

# Exhibit No. 1

Exhibit No.:  
Issues: Support Services  
Witness: Patrick L. Baryenbruch  
Exhibit Type: Direct  
Sponsoring Party: Missouri-American Water Company  
Case No.: WR-2022-0303  
SR-2022-0304  
Date: July 1, 2022

**MISSOURI PUBLIC SERVICE COMMISSION**

**CASE NO. WR-2022-0303**

**CASE NO. SR-2022-0304**

**DIRECT TESTIMONY**

**OF**

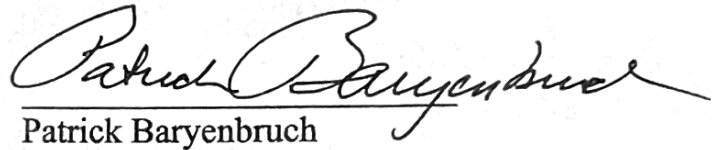
**PATRICK L. BARYENBRUCH**

**ON BEHALF OF**

**MISSOURI-AMERICAN WATER COMPANY**

## AFFIDAVIT

I, Patrick Baryenbruch, under penalty of perjury, and pursuant to Section 509.030, RSMo, state that I am CEO for Baryenbruch & Co., that the accompanying testimony has been prepared by me or under my direction and supervision; that if inquiries were made as to the facts in said testimony, I would respond as therein set forth; and that the aforesaid testimony is true and correct to the best of my knowledge and belief.

  
Patrick Baryenbruch

July 1, 2022  
Dated

**DIRECT TESTIMONY  
PATRICK L. BARYENBRUCH**

**MISSOURI AMERICAN WATER COMPANY  
CASE NO.: WR-2022-0303  
CASE NO.: SR-2022-0304**

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**DIRECT TESTIMONY**

**PATRICK L. BARYENBRUCH**

**I. INTRODUCTION**

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**Q. Please state your name, position of employment and business address.**

A. My name is Patrick L. Baryenbruch. I am the President of my own consulting practice, Baryenbruch & Company, LLC, which was established in 1985. In that capacity, I provide consulting services to utilities and their regulators. My business address is 2832 Claremont Road, Raleigh, North Carolina 27608.

**Q. Summarize your academic and professional background.**

A. I received a Bachelor's degree in Accounting from the University of Wisconsin-Oshkosh and a Master's in Business Administration degree from the University of Michigan. I am a member of the American Institute of Certified Public Accountants (AICPA) and the North Carolina Association of Certified Public Accountants.

I began my career with Arthur Andersen & Company where I performed financial audits of utilities, banks and finance companies. I left to pursue an M.B.A. degree. Upon graduation from business school, I worked with the consulting firms of Theodore Barry & Associates and Scott Consulting Group (now ScottMadden) before establishing my own firm.

**Q. Do you have any professional certifications?**

A. Yes, I am a Certified Public Accountant (CPA) with active licenses from the states of Wisconsin and North Carolina. I am a Certified Information Technology Professional, an accreditation awarded by the AICPA to CPA professionals who demonstrate expertise in information technology management. I also hold a Global Information Assurance

1 Certification (GIAC) in cybersecurity from the SANS Institute.

2 **Q. Have you provided testimony in other regulatory proceedings on the issue of**  
3 **utility/affiliate transactions?**

4 A. Yes. In the course of my career, I have performed 130 evaluations of affiliate charges to  
5 43 utility companies. I have acted as an expert witness on utility/affiliate charges in over  
6 80 rate case proceedings before regulators in 20 US states and one Canadian province.  
7 Schedule PLB-1 presents my previous affiliate transaction-related assignments.

8 **Q. What other work experience do you have with the utility industry?**

9 A. During my consulting career, I have performed consulting assignments for nearly  
10 90 utilities and 10 public service commissions. I have participated as project manager,  
11 lead or staff consultant for 24 commission-ordered management and prudence audits of  
12 public utilities. Of these, I have been responsible for evaluating the area of affiliate  
13 charges and allocation of corporate expenses in the Commission-ordered audits of  
14 Connecticut Light and Power, Connecticut Natural Gas, General Water  
15 Corporation (Pennsylvania Operations), Philadelphia Suburban Water Company (now  
16 Essential Utilities) and Pacific Gas & Electric Company.

17 My firm performed the commission-ordered audit of Southern California Edison's 2002,  
18 2003, 2004 and 2005 transactions with its non-regulated affiliate companies.

19 For 20 years, I was heavily involved in providing consulting services related to  
20 information technology (IT) infrastructure within the utility industry. These projects  
21 involved improvements in IT business management practices of utility IT organizations,  
22 covering processes such as business planning, risk management, performance  
23 measurement and reporting, cost recovery, budgeting, cost management and personnel

1 development. I was a member of the project management team for several very large-scale  
2 IT implementation projects involving more than 800,000 hours of work performed by  
3 hundreds of utility client employees and contractor personnel.

## 4 **II. OVERVIEW**

5 **Q. Please describe the reason for your testimony in this case.**

6 A. I am presenting the results of my study which evaluated the services provided by American  
7 Water Works Service Company, Inc. (Service Company) during 2021 to Missouri  
8 American Water Company (MAWC). This study was undertaken in conjunction with  
9 MAWC's rate case and is true to the best of my knowledge and belief. The study is  
10 attached as Schedule PLB-2.

11 **Q. What services does the Service Company provide to MAWC?**

12 A. The Service Company provides the following services to MAWC:

- 13 • Internal Audit
- 14 • Business Development
- 15 • Customer Service
- 16 • External Affairs, Communications and Public Policy
- 17 • Finance
- 18 • Human Resources
- 19 • Technology and Innovation
- 20 • Environmental Compliance
- 21 • Central Laboratory

- 1 • Investor Relations
- 2 • Planning and Strategic Integration
- 3 • Legal Counsel and Services
- 4 • Engineering
- 5 • Enterprise Security
- 6 • Health and Safety
- 7 • Facilities
- 8 • Operations Excellence
- 9 • Supply Chain

10 **Q. What were the objectives of your study?**

11 A. This study was undertaken to answer four questions concerning the services provided by  
12 the Service Company to MAWC, each of which bears on the reasonableness of those  
13 charges as incurred during 2021. First, were the Service Company’s charges to MAWC  
14 during 2021 reasonable? Second, was MAWC charged the lower of cost or market value  
15 for managerial and professional services provided by the Service Company during 2021?  
16 Third, were 2021 costs of the Service Company’s customer accounts services reasonable?  
17 Fourth, are the services MAWC receives from the Service Company necessary?

18 **Q. What conclusions were you able to draw concerning question number 1, whether the**  
19 **Service Company charges to MAWC were reasonable?**

20 A. The Service Company’s 2021 cost per MAWC customer is reasonable compared to cost  
21 per customer for the proxy service companies. During 2021, MAWC was charged \$73 per



1 customer for administrative and general (“A&G”)-related services provided by the Service  
2 Company. This compares to an average of \$115 per customer for service companies  
3 reporting to the Federal Energy Regulatory Commission (“FERC”). Seventeen of the 22  
4 utility service companies that filed a FERC Form 60 for 2020 had a higher per-customer  
5 A&G cost than MAWC’s charges from the Service Company.

6 **Q. What conclusions were you able to draw concerning question number 2, whether**  
7 **MAWC was charged the lower of cost or market services provided by the Service**  
8 **Company?**

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

10 (1) MAWC was charged the lower of cost or market value for managerial and  
11 professional services during the 2021.

12 (2) On average, the hourly rates for outside service providers are 70% higher than the  
13 Service Company’s hourly rates. Consequently, the Company obtains services  
14 from Service Company at considerably below the market prices for such services.

15 (3) The managerial and professional services provided by the Service Company are  
16 vital and could not be procured externally by MAWC without careful supervision  
17 on the part of the Company. If these services were contracted entirely to outside  
18 providers, MAWC would have to add at least 3 positions to manage activities of  
19 outside firms. These positions would be required to ensure the quality and  
20 timeliness of services provided.

21 (4) If all the managerial and professional services now provided by the Service  
22 Company had been outsourced during the 2021, MAWC and its customers would

1 have incurred approximately \$17.5 million in additional expenses. This amount  
2 includes the higher cost of outside providers and the cost of three new MAWC  
3 positions needed to direct the outsourced work.

4 (5) This study's hourly rate comparison actually understates the cost advantages that  
5 accrue to MAWC from its use of the Service Company. Outside service providers  
6 generally bill for every hour worked. Service Company exempt personnel, on the  
7 other hand, charge a maximum of eight hours per day even when they work more  
8 hours. If all overtime hours of Service Company personnel were factored into the  
9 hourly rate calculation, the Service Company would have had an even greater  
10 annual dollar advantage than the \$17.5 million cited above.

