

**KENTUCKY-AMERICAN WATER COMPANY
CASE NO. 2008-00427
ATTORNEY GENERAL'S FIRST REQUEST FOR INFORMATION**

Witness: Michael A. Miller

175. Please provide copies of any studies or analyses prepared by or for the Company, the Service Corporation or any American Water subsidiary regarding the level of the Company's or AWWSC's wages compared to the wages paid by other utilities, service companies, or any other entity.

Response:

Please find attached copies of studies prepared by Mr. Patrick Baryenbruch for American Water subsidiaries from June 2006 to the present. Also please find attached a copy of the report prepared by Booz Allen Hamilton, Inc. for Tennessee American Water dated March, 2008.

For the electronic version, refer to KAW_R_AGDR1#175_122308.pdf.

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

12 Months Ending June 30, 2007



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Market Cost Comparison of Service Company Charges
12 Months Ending June 30, 2007**

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I - Introduction

Purpose Of This Study

This study was undertaken to answer three questions concerning the services provided by American Water Works Service Company, Inc. (Service Company) to Illinois American Water Company (IAWC):

1. Was IAWC charged the lower of cost or market for managerial and professional services provided by the Service Company during the 12 months ending June 30, 2007?
2. Was the 12 months ending June 30, 2007 cost of the Service Company's customer accounts services, including those of the National Call Centers, reasonable?
3. Are the services IAWC receives from Service Company necessary?

Study Results

Concerning question 1, the following conclusions can be drawn from this study:

- IAWC was charged the lower of cost or market for managerial and professional services during the 12 months ending June 30, 2007.
- On average, the hourly rates for outside service providers are **51% 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 IAWC without careful supervision on the part of IAWC. If these services were contracted entirely to outside providers, IAWC would have to add at least one position to manage activities of outside firms. These positions would be necessary to ensure the quality and timeliness of services provided.
- If all the managerial and professional services now provided by the Service Company had been out-sourced during the 12 months ending June 30, 2007, IAWC and its ratepayers would have incurred an **additional \$7.8 million** in expenses. This amount includes the higher cost of outside providers and the cost of two additional IAWC positions needed to direct and oversee the outsourced work.
- This study's hourly rate comparison actually understates the cost advantages that accrue to IAWC from its use of the Service Company. Outside service providers generally bill for every hour worked. Service Company exempt personnel, on the other hand, charge a maximum 8 per day even when they work more. 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 \$7.8 million cited above. For instance, if Service Company overtime is conservatively estimated at 5% (2 hours per week), then that work would have cost an estimated \$376,000 in additional charges from outside providers.
- It would be difficult for IAWC 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 IAWC ratepayers.

Concerning question 2, it was determined that the cost of the Service Company's customer accounts services, including those provided by the National Call Center, **is within the range of the comparison group of neighboring electric utilities.** 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 IAWC. During the 12 months ending June 30, 2007, the customer accounts cost for IAWC customers was \$32.18 compared to the 2006 average of \$27.65 for neighboring electric utilities. The highest comparison group per customer cost was \$43.63 and the lowest \$12.99.

IAWC's comparative position is completely acceptable for two reasons. First, every appropriate cost element has been included in the calculation of IAWC's customer account services cost pool. Second, some of the comparison group electric utilities may follow accounting policies that cause their cost pools to be higher or lower than that of IAWC. Even though electric utilities follow the FERC's Uniform System of Accounts, there is still some discretion as to how transactions are recorded. For instance, one utility may record the IT support costs for their customer information system to FERC account 903 Customer Records and Collections Expenses while another utility records that type of expense to different FERC account. This probably accounts for some of the wide range in per customer costs among the electric utilities.

Concerning question 3, the following conclusions can be drawn:

- The services that the Service Company provides are necessary and would be required even if IAWC were a stand-alone water utility.
- There is no redundancy or overlap in the services provided by the Service Company to IAWC. For all of the services listed in Schedule 10, there was only one entity that was primarily responsible for the service.

II - Background

Overview Of American Water Works Service Company

The Service Company maintains several types of offices from which it provides services to American Water operating companies. They include:

- 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 the second quarter of 2001 and a second in Pensacola, Florida that went into operation in April 2005. Prior to the establishment of these national call centers, customer service functions were performed by employees of IAWC, 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 and operations.
- 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 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 number, if transaction is a direct charge
- Formula number if transaction is allocated
- Employee hours worked
- Account number for non-labor charges

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

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:

- Operating company (for direct charge)
- Formula number (for allocation)
- Work order (where applicable)
- Authorization number (where applicable)

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 their 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 the Central Region's professional labor is assigned to IAWC 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 Central Region's accumulated professional and support labor is charged to IAWC during the month, then 20% of that month's overhead expenses will be assigned to IAWC.

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 IAWC, then 2% of that office's office expenses would be assigned to IAWC. 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

During the 12 months ending June 30, 2007, the Service Company billed IAWC \$21.5 million in management fees (O&M) and \$2.6 million in capital and other charges. For purposes of this market cost study, certain items were subtracted from the Service Company’s total charges to IAWC, as shown in the table below. The first item was the non-recurring accounting reclassification of pension expenses from management fees to pension expense. Other non-recurring expenses (Sarbanes Oxley implementation, business change, Service Company building write-off) for which IAWC is not seeking recovery were also subtracted. Finally, certain charges from regional offices other than the Central Region were eliminated. After these adjustments, testable Service Company charges totaled just over \$19 million.

	12 Months Ended June 30, 2007
Total Management Fees (O&M)	\$ 21,500,593
JE to reclass pension expense	\$ (2,101,519)
Mgmt Fee Expense per P&L	\$ 19,399,074
Less: Non-Recurring Expenses	
Divestiture & SOX	\$ (2,728,916)
Business Change	\$ (71,099)
Write-Off of Svc Co Bldg	\$ (45,289)
Net O&M Adjustments	\$ (2,845,304)
Less: Non-Central Regions	\$ (92,668)
Net Testable O&M	\$ 16,461,102
Total Capital	\$ 2,570,040
Total Other	\$ 50,158
Total Testable SC Charges	\$ 19,081,299

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

- Managerial and Professional Services – Includes such services as management, accounting, legal, human resources, information technology, and engineering.
- Water Quality Testing Services – Includes testing services performed by the Belleville Laboratory.
- Customer Accounts Services – Includes customer-related services, such as call center, credit, billing, collection and payment processing.

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

	12 Months Ended June 30, 2007	
	Amount	Hours
Management and Professional Services	\$ 14,702,513	153,312
Customer Account Services	\$ 4,378,786	118,362
Total Service Company Charges	\$ 19,081,299	271,674

This study’s first question—whether the Service Company charges 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 IAWC during the 12 months ending June 30, 2007. Outside providers' billing rates came from surveys or other information from professionals that could perform the services now provided by the Service Company.

The second question—reasonableness of the National Call Center costs—was addressed by comparing IAWC'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 third question—the necessity of Service Company services—was first investigated by determining the services provided to IAWC. A determination was then made as to whether these services would be required if IAWC were a stand-alone utility.

IV – Managerial And Professional Services Hourly Rate Comparison

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.

Service Company hourly rates were calculated for the four outside service provider categories, based on the dollars and hours charged to IAWC during the 12 months ended June 30, 2007. Hourly billing rates for outside service providers were developed using third party surveys or directly from information furnished by outside providers.

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.

It should be noted that by using the Service Company's hours charged IAWC during the 12 months ended June 30, 2007, 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.

Service Company Hourly Rates

Schedule 1 (page 10) details the assignment of 12 months ended June 30, 2007 management and professional Service Company charges by outsider provider category. Schedule 2 (page 11) shows the same assignment for Service Company management and professional hours charged to IAWC during the 12 months ended June 30, 2007.

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 June 30, 2007 test period non-labor Service Company charges:

- Contract Services – 12 months ended June 30, 2007 Service Company charges to IAWC include approximately \$989,000 in 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.
- Computer Hardware and Software Expenses – Included in the 12 months ended June 30, 2007 Service Company charges to IAWC are charges for outside expenses for leases and maintenance fees related to mainframe, server and network infrastructure, corporate business applications and the communications systems. An outside provider that would take over operation of a data center would recover these expenses over and above the labor necessary to operate the data center.

Schedule 3 (page 12) 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 Schedules 1 and 2 and the excludable items shown in Schedule 3, the Service Company's equivalent costs per hour for the 12 months ended June 30, 2007 are calculated below.

	Attorney	Management Consultant	Certified Public Accountant	Professional Engineer	Total
Total management, professional & technical services charges	\$ 558,149	\$ 4,926,856	\$ 6,000,263	\$ 3,217,245	\$ 14,702,513
Less:					
Contract services	\$ 17,421	\$ 326,297	\$ 590,549	\$ 55,094	\$ 989,361
Travel expenses	\$ 3,230	\$ 64,319	\$ 20,769	\$ 30,606	\$ 118,924
Computer hardware/software	\$ 15	\$ 41,237	\$ 148,137	\$ 34,510	\$ 223,898
Net Service Charges (A)	\$ 537,483	\$ 4,495,003	\$ 5,240,808	\$ 3,097,035	\$ 13,370,329
Total Hours (B)	5,062	36,342	64,686	47,222	153,312
Average Hourly Rate (A / B)	\$ 106	\$ 124	\$ 81	\$ 66	

**Illinois American Water Company
Analysis of 12 Months Ended June 30, 2007 Service Company Charges By Location And Function**

Location	Function	12 Months Ended June 30, 2007 Service Company Charges				Total
		Attorney	Management Consultant	Certified Public Accountant	Professional Engineer	
Belleville Lab	Water Quality		\$ 95,648	\$ 453,574	\$ 453,574	\$ 95,648
Call Center	Human Resources					
Corporate	Accounting		\$ 613,000			\$ 613,000
	Administration	\$ 54,659	\$ 512,210	\$ 410,240	\$ 160,484	\$ 1,137,593
	Audit		\$ 104,147			\$ 104,147
	Communications	\$ 199,692				\$ 199,692
	Engineering			\$ 40,518		\$ 40,518
	Finance		\$ 343,276			\$ 343,276
	Human Resources	\$ 477,718				\$ 477,718
	Legal	\$ 204,474				\$ 204,474
	Operations	\$ 308,254		\$ 248,844		\$ 557,098
	Rates & Revenue		\$ 230,519			\$ 230,519
	Risk Management	\$ 139,211				\$ 139,211
	Water Quality			\$ 129,988		\$ 129,988
Regional Offices	Accounting		\$ 57,282			\$ 57,282
	Administration	\$ 1,614,325				\$ 1,614,325
	Communications	\$ 226,530				\$ 226,530
	Engineering			\$ 1,218,590		\$ 1,218,590
	Finance		\$ 617,375			\$ 617,375
	Human Resources	\$ 592,031				\$ 592,031
	Legal	\$ 299,016				\$ 299,016
	Operations	\$ 271,581		\$ 661,113		\$ 932,694
	Risk Management	\$ 219,017				\$ 219,017
	Water Quality			\$ 304,136		\$ 304,136
Information Technology	Audit		\$ 45,148			\$ 45,148
	Information Technology		\$ 2,492,693			\$ 2,492,693
Shared Services	Accounting		\$ 891,512			\$ 891,512
	Administration	\$ 270,639				\$ 270,639
	Finance		\$ 108,127			\$ 108,127
	Rates & Revenue		\$ 86,944			\$ 86,944
	Total Dollars Charged	\$ 558,149	\$ 4,926,856	\$ 6,000,263	\$ 3,217,245	\$ 14,702,513

Witness: Patrick Baryenbruch
Schedule 2

**Illinois American Water Company
Analysis of 12 Months Ended June 30, 2007 Service Company Hours By Location And Function**

Location	Function	12 Months Ended June 30, 2007 Service Company Hours				Total
		Attorney	Consultant	Certified Public Accountant	Professional Engineer	
Belleville Lab	Water Quality				5,808	5,808
Call Center	Human Resources		1,054			1,054
Corporate	Accounting			7,252		7,252
	Administration		1,814			1,814
	Audit			1,363		1,363
	Communications		826			826
	Engineering				175	175
	Finance			3,249		3,249
	Human Resources		5,608			5,608
	Legal	1,241				1,241
	Operations		1,864		1,666	3,530
	Rates & Revenue			1,008		1,008
	Risk Management		1,096			1,096
	Water Quality				2,142	2,142
Regional Offices	Accounting			808		808
	Administration		5,134			5,134
	Communications		3,282			3,282
	Engineering				22,187	22,187
	Finance			8,165		8,165
	Human Resources		7,116			7,116
	Legal	3,821				3,821
	Operations		2,664		10,242	12,906
	Risk Management		4,564			4,564
	Water Quality				5,002	5,002
Information Technology	Audit			1,007		1,007
	Information Technology			20,800		20,800
Shared Services	Accounting			17,571		17,571
	Administration		1,320			1,320
	Finance			2,918		2,918
	Rates & Revenue			547		547
Total Hours Charged		5,062	36,342	64,686	47,222	153,312

Illinois American Water Company
12 Months Ended June 30, 2007 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	\$ 308,295	\$ 5,288	\$ 4,375	\$ 317,959
Administration	\$ 51,422	\$ 22,048	\$ (2,093)	\$ 71,376
Audit	\$ 4,312	\$ 1,030		\$ 5,342
Communications	\$ 48,924	\$ 6,095	\$ 810	\$ 55,828
Engineering	\$ 16,150	\$ 13,061	\$ 6,276	\$ 35,486
Finance	\$ 54,633	\$ 5,089	\$ 1,912	\$ 61,634
Human Resources	\$ 187,200	\$ 8,026	\$ 8,549	\$ 203,774
Information Technology	\$ 208,669	\$ 7,038	\$ 141,807	\$ 357,514
Legal	\$ 17,421	\$ 3,230	\$ 15	\$ 20,666
Operations	\$ 34,012	\$ 32,951	\$ 3,130	\$ 70,093
Rates & Revenue	\$ 14,639	\$ 2,324	\$ 43	\$ 17,006
Risk Management	\$ 9,941	\$ 8,327	\$ 33,421	\$ 51,689
Water Quality	\$ 33,744	\$ 4,418	\$ 25,662	\$ 63,824
Total	\$ 989,361	\$ 118,924	\$ 223,906	\$ 1,332,191

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	Total
Attorney	\$ 17,421	\$ 3,230	\$ 15	\$ 20,666
Management Consultant	\$ 326,297	\$ 64,319	\$ 41,237	\$ 431,853
Certified Public Accountant	\$ 590,549	\$ 20,769	\$ 148,137	\$ 759,455
Professional Engineer	\$ 55,094	\$ 30,606	\$ 34,510	\$ 120,210
Total	\$ 989,361	\$ 118,924	\$ 223,898	\$ 1,332,184

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.

