

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

2 A. Patrick L. Baryenbruch, 2832 Claremont Road, Raleigh, North Carolina  
3 27608.

4  
5 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL AND PROFESSIONAL**  
6 **BACKGROUND.**

7 A. I received a Bachelors degree in accounting from the University of  
8 Wisconsin-Oshkosh in 1974 and a Masters in Business Administration  
9 degree from the University of Michigan in 1979.

10 I am a financial consultant and a certified public accountant licensed by the  
11 state of Wisconsin. I am a member of the American Institute of Certified  
12 Public Accountants and the North Carolina Association of Certified Public  
13 Accountants.

14 I began my career as a staff accountant with Arthur Andersen & Company  
15 where I performed financial audits of utilities, banks and finance  
16 companies. After three years I left to pursue an M.B.A. degree. Upon  
17 graduation from business school, I worked with the consulting firms of  
18 Theodore Barry & Associates and Scott, Madden & Associates.

19 During my consulting career, I have performed consulting assignments for  
20 approximately 50 utilities and 10 public service commissions. I have  
21 participated as project manager, lead or staff consultant for 24

1 commission-ordered management and prudence audits of public utilities.  
2 Of these, I have been responsible for evaluating the area of affiliate  
3 charges and allocation of corporate expenses in the Commission-ordered  
4 audits of Connecticut Light and Power, Connecticut Natural Gas, General  
5 Water Corporation (Pennsylvania Operations), Philadelphia Suburban  
6 Water Company (now Aqua America), and Pacific Gas & Electric  
7 Company.

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

11

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

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

17

18 **Q. HAVE YOU PREVIOUSLY ACTED AS AN EXPERT WITNESS IN**  
19 **UTILITY RATE CASES?**

20 A. Yes, I have acted as an expert witness on the subject of utility-affiliate  
21 transactions in over 40 utility rate cases for 27 utility clients.

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**Q. PLEASE DESCRIBE THE REASON FOR YOUR TESTIMONY IN THIS CASE.**

A. I am presenting the results of my study which evaluated the services provided by American Water Works Service Company (“Service Company”) during the 12 months ending March 31, 2010 to Tennessee-American Water Company (“TAWC”). This study was undertaken in conjunction with TAWC’s rate case and is true to the best of my knowledge and belief. The study is attached as Exhibit PLB-1.

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

A. This study was undertaken to answer four questions concerning the services provided by the Service Company to TAWC during the 12 months ended March 31, 2010. The four questions are as follows:

1. Were the Service Company’s charges to TAWC during the 12 months ended March 31, 2010 reasonable?
2. Was TAWC charged the lower of cost or market for managerial and professional services provided by the Service Company during the 12 months ended March 31, 2010?
3. Were the 12 months ended March 31, 2010 costs of the Service Company’s customer accounts services, including those of the National Call

1 Centers, comparable to those of other utilities?

2 4. Are the services TAWC receives from Service Company necessary?

3

4 **Q. WHAT CONCLUSIONS WERE YOU ABLE TO DRAW CONCERNING**  
5 **QUESTION NUMBER 1, WHETHER THE SERVICE COMPANY CHARGES TO**  
6 **TAWC WERE REASONABLE?**

7 A. I was able to draw the following conclusions about the reasonableness of those  
8 charges:

9 The Service Company's 12 months ended March 31, 2010 cost per TAWC  
10 customer was reasonable compared to cost per customer for electric and  
11 combination electric/gas service companies. During the 12 months ended  
12 March 31, 2010, TAWC was charged \$59 per customer for administrative  
13 and general (A&G)-related services provided by the Service Company.  
14 This compares to an average of \$95 per customer for service companies  
15 reporting to the Federal Energy Regulatory Commission (FERC). Only 4  
16 of the 24 comparison group utility service companies filed a FERC Form  
17 60 for 2009 had a lower per customer A&G cost than TAWC's charges  
18 from the Service Company.

19

20 **Q. WHAT CONCLUSIONS WERE YOU ABLE TO DRAW CONCERNING**  
21 **QUESTION NUMBER 2, WHETHER TAWC WAS CHARGED THE LOWER OF**  
22 **COST OR MARKET SERVICES PROVIDED BY THE SERVICE COMPANY?**

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

1                   (1) TAWC was charged the lower of cost or market for  
2 managerial and professional services during the 12 months ended March  
3 31, 2010.

4                   (2) On average, the hourly rates for outside service providers  
5 are 45% higher than the Service Company's hourly rates.

6                   (3) The managerial and professional services provided by the  
7 Service Company are vital and could not be procured externally by TAWC  
8 without careful supervision on the part of TAWC. If these services were  
9 contracted entirely to outside providers, TAWC would have to add at least  
10 one position to manage activities of outside firms. This position would be  
11 necessary to ensure the quality and timeliness of services provided.

12                   (4) If all the managerial and professional services now provided  
13 by the Service Company had been outsourced during the 12 months  
14 ended March 31, 2010, TAWC and its ratepayers would have incurred  
15 \$2,000,000 in additional expenses. This amount includes the higher cost  
16 of outside providers and the cost of one TAWC position needed to direct  
17 the outsourced work.

18                   (5) This study's hourly rate comparison actually understates the  
19 cost advantages that accrue to TAWC from its use of the Service  
20 Company. Outside service providers generally bill for every hour worked.  
21 Service Company exempt personnel, on the other hand, charge a  
22 maximum of 8 hours per day even when they work more hours. If the  
23 overtime hours of Service Company personnel were factored into the

1           hourly rate calculation, the Service Company would have had an even  
2           greater annual dollar advantage than the \$2,000,000 cited above. For  
3           instance, if Service Company overtime is conservatively estimated at 5%  
4           (2 hours per week) then that work would have added more than \$92,000  
5           in charges from outside providers.

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

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

14  
15   **Q.     WHAT IS YOUR CONCLUSION REGARDING THE REASONABLENESS OF**  
16   **THE COSTS OF THE NATIONAL CALL CENTER THAT PROVIDES SERVICE**  
17   **TO TAWC?**

18   **A.**    I was able to determine that the cost of the Service Company's customer  
19          accounts services, including those provided by the National Call Center, is below  
20          the range of the average of the neighboring electric utility comparison group. As  
21          will be explained further herein, this group of companies provides a reasonable  
22          proxy group for comparison to a regulated utility of the size and scope of the  
23          Service Company and TAWC. During the 12-months ended March 31, 2010, the

1 customer accounts cost for TAWC customers was \$29.08 compared to the 2009  
2 average of \$32.01 for neighboring electric utilities. The highest comparison  
3 group per customer cost was \$67.39 and the lowest \$17.53.

4

5 **Q. WHAT CONCLUSIONS WERE YOU ABLE TO DRAW CONCERNING**  
6 **THE NECESSITY OF THE SERVICES TAWC RECEIVES FROM THE**  
7 **SERVICE COMPANY?**

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

9 (1) The services that the Service Company provides are  
10 necessary and would be required even if TAWC were a stand-alone  
11 water utility.

12 (2) There is no redundancy or overlap in the services  
13 provided by the Service Company to TAWC.

14

15 **Q. DID THE TENNESSEE REGULATORY AUTHORITY'S CONSULTANT**  
16 **WHO RECENTLY COMPLETED THE AFFILIATE AUDIT OF TAWC**  
17 **DRAW ANY CONCLUSION AS TO THE VALUE OF YOUR STUDIES?**

18 A. Yes. The firm of Schumaker & Company found as it relates to the Service  
19 Company's charges to operating companies such as TAWC, my study's  
20 methodology "is a reasonable approach to verify that ratepayers are not  
21 being harmed by charging these services at cost rather than market."

1

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

3 **A. Yes.**

4

5

**TENNESSEE REGULATORY AUTHORITY**

**STATE OF NORTH CAROLINA**

**COUNTY OF WAKE**

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared Patrick L. Baryenbruch, being by me first duly sworn deposed and said that:

He is appearing as a witness on behalf of Tennessee-American Water Company before the Tennessee Regulatory Authority, and if present before the Authority and duly sworn, his testimony would set forth in the annexed transcript consisting of 8 pages.



Patrick L. Baryenbruch

Sworn to and subscribed before me  
this 9<sup>th</sup> day of September 2010.

  
Notary Public

My commission expires Oct 5<sup>th</sup> 2010



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**Market Cost Comparison of Service Company Charges to  
Tennessee American Water Company  
12-Months Ended March 31, 2010**

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**Tennessee American Water Company  
Market Cost Comparison of Service Company Charges  
12-Months Ended March 31, 2010**

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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 Tennessee American Water Company (TAWC):

1. Are the Service Company's charges to TAWC during the 12 months ended March 31, 2010 reasonable?
2. Was TAWC charged the lower of cost or market for managerial and professional services provided by the Service Company during the 12 months ended March 31, 2010?
3. Were the 12 months ended March 31, 2010 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 TAWC receives from Service Company necessary?

### **Study Results**

Concerning question 1, the following conclusion was reached:

- The Service Company's 12 months ended March 31, 2010 cost per TAWC customer was reasonable compared to cost per customer for electric and combination electric/gas service companies. During the 12 months ended March 31, 2010, TAWC was charged \$59 per customer for administrative and general (A&G)-related services provided by the Service Company. This compares to an average of \$95 per customer for service companies reporting to the Federal Energy Regulatory Commission (FERC). Only 4 of the 24 comparison group utility service companies filed a FERC Form 60 for 2009 had a lower per customer A&G cost than TAWC's charges from the Service Company.