11 (6) It would be difficult for MAWC to find local service providers with the same  
12 specialized water and wastewater industry expertise as that possessed by the  
13 Service Company staff. Service Company personnel spend substantially all their  
14 time serving operating water and wastewater companies. This specialization brings  
15 with it a unique knowledge of water and wastewater utility operations and  
16 regulation that may not be available from local service providers and provides  
17 efficiencies over third-party providers.

18 (7) Service Company fees do not include any profit markup. Only its actual cost of  
19 service is being charged to MAWC.

20 **Q. What conclusions were you able to draw concerning question number 3, whether 2021**  
21 **costs of the Service Company's customer accounts services were reasonable?**

22 A. The costs of the Service Company's customer accounts services were reasonable. Such  
23 costs are below the average of the neighboring electric utility comparison group. This

1 group of companies provides a reasonable proxy group for comparison to a regulated utility  
2 like MAWC. During the 2021, the per-customer cost of customer accounts services for  
3 MAWC customers was \$22.50, compared to the 2020 average of \$30.28 for other utilities.

4 **Q. What conclusions were you able to draw concerning question number 4, whether the**  
5 **services MAWC receives from the Service Company are necessary?**

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

7 (1) The services that the Service Company provides are necessary and are required for  
8 a water and wastewater utility.

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

11 **Q. Does this complete your testimony?**

12 A. Yes.

	Client	State	Year	Purpose	Rate Case Witness?
1	Connecticut American Water	Connecticut	1999	Rate Case	Yes
2	Illinois American Water	Illinois	2007	Rate Case	Yes
3	Indiana American Water	Indiana	2017	Rate Case	Yes
4	Iowa American Water	Iowa	2020	Rate Case	Yes
5	Kentucky American Water	Kentucky	2003	Rate Case	Yes
		Kentucky	2006	Rate Case	Yes
		Kentucky	2008	Rate Case	Yes
		Kentucky	2009	Rate Case	Yes
		Kentucky	2018	Rate Case	Yes
6	Massachusetts American Water	Massachusetts	2000	Rate Case	Yes
7	Missouri American Water	Missouri	2002	Rate Case	Yes
		Missouri	2008	Rate Case	Yes
		Missouri	2014	Rate Case	Yes
		Missouri	2016	Rate Case	Yes
		Missouri	2019	Rate Case	Yes
8	New Jersey American Water	New Jersey	2005	Rate Case	Yes
		New Jersey	2007	Rate Case	Yes
		New Jersey	2009	Rate Case	Yes
		New Jersey	2010	Rate Case	Yes
		New Jersey	2014	Rate Case	Yes
		New Jersey	2017	Rate Case	Yes
		New Jersey	2019	Rate Case	Yes
9	New Mexico American Water	New Mexico	2007	Rate Case	Yes
10	New York American Water	New York	2006	Rate Case	Yes
		New York	2010	Rate Case	Yes
		New York	2013	Rate Case	Yes
		New York	2015	Rate Case	Yes
11	Ohio American Water	Ohio	2006	Rate Case	Yes
		Ohio	2010	Rate Case	Yes
12	Pennsylvania American Water	Pennsylvania	2008	Compliance	No
		Pennsylvania	2011	Compliance	No
		Pennsylvania	2014	Compliance	No
		Pennsylvania	2017	Compliance	No
		Pennsylvania	2020	Compliance	No
13	Tennessee American Water	Tennessee	2006	Rate Case	Yes
		Tennessee	2010	Rate Case	Yes
14	Virginia American Water	Virginia	1996	Rate Case	Yes
		Virginia	1999	Rate Case	Yes
		Virginia	2000	Rate Case	Yes
		Virginia	2001	Rate Case	Yes
		Virginia	2003	Rate Case	Yes
		Virginia	2007	Rate Case	Yes
		Virginia	2009	Rate Case	Yes
		Virginia	2011	Rate Case	Yes
		Virginia	2014	Rate Case	Yes
		Virginia	2018	Rate Case	Yes
Virginia	2021	Rate Case	Yes		
15	West Virginia American Water	West Virginia	2002	Rate Case	Yes
		West Virginia	2006	Rate Case	Yes
		West Virginia	2007	Rate Case	Yes
		West Virginia	2009	Rate Case	Yes
		West Virginia	2012	Rate Case	Yes
		West Virginia	2014	Rate Case	Yes
		West Virginia	2017	Rate Case	Yes
		West Virginia	2020	Rate Case	Yes
16	Atlanta Gas Light (Southern Co)	Georgia	2009	Rate Case	Yes
17	Atmos Energy Corporation	Virginia	2004	Compliance	No
18	Columbia Gas of Kentucky	Kentucky	2015	Rate Case	Yes
19	Columbia Gas of Maryland	Maryland	2015	Rate Case	Yes
20	Columbia Gas of Massachusetts	Massachusetts	2004	Rate Case	Yes
		Massachusetts	2006	Internal Info	No
		Massachusetts	2011	Internal Info	No
		Massachusetts	2012	Internal Info	No
		Massachusetts	2014	Internal Info	No
		Massachusetts	2017	Internal Info	No

	Client	State	Year	Purpose	Rate Case Witness?
21	Columbia Gas of Pennsylvania	Pennsylvania	2015	Internal Info	No
		Pennsylvania	2020	Rate Case	Yes
22	Columbia Gas of Virginia	Virginia	2003	Compliance	No
		Virginia	2004	Compliance	No
		Virginia	2005	Rate Case	Yes
		Virginia	2006	Compliance	No
		Virginia	2007	Compliance	No
		Virginia	2008	Compliance	No
		Virginia	2009	Rate Case	Yes
		Virginia	2010	Compliance	No
		Virginia	2011	Compliance	No
		Virginia	2012	Compliance	No
		Virginia	2013	Rate Case	Yes
		Virginia	2014	Compliance	No
		Virginia	2015	Rate Case	Yes
		Virginia	2016	Compliance	No
		Virginia	2017	Rate Case	Yes
		Virginia	2018	Compliance	No
		Virginia	2019	Compliance	No
		Virginia	2020	Compliance	No
23	Northern Indiana Public Service	Indiana	2015	Internal Info	No
		Indiana	2016	Rate Case	Yes
		Indiana	2020	Rate Case	Yes
24	Dominion Energy, Inc.	Virginia	2008	Rate Case	Yes
		Virginia	2009	Compliance	No
		Virginia	2010	Compliance	No
		Virginia	2011	Compliance	No
		Virginia	2012	Compliance	No
		Virginia	2014	Compliance	No
		Virginia	2017	Compliance	No
		Virginia	2019	Compliance	No
25	Duke Energy	North Carolina	2006	Compliance	No
26	Elizabethtown Gas (Southern Co)	New Jersey	2008	Rate Case	Yes
27	Electric Transmission Texas	Texas	2016	Rate Case	Yes
28	General Water Works of Rio Rancho	New Mexico	1993	Rate Case	Yes
29	General Water Works of Virginia	Virginia	1992	Rate Case	Yes
30	Po River Water and Sewer	Virginia	1993	Rate Case	Yes
		Virginia	2007	Rate Case	Yes
		Virginia	2008	Rate Case	Yes
31	Progress Energy	North Carolina	2001	Internal Info	No
32	Roanoke Gas	Virginia	2006	Compliance	No
33	Southern California Edison	California	2002	Compliance	No
		California	2003	Compliance	No
		California	2004	Compliance	No
		California	2005	Compliance	No
34	AEP Texas	Texas	2018	Rate Case	Yes
35	Southwestern Electric Power	Texas	2016	Rate Case	Yes
		Texas	2020	Rate Case	Yes
36	Kentucky Utilities	Virginia	2020	Rate Case	Yes
37	Virginia Natural Gas (Southern Co)	Virginia	2004	Compliance	No
		Virginia	2005	Rate Case	Yes
		Virginia	2010	Rate Case	Yes
38	United Water of Pennsylvania	Pennsylvania	2004	Rate Case	Yes
39	Corix Infrastructure/Water Services Corp.	Enterprise	2018	Internal Info	No
		Enterprise	2019	Internal Info	No
		Enterprise	2021	Internal Info	No
40	Massanutten Public Service Company	Virginia	2006	Rate Case	Yes
		Virginia	2008	Rate Case	Yes
		Virginia	2013	Rate Case	Yes
		Virginia	2019	Rate Case	Yes
41	Water Service Corporation Kentucky	Kentucky	2010	Rate Case	Yes
		Kentucky	2012	Rate Case	Yes
		Kentucky	2019	Rate Case	Yes
42	Corix Utilities Oklahoma	Oklahoma	2019	Compliance	Yes
43	Great Basin Water Company	Nevada	2020	Rate Case	Yes
				Total Studies	130
				Number of Rate Cases	88
				Number of Utility Clients	43
				Number of States	20