Attorneys

The Illinois Bar Association does not survey its members as to their hourly billing rates. In addition, publicly available billing rate information could not be found for Illinois attorneys. Therefore, an Illinois estimate was developed from a survey of Michigan lawyers conducted annually by the Michigan Lawyers Weekly. As presented in Schedule 4, the average rate for each Michigan firm respondent was adjusted for the cost of living differential between their location and Belleville, Illinois. The survey includes rates that were in effect at December 31, 2005. Thus, the 2005 average rate was escalated to December 31, 2006—the midpoint of the 12 months ending June 30, 2007.

Management Consultants

The cost per hour for management consultants was developed from the 2006 annual survey performed by the Association of Management Consulting Firms—an industry trade organization. The first step in the calculation, presented in Schedule 5, was to determine an average rate by consultant position level. From these rates, a single weighted average hourly rate was calculated based upon the percent of time that is typically applied to a consulting assignment by each consultant position level. This survey includes rates that were in effect during 2005 for firms in 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 survey includes rates that were in effect at December 31, 2005. This 2005 average rate was escalated to December 31, 2006—the midpoint of the 12 months ending June 30, 2007.

Certified Public Accountants

The average hourly rate for Illinois certified public accountants was developed from a 2006 survey conducted by the American Institute of Certified Public Accountants (AICPA) every two years. Hourly rates in the AICPA survey are the average of firms in Illinois. The average hourly rate was calculated for a set of typical accountant positions, as shown in Schedule 6. Based on a typical staff assignment by each accountant position, a weighted average hourly rate was calculated. The survey includes rates that were in effect at December 31, 2005. Thus, the 2005 average rate was escalated to December 31, 2006—the midpoint of the 12 months ending June 30, 2007.

Professional Engineers

The Service Company provided hourly rate information for outside engineering firms that could have been utilized by IAWC during 2007. As presented in Schedule 7, 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.

Schedule 4

Illinois American Water Company
Estimated Billing Rates For Illinois Attorneys Based On Michigan Attorney Billing Rates

Billing rates as of December 31, 2006 (Note A)									
Firm	Michigan Location	Number Of Mich Lawyers	Billing Rate Range					Cost of Living Adjust (C)	Adjusted Rate
			Associate		Partner		Average		
			Low	High	Low	High			
Dickinson Wright PLLC	Detroit	218	\$ 170	\$ 275	\$ 260	\$ 530	\$ 309	92%	\$ 337
Butzel Long	Detroit	212	\$ 165	\$ 400	\$ 220	\$ 550	\$ 334	92%	\$ 364
Bodman LLP	Detroit	130	\$ 125	\$ 215	\$ 210	\$ 495	\$ 261	92%	\$ 285
Jaffe Raitt Heuer & Weiss, PC	Southfield	95	\$ 165	\$ 225	\$ 225	\$ 500	\$ 279	105%	\$ 266
Trott & Trott, PC	Bingham Farms	57	\$ 170	\$ 170	\$ 235	\$ 235	\$ 203	136%	\$ 149
Brooks Kushman PC	Southfield	52	\$ 160	\$ 275	\$ 250	\$ 505	\$ 298	105%	\$ 284
Kemp, Klein, Umphrey, Edelman & May PC	Troy	38	\$ 150	\$ 190	\$ 200	\$ 340	\$ 220	120%	\$ 183
Pepper Hamilton LLP	Detroit	31	\$ 200	\$ 315	\$ 340	\$ 615	\$ 368	92%	\$ 401
Hertz, Schram & Saretsky, PC	Bloomfield Hills	30	\$ 175	\$ 260	\$ 275	\$ 400	\$ 278	150%	\$ 185
Strobl & Sharp, PC	Bloomfield Hills	26	\$ 110	\$ 210	\$ 200	\$ 300	\$ 205	150%	\$ 136
Kupelian Ormond & Magy, PC	Southfield	24	\$ 165	\$ 195	\$ 235	\$ 320	\$ 229	105%	\$ 218
Rader, Fishman & Grauer, PLLC	Bloomfield Hills	23	\$ 130	\$ 250	\$ 275	\$ 495	\$ 288	150%	\$ 191
McShane & Bowie PLC	Grand Rapids	22	\$ 160	\$ 275	\$ 250	\$ 375	\$ 265	104%	\$ 255
Overall Average at December 31, 2006									\$ 250
Average Billing Rate At December 31, 2006 - the midpoint of 12 months ended June 30, 2007									\$ 250

Note A: Source is Michigan Lawyers Weekly, April 2007

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

Note C: Source is Sperling's Best Places (<http://www.bestplaces.net/col/col.aspx>). This number represents the cost of living difference between the Michigan city and Belleville, Ill. A number over 100% indicates the Michigan city's cost of living is higher than Belleville. A number less than 100% indicates Belleville's cost of living is higher.

Schedule 5

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

A. Calculation of Average Hourly Billing Rate by Consultant Position						
Survey billing rates were those in effect in 2005 (Note A)						
Average Hourly Rates (Note A)						
	Entry-Level Consultant	Associate Consultant	Senior Consultant	Junior Partner	Senior Partner	
Average	\$ 141	\$ 186	\$ 234	\$ 320	\$ 350	
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)	\$ 141	\$186	\$234	\$320	\$350	
Typical Percent of Time Spent on a Consulting Project	30%	30%	20%	10%	10%	Weighted Average
	\$ 42	\$ 56	\$ 47	\$ 32	\$ 35	\$ 212
<u>Escalation to Test Year Mid-Point June 30, 2007 (Note B)</u>						
						CPI at December 31, 2005
						196.8
						CPI at December 31, 2006
						201.8
						Inflation/Escalation
						2.5%
Estimated Average Hourly Billing Rate For Illinois CPAs At December 31, 2006						\$ 217

Note A: source: "Operating Ratios For Management Consulting Firms, 2006 Edition" Association of Management Consulting Firms

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

Schedule 6

Illinois American Water Company
Estimated Billing Rates Of Illinois Certified Public Accountants

A. Calculation of Average Hourly Billing Rate by Public Accounting Position Survey billing rates were those in effect in 2005 (Note A)				
	Average Hourly Billing Rate (Note A)			
Type of Firm	Staff Accountant	Senior Accountant	Manager	Partner
Average Hourly Rate	\$ 94	\$ 102	\$ 110	\$ 150
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)	\$ 94	\$ 102	\$ 110	\$ 150
Typical Percent of Time Spent on an Accounting Assignment	30%	30%	20%	20%
	\$ 28	\$ 31	\$ 22	\$ 30
				Weighted Average \$ 111
<u>Escalation to Test Year Mid-Point June 30, 2007 (Note B)</u>				
			CPI at December 31, 2005	196.8
			CPI at December 31, 2006	201.8
			Inflation/Escalation	2.5%
Estimated Average Hourly Billing Rate For Illinois CPAs At December 31, 2006				\$ 114

Note A: Source is AICPA's 2006 National PCPS/TSCPA Management of an Accounting Practice Survey

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

Witness: Patrick Baryenbruch
Schedule 7

Illinois American Water Company
Billing Rates Of Illinois Engineers

Note: Billing rates were those in effect in 2007					
A. Calculation of Average Hourly Rate by Engineer Position					
Name of Firm	Average Hourly Billing Rates				
	Surveyor Technician Senior Technician	Engineer Design Engineer Project Engineer	Project Manager Sr. Mgr. Engineer	Officer Principal Engineer	
Firm #1	\$62	\$99	\$164	\$179	
Firm #2	\$73	\$83	\$104	\$135	
Firm #3	\$68	\$63	\$125	\$175	
Firm #4	\$72	\$77	\$120	\$157	
B. Calculation of Overall Average Engineering Hourly Billing Rate					
Average Hourly Billing Rate (From Above)	CAD Drafter Engineer Tech	Engineer Design Engineer Project Engineer Elect Proj Engineer	Project Manager Project Associate Sr. Mgr. Engineer	Officer Principal Engineer	
	\$69	\$80	\$128	\$162	
Typical Percent of Time on an Engineering Assignment	30%	35%	25%	10%	Weighted Average
	\$21	\$28	\$32	\$16	\$97

Source: Information provided by American Water Works Service Company

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.

12 Months Ended June 30, 2007			
Service Provider	Service Company	Outside Provider	Difference-- Service Co. Greater(Less) Than Outside
Attorney	\$ 106	\$ 250	\$ (144)
Management Consultant	\$ 124	\$ 212	\$ (88)
Certified Public Accountant	\$ 81	\$ 114	\$ (33)
Professional Engineer	\$ 66	\$ 97	\$ (31)

Based on these cost per hour differentials and the number of managerial and professional services hours billed to IAWC during the 12 months ending June 30, 2007, outside service providers would have cost \$7,522,703 more than the Service Company (see table below). Thus, on average, outside provider's hourly rates are almost 51% higher than those of the Service Company (\$7,522,703 / \$14,702,513).

12 Months Ended June 30, 2007			
Service Provider	Hourly Rate Difference-- Service Co. Greater(Less) Than Outside	Service Company Hours Charged	Dollar Difference
Attorney	\$ (144)	5,062	\$ (729,957)
Management Consultant	\$ (88)	36,342	\$ (3,200,321)
Certified Public Accountant	\$ (33)	64,686	\$ (2,108,937)
Professional Engineer	\$ (31)	47,222	\$ (1,483,488)
Service Company Less Than Outside Providers			\$ (7,522,703)

If IAWC were to use outside service providers rather than the Services 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 153,312 hours of work (over 100 full-time equivalents at 1,500 "billable" hours per FTE per year) would add a significant workload to the existing IAWC management team. Thus, it would be necessary for IAWC to add at least two positions to supervise the outside firms and ensure they delivered quality and timely services. The individuals that would fill these positions 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, these positions would add another \$304,000 per year to IAWC's personnel expenses.

Cost of Adding Administrative Positions To IAWC's Staff

	Per Position	Total
New Positions' (2) Salary	\$ 100,000	\$ 200,000
Benefits (at 52%)	\$ 52,000	\$ 104,000
Total Cost of the New Positions		\$ 304,000

Thus, the total effect on the ratepayers of IAWC of contracting all services now provided by Service Company would be an increase in their costs of \$7,826,703 (\$7,522,703 + \$304,000).

Other Cost Comparisons

Every year, the Belleville Lab conducts a comparison of its cost for performing major tests to the cost of using outside testing laboratories. Over the past several years, these surveys have shown the following results been as follows:

Year	Number of Major Tests Surveyed	Percent Belleville Lower Than Outside Labs
2000	26	15%
2001	25	19%
2002	24	16%
2003	23	10%
2004	24	9%
2005	24	25%
2006	24	31%

These studies provide additional evidence that the Service Company arrangement is the lowest-cost alternative for IAWC.

V – Customer Account Services Cost Comparison

Background

It is difficult to compare the cost of American Water's National Call Centers with outside providers of the same call center-related services. Call center survey data is proprietary and expensive to obtain. For this reason, IAWC's National Call Center costs are compared to those of neighboring electric utilities because the data necessary to make this comparison is readily available to the public.

Electric utility cost information comes from their FERC Form 1. FERC's chart of accounts is defined in chapter 18, part 101 of Code of Federal Regulations. FERC accounts that contain call center-related expenses and are used in this study's comparison are:

- Account 903 Customer Accounts Expense – Records and Collection Expense
- Account 905 Customer Accounts Expense – Miscellaneous Customer Accounts Expense.

In addition, 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).

Schedule 9 provides FERC's description of what should be charged to these accounts. In questioning the controller of a large Southeastern electric utility, it was determined that expenses of the activities described below are recorded in the designated FERC accounts.

<p><u>903 Records and Collection Expense</u></p> <ul style="list-style-type: none">• 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 of customer payments received in the mail• Bill payment centers – locations where customers can pay their bills in person <p><u>905 Miscellaneous Customer Accounts Expense</u></p> <ul style="list-style-type: none">• Customer Information System IT – maintenance and support of the customer information system
--

This study assumes the FERC accounts for other electric and gas utilities contain expenses for the same activities.

Illinois 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.

Illinois 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.

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.

Illinois	<ul style="list-style-type: none"> • Central Illinois Light • Central Illinois Public Service 	<ul style="list-style-type: none"> • Commonwealth Edison • Illinois Power
Iowa	<ul style="list-style-type: none"> • Interstate Power & Light 	<ul style="list-style-type: none"> • MidAmerican Energy
Wisconsin	<ul style="list-style-type: none"> • Madison Gas & Electric • Northern States Power – Wis • Northwestern Wisconsin Elect • So. Beloit Light & Power 	<ul style="list-style-type: none"> • Superior Water, Light & Pwr • Wisconsin Electric Power • Wisconsin Power & Light • Wisconsin Public Service
Missouri	<ul style="list-style-type: none"> • Aquila Inc. • Kansas City Power & Light 	<ul style="list-style-type: none"> • Union Electric
Kentucky	<ul style="list-style-type: none"> • Duke Energy – Kentucky • Kentucky Power 	<ul style="list-style-type: none"> • Kentucky Utilities • Louisville Gas & Electric
Indiana	<ul style="list-style-type: none"> • Duke Energy – Indiana • Indiana Michigan Power • Indiana Power & Light 	<ul style="list-style-type: none"> • NIPSCO • So. Indiana Gas & Electric

Some neighboring electric utilities could not be included in the comparison group because they did not submit the necessary FERC Form 1 data.

