,621,380
<b>Total Cost Pool</b>	<b>\$ 1,340,048</b>	<b>\$ 5,759,109</b>	<b>\$ 418,777,934</b>
Total Customers (page 304, line 43)	47,253	529,418	12,636,885
<b>Customer Account Services Expense per Customer</b>	<b>\$ 28.36</b>	<b>\$ 10.88</b>	<b>\$ 33.14</b>
		see Illinois	
<b>Note A: Calc of Pension &amp; Benefits Pertaining to Cust Acct Svcs</b>			
Account 926 - Employee Pension & Benefits (page 323, line 187)	\$ 241,738	\$ 19,307,118	\$ 703,598,553
Total O&M Payroll (page 355, line 65)	\$ 1,996,821	\$ 102,800,122	\$ 2,259,154,373
Benefits as Percent of Payroll	12.1%	18.8%	31.1%
Payroll Applicable to Customer Account Services			
Total Payroll Charged to Customer Accounts Function			
Electric (page 354, line 7)	\$ 350,071	\$ 7,715,817	\$ 245,381,791
Percent Applicable to Customer Accounts Services (903 and 905):			
Account 903 - Customer Records & Collection (page 322, line 161)	\$ 1,274,952	\$ 5,012,971	\$ 336,784,903
Account 905 - Misc Customer Accounts (page 322, line 163)	\$ 3,038	\$ 30,279	\$ 4,067,044
Subtotal - Total Charges Applicable to Customer Accounts Services	\$ 1,277,990	\$ 5,043,250	\$ 340,851,947
Account 902 - Meter Reading Expenses (page 322, line 160)	\$ 146,269	\$ 9,323,907	\$ 129,905,578
Total Charges Applicable to Customer Accounts Svcs & Meter Reading	\$ 1,424,259	\$ 14,367,157	\$ 470,757,525
Percent Applicable to Customer Accounts Services (903 and 905)	89.7%	35.1%	72.4%
Customer Account Services Portion of Total Payroll	\$ 314,119	\$ 2,708,385	\$ 177,668,665
Pension & Benefits Pertaining to Customer Accounts Services	\$ 38,028	\$ 508,668	\$ 55,333,720
<b>Note B: Calculation of Employer's FICA Pertaining to Customer Acct Svcs</b>			
Customer Account Services Portion of Total Payroll	\$ 314,119	\$ 2,708,385	\$ 177,668,665
Employer's Portion of FICA (8.20%) and Medicare (1.45%)	7.65%	7.65%	7.65%
Estimated Employer's Portion of FICA	\$ 24,030	\$ 207,191	\$ 13,591,653

## VI - Question 4 – Need for Service Company Services

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### Analysis of Services

The final aspect of this study was an assessment of whether the services provided to MAWC by the Service Company would be necessary if MAWC were a stand-alone water utility. The first step in this evaluation was to determine specifically what the Service Company does for MAWC. Based on discussions with Service Company personnel, the matrix in Exhibit 13 (pages 37-39) was created showing which entity—MAWC or a Service Company location—is responsible for each of the functions MAWC requires to ultimately provide service to its customers. This matrix was reviewed to determine: (1) if there was redundancy or overlap in the services being provided by the Service Company and (2) if Service Company services are typical of those needed by a stand-alone water utility.

Upon review of Exhibit 13, the following conclusions can be drawn:

- The services that the Service Company provides are necessary and would be required even if MAWC were a stand-alone water utility.
- There is no redundancy or overlap in the services provided by the Service Company to MAWC. For all of the services listed in Exhibit 13, there was only one entity that was primarily responsible for the service.

**Missouri American Water Company  
Designation of Responsibility for Water Utility Functions**

Water Company Function	Performed By:					
	MAWC	American Water Service Company				
		Customer Call Center	Central	Central Services	IT Service Centers	Central Lab
<b>Engineering and Construction Management</b>						
CPS Preparation	P			S		
Five-Year System Planning	P			S		
Engineering Standards & Policies Development				P		
Project Design						
Major Projects (e.g., new treatment plant)	P			S		
Special Projects	P			S		
Mnor Projects (e.g., pipelines)	P					
Construction Project Management						
Major Projects	P			S		
Special Projects	P					
Mnor Projects	P					
Hydraulics Review	P					
Developers Extensions	P					
Tank Painting	P					
<b>Water Quality and Purification</b>						
Water Quality Standards Development	P(I)			P(I)		S
Research Studies	S			P		S
Water Quality Program Implementation	P			S		S
Water Treatment Operations & Maintenance	P			S		
Compliance Sampling	P					S
Testing/Other Sampling	P					S
<b>Transmission and Distribution</b>						
Preventive Maintenance Program Development	P			S		
System Maintenance	P					
Leak Detection	P					
<b>Customer Service</b>						
Community Relations	P			S		
Customer Contact	P(I)	P(I)				
Call Processing		P				
Service Order Processing	P	S				
Customer Credit		P				
Meter Reading	P					S
Customer Bill Preparation		S				P
Bill Collection	S	P				S
Customer Payment Processing	S			P		S
Meter Standards Development	S			P		
Meter Testing, Maintenance & Replacement	P					
Note 1: MAWC responsible for State regulations, Central Services responsible for Federal regulations						
Note 2: MAWC provide in-person customer contact while Service Company call centers provide customer phone contact						