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**Market to Cost Comparison of Service Company Charges to  
Missouri American Water Company**

**12 Months Ended December 31, 2021**

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May 2022

**Missouri American Water Company  
Market to Cost Comparison of Service Company Charges  
12 Months Ended June 30, 2021**

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## I – Introduction

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### **Purpose of This Study**

This market-to-cost comparison of American Water Works Service Company, Inc. (Service Company) Charges to Missouri American Water Company (MAWC) study (Study) was undertaken to answer four questions, each of which bears on the reasonableness of those charges as incurred during 2021:

1. Were the Service Company's charges to MAWC during 2021 reasonable?
2. Was MAWC charged the lower of cost or market value for managerial and professional services provided by the Service Company during 2021?
3. Were 2021 costs of Service Company's customer accounts services 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 2021 cost per MAWC customer is reasonable compared to cost per customer for the proxy service companies. During 2021, MAWC was charged \$73 per customer for administrative and general ("A&G")-related services provided by the Service Company. This compares to an average of \$115 per customer for service companies reporting to the Federal Energy Regulatory Commission ("FERC"). Seventeen of the 22 utility service companies that filed a FERC Form 60 for 2020 had a higher per-customer A&G cost than MAWC's charges from the Service Company.

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

- MAWC was charged the lower of cost or market value for managerial and professional services during 2021.
- On average, the hourly rates for outside service providers are 72% higher than the Service Company's hourly rates. Consequently, the Company obtains services from Service Company at considerably below the market prices for such services.
- 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 3 positions to manage activities of outside firms. These positions would be required 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 2021, MAWC and its customers would have incurred approximately \$17.5 million in additional expenses. This amount includes the higher cost of outside providers and the cost of 3 new 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



## I – Introduction

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maximum of eight 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 Company would have had an even greater annual dollar advantage than the \$17.5 million cited above.

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

Concerning question 3, the following conclusion was reached:

- The costs of the Service Company's customer accounts services were reasonable. Such costs are below the average of the neighboring electric utility comparison group. 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 2021, the cost of customer accounts services for MAWC customers was \$22.50, compared to the 2020 average of \$30.28 for other utilities.

Concerning question 4, the following conclusions were drawn:

- The services that the Service Company provides are necessary and required for a water and wastewater utility.
- Furthermore, there is no redundancy or overlap in the services provided by the Service Company to MAWC.

## 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 customers:

- **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 enterprise-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 organization. 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 manage 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 Enterprise-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 align operating utility operations because their implementation is supported by the Service Company.
- **Improved Support and Guidance** – American Water's Service Company provides another dimension of management and financial support and guidance 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:

- One Water Street – Service Company employees at One Water Street provide corporate governance and service functions, including executive management, finance, accounting, audit, tax, regulatory, external affairs, engineering, supply chain, human resources and benefits services. One Water Street also includes American Water's main Information Technology (IT) Services center for employees, which provides software delivery and enhancements. The center also provides local on-site support as well as the IT Service Desk for remote assistance for all employees using personal computers in the performance of their day-to-day activities. Further, One Water Street supports mission-critical systems such as SCADA as well as emerging technologies such as geographic information systems and mobility. It provides technical expertise in project governance and release management while ensuring compliance with all governmental regulations.
- Central Lab – The national trace substance laboratory is located in Belleville, Illinois, and performs testing for all American Water operating companies.
- Customer Relations and Customer Service Centers – Provides customer relations and field resource coordination services from two locations: Belleville, Illinois, and Wilkes Barre, Pennsylvania and provides customer communication, billing and collection services from various locations.
- Information Technology Services Center –The IT Services Center supports the technology infrastructure required to run business applications and communications systems for American Water's operating companies. American Water's primary data center is an IBM facility in Sterling Forrest, New York.
- Haddon Heights IT Services Center – American Water's data center, located in Haddon Heights, New Jersey, maintains data servers for back-up and disaster recovery.
- Regional Support Services – Operating companies are provided with certain support services that are delivered more effectively on a regional basis because individual operating company workloads are not sufficient to warrant maintaining their own full-time staff for these activities. These services require closer proximity to operating companies and therefore are located closer to the operating companies the employees provide service to instead of one of the corporate locations.

### 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, family leave, 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.

## II – Background

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- **Service Company Expenses:** Expenditures (i.e., standard invoices, purchase orders, electronic disbursements, miscellaneous invoices, recurring invoices, recurring vouchers, and procurement cards) and journal entries require a preparer to enter accounting coding details (e.g., cost center, cost element and Work Breakdown Structure (WBS)) 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 generally accepted accounting principles. 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 Service Company to meet its business needs. One Water Street (OWS), which owns the Camden headquarters, is providing furniture, fixtures and office-related equipment for the first seven years of the lease with the Service Company.
- **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.

### **Service Company Billing and Clearing**

Service Company has developed a billing system that 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 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., Affiliate's cost center) for O&M costs or an Affiliate's WBS element for capital expenditures (CAPEX). 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:** 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 Corp., (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

## II – Background

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estimate) with adjustment for prior month actual to estimate (previous month funding) true-up.

### III – Service Company Cost Comparison Approach

#### Service Company Charges

During 2021, the Service Company billed MAWC a total of approximately \$50.3 million, as shown in the table below. These charges were subjected to a market-to-cost-comparison.

	2021
Support Services - O&M	\$ 38,834,279
Support Services - Capital	\$ 11,507,601
Total Service Company Charges	\$ 50,341,880

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

- **Managerial and Professional Services** – Includes such services as management, accounting, legal, human resources, engineering and information technology.
- **Customer Accounts Services** – Includes customer-related services, such as call center, credit, billing, collection and payment processing.
- **Field Resource Coordination Services** – Includes tracking and dispatching service orders for field representatives and distribution crews.

Total 2021 Service Company dollar and hour charges break down between management and professional services and customer accounts services as follows:

	2021	
	Charges	Hours
Management and Professional Services	\$ 39,836,521	176,458
Customer Account Services	\$ 9,097,375	23,906
Field Resource Coordination Services	\$ 1,407,984	81,363
Total Service Company Charges	\$ 50,341,880	281,727

#### Service Company Cost Comparison Approach

This Study’s first question—whether the Service Company charges during 2021 were reasonable—was determined by comparing MAWC’s A&G-related Service Company charges per regulated retail 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 2021 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 2021. Outside providers' billing rates came from surveys or other information from professionals who could perform the services now provided by the Service Company.

The third question—whether Service Company’s 2021 customer accounts services charges 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 accounts services activities, including updating customer records for meter reads, printing and mailing bills, and collecting and processing

### III – Service Company Cost Comparison Approach

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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 not part of the American Water organization.

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

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### Methodology

Utility service companies deliver a variety of services. Some may 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 the case because considerable economies of scale derive from centralizing the management of corporate A&G services such as finance, human resources and information technology. Because A&G-related services are delivered by all 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 2021, MAWC was charged \$73 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.

	2021
Total Service Company charges	\$ 50,341,880
Less: Capital charges	\$ (11,507,601)
Less: Non-A&G charges	
Engineering	\$ (631,252)
Operations	\$ (2,020,574)
Water Quality	\$ (164,012)
Net A&G Service Company Charges	\$ 36,018,440
MAWC Customer Count	490,256
MAWC A&G SC Charges per Customer	\$ 73

### Comparison Group A&G 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. The Form 60 is designed to collect financial information from service companies within a holding company structure.

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 2020, a Form 60 was filed by service companies associated with 22 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 22 utility companies whose service companies filed a Form 60 for 2020 are calculated in Exhibit 1 (page 11).

Exhibit 2 (pages 12) shows MAWC's 2021 Service Company cost per customer of \$73 to be lower than the average of \$115 per customer for the comparison group service companies. Seventeen of the 22 comparison group service companies had higher per-customer A&G costs than MAWC's charges from the Service Company. Based on this result, it is possible to conclude that the Service Company's charges to MAWC are reasonable.