Comparison Approach

The basis for this comparison is customer account services expenses per customer. IAWC's cost pool was developed to include the same expenses included in electric utility's FERC accounts 903 and 905. As shown in the graphic below, IAWC's resultant cost pool contains the expenses of Service Company locations and certain operating company expenses.

American Water
<u>Service Company</u>
Pensacola & Alton Call Centers
a. Customer contact
b. Customer order processing
c. Billing information processing
d. Collections
e. Correspondence processing
f. Customer payment processing
<u>Operating Company</u>
a. Postage and forms

Electric Utilities
FERC Acct 903 - Records and Collection Expense <u>and</u> FERC Acct 905 - Misc Customer Accounts Expense
a. Customer contact
b. Customer order processing
c. Bill preparation and mailing
d. Collections
e. Payment processing
f. Correspondence processing

IAWC Cost Per Customer

In order to make a valid comparison to neighboring electric utilities, certain adjustments had to be made to the applicable Service Company charges to IAWC. 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 1.28 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. As shown below, IAWC's adjusted annual expense per customer is \$32.18—the number that can be compared to neighboring electric utilities' expenses.

Illinois American 12 Months Ended June 30, 2007 Cost Per Customer		Service Co	Adjustment Fewer Calls For	Adjusted
Cost Component		Charges	Water Cos. (A)	
Service Company				
Call Centers	Call processing, order processing, credit, bill collection	\$ 3,836,943	\$ 3,657,086	\$ 7,494,028
Regional Offices		\$ 541,844		\$ 541,844
Service Company	Customer payment processing			\$ 454,284
Operating Company	Postage & forms			\$ 1,295,703
			Cost Pool Total	\$ 9,785,858
			Total Customers	304,072
				<u>\$ 32.18</u>
12 Months Ended June 30, 2007 Cost Per Illinois American Customer				

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 annualized Call Center charges	\$ 3,836,943
Electric utility industry's avg calls/customer	2.50
American Water's avg calls/customer	1.28
Percent different	95% 95%
Total Adjustment B	\$ 3,657,086

Note B: Estimated customer payment processing expenses

Number of customers	304,072
Number of payments/customer/year	12
Total payments processed/year	3,648,864
Bank charge per item	\$ 0.1245
Total estimated annual expense	\$ 454,284

Electric Utility Group Cost Per Customer

Schedule 9 shows the actual 2006 customer accounts expense per customer calculation for the electric utility comparison group. All of the underlying data was taken from the utilities' FERC Form 1.

Summary Of Results

As shown in the table below, IAWC's cost per customer is within the range of the electric utility comparison group. It can therefore be concluded that the customer accounts-related expenses, including those of the Alton and Pensacola Call Centers, assigned by the Service Company to IAWC are reasonable.

Average Customer Accounts Expense Per Customer	
Wisconsin Power & Light	\$ 12.99
Louisville Gas & Electric	\$ 13.46
Interstate Power & Light	\$ 13.79
Superior Water, Light & Power	\$ 17.56
Southern Indiana Gas & Electric	\$ 19.48
Indianapolis Power & Light	\$ 20.40
Wisconsin Electric Power	\$ 20.53
Illinois Power	\$ 20.92
Northern States Power (Wisconsin)	\$ 23.00
Union Electric	\$ 23.23
Kansas City Power & Light	\$ 24.00
Central Illinois Public Service	\$ 25.84
Kentucky Utilities	\$ 27.14
Comparison Group Average	\$ 27.65
Northwestern Wisconsin Electric	\$ 27.87
MidAmerican Energy	\$ 28.71
Aquila	\$ 29.90
Duke Energy Indiana	\$ 30.16
Indiana Michigan Power	\$ 30.76
Illinois American Water	\$ 32.18
Commonwealth Edison	\$ 33.33
Central Illinois Light	\$ 34.54
Kentucky Power	\$ 35.75
Duke Energy Kentucky	\$ 39.46
Northern Indiana Public Service	\$ 41.08
Wisconsin Public Service	\$ 42.72
Madison Gas & Electric	\$ 43.63

Witness: Patrick Baryenbruch
Schedule 9
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**Illinois American Water Company
Comparison Group 2006 Actual Customer Accounts Expense Per Customer**

	Illinois				Iowa	
	Central Illinois Light	Central Illinois Pub Service	Comm Edison	Illinois Power	Interstate Power & Light	MidAmerica Energy
\$ 5,779,124	\$ 8,326,451	\$ 100,156,711	\$ 10,983,933	\$ 5,758,308	\$ 13,972,648	
\$ 241,537	\$ 350,812	\$ -	\$ 645,956	\$ 30,160	\$ 484,674	
\$ 6,020,661	\$ 8,677,263	\$ 100,156,711	\$ 11,629,889	\$ 5,788,468	\$ 14,457,322	
\$ 911,760	\$ 908,070	\$ 20,194,194	\$ 888,675	\$ 1,314,962	\$ 4,348,182	
\$ 320,091	\$ 438,848	\$ 4,770,329	\$ 375,412	\$ 319,916	\$ 1,575,023	
\$ 7,252,512	\$ 10,024,181	\$ 125,121,234	\$ 12,893,976	\$ 7,423,346	\$ 20,380,527	
209,990	387,934	3,754,162	616,239	538,258	709,861	
\$ 34.54	\$ 25.84	\$ 33.33	\$ 20.92	\$ 13.79	\$ 28.71	
\$ 7,566,312	\$ 9,327,733	\$ 84,071,540	\$ 7,324,915	\$ 29,389,292	\$ 41,820,167	
\$ 34,722,827	\$ 58,926,307	\$ 259,602,825	\$ 40,448,829	\$ 93,465,164	\$ 198,017,413	
21.8%	15.8%	32.4%	18.1%	31.4%	21.1%	
\$ 3,030,390	\$ 5,651,310	\$ 80,457,255	\$ 7,888,565	\$ 6,206,724	\$ 16,440,343	
\$ 2,529,882	\$ 2,627,496	\$ -	\$ -	\$ 2,275,016	\$ 14,795,551	
\$ 5,560,272	\$ 8,278,806	\$ 80,457,255	\$ 7,888,565	\$ 8,481,740	\$ 31,235,894	
\$ 5,779,124	\$ 8,326,451	\$ 100,156,711	\$ 10,983,933	\$ 5,758,308	\$ 13,972,648	
\$ 241,537	\$ 350,812	\$ -	\$ 645,956	\$ 30,160	\$ 484,674	
\$ 6,020,661	\$ 8,677,263	\$ 100,156,711	\$ 11,629,889	\$ 5,788,468	\$ 14,457,322	
\$ 1,980,053	\$ 3,845,433	\$ 29,071,798	\$ 7,065,186	\$ 5,951,711	\$ 7,476,607	
\$ 8,000,714	\$ 12,522,696	\$ 129,228,509	\$ 18,695,075	\$ 11,740,179	\$ 21,933,929	
75.3%	69.3%	77.5%	62.2%	49.3%	65.9%	
\$ 4,184,191	\$ 5,736,574	\$ 62,357,247	\$ 4,907,342	\$ 4,181,902	\$ 20,588,531	
\$ 911,760	\$ 908,070	\$ 20,194,194	\$ 888,675	\$ 1,314,962	\$ 4,348,182	
\$ 4,184,191	\$ 5,736,574	\$ 62,357,247	\$ 4,907,342	\$ 4,181,902	\$ 20,588,531	
7.65%	7.65%	7.65%	7.65%	7.65%	7.65%	
\$ 320,091	\$ 438,848	\$ 4,770,329	\$ 375,412	\$ 319,916	\$ 1,575,023	

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 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



Witness: Patrick Baryenbruch
Schedule 9
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**Illinois American Water Company
Comparison Group 2006 Actual Customer Accounts Expense Per Customer**

		Wisconsin						
Madison Gas & Electric	NSP - Wisconsin	Northwestern Wis Electric	Superior W, L&P	Wis Electric Power	Wis Power & Light	Wis Public Service		
\$ 4,205,856	\$ 4,545,777	\$ 273,223	\$ 188,845	\$ 18,912,041	\$ 4,615,649	\$ 6,127,292		
\$ 38,622	\$ 443,712	\$ -	\$ 9,527	\$ 90,846	\$ (178,324)	\$ 5,785,903		
\$ 4,244,478	\$ 4,989,489	\$ 273,223	\$ 198,372	\$ 19,002,887	\$ 4,437,325	\$ 11,913,195		
\$ 1,332,722	\$ 594,529	\$ 71,657	\$ 35,344	\$ 2,679,553	\$ 1,240,141	\$ 5,250,559		
\$ 385,277	\$ 284,614	\$ 16,659	\$ 20,992	\$ 850,774	\$ 240,289	\$ 1,031,418		
\$ 5,962,477	\$ 5,868,632	\$ 361,539	\$ 254,708	\$ 22,533,213	\$ 5,917,756	\$ 18,195,172		
\$ 136,658	\$ 255,125	\$ 12,973	\$ 14,508	\$ 1,097,510	\$ 455,449	\$ 425,928		
\$ 43.63	\$ 23.00	\$ 27.87	\$ 17.56	\$ 20.53	\$ 12.99	\$ 42.72		
\$ 10,447,852	\$ 6,786,941	\$ 594,548	\$ 608,651	\$ 64,651,810	\$ 28,901,712	\$ 42,884,098		
\$ 39,481,969	\$ 42,471,362	\$ 1,806,780	\$ 4,725,346	\$ 268,331,124	\$ 73,202,441	\$ 110,119,464		
26.5%	16.0%	32.9%	12.9%	24.1%	39.5%	38.9%		
\$ 2,882,319	\$ 4,264,116	\$ 392,360	\$ 224,055	\$ 12,054,597	\$ 5,145,197	\$ 8,200,700		
\$ 2,583,355	\$ 1,525,286	\$ -	\$ 175,700	\$ 4,298,427	\$ 1,412,904	\$ 5,572,834		
\$ 5,445,674	\$ 5,789,402	\$ 392,360	\$ 399,755	\$ 16,353,024	\$ 6,558,101	\$ 13,773,534		
\$ 4,205,856	\$ 4,545,777	\$ 273,223	\$ 188,845	\$ 18,912,041	\$ 4,615,649	\$ 6,127,292		
\$ 38,622	\$ 443,712	\$ -	\$ 9,527	\$ 90,846	\$ (178,324)	\$ 5,785,903		
\$ 4,244,478	\$ 4,989,489	\$ 273,223	\$ 198,372	\$ 19,002,887	\$ 4,437,325	\$ 11,913,195		
\$ 345,014	\$ 2,774,676	\$ 219,069	\$ 90,623	\$ 8,939,597	\$ 4,827,263	\$ 257,078		
\$ 4,589,492	\$ 7,764,165	\$ 482,292	\$ 288,995	\$ 27,942,484	\$ 9,264,588	\$ 12,170,273		
\$ 92.5%	\$ 64.3%	\$ 55.5%	\$ 68.0%	\$ 68.0%	\$ 47.9%	\$ 97.9%		
\$ 5,036,297	\$ 3,720,446	\$ 217,761	\$ 274,400	\$ 11,121,226	\$ 3,141,038	\$ 13,482,590		
\$ 1,332,722	\$ 594,529	\$ 71,657	\$ 35,344	\$ 2,679,553	\$ 1,240,141	\$ 5,250,559		
\$ 5,036,297	\$ 3,720,446	\$ 217,761	\$ 274,400	\$ 11,121,226	\$ 3,141,038	\$ 13,482,590		
7.65%	7.65%	7.65%	7.65%	7.65%	7.65%	7.65%		
\$ 385,277	\$ 284,614	\$ 16,659	\$ 20,992	\$ 850,774	\$ 240,289	\$ 1,031,418		

Customer Account Services Cost Pool

FERC Account Balances:
 Act 903 - Customer Records & Collection (page 322, line 161)
 Act 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 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):

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

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

Subtotal - Total Charges Applicable to Customer Accounts Services

Act 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

Witness: Patrick Baryenbruch
Schedule 9
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**Illinois American Water Company
Comparison Group 2006 Actual Customer Accounts Expense Per Customer**