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

- TAWC was charged the lower of cost or market for managerial and professional services during the 12 months ended March 31, 2010.
- On average, the hourly rates for outside service providers are 45% 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 TAWC without careful supervision on the part of TAWC. If these services were contracted entirely to outside providers, TAWC would have to add at least one position to manage activities of outside firms. This position 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 the 12 months ended March 31, 2010, TAWC and its ratepayers would have incurred \$2,000,000 in additional expenses. This amount includes the higher cost of outside providers and the cost of one TAWC position needed to direct the outsourced work.
- This study's hourly rate comparison actually understates the cost advantages that accrue to TAWC from its use of the Service Company. Outside service providers generally bill

## I – Introduction

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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 the 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 \$2,000,000 cited above. For instance, if Service Company overtime is conservatively estimated at 5% (2 hours per week) then that work would have added more than \$92,000 in charges from outside providers.

- It would be difficult for TAWC 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 TAWC 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 Center, is below the range of 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 TAWC. During the 12-months ended March 31, 2010, the customer accounts cost for TAWC customers was \$29.08 compared to the 2009 average of \$32.01 for neighboring electric utilities. The highest comparison group per customer cost was \$67.39 and the lowest \$17.53.

Concerning question 4, the following conclusions were drawn:

- The services that the Service Company provides are necessary and would be required even if TAWC were a stand-alone water utility.
- Furthermore, there is no redundancy or overlap in the services provided by the Service Company to TAWC. For all of the services listed in Exhibit 11, 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 their own data center with its 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 was 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 that help ensure 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 TAWC, 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.

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

## II – Background

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- **Corporate Office** – Includes American Water's executive management and personnel from the various corporate support services. American Water's corporate office is located in Voorhees, New Jersey.
- **National Call Centers** – Perform customer service functions, including: customer call processing, service order processing, correspondence processing, credit and collections. American Water maintains two call centers. One in Alton, Illinois that went into operation in 2001 and a second in Pensacola, Florida that went into operation in 2005. Prior to the establishment of these national call centers, customer service functions were performed by employees of TAWC, which incurred the expense on its books.
- **National Shared Services Center** – The Shared Services Center, located in Cherry Hill, New Jersey, provides various financial, accounting and treasury functions that had been performed by individual operating companies. This arrangement has improved and streamlined the Company's financial processes and allowed operating companies to focus on providing utility service.
- **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 rates and revenues, engineering, operations and field resource coordination.
- **Belleville Lab** – The national trace substance laboratory is located in Belleville, Illinois and performs testing for all American Water operating companies.
- **Information Technology Service Centers** – American Water's principal data center, located in Hershey, Pennsylvania, supports the IT infrastructure required to run corporate and operating company business applications and the communications systems. IT personnel rotate, as needed, throughout the regional offices and operating companies.

### **Service Company Expense Categories**

The Service Company renders a monthly bill to operating companies. Charges are broken down into the following expense categories:

- **Labor** – base pay (salaries) of managerial and professional employees
- **Labor-Related Overheads** - employee benefit costs (payroll taxes, medical coverage, pensions, disability insurance) and other general expenses
- **Support** - wages and salaries of office support personnel, including secretaries, clerical personnel, telephone operators and mail clerks
- **Office Expenses** - office rent, equipment leases, telephone, electric, office supplies, property taxes, office maintenance
- **Vouchers/Journal Entries** – (1) travel expenses incurred by Service Company personnel, (2) other items submitted for reimbursement by employees, including professional association dues, (3) outside service contracts for such things as actuarial

## II – Background

services, and (4) various other expenditures, including data center expenses for software licenses and hardware maintenance.

Service Company expenses are either assigned directly or allocated to operating companies, as shown in the table below.

Expense Category	Direct Charged	Allocated	Comments
Labor	X	X	Professional personnel working for one or several operating companies
Labor-Related Overheads	X	X	These are primarily employee benefit costs that relate directly to labor
Support		X	Administrative personnel support the professional staff, thus support costs are allocated on the basis of professional labor
Office Expense		X	Are all allocated on the basis of professional labor
Vouchers/Journals	X	X	May be either directly in support of one operating company (e.g., an engineer traveling from the Corporate Office to the operating company) or allocated to several operating companies

A direct charge occurs when Service Company work or expenses are incurred in support of only one operating company. Direct charge examples include work in support of an operating company's rate case, engineering design work on an operating company's project and the preparation of an operating company's financial statements.

Service Company expenses are allocated when more than one operating company benefits from the underlying work. Examples include assessments of new Federal water quality regulations, development of the company-wide materials procurement contracts and creation of company-wide engineering design standards.

### Charging and Assignment Of Service Company Time and Expenses

Service Company transactions are assigned with the following information so there is a proper accounting and eventual charging to an operating company:

- Operating company
- Formula number
- Work order (where applicable)
- Authorization number (where applicable)

Charges can originate from the following systems:

- Payroll System
- RVI System (outside vendor payments)
- PCard System (credit card payments)
- Internal Purchase Order System
- Journal entries

## II – Background

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The Service Company's time reporting process enables labor and support charges to be assigned to the proper operating company. Labor charges are based on the time reported by managerial and professional Service Company employees. Every week, Service Company professional employees complete an electronic time sheet that shows:

- Formula number (this is linked to operating company within American Water's financial system)
- Employee hours worked
- Account number for non-labor charges

At month-end, time report information is processed and direct and allocated professional labor hours tabulated for each operating company. Dollar charges are then calculated using the hourly rate of each Service Company professional employee based upon their base salary (i.e., an employee's hours times his/her hourly rate of pay).

Support (administrative) personnel charge their time to the activity "General Admin." As described in the table on page 4, their labor charges are allocated to operating companies based upon how their office's professional personnel labor charges are assigned. For instance, if 20% of American Water's Southeast Region's professional labor is assigned to TAWC during a month, then 20% of that office's monthly administrative labor charges also are assigned to the operating company.

The overhead cost category is next assigned based on professional and administrative labor costs. Thus, if 20% of the Southeast Region's accumulated professional and support labor is charged to TAWC during the month, then 20% of that month's overhead expenses will be assigned to TAWC.

Each Service Company location's office expenses are allocated to operating companies based on how professional labor charges for that office have been assigned. For instance, if 2% of professional labor from one Service Company office is assigned to TAWC, then 2% of that office's office expenses would be assigned to TAWC. Thus, office expenses are allocated in the very same way as administrative labor.

Vouchers/journal entries may be charged directly or allocated, depending on who benefits from the expenditure. For instance, the cost of a continuing professional education course taken by a professional in a regional office is allocated to the operating companies served by that office. Travel expenses by that same professional to a rate case proceeding are charged directly to the operating company whose case is being heard.

### III – Service Company Cost Comparison Approach

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During the 12 months ended March 31, 2010, the Service Company billed TAWC \$5,008,401 in O&M-related charges and \$311,927 in capital-related charges. These total charges of \$5,320,328 were subjected to a market cost comparison.

<b>Service Company Charges</b>	12 Months Ended March 31, 2010
Management Fees - O&M	\$ 5,008,401
Management Fees - Capital	\$ 311,927
<b>Total Testable SC Charges</b>	<b>\$ 5,320,328</b>

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, information technology and engineering.
- **Customer Accounts Services** – Includes customer-related services, such as call center, credit, billing, collection and payment processing.
- **Field Resource Coordination Services** – Includes the dispatching and oversight of work to operating company field crews.

Total test period Service Company charges break down between management/professional services, customer account services and field resource coordination as follows:

	12 Months Ended Mar. 31, 2010	
	Amount	Hours
Management and Professional Services	\$ 4,099,018	39,973
Customer Account Services	\$ 1,120,113	29,545
Field Resource Coordination	\$ 101,197	1,640
<b>Total Service Company Charges</b>	<b>\$ 5,320,328</b>	<b>71,158</b>

This study's first question—whether Service Company 12 months ended March 31, 2010 charges are reasonable—was determined by comparing TAWC's A&G-related Service Company charges per customer to the same charges for utility companies that must file the FERC Form 60 – Annual Report of Service Companies.

The second question—whether Service Company charges during the 12 months ended March 31, 2009 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 TAWC during the 12 months ended March 31, 2010. Outside providers' billing rates came from surveys or other information from professionals that 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 12 months ended March 31, 2010 customer account services charges, including those of the National Call Center costs, were comparable to other utilities—was addressed by comparing TAWC’s customer accounts services expenses to those of neighboring electric utilities. This approach was selected because the costs of outside providers of call center services are not publicly available. However, electric utility customer account services expenses can be obtained from the FERC Form 1. The availability and transparency of FERC data adds to the validity of its use in this comparison.

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

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

### TAWC's Service Company Cost per Customer

During the 12 months ended March 31, 2010, TAWC was charged \$59 per customer by the Service Company for A&G-related services. The calculation of this amount, shown in the table below, starts with total net testable Service Company charges and adjusts for capital and non-A&G functions (engineering, operations and water quality) charges. These adjustments are necessary to develop a per customer cost that is comparable to cost of utility service companies.