Exhibit 1

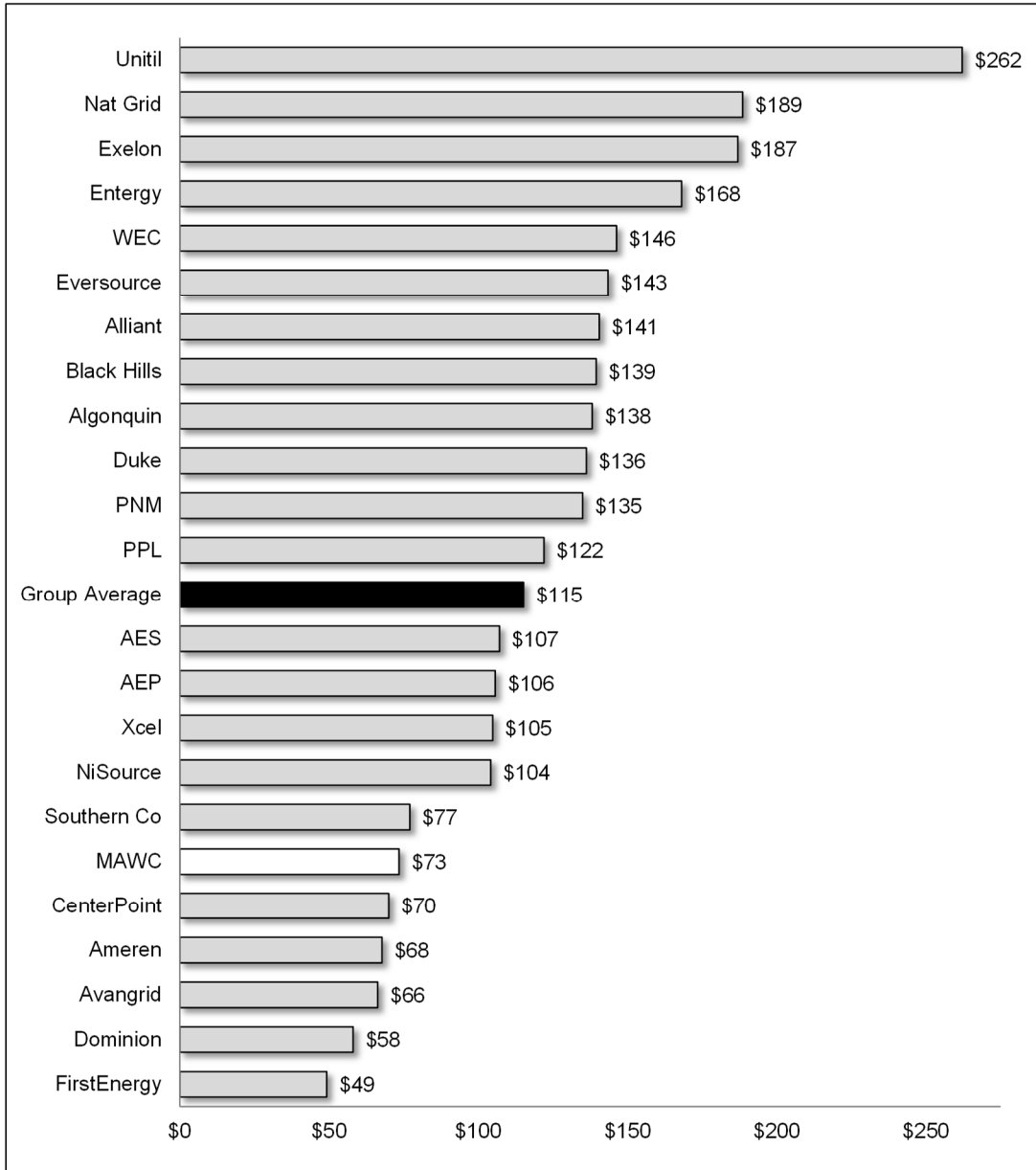
Missouri American Water Company  
Calculation of 2020 Service Company A&G Expenses Per Customer

Utility Company	2020 Regulated Retail Service Company A&G Expenses	Regulated Retail Customers	Cost per Customer
AEP	\$581,431,806	5,500,000	\$ 106
AES	\$84,972,673	793,500	\$ 107
Algonquin	\$93,507,879	677,000	\$ 138
Alliant	\$195,356,017	1,390,000	\$ 141
Ameren	\$223,383,695	3,300,000	\$ 68
Avangrid	\$218,683,477	3,300,000	\$ 66
Black Hills	\$178,511,164	1,280,000	\$ 139
CenterPoint	\$519,740,566	7,427,500	\$ 70
Dominion	\$404,160,305	6,963,000	\$ 58
Duke	\$1,299,912,203	9,541,000	\$ 136
Entergy	\$538,366,404	3,202,000	\$ 168
Eversource	\$575,146,581	4,009,000	\$ 143
Exelon	\$1,869,988,049	10,000,000	\$ 187
FirstEnergy	\$295,447,481	6,000,000	\$ 49
Nat Grid	\$1,319,903,837	7,000,000	\$ 189
NiSource	\$371,616,218	3,569,000	\$ 104
PNM	\$107,797,415	798,700	\$ 135
PPL	\$329,504,996	2,700,000	\$ 122
Southern Co	\$665,433,317	8,630,000	\$ 77
Unitil	\$50,514,408	192,700	\$ 262
WEC	\$335,637,101	2,294,000	\$ 146
Xcel	\$597,442,792	5,700,000	\$ 105
Total/Average	\$10,856,458,384	94,267,400	\$ 115

Source: FERC Form 60; Baryenbruch & Company, LLC, analysis

Exhibit 2

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



Source: Company information; 2020 FERC Form 60; Baryenbruch & Company, LLC, analysis

## 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.

Service Company's hourly rates were calculated for each of the five outside service provider categories, based on the dollars and hours charged to MAWC during 2021. 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 to MAWC during 2021, 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 2021 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 2021.

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 non-labor Service Company charges for 2021:

- Contract Services – 2021 Service Company charges to MAWC include expenses associated with the use of outside professional firms to perform certain enterprise-wide 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.
- IT Infrastructure Expenses – Included in 2021 Service Company charges to MAWC are leases, maintenance fees and depreciation related to American Water's enterprise computing and network infrastructure and business applications. An outside provider that would take over operation of this infrastructure would recover these expenses over and above the cost of personnel necessary to operate the data center.

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

- 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.
- Other 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, IT infrastructure and other Service Company charges are assigned to the five outside provider categories.

Based on the assignment of expenses and hours shown in Exhibits 3 and 4 and the excludable items shown in Exhibit 5, the Service Company's equivalent costs per hour for 2021 are calculated below.

	2021					
	Attorney	Management Consultant	Certified Public Accountant	IT Professional	Professional Engineer	Total
Total management, professional & technical services charges	\$ 1,084,084	\$ 10,776,556	\$ 7,279,215	\$ 18,728,555	\$ 1,968,111	\$ 39,836,521
Less: Exclusions						
Contract services	\$ 21,637	\$ 851,899	\$ 687,805	\$ 7,948,638	\$ 54,373	\$ 9,564,352
IT infrastructure expenses	\$ 370	\$ 1,834,287	\$ 1,155,604	\$ 3,025,809	\$ 130,172	\$ 6,146,242
Travel expenses	\$ 182,253	\$ 121,697	\$ (97,795)	\$ 156,765	\$ 67,086	\$ 430,006
Other expenses	\$ 1,108	\$ 19,934	\$ 16,839	\$ 13,571	\$ 23,903	\$ 75,355
Total Exclusions	\$ 205,367	\$ 2,827,818	\$ 1,762,454	\$ 11,144,783	\$ 275,534	\$ 16,215,955
Net Service-Related Charges (A)	\$ 878,717	\$ 7,948,738	\$ 5,516,761	\$ 7,583,773	\$ 1,692,577	\$ 23,620,565
Total Hours (B)	3,506	44,076	58,970	55,253	14,654	176,458
<b>Average Hourly Rate (A / B)</b>	<b>\$ 251</b>	<b>\$ 180</b>	<b>\$ 94</b>	<b>\$ 137</b>	<b>\$ 116</b>	

Exhibit 3

Missouri American Water Company  
2021 Service Company Charges by Location and Function