	Missouri				Kentucky			
	Aquila	Kansas City Pwr & Light	Union Electric	Duke Energy Kentucky	Kentucky Power	Kentucky Utilities	Louisville Gas & Electric	
Customer Account Management Cost Pool								
FERC Account Balances:								
Act 903 - Customer Records & Collection (page 322, line 131)	\$ 10,189,732	\$ 10,322,640	\$ 23,104,931	\$ 3,332,632	\$ 5,947,615	\$ 11,543,567	\$ 4,361,172	
Act 905 - Misc Customer Accounts (page 322, line 133)	\$ 4,731	\$ 5,972	\$ 456,938	\$ 6,343	\$ 2,104	\$ 70,757	\$ 248,889	
Subtotal	\$ 10,194,463	\$ 10,328,612	\$ 23,561,869	\$ 3,338,975	\$ 5,949,719	\$ 11,614,324	\$ 4,610,061	
Add: Employee Benefits & Employer FICA (not included in above amounts)								
Account 926 - Employee Pension & Benefits	\$ 3,087,027	\$ 1,358,942	\$ 2,888,787	\$ 1,031,926	\$ 232,836	\$ 2,465,044	\$ 652,046	
Account 408 - Taxes Other Than Income (Employer's Portion of FICA)	\$ 608,226	\$ 397,865	\$ 747,238	\$ 274,415	\$ 94,616	\$ 249,993	\$ 87,152	
Total Cost Pool	\$ 13,889,716	\$ 12,085,419	\$ 27,197,894	\$ 4,645,316	\$ 6,277,171	\$ 14,329,361	\$ 5,349,259	
Total Customers (page 304, line 43)	464,588	503,517	1,170,738	117,722	175,571	527,907	397,331	
Customer Account Services Expense per Customer	\$ 29.90	\$ 24.00	\$ 23.23	\$ 39.46	\$ 35.75	\$ 27.14	\$ 13.46	
Note A: Calculation of Pension & Benefits Pertaining to Customer Acct Mgmt								
Account 926 - Employee Pension & Benefits (page 323, line 187)	\$ 36,457,466	\$ 41,555,196	\$ 85,099,288	\$ 8,999,663	\$ 3,888,690	\$ 28,229,324	\$ 24,717,445	
Total O&M Payroll (page 355, line 65)	\$ 93,896,620	\$ 159,037,193	\$ 287,745,228	\$ 31,284,068	\$ 20,656,477	\$ 37,423,258	\$ 43,185,745	
Benefits as Percent of Payroll	38.8%	26.1%	29.6%	28.8%	18.8%	75.4%	57.2%	
Payroll Applicable to Customer Account Services								
Total Payroll Charged to Customer Accounts Function	\$ 7,299,421	\$ 7,405,801	\$ 13,589,950	\$ 2,925,473	\$ 1,496,370	\$ 4,588,293	\$ 880,094	
Electric (page 354, line 7)	\$ 4,347,912	-	\$ 3,160,299	\$ 1,823,135	-	-	\$ 757,336	
Gas (page 354, line 37)	\$ 11,647,333	\$ 7,405,801	\$ 16,750,249	\$ 4,748,608	\$ 1,496,370	\$ 4,588,293	\$ 1,637,430	
Total Payroll Charged to Customer Accounts	\$ 10,189,732	\$ 10,322,640	\$ 23,104,931	\$ 3,332,632	\$ 5,947,615	\$ 11,543,567	\$ 4,361,172	
Percent Applicable to Customer Accounts Services (903 and 905):								
Act 903 - Customer Records & Collection (page 322, line 161)	\$ 4,731	\$ 5,972	\$ 456,938	\$ 6,343	\$ 2,104	\$ 70,757	\$ 248,889	
Act 905 - Misc Customer Accounts (page 322, line 163)	\$ 10,194,463	\$ 10,328,612	\$ 23,561,869	\$ 3,338,975	\$ 5,949,719	\$ 11,614,324	\$ 4,610,061	
Subtotal - Total Charges Applicable to Customer Accounts Services	\$ 4,739,910	\$ 4,378,916	\$ 16,842,962	\$ 1,081,142	\$ 1,248,628	\$ 4,692,871	\$ 2,015,982	
Act 902 - Meter Reading Expenses (page 322, line 160)	\$ 14,934,373	\$ 14,707,528	\$ 40,404,831	\$ 4,420,117	\$ 7,198,347	\$ 16,307,195	\$ 6,626,043	
Total Charges Applicable to Customer Accounts Svcs & Meter Reading	68.3%	70.2%	58.3%	75.5%	82.7%	71.2%	69.6%	
Percent Applicable to Customer Accounts Services (903 and 905)	\$ 7,950,672	\$ 5,200,850	\$ 9,767,821	\$ 3,587,118	\$ 1,236,809	\$ 3,267,878	\$ 1,139,240	
Customer Account Services Portion of Total Payroll	\$ 3,087,027	\$ 1,358,942	\$ 2,888,787	\$ 1,031,926	\$ 232,836	\$ 2,465,044	\$ 652,046	
Pension & Benefits Pertaining to Customer Accounts Services								
Customer Account Services Portion of Total Payroll	\$ 7,950,672	\$ 5,200,850	\$ 9,767,821	\$ 3,587,118	\$ 1,236,809	\$ 3,267,878	\$ 1,139,240	
Employer's Portion of FICA (6.20%) and Medicare (1.45%)	7.65%	7.65%	7.65%	7.65%	7.65%	7.65%	7.65%	
Estimated Employer's Portion of FICA	\$ 608,226	\$ 397,865	\$ 747,238	\$ 274,415	\$ 94,616	\$ 249,993	\$ 87,152	

Customer Account Management Cost Pool

FERC Account Balances:
Act 903 - Customer Records & Collection (page 322, line 131)
Act 905 - Misc Customer Accounts (page 322, line 133)

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 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):

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

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

Subtotal - Total Charges Applicable to Customer Accounts Services

Act 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



Witness: Patrick Baryenbruch
Schedule 9
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**Illinois American Water Company
Comparison Group 2006 Actual Customer Accounts Expense Per Customer**

		Indiana			So Indiana Gas & Electric
	Duke Energy Indiana	Indiana Michigan Pwr	Indianapolis Power & Light	NIPSCO	
	\$ 18,117,442	\$ 16,610,048	\$ 7,603,902	\$ 13,156,536	\$ 2,969,508
	\$ 57,534	\$ 12,309	\$ 71,252	\$ 137,286	\$ 151,126
	\$ 18,174,976	\$ 16,622,357	\$ 7,675,154	\$ 13,293,822	\$ 3,120,634
Note A	\$ 4,237,121	\$ 892,045	\$ 1,555,051	\$ 4,084,026	\$ 2,824
Note B	\$ 696,664	\$ 352,614	\$ 293,531	\$ 1,143,737	\$ 150,378
	\$ 23,108,761	\$ 17,867,016	\$ 9,523,735	\$ 18,521,585	\$ 3,273,836
	\$ 766,165	\$ 580,891	\$ 466,833	\$ 450,819	\$ 168,069
	\$ 30.16	\$ 30.76	\$ 20.40	\$ 41.08	\$ 19.48
	\$ 72,322,016	\$ 31,195,475	\$ 37,890,227	\$ 27,645,570	\$ 40,455
	\$ 155,439,571	\$ 161,191,645	\$ 93,492,125	\$ 101,204,934	\$ 28,159,930
	46.5%	19.4%	40.5%	27.3%	0.1%
	\$ 12,564,124	\$ 5,630,709	\$ 6,593,347	\$ 6,733,185	\$ 1,482,695
	\$ -	\$ -	\$ -	\$ 11,231,830	\$ 1,315,238
	\$ 12,564,124	\$ 5,630,709	\$ 6,593,347	\$ 17,965,015	\$ 2,797,933
	\$ 18,117,442	\$ 16,610,048	\$ 7,603,902	\$ 13,156,536	\$ 2,969,508
	\$ 57,534	\$ 12,309	\$ 71,252	\$ 137,286	\$ 151,126
	\$ 18,174,976	\$ 16,622,357	\$ 7,675,154	\$ 13,293,822	\$ 3,120,634
	\$ 6,900,209	\$ 3,683,346	\$ 5,513,507	\$ 2,680,146	\$ 1,321,154
	\$ 25,075,185	\$ 20,305,703	\$ 13,188,661	\$ 15,973,968	\$ 4,441,788
	72.5%	81.9%	58.2%	83.2%	70.3%
	\$ 9,106,719	\$ 4,609,328	\$ 3,837,005	\$ 14,950,807	\$ 1,965,723
	\$ 4,237,121	\$ 892,045	\$ 1,555,051	\$ 4,084,026	\$ 2,824
	\$ 9,106,719	\$ 4,609,328	\$ 3,837,005	\$ 14,950,807	\$ 1,965,723
	7.65%	7.65%	7.65%	7.65%	7.65%
	\$ 696,664	\$ 352,614	\$ 293,531	\$ 1,143,737	\$ 150,378

	Group Average
\$	\$ 311,105,583
\$	\$ 9,168,666
\$	\$ 320,274,249
\$	\$ 62,258,023
\$	\$ 15,726,068
\$	\$ 398,258,340
\$	\$ 14,404,746
\$	\$ 27.65
\$	\$ 732,416,386
\$	\$ 2,438,038,645
	30.0%
	22,402,393
	604,120,1
\$	\$ 284,439,594
\$	\$ 311,105,583
\$	\$ 9,168,666
\$	\$ 320,274,249
\$	\$ 12,794,288
\$	\$ 448,217,130
\$	\$ 71.5%
\$	\$ 205,569,515
\$	\$ 61,755,576
\$	\$ 205,569,515
\$	\$ 7.65%
\$	\$ 15,726,068

Customer Account Services Cost Pool

FERC Account Balances:
 Acct 903 - Customer Records & Collection (page 322, line 131)
 Acct 905 - Misc Customer Accounts (page 322, line 133)
 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 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

VI - Need For Service Company Services

Analysis Of Services

The final aspect of this study was an assessment of whether the services that are provided to IAWC by the Service Company would be necessary if IAWC were a stand-alone water utility. The first step in this evaluation was to determine specifically what the Service Company does for IAWC. Based on discussions with Service Company personnel, the matrix in Schedule 10 was created showing which entity—IAWC or a Service Company location—is responsible for each of the functions IAWC 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 Schedule 10, the following conclusions can be drawn:

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

Designation Of Responsibility For Water Utility Functions

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

Designation Of Responsibility For Water Utility Functions

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

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

Governance Practices Associated With Service Company Charges

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

- **Regional President Oversight** – The Regional President of the Central Region is on the Executive Management Team (EMT) of American Water. The Regional President is responsible for the overall performance of each operating company in the region, including IAWC. As part of the EMT, each Regional 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. The Regional President also serves as a Director on the Board of the Service Company.
- **Regional Vice President & Treasurer** – The Regional Vice President and Treasurer of the Central Region is responsible for the financial reporting, performance and internal controls of each of the operating companies in the region. The Regional Service Delivery and Finance Directors monitor the performance and reporting from the Service Company and pushes back whenever the quality and service are not appropriate.
- **Operating Company Board Oversight** – IAWC board of directors includes the Regional President, Vice President of Operations and Vice President of Finance.
- **Service Company Budget Review/Approval** – Every Regional President sits 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.
- **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 Regional President. The Regional President, with input from the regional management team has the ability to impact all new initiatives and projects before they are authorized. Projects ultimately must be accounted for in the Service Company Budget, approved by its Board.
- **Service Company Bill Scrutiny** – Operating company 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.
- **Service Company Budget Variance Reporting** – Each month, a summary variance analysis is prepared that explains differences between budgeted and actual Service Company spending. In addition, the monthly financial review meetings are held to review various aspects of the financial statements of the Service Company.
- **Operating Company Budget Variance Reporting** – The "Budget/Plan Analysis," produced monthly by each operating company, has a line item for Management Fees (i.e., Service Company charges). In this way, Service Company budget versus actual charges can be monitored for the month and year-to-date. The Regional President attends the monthly review of the Service Company which includes an analysis of variances in both operating and financial data.
- **Capital Investment Management (CIM)** – Capital investment within American Water is a significant and essential part of the business. It is necessary to maintain regulatory compliance, provide for reliable, efficient, and quality service, keep pace with growth, and

facilitate appropriate infrastructure renewal. American Water's CIM policy supports the following objectives:

- Capital investment plans are developed and aligned with business plan objectives
- Effective technical oversight and governance is in place for individual projects
- Establishes investment strategies that represent value enhancements for customers
- Periodically review investment performance against established objectives and make adjustments to meet business needs

The CIM process was designed to optimize the effectiveness of asset investment. The process is managed at three levels for all American Water companies, including IAWC.

**Market Cost Comparison of Service Company Charges to
Long Island American Water**

12-Months Ended December 31, 2006

**Long Island American Water
Market Cost Comparison of Service Company Charges
12-Months Ended December 31, 2006**

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I - Introduction

Purpose Of This Study

This study was undertaken to answer three questions concerning the services provided by American Water Works Service Company, Inc. (Service Company) to Long Island American Water (LIAW):

1. Was LIAW charged the lower of cost or market for managerial and professional services provided by the Service Company during 2006?
2. Were the 2006 cost of the Service Company's customer accounts services, including those of the National Call Centers, reasonable?
3. Are the services LIAW receives from Service Company necessary?

Study Results

Concerning question 1, the following conclusions can be drawn from this study:

- LIAW was charged the lower of cost or market for managerial and professional services during the 12-months ended December 31, 2006.
- On average, the hourly rates for outside service providers are **59% 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 LIAW without careful supervision on the part of LIAW. If these services were contracted entirely to outside providers, LIAW would have to add at least one position to manage activities of outside firms. These positions would be necessary to ensure the quality and timeliness of services provided.
- If all the managerial and professional services now provided by the Service Company had been out-sourced during the 12-months ended December 31, 2006, LIAW and its ratepayers would have incurred an **additional \$1.8 million** in expenses. This amount includes the higher cost of outside providers and the cost of a LIAW position needed to direct the outsourced work.
- This study's hourly rate comparison actually understates the cost advantages that accrue to LIAW from its use of the Service Company. Outside service providers generally bill for every hour worked. Service Company personnel, on the other hand, charge a maximum 8 per day even when they work more. If the overtime hours of Service Company personnel had been factored into the hourly rate calculation, the Service Company would have had an even greater annual dollar advantage than the \$1.8 million cited above.
- It would be difficult for LIAW 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 LIAW ratepayers.

Concerning question 2, it was determined that the cost of the Service Company's customer accounts services, including those provided by the National Call Center, **is below the average of the comparison group of neighboring electric utilities.** 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 LIAW. During the 12-months ended December 31, 2006, the customer accounts cost for LIAW customers was \$26.98 compared to the 2005 average of \$29.32 for neighboring electric utilities. The highest comparison group per customer cost was \$77.79 and the lowest \$13.83.

Concerning question 3, the following conclusions can be drawn:

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

II - Background

Overview Of American Water Service Company

The Service Company maintains several types of offices from which it provides services to American Water operating companies. They include:

- 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 the second quarter of 2001 and a second in Pensacola, Florida that went into operation in April 2005. Prior to the establishment of these national call centers, customer service functions were performed by employees of LIAW, which incurred the expense on its books. LIAW transitioned to the Call Center in October 2003.
- 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 have not been consolidated into the National Shared Services Center. Examples of regional office services include rates and revenues, engineering and operations.
- 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 email system. 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 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 number, if transaction is a direct charge
- Formula number if transaction is allocated
- Employee hours worked
- Account number for non-labor charges

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

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 (see example in Schedule 1) that shows:

- Operating company (for direct charge)
- Formula number (for allocation)
- Work order (where applicable)
- Authorization number (where applicable)

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 their 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 2% of the Voorhees Data Center's professional labor is assigned to LIAW during a month, then 2% of that office's monthly administrative labor charges also is assigned to the operating company.

The overhead cost category is next assigned based on professional and administrative labor costs. Thus, if 2% of the Corporate Office's accumulated professional and support labor is charged to LIAW during the month, then 2% of that month's overhead expenses will be assigned to LIAW.