	12 Months ended Mar 31, 2010 Svc. Co. Charges
Testable Service Company charges	\$ 5,320,328
Less: Capital charges	\$ (311,927)
Less: Non-A&G function O&M charges	
Engineering	\$ (10,568)
Operations	\$ (541,144)
Water Quality	\$ (97,262)
Net A&G/O&M-related charges	\$ 4,359,427
TAWC customers	74,475
<b>TAWC Cost Per Customer</b>	<b>\$ 59</b>

### Comparison Group Cost Per Customer

Every centralized service company in a holding company system 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 C.F.R. paragraph 366.23. This report is designed to collect financial information from service companies that are subject to regulation by the FERC.

For 2009, a Form 60 was filed by service companies that are part of 25 utility holding companies that own utilities providing regulated electric and, in some cases, gas service to retail customers. In order to make a valid comparison of these service companies' costs to those of American Water Works Service Company, it was necessary to isolate expenses that they have in common. These include A&G-related charges recorded in the following FERC accounts:

901 – Supervision	921 – Office supplies and expenses
903 – Customer records and collection expenses	923 – Outside services employed
905 – Miscellaneous customer accounts expenses	928 – Regulatory commission expenses
907 – Supervision	930.2 – Miscellaneous general expenses
910 – Misc customer service and info expenses	931 – Rents
911 – Supervision	935 – Maintenance of structures and equipment
920 - Administrative and general salaries	

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. This schedule shows charges by FERC Account.

Comparison group service company 2009 expenses were also adjusted to remove charges to non-regulated affiliates from the cost pool used to calculate the cost per regulated service customer. This determination was made using information from the FERC Form 60 schedule: Account 457 – Analysis of Billing – Associate Companies.

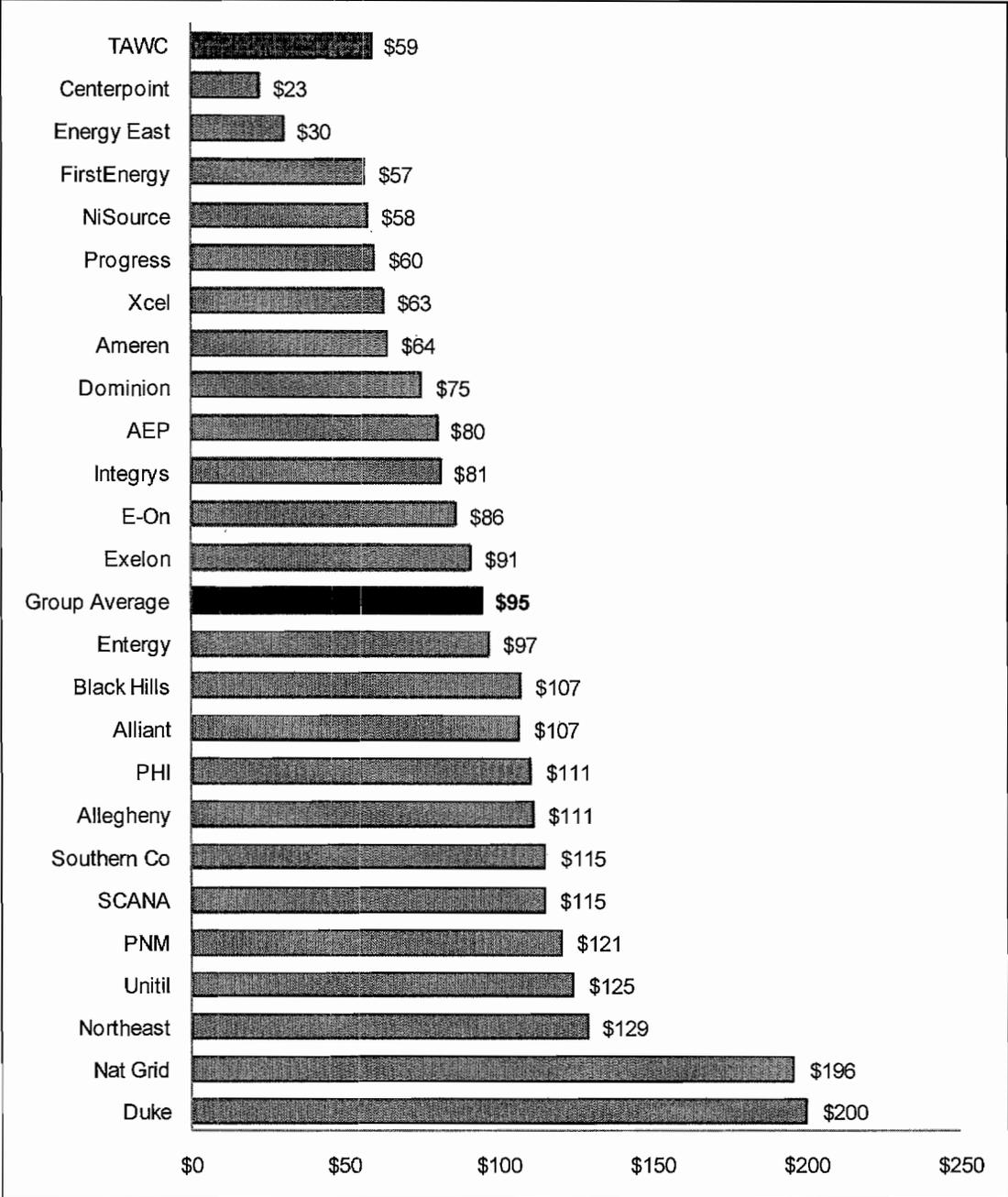
#### IV – Question 1 – Reasonableness of Service Company Charges

One service company that filed a Form 60 was excluded from the comparison group because its Form 60 contained no data for 2009. That service company, Great Plains Energy Services Incorporated, became inactive in 2009 and had no charges to its regulated utility affiliate. The A&G expenses per regulated utility customer for the other 24 utility companies that filed a Form 60 for 2009 are calculated below.

Utility Company	2009 Regulated		Cost per Customer
	Retail Service Company A&G Expenses	Regulated Retail Customers	
AEP	\$418,484,117	5,213,000	\$ 80
Allegheny	\$176,685,245	1,585,700	\$ 111
Alliant	\$149,116,475	1,395,189	\$ 107
Ameren	\$212,036,412	3,300,000	\$ 64
Black Hills	\$81,484,333	759,400	\$ 107
Centerpoint	\$119,304,604	5,300,000	\$ 23
Dominion	\$279,128,940	3,700,000	\$ 75
Duke	\$901,762,388	4,500,000	\$ 200
Energy East	\$89,580,962	2,973,000	\$ 30
Entergy	\$262,596,172	2,700,000	\$ 97
E-On	\$105,893,093	1,226,000	\$ 86
Exelon	\$537,633,122	5,886,000	\$ 91
FirstEnergy	\$255,874,712	4,500,000	\$ 57
Integrus	\$175,423,352	2,157,700	\$ 81
Nat Grid	\$1,314,902,105	6,700,000	\$ 196
NiSource	\$216,480,637	3,750,000	\$ 58
Northeast	\$269,948,801	2,095,000	\$ 129
PHI	\$215,465,623	1,946,000	\$ 111
Progress	\$186,256,921	3,100,000	\$ 60
PNM	\$87,998,259	729,700	\$ 121
SCANA	\$166,555,883	1,445,000	\$ 115
Southern Co	\$508,130,523	4,402,000	\$ 115
Unitil	\$21,115,280	169,600	\$ 125
Xcel	\$333,389,459	5,300,000	\$ 63
<b>Group Total</b>	<b>\$7,085,247,416</b>	<b>74,833,289</b>	<b>\$ 95</b>

Exhibit 1 shows TAWC's 12 months ended March 31, 2010 Service Company cost per customer of \$59 to be considerably lower than the average of \$95 per customer for the comparison group service companies. Only 4 of 24 comparison group service companies had a lower cost per customer than TAWC. Based on this result, it is possible to conclude that the Service Company's 12 months ended March 31, 2010 charges to TAWC were reasonable.

**Tennessee American Water Company  
Comparison of Service Company Annual Costs 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 services, human resources and communications services
- Attorneys – legal services
- Certified Public Accountants – accounting, financial, information technology and rates and revenues 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 valid 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 four outside service provider categories, based on the dollars and hours charged to TAWC during the 12 months ended March 31, 2010. 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 TAWC during the 12 months ended March 31, 2010, its hourly rates are actually overstated because Service Company personnel charge a maximum 8 per day even when they work more. Outside service providers generally bill for every hour worked. If the 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 market cost 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 2 (page 14) details the assignment of 12 months ended March 31, 2010 management and professional Service Company charges by outsider provider category. Exhibit 3 (page 15) shows the same assignment for Service Company management and professional hours charged to TAWC during the 12 months ended March 31, 2010.

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 12 months ended March 31, 2010 test period non-labor Service Company charges:

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

- **Contract Services** – 12 months ended March 31, 2010 Service Company charges to TAWC include expenses associated with the use of outside professional firms to perform certain corporate-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.
- **Travel Expenses** – In general, client-related travel expenses are not recovered by outside service providers through their hourly billing rate. 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 the 12 months ended March 31, 2010 Service Company charges to TAWC are leases, maintenance fees and depreciation related to American Water's enterprise mainframe, server 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.

Exhibit 4 (page 16) shows how contract services, travel expenses and computer hardware/software-related Service Company charges are assigned among 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 the 12 months ended March 31, 2010 are calculated below.