		2021 Service Company Charges					
Location	Function	Attorney	Management Consultant	Certified Public Accountant	T&I Professional	Professional Engineer	Total
Belleville Lab	Water Quality	\$ -	\$ -	\$ -	\$ -	\$ 164,012	\$ 164,012
Call Centers	Human Resources	\$ -	\$ 505	\$ -	\$ -	\$ -	\$ 505
Corporate	Accounting	\$ -	\$ -	\$ 2,917,429	\$ -	\$ -	\$ 2,917,429
	Administration	\$ -	\$ 5,098,047	\$ -	\$ -	\$ -	\$ 5,098,047
	Audit	\$ -	\$ -	\$ 423,055	\$ -	\$ -	\$ 423,055
	Business Development	\$ -	\$ 285,917	\$ -	\$ -	\$ -	\$ 285,917
	Business Transformation	\$ -	\$ 2	\$ -	\$ -	\$ -	\$ 2
	Communications	\$ -	\$ 797,885	\$ -	\$ -	\$ -	\$ 797,885
	Engineering	\$ -	\$ -	\$ -	\$ -	\$ 1,734,043	\$ 1,734,043
	External Affairs	\$ -	\$ 91,329	\$ -	\$ -	\$ -	\$ 91,329
	Finance	\$ -	\$ (5,647)	\$ 2,287,920	\$ -	\$ -	\$ 2,282,273
	Human Resources	\$ -	\$ 2,771,168	\$ -	\$ -	\$ -	\$ 2,771,168
	Information Technology	\$ -	\$ -	\$ -	\$ 472,487	\$ -	\$ 472,487
	Legal	\$ 478,081	\$ -	\$ -	\$ -	\$ -	\$ 478,081
	Operations	\$ -	\$ 997,053	\$ -	\$ -	\$ -	\$ 997,053
	Supply Chain	\$ -	\$ -	\$ 1,210,884	\$ -	\$ -	\$ 1,210,884
Regional Offices	Administration	\$ -	\$ 284,858	\$ -	\$ -	\$ -	\$ 284,858
	Business Development	\$ -	\$ 220,549	\$ -	\$ -	\$ -	\$ 220,549
	Engineering	\$ -	\$ -	\$ -	\$ -	\$ 70,056	\$ 70,056
	External Affairs	\$ -	\$ 96,351	\$ -	\$ -	\$ -	\$ 96,351
	Finance	\$ -	\$ -	\$ 381,173	\$ -	\$ -	\$ 381,173
	Human Resources	\$ -	\$ 10,067	\$ -	\$ -	\$ -	\$ 10,067
	Legal	\$ 606,003	\$ -	\$ -	\$ -	\$ -	\$ 606,003
	Operations	\$ -	\$ 90,531	\$ -	\$ -	\$ -	\$ 90,531
Innov & Technology	Rates & Regulatory	\$ -	\$ -	\$ 58,753	\$ -	\$ -	\$ 58,753
	Information Technology	\$ -	\$ 37,942	\$ -	\$ 18,256,069	\$ -	\$ 18,294,010
<b>Total Dollars Charged</b>		<b>\$ 1,084,084</b>	<b>\$ 10,776,556</b>	<b>\$ 7,279,215</b>	<b>\$ 18,728,555</b>	<b>\$ 1,968,111</b>	<b>\$ 39,836,521</b>

Exhibit 4

Missouri American Water Company  
2021 Service Company Hours by Location and Function

		2021 Service Company Hours					
Location	Function	Attorney	Management Consultant	Certified Public Accountant	IT Professional	Professional Engineer	Total
Belleville Lab	Water Quality	-	-	-	-	1,385	1,385
Call Centers	Human Resources	-	-	-	-	-	-
Corporate	Accounting	-	-	27,286	-	-	27,286
	Administration	-	8,161	-	-	-	8,161
	Audit	-	-	1,996	-	-	1,996
	Business Transformation	-	-	-	-	-	-
	Business Development	-	1,239	-	-	-	1,239
	Communications	-	4,580	-	-	-	4,580
	Engineering	-	-	-	-	13,269	13,269
	External Affairs	-	-	-	-	-	-
	Finance	-	791	13,267	-	-	14,058
	Human Resources	-	20,961	-	-	-	20,961
	Information Technology	-	-	-	4,182	-	4,182
	Legal	1,134	-	-	-	-	1,134
	Operations	-	5,373	-	-	-	5,373
	Supply Chain	-	-	12,545	-	-	12,545
Regional Offices	Administration	-	677	-	-	-	677
	Business Development	-	1,286	-	-	-	1,286
	Engineering	-	-	-	-	-	-
	External Affairs	-	-	-	-	-	-
	Finance	-	-	3,834	-	-	3,834
	Human Resources	-	143	-	-	-	143
	Legal	2,371	-	-	-	-	2,371
	Operations	-	864	-	-	-	864
	Rates & Regulatory	-	-	41	-	-	41
Innov & Technology	Information Technology	-	-	-	51,071	-	51,071
<b>Total Hours Charged</b>		<b>3,506</b>	<b>44,076</b>	<b>58,970</b>	<b>55,253</b>	<b>14,654</b>	<b>176,458</b>

Exhibit 5

Missouri American Water Company  
2021 Service Company Charges Excludable from the Hourly Rate Calculation

Charges By Function	Exclusions From Hourly Rate Calculation				Total
	Contract Services	Enterprise IT Expenses	Travel Expenses	Other Expenses	
Accounting	\$ 417,608	\$ 122	\$ (140,333)	\$ 6,396	\$ 283,793
Administration	\$ 363,667	\$ 1,834,287	\$ 21,741	\$ 14,500	\$ 2,234,196
Audit	\$ 166,044		\$ 341	\$ 585	\$ 166,970
Business Development	\$ 13,703	\$ (1)	\$ 29,999	\$ 2,901	\$ 46,602
Communications	\$ 108,956		\$ 27,488	\$ 4,964	\$ 141,407
Engineering	\$ 28,939	\$ 129,631	\$ 4,452	\$ 18,754	\$ 181,776
External Affairs	\$ 8		\$ 16	\$ (6,890)	\$ (6,866)
Finance	\$ 95,751	\$ 1,155,483	\$ 27,837	\$ 7,014	\$ 1,286,084
Human Resources	\$ 365,566		\$ 42,453	\$ 4,459	\$ 412,478
Information Technology	\$ 7,948,638	\$ 3,025,809	\$ 156,765	\$ 13,571	\$ 11,144,783
Legal	\$ 21,637	\$ 370	\$ 182,253	\$ 1,108	\$ 205,367
Operations	\$ 34,199	\$ 37	\$ 15,569	\$ 5,095	\$ 54,900
Rates & Regulatory	\$ 34		\$ -	\$ 707	\$ 741
Supply Chain	\$ 8,369		\$ 14,361	\$ 2,137	\$ 24,867
Water Quality	\$ (8,766)	\$ 505	\$ 47,065	\$ 54	\$ 38,857
<b>Total</b>	<b>\$ 9,564,352</b>	<b>\$ 6,146,242</b>	<b>\$ 430,006</b>	<b>\$ 75,355</b>	<b>\$ 16,215,955</b>

Recap By Outside Provider	Exclusions From Hourly Rate Calculation				Total
	Contract Services	Enterprise IT Expenses	Travel Expenses	Other Expenses	
Attorney	\$ 21,637	\$ 370	\$ 182,253	\$ 1,108	\$ 205,367
Management Consultant	\$ 851,899	\$ 1,834,287	\$ 121,697	\$ 19,934	\$ 2,827,818
Certified Public Accountant	\$ 687,805	\$ 1,155,604	\$ (97,795)	\$ 16,839	\$ 1,762,454
IT Professional	\$ 7,948,638	\$ 3,025,809	\$ 156,765	\$ 13,571	\$ 11,144,783
Professional Engineer	\$ 54,373	\$ 130,172	\$ 67,086	\$ 23,903	\$ 275,534
<b>Total</b>	<b>\$ 9,564,352</b>	<b>\$ 6,146,242</b>	<b>\$ 430,006</b>	<b>\$ 75,355</b>	<b>\$ 16,215,955</b>



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

**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**

An estimate of Missouri attorney rates was developed from National Law Journal's Survey of Law Firm Economics Report. As shown in Exhibit 6 (page 20), data from this survey has been adjusted for cost-of-living differences between the survey's regions and St Louis, Missouri. The National Law Review billing survey hourly rates data is for 2020. The survey's calculated average rate was escalated to June 30, 2021—the midpoint of 2021.

**Management Consultants**

The cost per hour for management consultants was developed from a survey performed by Rodenhauer & Company LLC, a research company that monitors the consulting industry. The survey includes rates that were in effect during 2020 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, the U.S. national average is appropriate for comparison.

The first step in the calculation, presented in Exhibit 7 (page 21), 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. This survey covered hourly rates in effect during 2020. The survey's calculated average rate was escalated to June 30, 2021—the midpoint of 2021.

## 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 2018 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 22), 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 2020. The calculated average rate was escalated to December 31, 2021—the midpoint of 2021.

### **Information Technology Professionals**

The 2021 average hourly rate for information technology consultants and contractors was developed from two sources: The Service Company for IT contractor rates and a survey performed by Rodenhauser & Company, LLC, for IT consultants. As shown in Exhibit 9 (page 23), that data was compiled and a weighted average was calculated based on a percent of time that is typically applied to an IT work assignment, based on Baryenbruch & Company, LLC's, experience.