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 LIAW, then 2% of that office's office expenses would be assigned to LIAW. 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 state rate case proceeding are charged directly to the operating company whose case is being heard.

Long Island American Water
Sample Electronic Time Sheet

American Water Works Company (581020) - 3/23/07

File Edit Help

15:31:54
Emp#: 03002531
View Mode

Week Ending: 2/25/07 Watkins, John M.
Dept: 036507 NE-Finance

Totals: 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00

Formula	Typ	Mo	Tu	We	Th	Fr	Sa	Su	Total	Meal
		2/19	2/20	2/21	2/22	2/23	2/24	2/25	Hours	Money
100074	001				4.00				4.00	
100082	001								.00	
100084	001		3.00	3.00	4.00				10.00	
100229	001								.00	
100231	001								.00	
100625	001		8.00	5.00	5.00				18.00	
100074	250								.00	
100074	300	8.00							8.00	
100074	400								.00	
100074	430								.00	

F3-Save/Exit F6-Submit F9-Comments
F1-Search F4-Fold/UnFold F7-Display Errors F10-Save Template
OK Cancel Help Bottom

III – Service Company Cost Comparison Approach

During 2006, the Service Company billed LIAW \$4,089,726 in O&M-related and \$208,686 in capital-related charges. Included in the O&M amount is \$513,501 for which LIAW will not seek recovery. As calculated in the table below, the net O&M and capital charges of \$3,784,911 were subjected to a market cost comparison.

Reconciliation to 2006 Testable Service Co Charges

O&M Per LIAW G/L	\$	4,089,726
Net O&M Adjustments	\$	(513,501)
Net Testable O&M	\$	3,576,225
Capital per LIAW G/L	\$	208,686
Net Testable SC Charges	\$	3,784,911

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

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

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

	2006	
	Amount	Hours
Management and Professional Services	\$ 2,876,809	28,705
Customer Account Services	\$ 908,103	30,197
Total	\$ 3,784,911	58,902

This study's first question—whether the Service Company charges 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 LIAW during 2006. Outside providers' billing rates came from surveys or other information from professionals that could perform the services now provided by the Service Company.

The second question—reasonableness of the National Call Center costs—was addressed by comparing LIAW'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 third question—the necessity of Service Company services—was first investigated by determining the services provided to LIAW. A determination was then made as to whether these services would be required if LIAW were a stand-alone utility.

IV – Managerial And Professional Services Hourly Rate Comparison

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 educational backgrounds as Service Company engineering personnel. In fact, many Belleville employees have engineering degrees. 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 LIAW during 2006. 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 LIAW during 2006, 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

Schedule 2 (page 10) details the assignment of 2006 management and professional Service Company charges to outsider provider categories. Schedule 3 (page 11) shows the same assignment for Service Company management and professional hours charged to LIAW during 2006.

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 2006 test period non-labor Service Company charges:

- **Contract Services** – 2006 Service Company charges to LIAW include over \$350,000 in charges associated with existing arrangements with outside professional firms who 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.
- **Computer Hardware and Software Expenses** – Included in 2006 Service Company charges to LIAW are charges for outside expenses related to leases and maintenance fees related to mainframe, server and network infrastructure, corporate business applications and the email system. An outside provider that would take over operation of a data center would recover these expenses over and above the labor necessary to operate the data center.

Schedule 4 (page 12) 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 Schedules 2 and 3 and the excludable items shown in Schedule 4, the Service Company's equivalent costs per hour for 2006 are calculated below.

	Attorney	Management Consultant	Certified Public Accountant	Professional Engineer	Total
Total management, professional & technical services charges	\$ 124,825	\$ 969,933	\$ 1,442,053	\$ 339,998	\$ 2,876,809
Less:					
Contract services	\$ 3,840	\$ 129,633	\$ 202,147	\$ 16,455	\$ 352,074
Travel expenses	\$ 1,180	\$ 10,745	\$ 6,009	\$ 2,021	\$ 19,955
Computer hardware/software	\$ 3	\$ 14,014	\$ 38,751	\$ 306	\$ 53,074
Net Service Charges (A)	\$ 119,803	\$ 815,540	\$ 1,195,146	\$ 321,217	\$ 2,451,706
Total Hours (B)	1,139	7,681	16,109	3,776	28,705
Average Hourly Rate (A / B)	\$ 105	\$ 106	\$ 74	\$ 85	

**Long Island American Water
Analysis of 2006 Service Company Charges By Location And Function**

		2006 Service Company Charges				
Location	Function	Attorney	Management Consultant	Certified Public Accountant	Professional Engineer	Total
Belleville Lab	Water Quality				\$ 113,087	\$ 113,087
Call Center	Human Resources		\$ 23,399			\$ 23,399
Corporate	Accounting			\$ 87,694		\$ 87,694
	Administration	\$ 11,963	\$ 249,597	\$ 169,128	\$ 39,641	\$ 470,329
	Audit			\$ 24,684		\$ 24,684
	Communications		\$ 46,969			\$ 46,969
	Finance			\$ 104,329		\$ 104,329
	Human Resources		\$ 100,540			\$ 100,540
	Legal	\$ 49,234				\$ 49,234
	Operations		\$ 69,376		\$ 68,283	\$ 137,658
	Rates & Revenue			\$ 70,022		\$ 70,022
	Risk Management		\$ 29,498			\$ 29,498
	Water Quality				\$ 27,228	\$ 27,228
Regional Offices	Accounting			\$ 15,269		\$ 15,269
	Administration		\$ 148,995			\$ 148,995
	Communications		\$ 42,207			\$ 42,207
	Customer Service					\$ -
	Engineering				\$ 20,088	\$ 20,088
	Finance			\$ 147,578		\$ 147,578
	Human Resources		\$ 110,059			\$ 110,059
	Legal	\$ 63,628				\$ 63,628
	Operations		\$ 38,470		\$ 52,397	\$ 90,867
	Risk Management		\$ 71,627			\$ 71,627
	Water Quality				\$ 19,274	\$ 19,274
Information Technology	Audit			\$ 6,542		\$ 6,542
	Information Technology			\$ 522,204		\$ 522,204
Shared Services	Accounting			\$ 256,550		\$ 256,550
	Administration		\$ 39,197			\$ 39,197
	Finance			\$ 25,472		\$ 25,472
	Rates & Revenue			\$ 12,582		\$ 12,582
	Total Dollars Charged	\$ 124,825	\$ 969,933	\$ 1,442,053	\$ 339,998	\$ 2,876,809

**Long Island American Water
Analysis of 2006 Service Company Hours By Location And Function**

Location	Function	2006 Service Company Hours				Total
		Attorney	Management Consultant	Certified Public Accountant	Professional Engineer	
Belleville Lab	Water Quality				1,711	1,711
Call Center	Human Resources		328			328
Corporate	Accounting			1,458		1,458
	Administration		704			704
	Audit			412		412
	Communications		265			265
	Finance			1,030		1,030
	Human Resources		1,111			1,111
	Legal	325				325
	Operations		477		1,012	1,488
	Rates & Revenue			292		292
	Risk Management		267			267
	Water Quality				476	476
Regional Offices	Accounting			263		263
	Administration		969			969
	Communications		892			892
	Customer Service					-
	Engineering				219	219
	Finance			1,971		1,971
	Human Resources		1,075			1,075
	Legal	815				815
	Operations		320		358	677
	Risk Management		998			998
	Water Quality				-	-
Information Technology	Audit			110		110
	Information Technology			4,352		4,352
Shared Services	Accounting			5,115		5,115
	Administration		276			276
	Finance			898		898
	Rates & Revenue			207		207
	Total Hours Charged	1,139	7,681	16,109	3,776	28,705

**Long Island American Water
2006 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	\$ 95,996	\$ 1,109	\$ 646	\$ 97,750
Administration	\$ 37,019	\$ 4,693	\$ 6,131	\$ 47,843
Audit	\$ (68)	\$ 274	\$ -	\$ 207
Communications	\$ 13,323	\$ 329	\$ 137	\$ 13,788
Engineering	\$ -	\$ -	\$ -	\$ -
Finance	\$ 30,379	\$ 2,064	\$ 391	\$ 32,834
Human Resources	\$ 62,699	\$ 3,221	\$ 775	\$ 66,695
Information Technology	\$ 67,009	\$ 934	\$ 37,714	\$ 105,656
Legal	\$ 3,840	\$ 1,180	\$ 3	\$ 5,022
Operations	\$ 21,101	\$ 2,644	\$ 242	\$ 23,987
Rates & Revenue	\$ 8,831	\$ 1,628	\$ -	\$ 10,459
Risk Management	\$ 2,613	\$ 1,390	\$ 6,927	\$ 10,931
Water Quality	\$ 9,333	\$ 489	\$ 108	\$ 9,930
Total	\$ 352,074	\$ 19,955	\$ 53,074	\$ 425,103

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	\$ 3,840	\$ 1,180	\$ 3
Management Consultant	\$ 129,633	\$ 10,745	\$ 14,014
Certified Public Accountant	\$ 202,147	\$ 6,009	\$ 38,751
Professional Engineer	\$ 16,455	\$ 2,021	\$ 306
Total	\$ 352,074	\$ 19,955	\$ 53,074
			\$ 425,103



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.

Attorneys

The New York Bar Association does not survey its members as to their hourly billing rates. In addition, publicly available billing rate information could not be found for New York attorneys. Therefore, a New York estimate was developed from a survey of Massachusetts lawyers conducted annually by the Massachusetts Lawyers Weekly. As presented in Schedule 5, the average rate for each Massachusetts firm respondent was adjusted for the cost of living differential between their location and Lynbrook, New York. The survey includes rates that were in effect at December 31, 2005. Thus, the 2005 average rate was escalated to June 30, 2006—the midpoint of 2006.

Management Consultants

The cost per hour for management consultants was developed from the 2006 annual survey performed by the Association of Management Consulting Firms—an industry trade organization. The first step in the calculation, presented in Schedule 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. This survey includes rates that were in effect during 2005 for firms in 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 survey includes rates that were in effect at December 31, 2005. Thus, the 2005 average rate was escalated to June 30, 2006—the midpoint of 2006.

Certified Public Accountants

The average hourly rate for New York certified public accountants was developed from a 2006 survey conducted by the American Institute of Certified Public Accountants (AICPA) every two years. Hourly rates in the AICPA survey are the average of firms in New York. The average hourly rate was calculated for a set of typical accountant positions, as shown in Schedule 7. Based on a typical staff assignment by each accountant position, a weighted average hourly rate was calculated. The survey includes rates that were in effect at December 31, 2005. Thus, the 2005 average rate was escalated to June 30, 2006—the midpoint of 2006.

Professional Engineers

The Service Company provided hourly rate information for outside engineering firms that could have been utilized by LIAW 2006. As presented in Schedule 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.

Schedule 5

**Long Island American Water
Estimated Billing Rates Of New York Attorneys**

Billing rates as of December 31, 2005 (Note A)							Cost of Living Adjust (C)	Adjusted Rate
Firm	Massachusetts Location	Number Of Mass Lawyers	Billing Rate Range			Average		
			Associate	Partner				
Edwards Angel Palmer & Dodge	Boston	264	\$ 315	\$ 513	\$ 414		87%	\$ 476
Foley Hoag	Boston	225	\$ 333	\$ 503	\$ 418		87%	\$ 480
Holland & Knight	Boston	140	\$ 378	\$ 438	\$ 408		87%	\$ 469
Sullivan & Worcester	Boston	129	\$ 335	\$ 525	\$ 430		87%	\$ 494
Burns & Levinson	Boston	121	\$ 258	\$ 388	\$ 323		87%	\$ 371
Hinckley, Allen & Snyder	Boston	61	\$ 235	\$ 395	\$ 315		87%	\$ 362
Robinson & Cole	Boston	55	\$ 275	\$ 400	\$ 338		87%	\$ 388
Prince Lobel Glosky & Tye	Boston	50	\$ 243	\$ 375	\$ 309		87%	\$ 355
DLA Piper Rudnick Gray Cary US	Boston	49	\$ 365	\$ 560	\$ 463		87%	\$ 532
Murtha Cullina	Boston	33	\$ 185	\$ 338	\$ 261		87%	\$ 300
Lawson & Weitzen	Boston	32	\$ 175	\$ 288	\$ 231		87%	\$ 266
Lahive & Cockfield	Boston	31	\$ 313	\$ 488	\$ 400		87%	\$ 460
Melick, Porter & Shea	Boston	31	\$ 158	\$ 188	\$ 173		87%	\$ 198
Bernkopf Goodman	Boston	27	\$ 238	\$ 393	\$ 315		87%	\$ 362
Marcus Errico Emmer & Brooks	Braintree	26	\$ 300	\$ 325	\$ 313		87%	\$ 359
Eckert Seamans Cherin & Mellott	Boston	22	\$ 323	\$ 323	\$ 323		87%	\$ 371
Keegan Werlin	Boston	22	\$ 225	\$ 388	\$ 306		87%	\$ 352
Barron & Stadfeld	Boston	21	\$ 195	\$ 300	\$ 248		87%	\$ 285
Cain Hibbard Myers & Cook	Great Barrington	20	\$ 175	\$ 278	\$ 226		74%	\$ 304
Cushing & Dolan	Boston	20	\$ 225	\$ 295	\$ 260		87%	\$ 299
Lowrie, Lando & Anastasi	Cambridge	20	\$ 260	\$ 388	\$ 324		100%	\$ 325
Donovan & O'Connor	North Adams	19	\$ 175	\$ 175	\$ 175		67%	\$ 263
Overall Average at December 31, 2005								\$ 367
<u>Escalation to Mid-Point of Year - June 30, 2006 (Note B)</u>								
CPI at December 31, 2005							196.8	
CPI at June 30, 2006							202.9	
Inflation/Escalation							3.1%	
Average Billing Rate At June 30, 2006							\$ 378	

Note A: Source is Massachusetts Lawyers Weekly, April 2006

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

Note C: Source is Sperling's Best Places (<http://www.bestplaces.net/col/col.aspx>). This number represents the cost of living difference between the Massachusetts city and Lynbrook, NY. A number over 100% indicates the Massachusetts city's cost of living is higher than Lynbrook. A number less than 100% indicates Lynbrook's cost of living is higher.