	Attorney	Management Consultant	Certified Public Accountant	Professional Engineer	Total
Total management, professional & technical services charges	\$ 132,906	\$ 1,030,160	\$ 2,395,210	\$ 540,742	\$ 4,099,018
Less:					
Contract services	\$ 11,816	\$ 62,591	\$ 236,246	\$ (8,429)	\$ 302,224
Travel expenses	\$ 1,529	\$ 40,905	\$ 28,441	\$ 6,670	\$ 77,545
Computer hardware/software	\$ 3,397	\$ 143,421	\$ 156,874	\$ 17,524	\$ 321,216
Net Service Charges (A)	\$ 116,164	\$ 783,244	\$ 1,973,648	\$ 524,977	\$ 3,398,033
Total Hours (B)	899	6,118	24,293	8,664	39,973
<b>Average Hourly Rate (A / B)</b>	<b>\$ 129</b>	<b>\$ 128</b>	<b>\$ 81</b>	<b>\$ 61</b>	

**Tennessee American Water Company  
Analysis of 12 Months Ended December 31, 2009 Service Company Charges By Location And Function**

Location	Function	12 Months Ended March 31, 2010 Service Company Charges				Total
		Attorney	Consultant	Accountant	Professional Engineer	
Belleville Lab	Water Quality				\$ 119,043	\$ 119,043
Call Center	Human Resources	\$ 25,146				\$ 25,146
Corporate	Accounting		\$ 262,142			\$ 262,142
	Administration	\$ 276,758				\$ 276,758
	Audit		\$ 42,398			\$ 42,398
	Communications	\$ 61,742				\$ 61,742
	Engineering		\$ 272,550			\$ 272,550
	Finance	\$ 204,431				\$ 204,431
	Human Resources		\$ 33,960			\$ 33,960
	Legal	\$ 68,672				\$ 68,672
	Operations	\$ 108,420			\$ 283,716	\$ 392,136
	Rates & Revenue		\$ 47,325			\$ 47,325
	Risk Management	\$ 27,185				\$ 27,185
	Water Quality			\$ 2,099		\$ 2,099
Regional Offices	Accounting		\$ 16,440			\$ 16,440
	Administration	\$ 108,473				\$ 108,473
	Communications	\$ 87,832				\$ 87,832
	Engineering			\$ 10,497		\$ 10,497
	Finance		\$ 360,493			\$ 360,493
	Human Resources	\$ 2,480				\$ 2,480
	Legal	\$ 64,234				\$ 64,234
	Operations	\$ 49,366			\$ 124,617	\$ 173,984
	Risk Management	\$ 21,326				\$ 21,326
	Water Quality			\$ 771		\$ 771
Information Technology	Information Technology		\$ 1,010,475			\$ 1,010,475
Shared Services	Accounting		\$ 306,809			\$ 306,809
	Administration	\$ 57,000				\$ 57,000
	Finance		\$ 2,263			\$ 2,263
	Rates & Revenue		\$ 40,355			\$ 40,355
	<b>Total Dollars Charged</b>	<b>\$ 132,906</b>	<b>\$ 1,030,160</b>	<b>\$ 2,395,210</b>	<b>\$ 540,742</b>	<b>\$ 4,099,018</b>

**Tennessee American Water Company**  
**Analysis of 12 Months Ended December 31, 2009 Service Company Hours By Location And Function**

Location	Function	12 Months Ended March 31, 2010 Service Company Hours					Total
		Attorney	Consultant	Accountant	Engineer	Professional	
Belleville Lab	Water Quality				1,658		1,658
Call Center	Human Resources		309				309
Corporate	Accounting			3,268			3,268
	Administration		676				676
	Audit			372			372
	Communications		287				287
	Engineering			2,102			2,102
	Finance		1,689				1,689
	Human Resources			322			322
	Legal	300					300
	Operations		353		5,089		5,442
	Rates & Revenue			319			319
	Risk Management		256				256
	Water Quality				-		-
Regional Offices	Accounting			179			179
	Administration		-				-
	Communications		1,300				1,300
	Engineering				(1)		(1)
	Finance			4,507			4,507
	Human Resources		21				21
	Legal	599					599
	Operations		457		1,917		2,375
	Risk Management		449				449
	Water Quality				-		-
Information Technology	Information Technology			6,208			6,208
Shared Services	Accounting			6,489			6,489
	Administration		320				320
	Finance						-
	Rates & Revenue			527			527
	<b>Total Hours Charged</b>	<b>899</b>	<b>6,118</b>	<b>24,293</b>	<b>8,664</b>		<b>39,973</b>

**Tennessee American Water Company**  
**12 Months Ended December 31, 2009 Service Company Charges Excludable From The Hourly Rate Calculation**

Charges By Function	Exclusions From Hourly Rate Calculation			
	Contract Services	Travel Expenses	Computer HW/SW	Total
Accounting	\$ 49,641	\$ 3,649	\$ 2,646	\$ 55,937
Administration	\$ 9,743	\$ 3,174	\$ 130,234	\$ 143,151
Audit	\$ 6,793	\$ 652	\$ 422	\$ 7,868
Communications	\$ 9,698	\$ 4,581	\$ 991	\$ 15,270
Engineering	\$	\$ 158	\$ 135	\$ 293
Finance	\$ 56,928	\$ 7,774	\$ 7,058	\$ 71,760
Human Resources	\$ 35,576	\$ 7,411	\$ 4,696	\$ 47,684
Information Technology	\$ 114,727	\$ 14,041	\$ 145,956	\$ 274,724
Legal	\$ 11,816	\$ 1,529	\$ 3,397	\$ 16,742
Operations	\$ 8,629	\$ 28,678	\$ 10,947	\$ 48,254
Rates & Revenue	\$ 8,157	\$ 2,324	\$ 791	\$ 11,273
Risk Management	\$ 651	\$ 3,224	\$ 804	\$ 4,679
Water Quality	\$ (10,135)	\$ 350	\$ 13,137	\$ 3,352
<b>Total</b>	<b>\$ 302,224</b>	<b>\$ 77,545</b>	<b>\$ 321,216</b>	<b>\$ 700,985</b>

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

Recap By Outside Provider	Exclusions From Hourly Rate Calculation		
	Contract Services	Travel Expenses	Computer HW/SW
Attorney	\$ 11,816	\$ 1,529	\$ 3,397
Management Consultant	\$ 62,591	\$ 40,905	\$ 143,421
Certified Public Accountant	\$ 236,246	\$ 28,441	\$ 156,874
Professional Engineer	\$ (8,428)	\$ 6,670	\$ 17,524
<b>Total</b>	<b>\$ 302,224</b>	<b>\$ 77,545</b>	<b>\$ 321,216</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 cost comparison was to obtain the average billing rates for each outside service provider. 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 Tennessee 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	Tennessee Average
Partners/Owners	97%
Managers (6+ years experience)	83%
Sr Associates (4-5 years experience)	60%
Associates (1-3 years experience)	19%
New Professionals	6%

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

### Attorneys

The Tennessee State Bar does not survey its members as to their hourly billing rates. The Chattanooga Bar Association maintains a service called Chattanooga Lawyers Information Providers Service (CLIPS) to assist the public in finding a lawyer. CLIPS' website presents background information on a relatively small number of Chattanooga attorneys. Unfortunately, only 60% of the attorneys featured in CLIPS revealed their hourly billing rates. With this small sample size and incomplete hourly rate data, it was impossible to develop a valid set of Chattanooga attorney billing rates for comparison to the cost of the Service Company's legal services.

As a result, an estimate of Chattanooga hourly rates was developed from two surveys conducted by Lawyers Weekly in the states of Michigan and Missouri. The 2009 average rate for each firm in the surveys was adjusted for the cost of living differential between their locations and Chattanooga, Tennessee. The cost of living indices utilized in this analysis were obtained from the Council for Community and Economic Research, a membership organization created in 1961 to develop high quality regional economic data and analytical methods.

The resultant 2009 average hourly rate calculated in Exhibit 5 is in line with the few hourly billing rates shown on the CLIPS website. For instance, the following attorneys from the Chattanooga firm of Chambliss Bahner & Stophel were listed in the CLIP website. Their billing rates are relatively close to this study's cost-of-living-adjusted estimated average of \$265 per hour for Chattanooga attorneys.

- Mr. Robert Addison - \$260/hour
- Ms. Alicia Oliver - \$250/hour

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

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### **Management Consultants**

The cost per hour for management consultants was developed from a 2009 survey performed by the Association of Management Consulting Firms—an industry trade organization. The survey includes rates that were in effect during 2008 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 6, 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. The 2008 average rate was escalated to September 30, 2010—the midpoint of the 12 months ended March 31, 2010.

### **Certified Public Accountants**

The average hourly rate for Tennessee CPAs was developed from a 2008 survey performed by the American Institute of Certified Public Accountants (AICPA). The Tennessee version of this survey was used to develop hourly rates for member firms in Tennessee.

As shown in Exhibit 7, 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 2007. Thus, the data had to be escalated to September 30, 2009—the test year's midpoint.

### **Professional Engineers**

The Company provided hourly rate information for outside engineering firms that could have been used by TAWC in 2009. As presented in Exhibit 8, 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.