### **Professional Engineers**

The Company provided hourly rate information for outside engineering firms that provided MAWC with their rate schedules. As presented in Exhibit 10 (page 24), an average rate was developed for each engineering position level. Then, using the Service Company's percentage mix by engineering position, a weighted average cost per hour was calculated.

Missouri American Water Company  
Estimated Billing Rates for Missouri Attorneys

Average Hourly Billing Rates as of January 1, 2021									
Region	Avg Billing Rates (Note A)		Weighted Avg Rate Calculation			Cost of Living (COL) Adjustment			(X x Y) Adjusted Rate
	Partner	Associate	0.25	0.75	(X) Weighted Average	COL Indices (Note B)		(Y) St. Louis, MO COL Adjustment	
						Region	MO		
Northeast	\$ 480	\$ 313	\$ 120	\$ 234	\$ 354	121.1	94.4	78.0%	\$ 276
Midwest	\$ 375	\$ 225	\$ 94	\$ 169	\$ 263	94.0	94.4	100.5%	\$ 264
South	\$ 450	\$ 350	\$ 113	\$ 263	\$ 375	94.1	94.4	100.3%	\$ 376
West	\$ 350	\$ 260	\$ 88	\$ 195	\$ 283	108.4	94.4	87.1%	\$ 246
Overall Average Hourly Billing Rate									\$ 291
<u>Escalation to 2021 Midpoint (June 30, 2021)</u>									
CPI at December 31, 2020									260.5
CPI at June 30, 2021									271.7
Inflation/Escalation (Note C)									4.3%
Average Hourly Billing Rate For Attorneys At June 30, 2021									\$ 303

Note A: 2021 Survey of Law Firm Economics Report, National Law Journal

Note B: Cost of Living Index, Source Council for Community and Economic Research

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

Exhibit 7

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

Survey billing rates in effect in 2020 (Note A)

A. Calculation of Average Hourly Billing Rate by Consultant Position

		Average Hourly Rates (Note A)				
		Analyst Consultant	Associate	Sr. Assoc/ Manager	Principal	Partner
Average		\$ 227	\$ 273	\$ 334	\$ 515	\$ 641

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)		\$ 227	\$ 273	\$ 334	\$ 515	\$ 641	
Percent of Consulting Assignment		30%	30%	25%	10%	5%	Weighted Average
		\$ 68	\$ 82	\$ 84	\$ 52	\$ 32	\$ 317

<u>Escalation to 2021 Midpoint (June 30, 2021)</u>		
	CPI at December 31, 2020	260.5
	CPI at June 30, 2021	271.7
	Inflation/Escalation (Note B)	4.3%
Average Hourly Billing Rate For Management Consultants During 2021		\$ 331

Note A: Source is Rodenhauer & Company LLC; Baryenbruch & Company, LLC, analysis

Exhibit 8

Missouri American Water Company  
Billing Rates of Missouri Certified Public Accountants

A. Calculation of Average Hourly Billing Rate by Public Accounting Position  
Survey billing rates were those in effect in 2020 (Note A)

		Average Hourly Billing Rate (Notes A and B)				
		Staff Accountant	Senior Accountant	Manager	Partner	
Average Hourly Billing Rate by CPA Firm Position		\$ 113	\$ 149	\$ 199	\$ 280	
Percent of Accounting Assignment		30%	30%	20%	20%	Weighted Average
		\$ 34	\$ 45	\$ 40	\$ 56	\$ 174
		National Average Hourly Billing Rate (above)				\$ 174
		Cost of Living Adjustment				
		COL Index for St. Louis, MO				94.4
		Average COL Index				100.0
		Adjustment Percentage				94.4%
		Cost of Living Adjusted Hourly Rate				\$ 164
		<u>Escalation to 2021 Midpoint (June 30, 2021)</u>				
		CPI at December 31, 2020				260.5
		CPI at June 30, 2021				271.7
		Inflation/Escalation (Note C)				4.3%
		Average Hourly Billing Rate For CPAs At June 30, 2021				\$ 172

Note A: Source is AICPA's 2020 National PCPS/TSCPA Management of an Accounting Practice Survey

Note B: Source is Cost of Living Index, Source Council for Community and Economic Research

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

Exhibit 9

Missouri American Water Company  
Billing Rates of Information Technology Professionals

A. Calculation of 2021 Average Hourly Billing Rate by Information Technology Position

		Average Hourly Billing Rate (Note A)					
		Contractor Positions		Consultant Positions			
		Contractor	Senior Contractor	Associate	Manager	Partner	
Average Hourly Billing Rate by IT Position Category		\$ 91	\$ 121	\$ 263	\$ 368	\$ 498	
Percent of IT Assignment		25%	25%	25%	15%	10%	Weighted Average
		\$ 23	\$ 30	\$ 66	\$ 55	\$ 50	\$ 224

Note A: Source is AWWSC, Rodenhauer & Company, LLC, and Baryenbruch & Company, LLC

Exhibit 10

Missouri American Water Company  
Billing Rates of Missouri Engineers

A. Calculation of Average 2019 Hourly Rate by Engineer Position (Note A)

Name of Firm	Average Hourly Billing Rates			
	Technician	Engineer	Project Manager	Officer
	Senior Technician	Design Engineer Project Engineer	Sr. Mgr. Engineer	Principal Engineer
Firm #1	\$151	\$154	\$245	\$297
Firm #2	\$77	\$136	\$214	\$240
Firm #3	\$87	\$126	\$223	\$257
Firm #4	\$95	\$131	\$172	\$210
Firm #5	\$70	\$111	\$145	\$175
Firm #6	\$125	\$160	\$209	\$245
Firm #7	\$103	\$135	\$163	na
Firm #8	\$103	\$116	\$191	\$245
Firm #9	\$100	\$136	\$104	\$276
Firm #10	\$81	\$98	\$173	\$218
Firm #11	\$90	\$131	\$218	\$267
Firm #12	\$90	\$126	\$180	\$211
Firm #13	\$120	\$173	\$198	\$252
Firm #14	\$128	\$138	\$176	\$224
Firm #15	\$105	\$112	\$167	\$209
Firm #16	\$133	\$164	\$254	\$328
Firm #17	\$130	\$131	\$190	\$218
Firm #18	\$118	\$112	\$167	\$209
Firm #19	\$93	\$116	\$186	\$226
Firm #20	\$114	\$116	\$182	\$229
Firm #21	\$102	na	\$161	\$192
Firm #22	\$134	\$132	\$202	\$285
Firm #23	\$112	\$129	\$212	\$239
Firm #24	\$94	na	\$177	\$312
Firm #25	\$101	\$135	\$177	\$250
Firm #26	\$121	\$120	\$178	\$208
Firm #27	\$164	\$181	\$261	\$322

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)	\$109	\$133	\$190	\$244	
Typical Percent of Time on an Engineering Assignment	13%	31%	46%	10%	
	\$14	\$41	\$87	\$25	\$167

Note A: Source is American Water Service Company Information

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	2021		
	Service Company	Outside Provider	Difference-- Service Co. Greater(Less) Than Outside
Attorney	\$ 251	\$ 303	\$ (52)
Management Consultant	\$ 180	\$ 331	\$ (151)
Certified Public Accountant	\$ 94	\$ 172	\$ (78)
IT Professional	\$ 137	\$ 224	\$ (87)
Professional Engineer	\$ 116	\$ 167	\$ (51)

Based on these cost-per-hour differentials and the number of managerial and professional services hours billed to MAWC during 2021, outside service providers would have cost \$16,701,546 more than the Service Company (see table below). Thus, on average, outside providers' hourly rates are 72% higher than those of the Service Company (\$16,977,811 / \$23,620,565).

Service Provider	2021		
	Hourly Rate Difference-- Service Co. Greater(Less) Than Outside	Service Company Hours Charged	Dollar Difference
Attorney	\$ (52)	3,506	\$ (182,290)
Management Consultant	\$ (151)	44,076	\$ (6,655,402)
Certified Public Accountant	\$ (78)	58,970	\$ (4,599,637)
IT Professional	\$ (87)	55,253	\$ (4,793,122)
Professional Engineer	\$ (51)	14,654	\$ (747,359)
Service Company Less Than Outside Providers			\$ (16,977,811)

It should be noted that the cost differential associated with using outside providers is even greater than calculated above 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, whereas Service Company personnel 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 approximately 176,600 hours of work (approximately 98 full-time equivalents at 1,800 "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 deliver quality and timely services. The individuals who would fill these positions would need a good understanding of each profession being managed. These persons must also have management experience and the authority necessary to provide credibility with the outside firms. As calculated in the table below, the new positions would add \$522,000 per year to MAWC's personnel expenses.