Schedule 6

**Long Island American Water
Billing Rates of U.S. Management Consultants**

A. Calculation of Average Hourly Billing Rate by Consultant Position						
Survey billing rates were those in effect in 2005 (Note A)						
	Average Hourly Rates (Note A)					
	Entry-Level Consultant	Associate Consultant	Senior Consultant	Junior Partner	Senior Partner	
Average	\$ 141	\$ 186	\$ 234	\$ 320	\$ 350	
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)	\$ 141	\$186	\$234	\$320	\$350	
Typical Percent of Time Spent on a Consulting Project	30%	30%	20%	10%	10%	Weighted Average
	\$ 42	\$ 56	\$ 47	\$ 32	\$ 35	\$ 212
Escalation to Test Year Mid-Point June 30, 2006 (Note B)						
				CPI at December 31, 2005		196.8
				CPI at June 30, 2006		202.9
				Inflation/Escalation		3.1%
Estimated Average Hourly Billing Rate For Consultants At June 30, 2006						\$ 218

Note A: source: "Operating Ratios For Management Consulting Firms, 2006 Edition" Association of Management Consulting Firms

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

Schedule 7

Long Island American Water
Estimated Billing Rates Of New York Certified Public Accountants

A. Calculation of Average Hourly Billing Rate by Public Accounting Position Survey billing rates were those in effect in 2005 (Note A)				
	Average Hourly Billing Rate (Note A)			
Type of Firm	Staff Accountant	Senior Accountant	Manager	Partner
Average Hourly Rate	\$ 64	\$ 90	\$ 109	\$ 166
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)	\$ 64	\$ 90	\$ 109	\$ 166
Typical Percent of Time Spent on an Accounting Assignment	30%	30%	20%	20%
	\$ 19	\$ 27	\$ 22	\$ 33
				Weighted Average \$ 101
			CPI at December 31, 2005	196.8
			CPI at June 30, 2006	202.9
			Inflation/Escalation	3.1%
Estimated Average Hourly Billing Rate For New York CPAs At June 30, 2006				\$ 104

Note A: Source is AICPA's 2006 National PCPS/TSCPA Management of an Accounting Practice Survey

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

Exhibit Witness: PLB-1
Schedule 8

Long Island American Water
Billing Rates Of New York Engineers

Note: Billing rates were those in effect during 2006

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 Elect Proj Engineer	Project Manager Project Associate Sr. Mgr. Engineer	Officer Principal Engineer
Firm #1	\$62	\$104	\$168	\$180
Firm #2	\$53	\$67	\$118	\$165
Firm #3	\$65	\$85	\$148	\$200
Firm #4	\$62	\$80	\$129	\$170
Firm #5	\$76	\$86	\$135	\$180
Firm #6	\$62	\$81	\$121	\$170
Firm #7	\$64	\$94	\$147	\$185

B. Calculation of Overall Average Engineering Hourly Billing Rate

Average Hourly Billing Rate (From Above)	CAD Drafter Engineer Tech	Engineer Design Engineer Project Engineer Elect Proj Engineer	Project Manager Project Associate Sr. Mgr. Engineer	Officer Principal Engineer	Weighted Average
		\$63	\$85	\$138	
Typical Percent of Time on an Engineering Assignment	30%	35%	25%	10%	
	\$19	\$30	\$34	\$18	\$101

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

Service Company Versus Outside Provider Cost Comparison

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

Service Provider	12 Months Ended December 31, 2006		
	Service Company	Outside Provider	Difference-- Service Co. Greater(Less) Than Outside
Attorney	\$ 105	\$ 378	\$ (273)
Management Consultant	\$ 106	\$ 218	\$ (112)
Certified Public Accountant	\$ 74	\$ 104	\$ (30)
Professional Engineer	\$ 85	\$ 101	\$ (16)

Based on these cost per hour differentials and the number of managerial and professional services hours billed to LIAW during the 12-months ended December 31, 2006, outside service providers would have cost \$1,710,628 more than the Service Company (see table below). Thus, on average, outside provider's hourly rates are almost 59% higher than those of the Service Company (\$1,710,628/ \$ 2,876,809).

Service Provider	12 Months Ended December 31, 2006		
	Hourly Rate Difference-- Service Co. Greater(Less) Than Outside	Service Company Hours Charged	Dollar Difference
Attorney	\$ (273)	1,139	\$ (310,921)
Management Consultant	\$ (112)	7,681	\$ (858,841)
Certified Public Accountant	\$ (30)	16,109	\$ (480,198)
Professional Engineer	\$ (16)	3,776	\$ (60,668)
Service Company Less Than Outside Providers			\$ (1,710,628)

If LIAW were to use outside service providers rather than the Services 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 28,705 hours of work (about 19 full-time equivalents at 1,500 billable hours per FTE) would add a significant workload to the existing LIAW management team. Thus, it would be necessary for LIAW 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 another \$121,400 per year to LIAW's personnel expenses.

Cost of Adding Administrative Positions To LIAWC's Staff

	Total
New Positions' Salary	\$ 85,000
Benefits (at 52%)	\$ 36,400
Total Cost of the New Position	\$ 121,400

Thus, the total effect on the ratepayers of LIAW of contracting all services now provided by Service Company would be an increase in their costs of **\$1,832,028** (\$1,710,628 + \$121,400).

Other Cost Comparisons

Every year, the Belleville Lab conducts a comparison of its cost for performing major tests to the cost of using outside testing laboratories. Over the past several years, these surveys have shown the following results been as follows:

Year	Number of Major Tests Surveyed	Percent Belleville Lower Than Outside Labs
2000	26	15%
2001	25	19%
2002	24	16%
2003	23	10%
2004	24	9%
2005	24	25%

These studies provide additional evidence that the Service Company arrangement is the lowest-cost alternative for LIAW.

V – Customer Account Services Cost Comparison

Background

It is difficult to compare the cost of American Water's National Call Centers with outside providers of the same call center-related services. Call center survey data is proprietary and expensive to obtain. For this reason, LIAW's National Call Center costs are compared to those of neighboring electric utilities because the data necessary to make this comparison is readily available to the public.

Electric utility cost information comes from their FERC Form 1. FERC's chart of accounts is defined in chapter 18, part 101 of Code of Federal Regulations. FERC accounts that contain call center-related expenses and are used in this study's comparison are:

- Account 903 Customer Accounts Expense – Records and Collection Expense
- Account 905 Customer Accounts Expense – Miscellaneous Customer Accounts Expense.

In addition, 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).

Schedule 9 provides FERC's description of what should be charged to these accounts. In questioning the controller of a large Southeastern electric utility, it was determined that expenses of the activities described below are recorded in the designated FERC accounts.

<p><u>903 Records and Collection Expense</u></p> <ul style="list-style-type: none">• 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 of customer payments received in the mail• Bill payment centers – locations where customers can pay their bills in person <p><u>905 Miscellaneous Customer Accounts Expense</u></p> <ul style="list-style-type: none">• Customer Information System IT – maintenance and support of the customer information system
--

This study assumes the FERC accounts for other electric and gas utilities contain expenses for the same activities.

Long Island American Water
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.

Long Island American Water
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.

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.

Connecticut	<ul style="list-style-type: none"> • Connecticut Light & Power 	<ul style="list-style-type: none"> • United Illuminating
Massachusetts	<ul style="list-style-type: none"> • Boston Edison • Commonwealth Electric • Fitchburg Electric & Gas 	<ul style="list-style-type: none"> • Massachusetts Electric • Western Massachusetts Electric
New Jersey	<ul style="list-style-type: none"> • Atlantic City Electric • Jersey Central Power 	<ul style="list-style-type: none"> • Rockland Electric
New York	<ul style="list-style-type: none"> • Central Hudson Electric & Gas • Consolidated Edison 	<ul style="list-style-type: none"> • NY State Electric & Gas • Niagara Mohawk • Rochester Gas & Electric
Pennsylvania	<ul style="list-style-type: none"> • Duquesne Light • Philadelphia Electric • Pennsylvania Electric 	<ul style="list-style-type: none"> • Pennsylvania Power • Pennsylvania Power & Light • West Penn Power
Vermont	<ul style="list-style-type: none"> • Central Vermont Public Svc 	<ul style="list-style-type: none"> • Green Mountain Power

Some neighboring electric utilities could not be included in the comparison group because they did not submit the necessary FERC Form 1 data.

Comparison Approach

The basis for this comparison is customer account services expenses per customer. LIAW’s cost pool was developed to include the same expenses included in electric utility’s FERC accounts 903 and 905. As shown in the graphic below, LIAW’s resultant cost pool contains the expenses of Service Company locations and certain operating company expenses.

American Water
<u>Service Company</u> Pensacola & Alton Call Centers a. Customer contact b. Customer order processing c. Billing information processing d. Collections e. Correspondence processing f. Payment processing <u>IT Service Centers</u> a. Support expenses for the customer information system (ORCOM)

Electric Utilities
FERC Acct 903 - Records and Collection Expense and FERC Acct 905 - Misc Customer Accounts Expense a. Customer contact b. Customer order processing c. Bill preparation and mailing d. Collections e. Payment processing f. Correspondence processing

LIAW Cost Per Customer

In order to make a valid comparison to neighboring electric utilities, certain adjustments had to be made to the applicable Service Company charges to LIAW. 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 1.28 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. As shown below, LIAW's adjusted annual expense per customer is \$26.98—the number that can be compared to neighboring electric utilities' expenses.

Long Island American Water 2006 Cost Per Customer

Cost Component		2006 Service Co Charges	Adjustment Fewer Calls For Water Cos. (A)	Adjusted
Service Company				
Call Centers	Call processing, order processing, credit, bill collection	\$ 845,905	\$ 806,254	\$ 1,652,159
Regional Offices		\$ 62,197		\$ 62,197
IT/Data Centers	Bill preparation and mailing	\$ 172,533		\$ 172,533
Operating Company	Customer payment processing			\$ 95,715
Cost Pool Total				\$ 1,982,605
Total Customers				73,495
2006 Cost Per Long Island American Water Customer				\$ 26.98

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 annualized Call Center charges		\$ 845,905
Electric utility industry's avg calls/customer	2.50	
American Water's avg calls/customer	1.28	
Percent different	95%	95%
Total Adjustment B		\$ 806,254

Note B: Estimated customer payment processing expenses

Number of customers	73,495
Number of payments/customer/year	12
Total payments processed/year	881,940
Bank charge per item	\$ 0.1085
Total estimated annual expense	\$ 95,715

Electric Utility Group Cost Per Customer

Schedule 9 shows the actual 2005 customer accounts expense per customer calculation for the electric utility comparison group. All of the underlying data was taken from the utilities' FERC Form 1.

Summary Of Results

As shown in the table below, LIAW's cost per customer is below the average of the electric utility comparison group. It can therefore be concluded that the customer accounts-related expenses, including those of the Alton and Pensacola Call Centers, assigned by the Service Company to LIAW are reasonable.

Average Customer Accounts Expense Per Customer	
West Penn Power	\$ 13.83
Central Vermont Pub Service	\$ 14.90
Duquesne Light	\$ 15.52
Massachusetts Electric	\$ 16.68
Jersey Central Power	\$ 16.96
Pennsylvania Electric	\$ 19.13
Pennsylvania Power	\$ 19.69
Green Mountain Power	\$ 20.44
Connecticut Light & Power	\$ 21.58
PPL Electric	\$ 22.28
Rochester Gas & Electric	\$ 25.52
Central Hudson Gas & Electric	\$ 26.91
Long Island American Water	\$ 26.98
Commonwealth Electric	\$ 27.83
Western Mass Electric	\$ 28.44
New York State Electric & Gas	\$ 28.87
Comparison Group Average	\$ 29.32
Niagra Mohawk Power	\$ 32.59
United Illuminating	\$ 36.63
Consolidated Edison	\$ 37.29
Boston Edison	\$ 37.49
PECO Energy	\$ 46.94
Atlantic City Electric	\$ 49.33
Fitchburg Gas & Electric	\$ 50.85
Rockland Electric	\$ 77.79

Long Island American Water
Comparison Group 2005 Actual Customer Accounts Expense Per Customer

New York						
Central Hudson Gas & Electric	Consolidated Edison	New York State Electric & Gas	Niagara Mohawk Power	Rochester Gas & Electric		
\$ 5,905,516	\$ 102,727,772	\$ 21,597,780	\$ 36,083,949	\$ 8,735,793		
\$ 1,808,920	\$ 471,463	\$ 1,651,337	\$ 754,473	\$ 7,122		
\$ 7,714,436	\$ 103,199,235	\$ 23,249,117	\$ 36,838,422	\$ 8,742,915		
\$ (374,830)	\$ 7,792,121	\$ 153,908	\$ 9,149,442	\$ 159,601		
\$ 463,522	\$ 7,468,619	\$ 1,421,815	\$ 2,348,143	\$ 252,708		
\$ 7,803,128	\$ 118,459,974	\$ 24,824,841	\$ 48,336,007	\$ 9,155,224		
289,956	3,176,355	859,868	1,483,040	358,785		
\$ 26.91	\$ 37.29	\$ 28.87	\$ 32.59	\$ 25.52		
\$ (4,404,273)	\$ 87,983,157	\$ 1,564,876	\$ 99,508,678	\$ 3,696,707		
\$ 71,194,915	\$ 1,102,358,207	\$ 188,972,981	\$ 333,833,107	\$ 76,513,025		
-6.2%	8.0%	0.8%	29.8%	4.8%		
\$ 6,059,108	\$ 97,629,004	\$ 18,585,821	\$ 30,694,676	\$ 3,303,368		
\$ (374,830)	\$ 7,792,121	\$ 153,908	\$ 9,149,442	\$ 159,601		
\$ 6,059,108	\$ 97,629,004	\$ 18,585,821	\$ 30,694,676	\$ 3,303,368		
7.65%	7.65%	7.65%	7.65%	7.65%		
\$ 463,522	\$ 7,468,619	\$ 1,421,815	\$ 2,348,143	\$ 252,708		