**Tennessee American Water Company  
Estimated Billing Rates For Tennessee Attorneys Based On  
Michigan and Missouri Attorney Billing Rates**

Billing rates during 2009		Billing Rate Range (A)					Average	Cost of Living Adjust (B)	Adjusted Rate
Firm	Location	Associate		Partner					
		Low	High	Low	High				
Dickinson Wright	Detroit, Mi	\$ 195	\$ 275	\$ 355	\$ 575	\$ 350	115%	\$ 306	
Dykema	Detroit, Mi	\$ 185	\$ 425	\$ 295	\$ 615	\$ 380	115%	\$ 332	
Butzel Long	Detroit, Mi	\$ 175	\$ 325	\$ 250	\$ 600	\$ 338	115%	\$ 295	
Jaffe Raitt Heuer & Weiss	Southfield, Mi	\$ 175	\$ 250	\$ 225	\$ 550	\$ 300	115%	\$ 262	
Brooks Kushman	Southfield, Mi	\$ 180	\$ 275	\$ 300	\$ 425	\$ 295	115%	\$ 258	
Kemp, Klein, Umphrey, Edelman & Ma	Troy, Mi	\$ 145	\$ 260	\$ 200	\$ 350	\$ 239	115%	\$ 208	
Rader, Fishman & Grauer	Bloomfield Hills, Mi	\$ 130	\$ 250	\$ 275	\$ 550	\$ 301	115%	\$ 263	
Williams, Williams, Rattner & Plunkett	Birmingham, Mi	\$ 150	\$ 250	\$ 275	\$ 450	\$ 281	115%	\$ 246	
Abbott, Nicholson, Quilter, Esshaki,	Detroit, Mi	\$ 150	\$ 220	\$ 300	\$ 375	\$ 261	115%	\$ 228	
Parmenter O'Toole	Muskegon, Mi			\$ 125	\$ 275	\$ 200	103%	\$ 194	
Lipson, Neilson, Cole, Seltzer & Garin	Bloomfield Hills, Mi	\$ 185	\$ 235	\$ 225	\$ 300	\$ 236	115%	\$ 206	
Berman DeLeve Kuchan & Chapman	Kansas City, Mo			\$ 250	\$ 250	\$ 250	109%	\$ 230	
Boggs, Avellino, Lach & Boggs	St. Louis, Mo			\$ 160	\$ 160	\$ 160	101%	\$ 159	
Bryan Cave	Kansas City, Mo	\$ 200	\$ 200	\$ 385	\$ 435	\$ 305	109%	\$ 280	
Danna McKittrick	St. Louis, Mo			\$ 300	\$ 300	\$ 300	101%	\$ 298	
David Shroeder Law Offices	Springfield, Mo			\$ 260	\$ 260	\$ 260	99%	\$ 263	
Dobson, Goldberg, Berns & Rich	St. Louis, Mo			\$ 300	\$ 425	\$ 363	101%	\$ 360	
Dunn & Davison	Kansas City, Mo			\$ 225	\$ 225	\$ 225	109%	\$ 207	
Evans Partnership	St. Louis, Mo			\$ 175	\$ 175	\$ 175	101%	\$ 174	
Greensfelder Hemker & Gale	St. Louis, Mo			\$ 235	\$ 300	\$ 268	101%	\$ 266	
Husch Blackwell Sanders	Kansas City, Mo	\$ 204	\$ 345	\$ 356	\$ 472	\$ 344	109%	\$ 316	
Karfeld Law Firm	St. Louis, Mo			\$ 265	\$ 265	\$ 265	101%	\$ 264	
Krigel & Krigel	Kansas City, Mo	\$ 175	\$ 225	\$ 200	\$ 250	\$ 213	109%	\$ 195	
Law Office of Brad Goss	St. Charles, Mo			\$ 175	\$ 175	\$ 175	101%	\$ 174	
Law Offices of George A. Barton	Kansas City, Mo	\$ 300	\$ 400	\$ 400	\$ 600	\$ 425	109%	\$ 390	
McDowell, Rice, Smith & Buchann	Kansas City, Mo			\$ 425	\$ 425	\$ 425	109%	\$ 390	
Neil Weintraub, Attorney at Law	St. Louis, Mo			\$ 260	\$ 260	\$ 260	101%	\$ 259	
Pennington Shea	St. Louis, Mo			\$ 190	\$ 260	\$ 225	101%	\$ 224	
Pletz and Reed	Jefferson City, Mo	\$ 150	\$ 150	\$ 180	\$ 180	\$ 165	103%	\$ 160	
Polsinelli Shughart	Kansas City, Mo	\$ 210	\$ 350	\$ 380	\$ 600	\$ 385	109%	\$ 353	
Raymond I. Plaster	Springfield, Mo			\$ 275	\$ 275	\$ 275	99%	\$ 278	
Shook, Hardy & Bacon	Kansas City, Mo	\$ 265	\$ 265	\$ 425	\$ 425	\$ 345	109%	\$ 317	
Speer Law Firm	Kansas City, Mo	\$ 400	\$ 400	\$ 500	\$ 500	\$ 450	109%	\$ 413	
Spencer Fane Britt & Browne	Kansas City, Mo	\$ 150	\$ 325	\$ 310	\$ 470	\$ 314	109%	\$ 288	
Stanton & Redlingshafer	Kansas City, Mo			\$ 195	\$ 195	\$ 195	109%	\$ 179	
Stinson Morrison Hecker	Kansas City, Mo	\$ 195	\$ 195	\$ 350	\$ 445	\$ 296	109%	\$ 272	
The Sader Law Firm	Kansas City, Mo	\$ 225	\$ 235	\$ 265	\$ 265	\$ 248	109%	\$ 227	
Thompson Coburn	St. Louis, Mo	\$ 200	\$ 200	\$ 480	\$ 480	\$ 340	101%	\$ 338	
<b>Overall Cost-of-Living Adjusted Average 2009 Billing Rate</b>								<b>\$ 265</b>	

Note A: Source is Michigan Lawyers Weekly and Missouri Lawyers Weekly

Note B: Source is Council for Community and Economic Research. This percentage represents the cost of living difference between the Michigan and Missouri cities and Chattanooga, Tenn. A number over 100% indicates the Michigan or Missouri city's cost of living is higher than Chattanooga. A number less than 100% indicates Chattanooga's cost of living is higher.

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

Survey billing rates in effect in 2008 (Note A)							
A. Calculation of Average Hourly Billing Rate by Consultant Position							
	Average Hourly Rates (Note A)						
	Entry-Level Consultant	Associate Consultant	Senior Consultant	Junior Partner	Senior Partner		
Average	\$ 147	\$ 196	\$ 268	\$ 295	\$ 384		
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)	\$ 147	\$196	\$268	\$295	\$384		
Percent of Consulting Assignment	30%	30%	20%	10%	10%	Weighted Average	
	\$ 44	\$ 59	\$ 54	\$ 29	\$ 38	\$ 224	
<u>Escalation to Test Period Midpoint (September 30, 2009) (Note B)</u>							
						CPI at December 31, 2008	210.2
						CPI at September 30, 2009	216.0
						Inflation/Escalation	2.8%
						Average Hourly Billing Rate For Management Consultants At September 30, 2009	\$ 231

Note A: Source is "Operating Ratios For Management Consulting Firms, 2009 Edition," Association of Management Consulting Firms

Note B: Source is U.S. Bureau of Labor Statistics (<ftp://ftp.bls.gov/pub/special.requests/cpi/cpia1.txt>)

**Tennessee American Water Company  
Billing Rates Of Tennessee Certified Public Accountants**

Survey billing rates were those in effect in 2007 (Note A)				
	Average Hourly Billing Rate (Note A)			
Type of Firm	Staff Accountant	Senior Accountant	Manager	Partner
Average Hourly Rate	\$ 78	\$ 98	\$ 122	\$ 138
B. Calculation of Overall Average Accountant Billing Rate Based Upon Typical Distribution of Time on an Engagement				
	Staff Accountant	Senior Accountant	Manager	Partner
Average Hourly Billing Rate (From Above)	\$ 78	\$ 98	\$ 122	\$ 138
Typical Percent of Time Spent on an Accounting Assignment	30%	30%	20%	20%
	\$ 23	\$ 29	\$ 24	\$ 28
				<b>\$ 105</b>
<u>Escalation to Test Period Midpoint (June 30, 2009) (Note B)</u>				
			CPI at December 31, 2007	210.0
			CPI at June 30, 2009	215.7
			Inflation/Escalation	2.7%
			Average Hourly Billing Rate For CPAs At June 30, 2009	<b>\$ 108</b>

Note A: Source is AICPA's 2008 National PCPS/TSCPA Management of an Accounting Practice Survey (Tennessee edition)

Note B: source is US Bureau of Labor Statistics (<ftp://ftp.bls.gov/pub/special.requests/cpi/cpiiai.t>)

### Tennessee American Water Company Billing Rates Of Tennessee Engineers

Note: Billing rates in effect during 2009

A. Calculation of Average Hourly Rate by Engineer Position

Name of Firm	Average Hourly Billing Rates			
	CAD Drafter Engineer Tech	Engineer Design Engineer Project Engineer	Project Manager Project Associate Sr. Mgr. Engineer	Officer Principal Engineer
	Firm #1	\$68	\$89	\$136
Firm #2	\$80	\$98	\$149	\$179
Firm #3	\$68	\$96	\$168	\$208

B. Calculation of Overall Average Engineering Hourly Billing Rate

	CAD Drafter Engineer Tech	Engineer Design Engineer Project Engineer	Project Manager Project Associate Sr. Mgr. Engineer	Officer Principal Engineer	Weighted Average
	Average Hourly Billing Rate (From Above)	\$72	\$94	\$151	
Typical Percent of Time on an Engineering Assignment	30%	35%	25%	10%	
	\$22	\$33	\$38	\$19	<b>\$111</b>

Source: Information provided by American Water Works Service Company. Firm names have not been disclosed to preserve the confidentiality of their hourly rates.