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

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Cost of Adding 3 Professional Positions To MAWC's Staff

	<u>Total</u>
New Positions' Salary	\$ 120,000
Benefits (at 30%)	\$ 36,000
Office Expenses (15%)	\$ 18,000
Total Cost per Position	<u>\$ 174,000</u>
Number of Positions Required	<u>3</u>
Total Cost of Added MAWC Staff	<u>\$ 522,000</u>

Thus, the total effect on MAWC customers of contracting all services now provided by Service Company would be an increase in their costs of \$17,499,811 (\$16,977,811 + \$522,000). Based on the results of this comparison, the Service Company charged MAWC significantly lower costs than the Company would have been charged had it sourced such services from the competitive market during 2021.

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

### 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 (page 28) 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 overhead 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.

Utility	State
Ameren Missouri	Missouri
Empire District Electric	Missouri, Kansas
Ameren Illinois	Illinois
Commonwealth Edison	Illinois
MidAmerica Energy	Illinois, Iowa
Duke Energy Kentucky	Kentucky
Kentucky Power	Kentucky
Kentucky Utilities	Kentucky
Louisville Gas & Electric	Kentucky
Entergy Arkansas	Arkansas
Oklahoma Gas & Electric	Oklahoma, Arkansas
Public Service of Oklahoma	Oklahoma
Kingsport Power	Tennessee
Black Hills Power	Iowa, Arkansas
Interstate Power & Light	Iowa

For 2020, these utilities did not file a FERC Form 1:

Kansas City Power & Light Company  
 Kansas Gas and Electric Company  
 KCP&L Greater Missouri Operations Company  
 Westar Energy, Inc.

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.

**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 Account Services Costs

**MAWC's Cost per Customer**

As calculated below, MAWC's customer account services expense per customer was \$22.50 for 2021. 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 is necessary to adjust the Service Company's charges because electric utilities experience an average of 1.25 calls per customer compared to American Water's 0.79 calls per customer during 2021. Thus, the Service Company's expenses had to be increased, for comparison purposes, to reflect its costs if it had had 1.25 calls per customer.

Missouri American Water Company, Inc.		2021	Adjustment	
Cost Component		Service Co	Fewer	
		Charges	Calls For	Adjusted
			Water Cos. (A)	
Service Company	Call processing, order processing, credit, bill collection, postage & forms	\$ 9,097,375	\$ 866,814	\$ 9,964,189
	Customer payment processing			\$ 541,402 (B)
MAWC	Customer Advocacy unit			\$ 526,130
Cost Pool Total				\$ 11,031,722
Total Customers				490,256
2021 Cost Per MAWC Customer				<u>\$ 22.50</u>
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	\$ 1,464,887		
Electric utility industry's avg calls/customer	1.25			
American Water's avg calls/customer	0.79			
	Percent different	59%	59%	
	Total Adjustment	\$ 866,814		
Note B: Estimated customer payment processing expenses				
	Number of customer bills	4,904,003		
	Bank charge per item	\$ 0.1104		
	Total estimated annual expense	\$ 541,402		

**Electric Utility Group Cost per Customer**

Exhibit 12 (page 30) shows the calculation of customer account expense per customer for 2020 for the electric utility comparison group. All of the underlying data was taken from the utilities' FERC Form 1.

Exhibit 12

Missouri American Water Company  
Comparison Group 2020 Customer Accounts Expense Per Customer

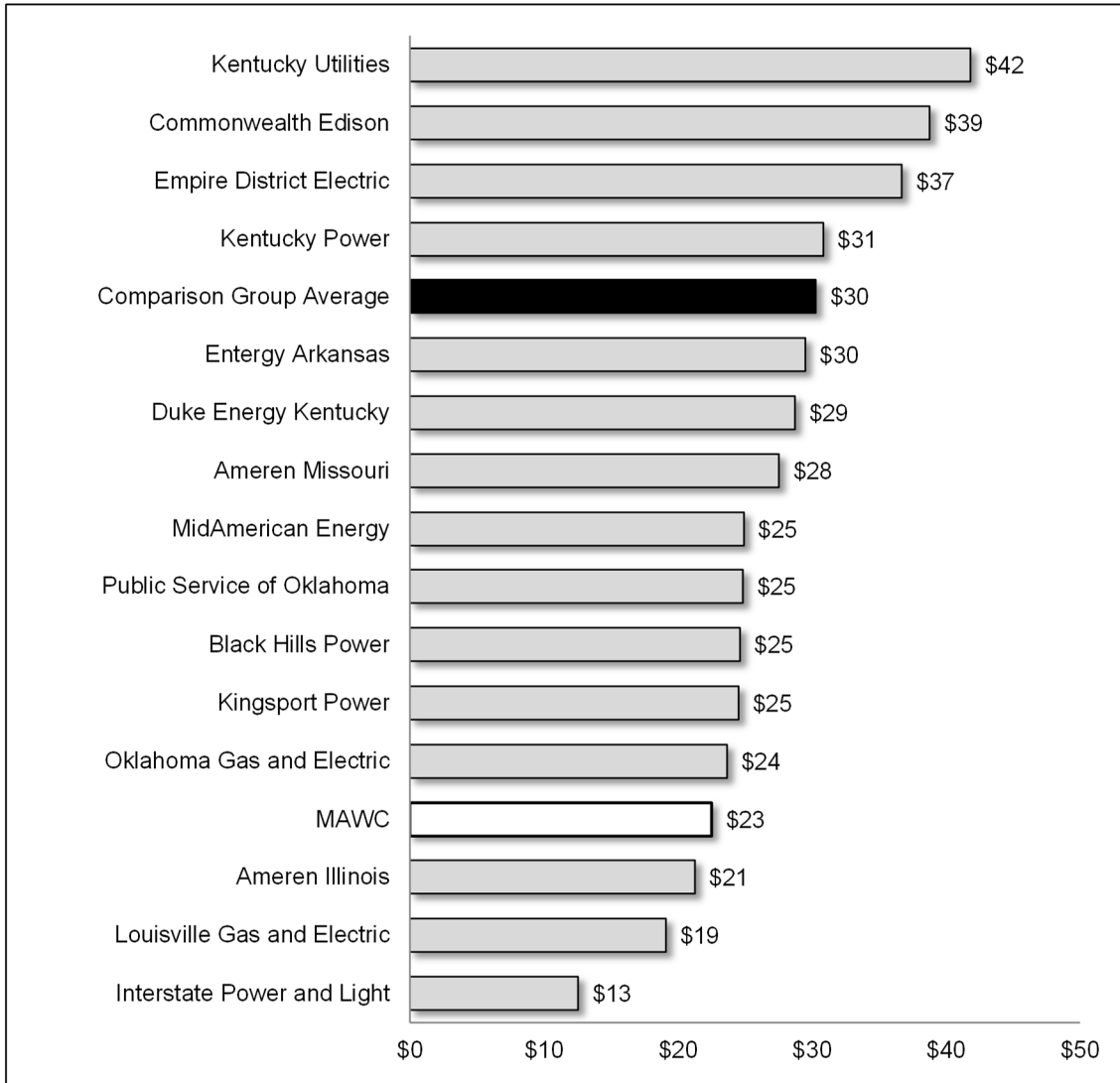
2020  Comparison Group	Customer Accounts Services Cost Pool				Total Customers	Customer Account Services Expenses per Customer
	Employee Benefits			Total Cost Pool		
	Account 903 and 905	Employee Pension and Benefits	Payroll Taxes			
Ameren Illinois Company	\$ 24,765,977	\$ 222,714	\$ 1,059,266	\$ 26,047,957	1,225,204	\$ 21.26
Ameren Missouri Company	\$ 32,508,741	\$ 485,725	\$ 1,059,259	\$ 34,053,725	1,236,963	\$ 27.53
Black Hills Power, Inc.	\$ 1,582,835	\$ 164,905	\$ 61,327	\$ 1,809,067	73,467	\$ 24.62
Commonwealth Edison Company	\$ 142,494,826	\$ 10,023,108	\$ 6,056,804	\$ 158,574,738	4,089,726	\$ 38.77
Duke Energy Kentucky, Inc.	\$ 3,861,735	\$ 194,018	\$ 135,535	\$ 4,191,289	145,957	\$ 28.72
Empire District Electric Company	\$ 5,122,190	\$ 1,122,811	\$ 238,115	\$ 6,483,117	176,724	\$ 36.68
Entergy Arkansas, Inc.	\$ 20,478,128	\$ 643,859	\$ 75,689	\$ 21,197,676	718,286	\$ 29.51
Interstate Power and Light Company	\$ 5,687,244	\$ 353,113	\$ 167,095	\$ 6,207,452	494,770	\$ 12.55
Kentucky Power Company	\$ 4,989,770	\$ 30,061	\$ 93,370	\$ 5,113,200	165,762	\$ 30.85
Kentucky Utilities Company	\$ 20,946,073	\$ 1,796,667	\$ 717,619	\$ 23,460,359	560,922	\$ 41.82
Kingsport Power Company	\$ 1,170,852	\$ (2,475)	\$ 19,346	\$ 1,187,723	48,444	\$ 24.52
Louisville Gas and Electric Company	\$ 7,373,579	\$ 446,907	\$ 234,068	\$ 8,054,554	421,842	\$ 19.09
MidAmerican Energy Company	\$ 18,335,639	\$ 447,818	\$ 1,031,696	\$ 19,815,153	795,351	\$ 24.91
Oklahoma Gas and Electric Company	\$ 18,422,603	\$ 1,284,056	\$ 713,836	\$ 20,420,495	863,014	\$ 23.66
Public Service Company of Oklahoma	\$ 13,742,406	\$ 58,633	\$ 169,386	\$ 13,970,425	562,590	\$ 24.83
Total/Average	\$ 321,482,598	\$ 17,271,922	\$ 11,832,412	\$ 350,586,931	11,579,022	\$ 30.28