Customer Account Services Cost Pool

FERC Account Balances:

- Acct 903 - Customer Records & Collection (page 322, line 131)
- Acct 905 - Misc Customer Accounts (page 322, line 133)

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 158)

Total Payroll (page 355, line 96)

Total Benefits as Percent of Payroll

Payroll Charged to Customer Accts Expenses (page 354, line 6)

Pension & Benefits Pertaining to Customer Accts Expenses

Note B: Calculation of Employer's Payroll Taxes Pertaining to Cust. Acct Mgmt

Payroll Charged to Customer Accts Expenses (page 354, line 6)

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

Estimated Employer's Portion of FICA and Medicare



Long Island American Water
Comparison Group 2005 Actual Customer Accounts Expense Per Customer

Pennsylvania					
	Duquesne Light	PECO Energy	Pennsylvania Electric	Pennsylvania Power	PPL Electric
	\$ 7,630,920	\$ 51,262,973	\$ 10,706,242	\$ 2,660,189	\$ 24,785,789
	\$ -	\$ 17,091,051	\$ 98,990	\$ 121,055	\$ 602,445
	\$ 7,630,920	\$ 68,354,024	\$ 10,805,232	\$ 2,781,244	\$ 25,388,234
Note A	\$ 729,457	\$ 2,946,156	\$ 11,831	\$ 227,639	\$ 3,320,449
Note B	\$ 732,520	\$ 1,155,943	\$ 419,574	\$ 94,893	\$ 1,618,783
Total Cost Pool	\$ 9,092,897	\$ 72,456,123	\$ 11,236,637	\$ 3,103,776	\$ 30,327,466
	586,050	1,543,543	587,533	157,660	1,361,407
Customer Account Services Expense per Customer	\$ 15.52	\$ 46.94	\$ 19.13	\$ 19.69	\$ 22.28
	\$ 8,677,884	\$ 36,605,786	\$ 136,028	\$ 2,618,720	\$ 37,811,499
	\$ 113,912,649	\$ 187,745,320	\$ 63,058,697	\$ 14,269,687	\$ 240,965,158
	7.6%	19.5%	0.2%	18.4%	15.7%
	\$ 9,575,422	\$ 15,110,369	\$ 5,484,627	\$ 1,240,430	\$ 21,160,563
	\$ 729,457	\$ 2,946,156	\$ 11,831	\$ 227,639	\$ 3,320,449
	\$ 9,575,422	\$ 15,110,369	\$ 5,484,627	\$ 1,240,430	\$ 21,160,563
	7.65%	7.65%	7.65%	7.65%	7.65%
	\$ 732,520	\$ 1,155,943	\$ 419,574	\$ 94,893	\$ 1,618,783

Customer Account Services Cost Pool

FERC Account Balances:

- Acct 903 - Customer Records & Collection (page 322, line 131)
- Acct 905 - Misc Customer Accounts (page 322, line 133)

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 158)

Total Payroll (page 355, line 96)

Total Benefits as Percent of Payroll

Payroll Charged to Customer Accts Expenses (page 354, line 6)

Pension & Benefits Pertaining to Customer Accts Expenses

Note B: Calculation of Employer's Payroll Taxes Pertaining to Cust. Acct Mgmt

Payroll Charged to Customer Accts Expenses (page 354, line 6)

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

Estimated Employer's Portion of FICA and Medicare



Long Island American Water
Comparison Group 2005 Actual Customer Accounts Expense Per Customer

	Pennsylvania		New Jersey		
	West Penn Power	Atlantic City Electric	Jersey Central Power	Rockland Electric	
	\$ 7,219,187	\$ 24,903,319	\$ 15,935,970	\$ 2,588,716	
	\$ -	\$ 15,492	\$ 641,165	\$ 1,010,864	
	\$ 7,219,187	\$ 24,918,811	\$ 16,577,135	\$ 3,599,580	
	\$ 1,860,894	\$ 968,590	\$ 781,635	\$ 1,811,442	
	\$ 637,822	\$ 171,115	\$ 736,750	\$ 153,635	
	\$ 9,717,903	\$ 26,058,516	\$ 18,095,520	\$ 5,564,656	
	702,792	528,271	1,067,246	71,533	
	\$ 13.83	\$ 49.33	\$ 16.96	\$ 77.79	
	\$ 17,383,598	\$ 24,202,520	\$ 8,893,834	\$ 11,348,816	
	\$ 77,885,393	\$ 55,891,648	\$ 109,583,104	\$ 12,582,149	
	22.3%	43.3%	8.1%	90.2%	
	\$ 8,337,540	\$ 2,236,796	\$ 9,630,718	\$ 2,008,300	
	\$ 1,860,894	\$ 968,590	\$ 781,635	\$ 1,811,442	
	\$ 8,337,540	\$ 2,236,796	\$ 9,630,718	\$ 2,008,300	
	7.65%	7.65%	7.65%	7.65%	
	\$ 637,822	\$ 171,115	\$ 736,750	\$ 153,635	

Customer Account Services Cost Pool

FERC Account Balances:

Acct 903 - Customer Records & Collection (page 322, line 131)
Acct 905 - Misc Customer Accounts (page 322, line 133)

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 158)

Total Payroll (page 355, line 96)

Total Benefits as Percent of Payroll

Payroll Charged to Customer Accts Expenses (page 354, line 6)

Pension & Benefits Pertaining to Customer Accts Expenses

Note B: Calculation of Employer's Payroll Taxes Pertaining to Cust. Acct Mgmt

Payroll Charged to Customer Accts Expenses (page 354, line 6)

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

Estimated Employer's Portion of FICA and Medicare



Long Island American Water
Comparison Group 2005 Actual Customer Accounts Expense Per Customer

		Massachusetts				
	Boston Edison	Commonwealth Electric	Fitchburg Gas & Electric	Massachusetts Electric	Western Mass Electric	
	\$ 20,638,108	\$ 7,444,540	\$ 1,333,809	\$ 18,581,920	\$ 4,884,652	
	\$ 1,204,133	\$ 477,905	-	\$ 82,379	\$ 71,304	
	\$ 21,842,241	\$ 7,922,445	\$ 1,333,809	\$ 18,664,299	\$ 4,955,956	
	\$ 3,506,628	\$ 1,764,043	\$ 64,987	\$ 1,165,079	\$ 608,959	
	\$ 991,277	\$ 445,248	\$ 23,703	\$ 242,974	\$ 241,374	
	\$ 26,340,146	\$ 10,131,736	\$ 1,422,499	\$ 20,072,352	\$ 5,806,288	
	702,551	364,081	27,973	1,203,637	204,134	
	\$ 37.49	\$ 27.83	\$ 50.85	\$ 16.68	\$ 28.44	
	\$ 41,548,735	\$ 14,712,905	\$ 1,024,678	\$ 38,460,497	\$ 6,540,025	
	\$ 153,532,940	\$ 48,543,337	\$ 4,885,476	\$ 104,847,578	\$ 33,886,005	
	27.1%	30.3%	21.0%	36.7%	19.3%	
	\$ 12,957,865	\$ 5,820,233	\$ 309,846	\$ 3,176,134	\$ 3,155,213	
	\$ 3,506,628	\$ 1,764,043	\$ 64,987	\$ 1,165,079	\$ 608,959	
	\$ 12,957,865	\$ 5,820,233	\$ 309,846	\$ 3,176,134	\$ 3,155,213	
	7.65%	7.65%	7.65%	7.65%	7.65%	
	\$ 991,277	\$ 445,248	\$ 23,703	\$ 242,974	\$ 241,374	

Customer Account Services Cost Pool

FERC Account Balances:

- Acct 903 - Customer Records & Collection (page 322, line 131)
- Acct 905 - Misc Customer Accounts (page 322, line 133)

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 158)

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Total Benefits as Percent of Payroll

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Pension & Benefits Pertaining to Customer Accts Expenses

Note B: Calculation of Employer's Payroll Taxes Pertaining to Cust. Acct Mgmt

Payroll Charged to Customer Accts Expenses (page 354, line 6)

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

Estimated Employer's Portion of FICA and Medicare



Exhibit Witness: PLB-1
Schedule 10
Page 5 of 5

**Long Island American Water
Comparison Group 2005 Actual Customer Accounts Expense Per Customer**

	Vermont			Connecticut			Group Average
	Central Vermont Pub Service	Green Mountain Power	Connecticut Light & Power	United Illuminating			
\$	1,581,249	\$ 1,555,251	\$ 21,335,988	\$ 9,169,343	\$ 409,268,975		
\$	38,699	\$ 249,491	\$ 1,319,778	\$ -	\$ 27,718,066		
\$	1,619,948	\$ 1,804,742	\$ 22,655,766	\$ 9,169,343	\$ 436,987,041		
\$	764,945	\$ 64,614	\$ 1,968,068	\$ 2,054,857	\$ 41,500,515		
\$	199,722	\$ 31,424	\$ 929,600	\$ 522,927	\$ 21,304,089		
\$	2,584,615	\$ 1,900,780	\$ 25,553,434	\$ 11,747,126	\$ 499,791,645		
	173,459	92,994	1,184,032	320,672	17,047,572		
\$	14,90	\$ 20.44	\$ 21.58	\$ 36.63	\$ 29.32		
\$	10,307,260	\$ 2,363,604	\$ 30,525,226	\$ 22,533,403	\$ 504,044,163		
\$	35,178,479	\$ 15,026,234	\$ 188,474,934	\$ 74,959,127	\$ 3,308,100,150		
\$	29.3%	15.7%	16.2%	30.1%	15.2%		
\$	2,610,744	\$ 410,773	\$ 12,151,635	\$ 6,835,642	\$ 278,484,827		
\$	764,945	\$ 64,614	\$ 1,968,068	\$ 2,054,857	\$ 42,431,802		
\$	2,610,744	\$ 410,773	\$ 12,151,635	\$ 6,835,642	\$ 278,484,827		
\$	7.65%	7.65%	7.65%	7.65%	7.65%		
\$	199,722	\$ 31,424	\$ 929,600	\$ 522,927	\$ 21,304,089		

Customer Account Services Cost Pool

FERC Account Balances:

- Acct 903 - Customer Records & Collection (page 322, line 131)
- Acct 905 - Misc Customer Accounts (page 322, line 133)

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

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Note B: Calculation of Employer's Payroll Taxes Pertaining to Cust. Acct Mgmt

Payroll Charged to Customer Accts Expenses (page 354, line 6)

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

Estimated Employer's Portion of FICA and Medicare



VI - Need For Service Company Services

Analysis Of Services

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

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

Designation Of Responsibility For Water Utility Functions

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

Designation Of Responsibility For Water Utility Functions

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

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

**Long Island American Water
 Designation Of Responsibility For Water Utility Functions**

Water Company Function	LIAW	Performed By:							
		Customer Call Center	Northeast Regional Office	Shared Services	Corporate Office	IT Service Centers	Belleville Lab		
Primarily Responsible P Provides Support S									
Rates									
Rate Studies & Tariff Change Administration	S		P	S					
Rate Case Planning and Preparation	S		P	S					
Rate Case Administration	S		P						
Commission Inquiry Response	S		P		S				
Legal									
Purchasing and Materials Management									
Specification Development	S		S	S	P				
Bid Solicitation	S			P					
Contract Administration	S			P					
Ordering	P								
Inventory Management	P			S					
Human Resources Management									
Benefit Program Development			S		P				
Benefits Program Administration			P	S					
Management Compensation Administration			P		S				
Wage & Salary Program Design			P		P				
Wage & Salary Administration			P		S				
Labor Negotiations--Wages	P		S						
Labor Negotiations--Benefits	P		S		S				
Labor Negotiations-- Work Rules	P		S		S				
Training Program Development			P						
Training--Course Delivery			P						
Affirmative Action/EEO--Plan Development			P						
Affirmative Action/EEO--Implementation			P						
Information Systems Services									
Service Company Data Centers									P
System Operations & Maintenance									P
Software Maintenance									P
Network Administration									P
PC Acquisition & Support									P
Help Desk									P

Governance Practices Associated With Service Company Charges

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

- **Regional President Oversight** – The Regional President of the Northeast Region is on the Executive Management Team (EMT) of American Water. The Regional President is responsible for the overall performance of each operating company in the region, including LIAW. As part of the EMT, each Regional 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.
- **Regional Vice President & Treasurer** – The Regional Vice President and Treasurer of the Northeast Region is responsible for the financial reporting, performance and internal controls of each of the operating companies in the region. The Vice President and Treasurer monitor the performance and reporting from the Service Company and pushes back whenever the quality and service are not appropriate.
- **Operating Company Board Oversight** – LIAW board of directors includes members of American Water's EMT, members of the regional management team and business and community leader(s) from outside the Company. This helps ensure that Northeast Region's needs are a factor in the delivery of Service Company services.
- **Service Company Budget Review/Approval** – Every Regional President sits 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.
- **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 Regional President. The Regional President, with input from the regional management team has the ability to impact all new initiatives and projects before they are authorized.
- **Service Company Bill Scrutiny** – Operating company 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.
- **Service Company Budget Variance Reporting** – Each month, a summary variance analysis is prepared that explains differences between budgeted and actual Service Company spending. In addition, a more detailed monthly variance report, called the "Statement of Expenses and Billed Charges," is produced by Service Company location and shows actual spending for the month.
- **Operating Company Budget Variance Reporting** – The "Budget/Plan Analysis," produced monthly by each operating company, has a line item for Management Fees (i.e., Service Company charges). In this way, Service Company budget versus actual charges can be monitored for the month and year-to-date.
- **Capital Investment Management (CIM)** – CIM is one of American Water's primary business planning processes. It covers capital and asset planning and is employed throughout American Water. The current CIM process and procedures were established in 2003 as part of an initiative to implement leading water industry practices. 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 for all American Water companies, including LIAW.