## 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 March 31, 2010		
	Service Company	Outside Provider	Difference-- Service Co. Greater(Less) Than Outside
Attorney	\$ 129	\$ 265	\$ (136)
Management Consultant	\$ 128	\$ 231	\$ (103)
Certified Public Accountant	\$ 81	\$ 108	\$ (27)
Professional Engineer	\$ 61	\$ 111	\$ (50)

Based on these cost per hour differentials and the number of managerial and professional services hours billed to TAWC during the 12-months ended March 31, 2010, outside service providers would have cost \$1,838,669 more than the Service Company (see table below). Thus, on average, outside provider's hourly rates are 45% higher than those of the Service Company (\$1,838,669 / \$4,099,018).

Service Provider	12 Months Ended March 31, 2010		
	Hourly Rate Difference-- Service Co. Greater(Less) Than Outside	Service Company Hours Charged	Dollar Difference
Attorney	\$ (136)	899	\$ (121,947)
Management Consultant	\$ (103)	6,118	\$ (630,010)
Certified Public Accountant	\$ (27)	24,293	\$ (650,038)
Professional Engineer	\$ (50)	8,664	\$ (436,675)
Service Company Less Than Outside Providers			\$ (1,838,669)

It should be noted that the cost differential associated with using outside providers is even greater because Service Company personnel do not charge for more than 8 hours per day even when they work more. Outside providers generally charge clients for all hours worked. If, for instance, Service Company personnel worked 5% overtime (2 hours) per week on TAWC's behalf, that would have amounted to 2,000 additional hours of work during the 12 months ended March 31, 2010. Based on the hourly rate differentials above, this overtime would have added another \$92,000 to the cost of using outside provider.

If TAWC 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 almost 40,000 hours of work (more than 26 full-time equivalents at 1,500 "billable" hours per FTE per year) would add a significant workload to the existing TAWC management team. Thus, it would be necessary for TAWC to add at least one position to supervise the outside firms and ensure they delivered quality and timely services. The individuals that would fill this position would need a good understanding of each profession being managed. They must also have management experience and the authority necessary to give them credibility with the outside firms. As calculated in the table below, this position would add almost \$165,000 per year to TAWC's personnel expenses.

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

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Cost of Adding a Professional Position To TAWC's Staff

	Total
New Positions' Salary	\$ 100,000
Benefits (at 49.4%)	\$ 49,400
Office Expenses (15.2%)	\$ 15,200
Total Cost of Full Time Position	\$ 164,600

Thus, the total effect on the ratepayers of TAWC of contracting all services now provided by Service Company would be an increase in their costs of \$2,003,269 (\$1,838,669 + \$164,600). Based on the results of this comparison, it is possible to conclude that the Service Company charged TAWC at the lower of cost or market for services provided during the 12 months ended March 31, 2010.

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

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### Background

Customer Accounts Services covers the following utility functions:

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

It is difficult to compare the cost of the Service Company's customer accounts services-related charges to TAWC with outside providers of the same services because survey data is proprietary and expensive to obtain. For this reason, TAWC's charges from the Service Company for customer accounts services are compared to those of neighboring electric utilities because the data necessary to make such comparison is available to the public.

Neighboring electric utility cost information comes from the FERC Form 1 that each utility must file. FERC's chart of accounts is defined in Chapter 18, Part 101 of the Code of Federal Regulations. FERC accounts that contain customer accounts services-related expenses are Account 903 Customer Accounts Expense – Records and Collection Expense and Account 905 Customer Accounts Expense – Miscellaneous Customer Accounts Expense. Exhibit 9 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 show amounts for accounts 903 and 905.

Tennessee	• Kingsport Power	
North Carolina	• Duke Energy Carolinas	• Progress Energy Carolinas
Kentucky	• Duke Energy Kentucky	• Kentucky Utilities
	• Kentucky Power	• Louisville Gas & Electric
Mississippi	• Entergy Mississippi	• Mississippi Power
Virginia	• Appalachian Power	• Virginia Electric Power
Georgia	• Georgia Power	
Alabama	• Alabama Power	
Arkansas	• Entergy Arkansas	
Missouri	• Empire District Electric	• Union Electric
	• Kansas City Power & Light	

## Tennessee 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.

**Tennessee 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

### TAWC Cost per Customer

As calculated below, TAWC's 12 months ended March 31, 2010 customer account services expense per customer was \$29.08. 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 TAWC. It was necessary to adjust the National Call Center charges because electric utilities experience an average of 2.50 calls per customer compared to American Water's 1.32 calls per customer. Thus, National Call Center expenses had to be increased, for comparison purposes, to reflect its costs at a 2.50 calls per customer level.

Tennessee American Water Company		Service Co	Adjustment Fewer Calls For	Adjusted	
Cost Component		Charges	Water Cos. (A)		
Service Company	Call Centers	\$ 1,120,113	\$ 450,805	\$ 1,570,918	
Service Company	Customer payment processing			\$ 130,927	Note B
Operating Company	Postage & forms			\$ 464,130	
			Cost Pool Total	\$ 2,165,975	
			Total Customers	74,475	
			<b>12 Months Ended March 31, 2010 Cost Per Customer</b>	<b>\$ 29.08</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

Test year Call Handling charges	\$ 502,486
Electric utility industry's avg calls/customer	2.50
American Water's avg calls/customer	1.32
Percent different	90%
Total Adjustment	\$ 450,805

Note B: Estimated customer payment processing expenses

Number of customers	74,475
Number of payments/customer/year	12.0
Total payments processed/year	893,700
Bank charge per item	\$ 0.1465
Total estimated annual expense	\$ 130,927

### Electric Utility Group Cost per Customer

Exhibit 10 shows the actual 2009 customer accounts expense per customer calculation for the electric utility comparison group. All of the underlying data was obtained from the utilities' FERC Form 1.

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

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### Summary of Results

As shown in the table below, TAWC's cost per customer is below the average cost of the neighboring electric utility comparison group. It can therefore be concluded that TAWC's 12 months ended March 31, 2010 customer accounts-related expenses, including those of the Alton and Pensacola Call Centers, assigned by the Service Company to TAWC were comparable to those of other utilities.

<b>Customer Account Services Expenses Per Customer</b>	
Virginia Electric Power	\$ 17.53
Louisville Gas & Electric	\$ 20.40
Union Electric	\$ 21.87
Progress Energy Carolinas	\$ 22.96
Duke Energy Carolinas	\$ 26.96
<b>Tennessee American Water</b>	<b>\$ 29.08</b>
Kansas City Power & Light	\$ 29.64
<b>Comparison Group Average</b>	<b>\$ 32.01</b>
Appalachian Power	\$ 32.70
Kingsport Power	\$ 32.78
Duke Energy Kentucky	\$ 34.65
Kentucky Utilities	\$ 35.47
Kentucky Power	\$ 36.03
Empire District Electric	\$ 37.79
Georgia Power	\$ 42.84
Entergy Mississippi	\$ 45.84
Entergy Arkansas	\$ 47.60
Alabama Power	\$ 49.05
Mississippi Power	\$ 67.39

**Tennessee American Water Company  
Comparison Group 2009 Actual Customer Accounts Expense Per Customer**

	Tennessee			Missouri			Alabama		Arkansas
	Kingsport Power	Empire District Electric	Kansas City Power & Light	Union Electric	Alabama Power	Entergy Arkansas			
\$	1,458,469	4,985,478	12,163,465	22,713,638	60,153,942	25,616,113			
\$	1,697	184,860	2,371	200,456	-	103,284			
\$	1,460,166	5,170,338	12,165,836	22,914,094	60,153,942	25,719,397			
\$	63,259	930,079	2,636,671	2,267,993	7,147,923	6,817,930			
\$	18,076	250,143	558,111	788,888	3,121,268	333,631			
\$	<b>1,541,601</b>	<b>6,350,560</b>	<b>15,360,618</b>	<b>25,970,975</b>	<b>70,423,133</b>	<b>32,870,958</b>			
	47,027	168,032	518,196	1,187,613	1,435,612	690,500			
\$	<b>32.78</b>	<b>37.79</b>	<b>29.64</b>	<b>21.87</b>	<b>49.05</b>	<b>47.60</b>			
\$	526,873	11,454,549	60,579,650	80,158,501	49,906,316	64,841,181			
\$	1,967,933	40,270,300	167,621,486	3364,470,026	284,869,068	41,476,558			
	26.8%	28.4%	36.1%	22.0%	17.5%	156.3%			
\$	261,311	4,346,335	9,742,970	14,738,859	49,380,337	5,473,554			
\$	-	-	-	3,534,098	-	-			
\$	261,311	4,346,335	9,742,970	18,272,957	49,380,337	5,473,554			
\$	1,458,469	4,985,478	12,163,465	22,713,638	60,153,942	25,616,113			
\$	1,697	184,860	2,371	200,456	-	103,284			
\$	1,460,166	5,170,338	12,165,836	22,914,094	60,153,942	25,719,397			
\$	154,677	1,702,173	4,081,210	17,688,852	12,648,925	6,560,032			
\$	1,614,843	6,872,511	16,247,046	40,602,946	72,802,867	32,279,429			
	90.4%	75.2%	74.9%	56.4%	82.6%	79.7%			
\$	236,281	3,269,841	7,295,565	10,312,263	40,800,892	4,361,183			
\$	63,259	930,079	2,636,671	2,267,993	7,147,923	6,817,930			
\$	236,281	3,269,841	7,295,565	10,312,263	40,800,892	4,361,183			
	7.65%	7.65%	7.65%	7.65%	7.65%	7.65%			
\$	18,076	250,143	558,111	788,888	3,121,268	333,631			