Missouri American Water Company  
Designation of Responsibility for Water Utility Functions

Water Company Function	Performed By:					
	MAWC	American Water Service Company				
		Customer Call Center	Central	Central Services	IT Service Centers	Central Lab
<b>Financial Management</b>						
Financial Planning	S		P	S		
Financings--Equity	S		S	P		
Financings--Long Term Debt & Preferred (Note A)	S		S	P		
Short Term Lines of Credit Arrangements(Note A)	S		S	P		
Investor Relations			S	P		
Insurance Program Administration	S			P		
Loss Control/Safety Program Administration	P			S		
Pension Fund Asset Management				P		
Cash Management/Disbursements				P		
<b>Internal Auditing</b>				P		
<b>Budgeting and Variance Reporting</b>						
Corporate Guidelines & Instructions				P		
Budget Preparation						
Revenue and O&M	S		S	P		
Depreciation and Interest Expense	S		S	P		
Budget Preparation--Service Company Charges	S	S	S	P	S	S
Capital Budget Preparation--Projects	P		S	S		
Capital Budget Preparation--Non-Project Work	P		S	S		
Prepare Monthly Budget Variance Report ("Budget/Plan Analysis")			S	P		
Prepare Capital Project Budget Status Report	P		S			
Year-End Projections	P		S			
<b>Accounting and Taxes</b>						
Accounts Payable Accounting	S			P		
Payroll Accounting	S			P		
Work Order Accounting	S		S	P		
Fixed Asset Accounting	S		S	P		
Journal Entry Preparations--Billing Corrections	S		S	P		
Journal Entry Preparation--All Others	S		S	P		
Financial Statement Preparation	S		S	P		
State Commission Reporting	S		S	P		
Income Taxes--State				P		
Income Taxes--Federal				P		
Property Taxes	S		S	P		
Gross Receipts (Town) Taxes	S		S	P		

Note A: Lines of credit are the responsibility of American Water Capital Corporation ("AWCC"). AWCC is also responsible for Corporate financings which may be distributed to the regulated subsidiaries. MAWC has the ability to issue LTD.

Missouri American Water Company  
Designation of Responsibility for Water Utility Functions

Water Company Function	Performed By:					
	MAWC	American Water Service Company				
		Customer Call Center	Central	Central Services	IT Service Centers	Central Lab
<b>Rates</b>						
Rate Studies & Tariff Change Administration	S		S	P		
Rate Case Planning and Preparation	S		P	S		
Rate Case Administration	S		P	S		
Commission Inquiry Response	S		P	S		
<b>Legal</b>	S		P	S		
<b>Purchasing and Materials Management – National (pipe, chemicals, meters, etc.)</b>						
Specification Development	S			P		
Bid Solicitation	S			P		
Contract Administration	S			P		
<b>Purchasing and Materials Management – State (state supplier service agreements)</b>						
Specification Development	P			S		
Bid Solicitation	P					
Contract Administration	P					
Ordering	P					
Inventory Management	P					
<b>Human Resources Management</b>						
Benefit Program Development				P		
Benefits Program Administration			S	P		
Management Compensation Administration			S	P		
Wage & Salary Program Design			S	P		
Wage & Salary Administration	S		P	S		
Labor Negotiations--Wages	S		P			
Labor Negotiations--Benefits	S		P	S		
Labor Negotiations-- Work Rules	S		P			
Training Program Development	S		S	P		
Training--Course Delivery	S		P			
Affirmative Action/EEO--Plan Development			S	P		
Affirmative Action/EEO--Implementation	S		P			
<b>Information Technology Services</b>						
Service Company Data Centers						
System Operations & Maintenance					P	
Software Maintenance					P	
Network Administration					P	
Workstation Acquisition & Support	S				P	
Help Desk					P	

## VI - Question 4 – Need for Service Company Services

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### Governance Practices Associated with Service Company Charges

There are several ways by which MAWC exercises control over Service Company services and charges. The most important of these are described below.