Source: 2020 FERC Form 1; Baryenbruch & Company, LLC, analysis

VI - Question 3 - Reasonableness of Customer Account Services Costs

**Summary of Results**

As shown in the table below, MAWC's cost per customer is below the 2020 average cost of the neighboring electric utility comparison group. It can be concluded that MAWC's 2021 total customer account expenses are comparable to those of other utilities.



Source: Company information; FERC Form 1; Baryenbruch & Company, LLC, analysis

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

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### **Analysis of Services**

The final aspect of this study is an assessment of whether the services provided to MAWC by the Service Company would be necessary if MAWC were not part of the American Water organization. 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 33-35) 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 if (1) there was redundancy or overlap in the services being provided by the Service Company and (2) Service Company services are typical of those needed by a water and wastewater 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 not part of the American Water organization.
- 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

P - Primarily Responsible S - Provides Support	Performed By:					
	MAWC	American Water Service Company				
Water Company Function		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		
Minor Projects (e.g., pipelines)	P					
Construction Project Management						
Major Projects	P			S		
Special Projects	P					
Minor Projects	P					
Hydraulics Review	P					
Developers Extensions	P					
Tank Painting	P					
<b>Water Quality and Purification</b>						
Water Quality Standards Development	P (Note 1)			P (Note 1)		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			S		
Leak Detection	P			S		
<b>Customer Service</b>						
Community Relations	P					
Customer Contact	P (Note 2)	P (Note 2)				
Call Processing		P				
Service Order Processing	P	S				
Customer Credit		P				
Meter Reading	P				S	
Customer Bill Preparation		P			S	
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**

P - Primarily Responsible S - Provides Support	Performed By:				
	MAWC	American Water Service Company			
		Customer Call Center	Central	Central Services	IT Service Centers
Water Company Function					
<b>Financial Management</b>					
Financial Planning				P	
Financings--Equity				P	
Financings--Long Term Debt & Preferred				P (Note 3)	
Short Term Lines of Credit Arrangements				P (Note 3)	
Investor Relations				P	
Insurance Program Administration				P	
Loss Control/Safety Program Administration	S			P	
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				P	
Revenue and O&M				P	
Depreciation and Interest Expense				P	
Budget Preparation--Service Company Charges		S		P	S
Capital Budget Preparation--Projects	S			P	
Capital Budget Preparation--Non-Project Work	S			P	
Prepare Monthly Budget Variance Report ("Budget/Plan Analysis")	S			P	
Prepare Capital Project Budget Status Report	P				
Year-End Projections				P	
<b>Accounting and Taxes</b>					
Accounts Payable Accounting				P	
Payroll Accounting				P	
Work Order Accounting				P	
Fixed Asset Accounting				P	
Journal Entry Preparations--Billing Corrections				P	
Journal Entry Preparation--All Others				P	
Financial Statement Preparation				P	
State Commission Reporting				P	
Income Taxes--State				P	
Income Taxes--Federal				P	
Property Taxes				P	
Gross Receipts (Town) Taxes				P	

Note 3: 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	MAWC	Performed By:				
		American Water Service Company				
		Customer Call Center	Central	Central Services	IT Service Centers	Central Lab
<b>Rates</b>						
Rate Studies & Tariff Change Administration	P			S		
Rate Case Planning and Preparation	P			S		
Rate Case Administration	P			S		
Commission Inquiry Response	P			S		
<b>Legal</b>	S			P		
<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 (Note 4)			P (Note 4)		
Bid Solicitation	P (Note 4)			P (Note 4)		
Contract Administration	P			S		
Ordering	P			S		
Inventory Management	P					
<b>Human Resources Management</b>						
Benefit Program Development				P		
Benefits Program Administration				P		
Management Compensation Administration				P		
Wage & Salary Program Design	S			P		
Wage & Salary Administration	S			P		
Labor Negotiations--Wages	P			S		
Labor Negotiations--Benefits	S			P		
Labor Negotiations-- Work Rules	P			S		
Training Program Development	S			P		
Training--Course Delivery	S			P		
Diversity and Inclusion--Plan Development	S			P		
Diversity and Inclusion--Implementation	P			S		
<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		

Note 4: MAWC is primarily responsible for O&M-related services, materials and small CAPEX items. AWWSC Engineering is primarily responsible for large CAPEX-related services and materials.

## VII - 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 and the Service Company exercise control over Service Company services and charges. The most important of these are described below.

1. **Chief Operating Officer Oversight** – The Chief Operating Officer (COO) is on the Executive Leadership Team (ELT) of American Water. This position is responsible for the overall performance of each operating company in American Water. As part of the ELT, the COO has equal say with other ELT members in major business decisions of American Water and has the ability to monitor Service Company performance quality and spending. The COO also addresses local concerns with each operating company president.
2. **Operating Company Board Oversight** – The MAWC board of directors includes members of members of the MAWC management team 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.
3. **Service Company Budget Review/Approval** – The ELT serves as the Board of Directors for the Service Company and 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 must be approved by the operating company's board of directors.
4. **Major Project Review and Approval** – Before major Service Company non-capital projects are undertaken, they must be reviewed and approved by American Water's ELT, which includes the COO. The COO, with significant input from 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 Planning process. A three-year technology roadmap of initiatives is developed from American Water's vision, strategy, operational objectives and key business programs. The alignment of these initiatives with enterprise goals is approved by the ELT and key business leaders from various operational and functional areas of American Water. The roadmap is updated annually to produce a rolling three-year roadmap and investment plan.
5. **Service Company Bill Scrutiny** – MAWC Finance personnel review the monthly Service Company operating expenses for accuracy and reasonableness. MAWC's Director of Finance discusses the monthly bill with Shared Services Center personnel, and any mistakes or over-charges are credited on a subsequent billing. The MAWC Director of Finance prepares an actual-to-budget comparison of management fees each month for use in identifying unusual variances. A Service Company actual-to-budget comparison is included in the monthly Financial Review Package (FRP). Unusual variances are researched, explanations are provided and any necessary corrections are made.
6. **Service Company Budget Variance Reporting** – Each month, a summary variance analysis is prepared that explains differences between budgeted and actual Service Company spending. In addition, a more detailed monthly variance report, called the "Statement of Expenses and Billed Charges," is produced by Service Company location and shows actual spending for the month.
7. **Operating Company Budget Variance Reporting** – The Budget/Plan Analysis, produced monthly by each operating company has line items for Management Fees and Shared Service Expense (i.e., IT, Call Center, etc.). 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 as compared to prior year, plan and reforecast.

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

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8. Capital Program Management (CPM) – CPM is one of American Water’s primary business planning processes. It covers capital and asset planning and is used throughout American Water. CPM provides a full range of governance practices, including a formal protocol for assessing system needs, prioritizing expenditures, managing the capital program, approving project spending, delivering projects and measuring outputs. CPM ensures that:
- Capital expenditure plans are aligned with the strategic intent of the business
  - The impact of capital expenditures and savings are fully reflected in operating expense plans
  - The effects of these plans are understood and affordable, and
  - Effective controls are in place over budgets (through business plans) and individual capital projects (through appropriate authorization thresholds, management and reporting processes).

The CPM process was designed to optimize the effectiveness of asset investment. The process is managed at two levels for all American Water companies, including all MAWC Operating Units. Monthly meetings of the CPM are held to review capital spending compared to plan, review new project requests and review updates or modifications to existing projects. The President of MAWC and others (e.g. MAWC operations managers and Finance Director) participate, as necessary, and provide the data used in the monthly review schedules.

9. 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 Service Company Finance team reviews 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.