**Customer Account Services Cost Pool**

FERC Account Balances:

Acct 903 - Customer Records & Collection (page 322, line 161)  
Acct 905 - Misc Customer Accounts (page 322, line 163)

Subtotal

Add: Employee Benefits & Employer FICA (not included in above amounts)

Account 926 - Employee Pension & Benefits

Account 408 - Taxes Other Than Income (Employer's Portion of FICA)

Total Cost Pool

Total Customers (page 304, line 43)

**Customer Account Services Expense per Customer**

**Note A**

**Note B**

**Note A:** Calculation of Pension & Benefits Pertaining to Customer Acct Mgmt

Account 926 - Employee Pension & Benefits (page 323, line 187)

Total O&M Payroll (page 355, line 65)

Benefits as Percent of Payroll

Payroll Applicable to Customer Account Services

Total Payroll Charged to Customer Accounts Function

Electric (page 354, line 7)

Gas (page 354, line 37)

Total Payroll Charged to Customer Accounts

Percent Applicable to Customer Accounts Services (903 and 905):

Acct 903 - Customer Records & Collection (page 322, line 161)

Acct 905 - Misc Customer Accounts (page 322, line 163)

Subtotal - Total Charges Applicable to Customer Accounts Services

Acct 902 - Meter Reading Expenses (page 322, line 160)

Total Charges Applicable to Customer Accounts Svcs & Meter Reading

Percent A applicable to Customer Accounts Services (903 and 905)

Customer Account Services Portion of Total Payroll

Pension & Benefits Pertaining to Customer Accounts Services

**Note B:** Calculation of Employer's FICA Pertaining to Customer Accounts Services

Customer Account Services Portion of Total Payroll

Employer's Portion of FICA (6.20%) and Medicare (1.45%)

Estimated Employer's Portion of FICA

**Tennessee American Water Company  
Comparison Group 2009 Actual Customer Accounts Expense Per Customer**

	Virginia			Kentucky			Louisville Gas & Electric
	Appalachian Power	Virginia Electric Power	Duke Energy Kentucky	Kentucky Power	Kentucky Utilities		
<b>Customer Account Services Cost Pool</b>							
FERC Account Balances:							
Acct 903 - Customer Records & Collection (page 322, line 161)	\$ 28,380,733	\$ 34,105,089	\$ 3,864,114	\$ 5,769,938	\$ 14,908,295	\$ 5,312,623	
Acct 905 - Misc Customer Accounts (page 322, line 163)	\$ 40,577	\$ -	\$ -	\$ 11,053	\$ 381,731	\$ 376,263	
Subtotal	\$ 28,421,310	\$ 34,105,089	\$ 3,864,114	\$ 5,780,991	\$ 15,290,026	\$ 5,688,886	
Add: Employee Benefits & Employer FICA (not included in above amounts)							
Account 926 - Employee Pension & Benefits	\$ 2,437,214	\$ 6,239,031	\$ 574,673	\$ 425,941	\$ 3,361,029	\$ 1,963,008	
Account 408 - Taxes Other Than Income (Employer's Portion of FICA)	\$ 529,463	\$ 1,787,731	\$ 232,521	\$ 97,581	\$ 526,276	\$ 322,726	
<b>Total Cost Pool</b>	<b>\$ 31,387,987</b>	<b>\$ 42,131,851</b>	<b>\$ 4,671,308</b>	<b>\$ 6,304,513</b>	<b>\$ 19,177,331</b>	<b>\$ 7,974,620</b>	
Total Customers (page 304, line 43)	959,814	2,403,558	134,819	174,994	640,618	390,825	
<b>Customer Account Services Expense per Customer</b>	<b>\$ 32.70</b>	<b>\$ 17.53</b>	<b>\$ 34.65</b>	<b>\$ 36.03</b>	<b>\$ 35.47</b>	<b>\$ 20.40</b>	
<b>Note A: Calculation of Pension &amp; Benefits Pertaining to Customer Acct Mgmt</b>							
Account 926 - Employee Pension & Benefits (page 323, line 187)	\$ 38,645,990	\$ 187,027,121	\$ 6,660,396	\$ 7,869,045	\$ 38,828,205	\$ 37,681,044	
Total O&M Payroll (page 365, line 65)	\$ 109,744,984	\$ 625,619,817	\$ 35,227,412	\$ 23,565,539	\$ 79,474,397	\$ 80,979,200	
Benefits as Percent of Payroll	35.2%	26.7%	18.9%	33.4%	48.9%	46.5%	
Payroll Applicable to Customer Account Services	\$ 7,978,348	\$ 30,292,243	\$ 2,598,192	\$ 1,433,061	\$ 8,670,255	\$ 3,198,589	
Total Payroll Charged to Customer Accounts Function	\$ -	\$ -	\$ 1,383,512	\$ -	\$ -	\$ 2,615,816	
Electric (page 354, line 7)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Gas (page 354, line 37)	\$ 7,978,348	\$ 30,292,243	\$ 3,981,704	\$ 1,433,061	\$ 8,670,255	\$ 5,814,405	
Total Payroll Charged to Customer Accounts	\$ 7,978,348	\$ 30,292,243	\$ 3,981,704	\$ 1,433,061	\$ 8,670,255	\$ 5,814,405	
Percent Applicable to Customer Accounts Services (903 and 905):							
Acct 903 - Customer Records & Collection (page 322, line 161)	\$ 28,380,733	\$ 34,105,089	\$ 3,864,114	\$ 5,769,938	\$ 14,908,295	\$ 5,312,623	
Acct 905 - Misc Customer Accounts (page 322, line 163)	\$ 40,577	\$ -	\$ -	\$ 11,053	\$ 381,731	\$ 376,263	
Subtotal - Total Charges Applicable to Customer Accounts Services	\$ 28,421,310	\$ 34,105,089	\$ 3,864,114	\$ 5,780,991	\$ 15,290,026	\$ 5,688,886	
Acct 902 - Meter Reading Expenses (page 322, line 160)	\$ 4,341,650	\$ 10,103,836	\$ 1,197,835	\$ 713,762	\$ 3,980,247	\$ 2,151,907	
Total Charges Applicable to Customer Accounts Svcs & Meter Reading	\$ 32,762,960	\$ 44,208,925	\$ 5,061,949	\$ 6,494,753	\$ 19,270,273	\$ 7,840,793	
Percent Applicable to Customer Accounts Services (903 and 905)	86.7%	77.1%	76.3%	89.0%	79.3%	72.6%	
Customer Account Services Portion of Total Payroll	\$ 6,921,081	\$ 23,369,029	\$ 3,039,493	\$ 1,275,570	\$ 6,879,426	\$ 4,218,641	
Pension & Benefits Pertaining to Customer Accounts Services	\$ 2,437,214	\$ 6,239,031	\$ 574,673	\$ 425,941	\$ 3,361,029	\$ 1,963,008	
<b>Note B: Calculation of Employer's FICA Pertaining to Customer Accounts Services</b>							
Customer Account Services Portion of Total Payroll	\$ 6,921,081	\$ 23,369,029	\$ 3,039,493	\$ 1,275,570	\$ 6,879,426	\$ 4,218,641	
Employer's Portion of FICA (6.20%) and Medicare (1.45%)	\$ 7.65%	\$ 7.65%	\$ 7.65%	\$ 7.65%	\$ 7.65%	\$ 7.65%	
Estimated Employer's Portion of FICA	\$ 529,463	\$ 1,787,731	\$ 232,521	\$ 97,581	\$ 526,276	\$ 322,726	

**Customer Account Services Cost Pool**

FERC Account Balances:

Acct 903 - Customer Records & Collection (page 322, line 161)

Acct 905 - Misc Customer Accounts (page 322, line 163)

Subtotal

Add: Employee Benefits & Employer FICA (not included in above amounts)

Account 926 - Employee Pension & Benefits

Account 408 - Taxes Other Than Income (Employer's Portion of FICA)

**Total Cost Pool**

Total Customers (page 304, line 43)

**Customer Account Services Expense per Customer**

**Note A: Calculation of Pension & Benefits Pertaining to Customer Acct Mgmt**

Account 926 - Employee Pension & Benefits (page 323, line 187)

Total O&M Payroll (page 365, line 65)

Benefits as Percent of Payroll

Payroll Applicable to Customer Account Services

Total Payroll Charged to Customer Accounts Function

Electric (page 354, line 7)

Gas (page 354, line 37)

Total Payroll Charged to Customer Accounts

Percent Applicable to Customer Accounts Services (903 and 905):

Acct 903 - Customer Records & Collection (page 322, line 161)