- **MAWC Company Board Oversight** – The MAWC board of directors includes the President of MAWC, the Vice President of Operations of MAWC, Director of Financial Analysis and Decision Support and external business and community leaders. This diverse board ensures that MAWC's needs are a factor in the delivery of Service Company services. The MAWC Board meets at a minimum of four times each year and at every meeting financial and operational reports and issues are discussed at length.
- **MAWC President Oversight** – The MAWC President is responsible for the overall performance of MAWC, including services and charges received from the American Water Service Company. In addition, as part of the overall management team of American Water through the President of Regulated Operations, MAWC's President has a significant voice in major business decisions of American Water and has the ability to monitor Service Company performance quality and spending as MAWC's President is one of ten direct reports to the President of Regulated Operations.
- **Director of Financial Analysis and Decision Support (FADS)** – The Director of Financial Analysis and Decision Support and supporting staff are responsible for monitoring the overall financial performance of MAWC. This includes overseeing MAWC's financial reporting process, performing revenue and expense analysis, the annual budgeting process and monitoring internal control performance. The FADS team performs detailed expense analysis on a monthly basis including analyzing Service Company fees. These expense analyses include monthly variance analysis as compared to budgeted results, prior year results and YTD monthly actual results. In addition, the FADS team reviews and investigates monthly Service Company charges, as necessary, based on the results of the team's analytical procedures in order to evaluate the appropriateness of the charges.
- **Service Company Board Oversight** – The Service Company Board of Directors is comprised of 12 members. They typically meet four times a year to provide governance on the activities and bylaws of Service Company. Their primary responsibilities include:
  - Approve the Business Plan and Operating Budget
  - Review Financial Performance of the Service Company
  - Review performance metrics of certain functional groups
  - Approve policy, procedures and practices of American Water as it relates to Service Company.
- **Service Company Budget Review/Approval** – Several state regulated water utility presidents serve on the Service Company board of directors and that board must formally approve the budget for Service Company charges for the next year. These budgeted charges are consolidated with the operating company's own spending into an overall budget that is presented to the operating company's board of directors (e.g., MAWC).
- **Major Project Review and Approval** – Major non-capital projects undertaken by the Service Company must first be reviewed by American Water's Executive Management Team, which includes the President of Regulated Operations. The President of Regulated Operations, with significant input from his direct reports, has the ability to impact all new initiatives and projects before they are authorized. Major non-capital projects and initiatives for the Service Company are approved through the Business Plan. All significant business-driven, information technology-enabled initiatives (capital and

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non-capital) are assessed through the ITS Comprehensive Planning Study (CPS) process that uses the corporate vision, corporate strategic targets, annual business planning updates and input from key business partners to develop a 3 to 5-year information technology roadmap. The ITS CPS roadmap has been reviewed and approved by the Technology Solutions Council (TSC) which is comprised of nine Director-level and above business executives representing key business process and functions across American Water. The TSC replaced the BATT (Business and Technology Team) and may undergo changes in the future, but there will always be an executive business team providing oversight for these information technology decisions.

- **Capital Investment Management (CIM)** – CIM covers capital and asset planning and is employed throughout American Water, including the Service Company. CIM provides a full range of governance practices, including a formal protocol for assessing system needs, prioritizing capital expenditures, managing the capital program, approving project spending, delivering projects and measuring outputs. CIM ensures that:
  - Capital expenditure plans are aligned with the strategic intent of the business
  - The impact of capital expenditure and income plans are fully reflected in operating expense plans
  - The impacts of these plans on state P&L's and budgets are understood
  - Effective controls are in place over budgets (through business plans) and individual capital projects (through appropriate authorization thresholds, management and reporting processes).

The CIM process was designed to optimize the effectiveness of asset investment.

- **Accounting and Financial Reporting** – The Service Company follows the same accounting and financial reporting processes as American Water's regulated utilities. During the month accounting transactions are recorded. At month-end, the Finance teams review all transactions. Variance analyses are performed based on month-to-month actual as well as actual to budget to ensure accuracy. Once completed, the service company bill is run and the actuals are "pushed down" and allocated to the states based on predetermined formulas. A conference call is scheduled before the operating companies close their books each month to discuss Service Company performance. This is based at a functional level with explanation reported for any expense variances that meet or exceed certain thresholds. At this time, the operating companies may question expenses and spending for better understanding of results. MAWC Financial Strategy, Planning & Decision Support personnel review the monthly Service Company bill for accuracy and reasonableness on a monthly basis. Any errors or overcharges are credited on a subsequent billing.
- **MAWC Company Budget Variance Analysis** – Each month a Service Company Affiliate Billing Analysis Report is prepared and provided to the operating company. In this way, Service Company budget versus actual charges as charged to the operating company can be monitored and reviewed for the month and year-to-date.