Acct 905 - Misc Customer Accounts (page 322, line 163)

Subtotal - Total Charges Applicable to Customer Accounts Services

Acct 902 - Meter Reading Expenses (page 322, line 160)

Total Charges Applicable to Customer Accounts Svcs & Meter Reading

Percent Applicable to Customer Accounts Services (903 and 905)

Customer Account Services Portion of Total Payroll

Pension & Benefits Pertaining to Customer Accounts Services

**Note B: Calculation of Employer's FICA Pertaining to Customer Accounts Services**

Customer Account Services Portion of Total Payroll

Employer's Portion of FICA (6.20%) and Medicare (1.45%)

Estimated Employer's Portion of FICA

**Tennessee American Water Company  
Comparison Group 2009 Actual Customer Accounts Expense Per Customer**

	Georgia		Mississippi		North Carolina	
	Georgia Power	Energy Mississippi	Mississippi Power	Duke Energy Carolinas	Prog Energy Carolinas	
	\$ 84,911,244	\$ 17,647,249	\$ 9,277,161	\$ 58,491,837	\$ 25,264,008	
	\$ 88,908	\$ 71,579	\$ 1,162,224	\$ 63,286	\$ 2,913,845	
	\$ 85,000,152	\$ 17,718,828	\$ 10,439,385	\$ 58,555,123	\$ 28,177,853	
	\$ 12,582,725	\$ 2,024,275	\$ 1,664,015	\$ 3,743,004	\$ 4,374,673	
	\$ 3,286,888	\$ 202,332	\$ 426,091	\$ 1,771,092	\$ 1,007,671	
	\$ 100,869,765	\$ 19,945,435	\$ 12,529,491	\$ 64,069,219	\$ 33,560,198	
	2,354,531	435,133	185,924	2,376,853	1,461,874	
	\$ 42.84	\$ 45.84	\$ 67.39	\$ 26.96	\$ 22.96	
						<b>Group Average</b>
						\$ 495,139,462
						15,465,923
						\$ 32.01

**Customer Account Services Cost Pool**

FERC Account Balances:

Acct 903 - Customer Records & Collection (page 322, line 161)

Acct 905 - Misc Customer Accounts (page 322, line 163)

Subtotal

Add: Employee Benefits & Employer FICA (not included in above amounts)

Account 926 - Employee Pension & Benefits

Account 408 - Taxes Other Than Income (Employer's Portion of FICA)

Total Cost Pool

Total Customers (page 304, line 43)

**Customer Account Services Expense per Customer**

**Note A**

**Note B**

**Note A:** Calculation of Pension & Benefits Pertaining to Customer Acct Mgmt

Account 926 - Employee Pension & Benefits (page 323, line 187)

Total O&M Payroll (page 355, line 65)

Benefits as Percent of Payroll

Payroll Applicable to Customer Account Services

Total Payroll Charged to Customer Accounts Function

Electric (page 354, line 7)

Gas (page 354, line 37)

Total Payroll Charged to Customer Accounts

Percent Applicable to Customer Accounts Services (903 and 905):

Acct 903 - Customer Records & Collection (page 322, line 161)

Acct 905 - Misc Customer Accounts (page 322, line 163)

Subtotal - Total Charges Applicable to Customer Accounts Services

Acct 902 - Meter Reading Expenses (page 322, line 160)

Total Charges Applicable to Customer Accounts Svcs & Meter Reading

Percent Applicable to Customer Accounts Services (903 and 905)

Customer Account Services Portion of Total Payroll

Pension & Benefits Pertaining to Customer Accounts Services

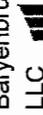
**Note B:** Calculation of Employer's FICA Pertaining to Customer Accounts Services

Customer Account Services Portion of Total Payroll

Employer's Portion of FICA (6.20%) and Medicare (1.45%)

Estimated Employer's Portion of FICA

Bayerbrunburch & Company, LLC



## 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 that are provided to TAWC by the Service Company would be necessary if TAWC were a stand-alone water utility. The first step in this evaluation was to determine specifically what the Service Company does for TAWC. Based on discussions with Service Company personnel, the matrix in Exhibit 11 was created showing which entity—TAWC or a Service Company location—is responsible for each of the functions TAWC 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 11, the following conclusions can be drawn:

- The services that the Service Company provides are necessary and would be required even if TAWC were a stand-alone water utility.
- There is no redundancy or overlap in the services provided by the Service Company to TAWC. For all of the services listed in Exhibit 11, there was only one entity that was primarily responsible for the service.

**Tennessee American Water Company  
Designation Of Responsibility For Water Utility Functions**

Water Company Function	Performed By:						
	TAMC	Customer Call Center	Division Office	Shared Services	Corporate Office	IT Service Centers	Belleville Lab
<b>P - Primarily Responsible</b>							
<b>S - Provides Support</b>							
Engineering and Construction Management	S				P		
CPS Preparation	S				P		
Five-Year System Planning	S				P		
Engineering Standards & Policies Development	S				P		
Project Design	S				P		
Major Projects (e.g., new treatment plant)	P				S		
Special Projects	P						
Minor Projects (e.g., pipelines)	P						
Construction Project Management	S				P		
Major Projects	S				P		
Special Projects	S				P		
Minor Projects	P						
Hydraulics Review	P				S		
Developers Extensions	P						
Tank Painting	P				S		
<b>Water Quality and Purification</b>							
Water Quality Standards Development	S				S		P
Research Studies	S				S		P
Water Quality Program Implementation	P				S		
Water Treatment Operations & Maintenance	P		S		S		
Compliance Sampling and Chemical Testing	S				S		P
Sample Collection and Other Testing	S				S		P
<b>Transmission and Distribution</b>							
Preventive Maintenance Program Development	P						
System Maintenance	P						
Leak Detection	P						
<b>Customer Service</b>							
Community Relations	P		S		S		
Customer Contact	S	P	S				
Call Processing	S	P	S				
Service Order Creation	S	P	S				
Service Order Processing	P	S	S				
Customer Credit	S	P	S				
Water Reading	P					S	
Customer Bill Preparation	S	S				P	
Bill Collection	S	P				S	
Customer Payment Processing	S			P			
Meter Standards Development	S		S		P		
Meter Testing, Maintenance & Replacement	P		S				

**Tennessee American Water Company  
Designation Of Responsibility For Water Utility Functions**

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

Note A: Financings and lines of credit are the responsibility of American Capital Corporation

**Tennessee American Water Company  
Designation Of Responsibility For Water Utility Functions**

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

## 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 TAWC exercises control over Service Company services and charges. The most important of these are described below.

- **Divisional Sr. Vice President Oversight** – The Eastern Division Senior Vice President is on the Executive Management Team (EMT) of American Water. The Divisional Sr. Vice President is responsible for the overall performance of each operating company in the Division, including Long Island Water Corp., Indiana American Water Company, Ohio American Water Company, Virginia American Water Company, West Virginia American Water Company, Kentucky American Water Company, Tennessee American Water Company, Michigan American Water Company, and Maryland American Water Company. As part of the EMT, each Divisional Senior Vice President has equal say with other EMT members in major business decisions of American Water and has the ability to monitor Service Company performance quality and spending.
- **Divisional Vice President & Treasurer** – The Divisional Vice President and Treasurer of the Eastern Division is responsible for the financial reporting, performance and internal controls of each of the operating companies in the division. The Vice President and Treasurer monitors the performance and expense levels of the Service Company and validates the cost of services received. Also, the Vice President and Treasurer reviews the monthly charges and investigates whenever the amount, quality and/or services are appropriate.
- **Operating Company Board Oversight** – TAWC board of directors includes members of American Water's EMT, members of the Eastern Division's management team, TAWC's Management team and business and community leaders from outside the Company. This diverse board ensures that TAWC's needs are a factor in the delivery of Service Company services. The TAWC Board meets at a minimum of four times each year and at every meeting financial and operational reports and issues are discussed at length.
- **Service Company Board Oversight** – The Service Company Board of Directors is comprised of 16 members, some of whom are the presidents of state operating companies. 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 Center
  - Review performance metrics of certain functional groups
  - Approve policy, procedures and practices of AW as it relates to Service Company
- **Service Company Budget Review/Approval** – Several operating company presidents sit on the Service Company board 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 which must be approved by the operating company's board of directors (e.g., TAWC).
- **Major Project Review And Approval** – Major projects undertaken by the Service Company must first be reviewed by American Water's Executive Management Team, which includes the Divisional Senior Vice President. The Divisional Senior Vice President, with input from the divisional and state management teams (including TAWC) 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 initiatives (capital or non-capital) are required to be submitted to the "BATT" (Business and Technology Team) committee for final

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

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approval. The “BATT” team is comprised of C-level executive members (CEO, CFO, etc.).

- **Accounting and Financial Reporting** – Similar to the states, the Service Company follows the same accounting and financial reporting processes. During the month accounting transactions are recorded. At month end, the SSC and Service Company 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 schedule 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 those expense variances that meet or exceed certain thresholds. At this time, the operating companies may question expenses and spending for better understanding of results. Finance personnel review the monthly Service Company bill for accuracy and reasonableness on a monthly basis. Any mistakes or overcharges are credited on a subsequent billing.
- **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.
- **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 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 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 CIM process was designed to optimize the effectiveness of asset investment. The process is managed at three levels (state, divisional, and national (corporate) for all American Water companies, including all Tennessee American Operating Units.