**Market Cost Comparison of Service Company Charges
Provided to New Jersey American Water Company, Inc.**

12 Months Ended June 30, 2007



**New Jersey American
Market Cost Comparison of Service Company Charges
12 Months Ended June 30, 2007**

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I - Introduction

Purpose Of This Study

This study was undertaken to answer three questions concerning the services provided by American Water Works Service Company, Inc. (Service Company) to New Jersey American Water Company, Inc. (NJAWC):

1. Was NJAWC charged the lower of cost or market for managerial and professional services provided by the Service Company during the 12 months ended June 30, 2007?
2. Were the 12 months ended June 30, 2007 costs of the Service Company's customer accounts services, including those of the National Call Centers, reasonable?
3. Are the services NJAWC receives from Service Company necessary?

Study Results

Concerning question 1, the following conclusions can be drawn from this study:

- NJAWC was charged the lower of cost or market for managerial and professional services during the 12 months ended June 30, 2007.
- On average, the hourly rates for outside service providers are **66% 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 NJAWC without careful supervision on the part of NJAWC. If these services were contracted entirely to outside providers, NJAWC would have to add at least two positions to manage activities of outside firms. These positions would be necessary to ensure the quality and timeliness of services provided.
- If all the managerial and professional services now provided by the Service Company had been out-sourced during the 12 months ended June 30, 2007, NJAWC and its ratepayers would have incurred an **additional \$17.9 million** in expenses. This amount includes the higher cost of outside providers and the cost of two NJAWC positions needed to direct the outsourced work.
- This study's hourly rate comparison actually understates the cost advantage that accrues to NJAWC from its use of the Service Company. Outside service providers generally bill for every hour worked. Service Company personnel, on the other hand, charge a maximum 8 per day even when they work more. 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 \$17.9 million cited above. For instance, if Service Company overtime is conservatively estimated at 5% (only 2 hours per week), then that work would have cost over \$800,000 in additional charges from outside providers.
- It would be difficult for NJAWC 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 NJAWC ratepayers.

Concerning question 2, it was determined that the cost of the Service Company's customer accounts services, including those provided by the National Call Center, **is close to the average of the comparison group of electric utilities in New Jersey and surrounding states.** It can therefore be concluded that the customer accounts-related expenses, including those of the Alton and Pensacola Call Centers, assigned by the Service Company to NJAWC are reasonable. As will be explained further herein, these companies provide a reasonable proxy group for comparison to a regulated utility of the size and scope of NJAWC. During the 12 months ended June 30, 2007, the customer accounts cost for NJAWC customers was \$31.02 compared to the 2006 average of \$27.70 for neighboring electric utilities. The highest comparison group per customer cost was \$61.67 and the lowest \$12.22.

Concerning question 3, the following conclusions can be drawn:

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

II - Background

Overview Of American Water Works Service Company

The Service Company maintains several types of offices from which it provides services to American Water operating companies. They include:

- Central Services – 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 the second quarter of 2001 and a second in Pensacola, Florida that went into operation in April 2005. Prior to the establishment of these national call centers, customer service functions were performed by employees of NJAWC, 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/Divisional Offices – Regional and Divisional offices provide operating companies with certain support services that can be performed more effectively on a regional or divisional 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, legal, human resources and operations. There are four regional offices—Northeast, Southeast, Central and West. Examples of divisional office services include administration, operation and customer support and security. Currently there is one divisional office, the Eastern Division which oversees the Northeast and Southeast regions.
- Laboratory Services – 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 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
Support		X	Administrative personnel support the professional staff, thus support costs are allocated on the basis of professional labor
Overhead	X	X	These are primarily employee benefit costs that relate directly to 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 number, if transaction is a direct charge
- Formula number if transaction is allocated
- Employee hours worked
- Account number for non-labor charges.

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.

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 (see example in Schedule 1) that shows:

- Operating company (for direct charge)
- Formula number (for allocation)
- Work order (where applicable)
- Authorization number (where applicable).

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 their 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 25% of the Northeast Region professional labor is assigned to NJAWC during a month, then 25% 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 25% of the Northeast Region accumulated professional and support labor is charged to NJAWC during the month, then 25% of that month's overhead expenses will be assigned to NJAWC.

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 25% of professional labor from one Service Company office is assigned to NJAWC, then 25% of that office's office expenses would be assigned to NJAWC. 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.

New Jersey American Water Company
Sample Electronic Time Sheet

American Water Works Company (581020) - 12/06/07

File Edit Help

10:33:42
Emp#: 18507361
View Mode

Week Ending: 4/29/07 Rex, H Edward
Dept: 036507 NE-Finance

Time Entry		Mo	Tu	We	Th	Fr	Sa	Su	Total	Meal	Money
Formula	Typ	4/23	4/24	4/25	4/26	4/27	4/28	4/29	Hours		
100074	001								.00		
100082	001		4.00						4.00		
100084	001	7.00	3.00	7.00	7.00	7.00			31.00		
100229	001								.00		
100231	001								.00		
100585	001								.00		
100625	001	1.00	1.00	1.00	1.00	1.00			5.00		
100074	300								.00		
100074	400								.00		

Totals: 8.00 8.00 8.00 8.00 8.00 40.00

F3-Save/Exit F6-Submit F9-Comments Bottom
F1-Search F4-Fold/UnFold F7-Display Errors F10-Save Template

OK Cancel Help

III – Service Company Cost Comparison Approach

During the 12 months ended June 30, 2007, the Service Company charged NJAWC \$34,866,623. For purposes of comparing these charges to outside benchmarks, Service Company services were placed into two categories:

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

Total test period Service Company charges break down by these categories as follows:

12 Months Ended June 30, 2007		
	Amount	Hours
Management and Professional Services	\$ 26,691,726	294,000
Customer Account Services	\$ 8,174,897	256,156
Total	\$ 34,866,623	550,156

This study’s first question—whether the Service Company charges 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 NJAWC during the 12 months ended June 30, 2007. Outside providers' billing rates came from surveys or other information from professionals that could perform the services now provided by the Service Company.

The second question—reasonableness of the National Call Center costs—was addressed by comparing NJAWC’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 third question—the necessity of Service Company services—was first investigated by determining the services provided to NJAWC. A determination was then made as to whether these services would be required if NJAWC were a stand-alone utility.

IV – Managerial And Professional Services Hourly Rate Comparison

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
- Professional Engineers - engineering, operations and water quality services.

It should be noted that 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 NJAWC during the 12 months ended June 30, 2007. 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 NJAWC during the 12 months ended June 30, 2007, 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

Schedules 2 and 3 (pages 10-11) details the assignment of 12 months ended June 30, 2007 management and professional Service Company charges and hours by outsider provider category.

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 June 30, 2007 non-labor Service Company charges:

- Contract Services – 12 months ended June 30, 2007 Service Company charges to NJAWC include over \$2.2 million in charges 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 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.
- Computer Hardware and Software Expenses – Included in the 12 months ended June 30, 2007 Service Company charges to NJAWC are charges from the IT Service Centers for outside expenses related to leases and maintenance fees related to mainframe, server and network infrastructure, corporate business applications and the communications systems. An outside provider that would take over operation of a data center would recover these expenses over and above the labor necessary to operate the systems.

Schedule 4 (page 12) shows how computer hardware/software, contract services and travel expense-related Service Company charges are assigned among the four outside provider categories.

Based on the assignment of expenses and hours shown in Schedules 2, 3 and 4, the Service Company's equivalent costs per hour for the 12 months ended June 30, 2007 are calculated below.

	12 Months Ended June 30, 2007				
	Attorney	Management Consultant	Certified Public Accountant	Professional Engineer	Total
Total management, professional & technical services charges	\$ 1,260,479	\$ 8,800,100	\$ 13,893,353	\$ 2,737,793	\$ 26,691,726
Less:					
Contract services	24,154	604,264	1,537,948	51,306	2,217,672
Travel expenses	31	84,744	241,460	7,149	333,384
Computer hardware/software	11,442	92,693	55,223	14,866	174,224
Net Service Charges (A)	\$ 1,224,852	\$ 8,018,399	\$ 12,058,722	\$ 2,664,472	\$ 23,966,446
Total Hours (B)	13,140	77,725	170,370	32,764	294,000
Average Hourly Rate (A / B)	\$ 93	\$ 103	\$ 71	\$ 81	

New Jersey American
Analysis of 12 Months Ended June 30, 2007 Service Company Managerial And Professional Charges By Location And Function

Location	Function	12 Months Ended June 30, 2007 Service Company Charges				Total	
		Attorney	Management Consultant	Certified Public Accountant	Professional Engineer		
Belleville Lab	Water Quality		\$ 189,788		\$ 935,280	\$ 935,280	
Call Center	Human Resources					\$ 189,788	
Corporate	Accounting			\$ 1,040,525		\$ 1,040,525	
	Administration	\$ 76,724	\$ 1,818,168	\$ 994,804	\$ 191,311	\$ 3,081,007	
	Audit			\$ 216,365		\$ 216,365	
	Communications					\$ 445,789	
	Engineering					\$ 99,495	
	Finance			\$ 936,017		\$ 936,017	
	Human Resources		\$ 965,479			\$ 965,479	
	Legal					\$ 424,723	
	Operations	\$ 424,723	\$ 641,623	\$ 463,811	\$ 535,241	\$ 1,176,864	
	Rates & Revenue					\$ 463,811	
	Risk Management		\$ 289,199			\$ 289,199	
	Water Quality				\$ 251,239	\$ 251,239	
Regional Offices	Accounting			\$ 142,787		\$ 142,787	
	Administration	\$ 1,624,713				\$ 1,624,713	
	Communications	\$ 295,821				\$ 295,821	
	Engineering				\$ 176,985	\$ 176,985	
	Finance			\$ 1,612,612		\$ 1,612,612	
	Human Resources		\$ 736,643			\$ 736,643	
	Legal					\$ 759,032	
	Operations	\$ 759,032				\$ 759,032	
	Risk Management		\$ 457,038		\$ 402,135	\$ 859,173	
	Water Quality		\$ 754,897		\$ 146,106	\$ 754,897	
	Information Technology	Audit			\$ 64,617		\$ 64,617
	Information Technology	Information Technology			\$ 5,888,078		\$ 5,888,078
Shared Services	Accounting			\$ 2,168,785		\$ 2,168,785	
	Administration	\$ 580,942				\$ 580,942	
	Finance			\$ 225,627		\$ 225,627	
	Rates & Revenue			\$ 139,327		\$ 139,327	
Total Dollars Charged		\$ 1,260,479	\$ 8,800,100	\$ 13,893,353	\$ 2,737,793	\$ 26,691,726	



**New Jersey American
Analysis of 12 Months Ended June 30, 2007 Service Company Managerial And Professional Hours By Location And Function**

Location	Function	12 Months Ended June 30, 2007 Service Company Hours					Total
		Attorney	Consultant	Accountant	Engineer	Professional	
Belleville Lab	Water Quality				13,474		13,474
Call Center	Human Resources		2,492				2,492
Corporate	Accounting			14,987			14,987
	Administration		6,733				6,733
	Audit			3,230			3,230
	Communications		2,585				2,585
	Engineering				1,556		1,556
	Finance			10,231			10,231
	Human Resources		12,634				12,634
	Legal	3,001					3,001
	Operations		4,438			7,344	11,782
	Rates & Revenue			2,466			2,466
Risk Management		2,560				2,560	
Water Quality				4,685		4,685	
Regional Offices	Accounting			2,911			2,911
	Administration		9,164				9,164
	Communications		5,960				5,960
	Engineering				1,817		1,817
	Finance			23,468			23,468
	Human Resources		11,243				11,243
	Legal	10,139					10,139
	Operations		4,983			2,994	7,977
	Risk Management		11,678				11,678
	Water Quality				895		895
Information Technology	Audit			1,250			1,250
	Information Technology			50,838			50,838
Shared Services	Accounting			51,530			51,530
	Administration		3,255				3,255
	Finance		6,915				6,915
	Rates & Revenue		2,546				2,546
Total Hours Charged		13,140	77,725	170,370	32,764		294,000

**New Jersey American
12 Months Ended June 30, 2007 Service Company Charges Excludable From The Hourly Rate Calculation – Computer HW/SW, Contract Services
and Travel Expenses**

Exclusions From Hourly Rate Calculation				
Charges By Function	Contract Services	Travel Expenses	Computer HW/SW	Total
Accounting	\$ 623,960	\$ 9,044	\$ 9,260	\$ 642,264
Administration	\$ 105,941	\$ (4,129)	\$ 41,305	\$ 143,117
Audit	\$ 8,898	\$	\$ 2,149	\$ 11,047
Communications	\$ 101,469	\$ 1,202	\$ 1,976	\$ 104,647
Engineering	\$ 16	\$ 545	\$ 1,205	\$ 1,766
Finance	\$ 270,315	\$ 5,761	\$ 16,077	\$ 292,153
Human Resources	\$ 308,699	\$ 16,906	\$ 22,391	\$ 347,996
Information Technology	\$ 604,304	\$ 226,566	\$ 22,822	\$ 853,692
Legal	\$ 24,154	\$ 31	\$ 11,442	\$ 35,627
Operations	\$ 81,230	\$ 5,490	\$ 26,448	\$ 113,168
Rates & Revenue	\$ 30,471	\$ 89	\$ 4,915	\$ 35,475
Risk Management	\$ 17,691	\$ 69,626	\$ 9,961	\$ 97,278
Water Quality	\$ 40,524	\$ 2,253	\$ 4,273	\$ 47,050
Total	\$ 2,217,672	\$ 333,384	\$ 174,224	\$ 2,725,280

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

Exclusions From Hourly Rate Calculation				
Recap By Outside Provider	Contract Services	Travel Expenses	Computer HW/SW	Total
Attorney	\$ 24,154	\$ 31	\$ 11,442	\$ 35,627
Management Consultant	\$ 604,264	\$ 84,744	\$ 92,693	\$ 781,701
Certified Public Accountant	\$ 1,537,948	\$ 241,460	\$ 55,223	\$ 1,834,631
Professional Engineer	\$ 51,306	\$ 7,149	\$ 14,866	\$ 73,321
Total	\$ 2,217,672	\$ 333,384	\$ 174,224	\$ 2,725,280

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.

Attorneys

The New Jersey Bar Association does not survey its members as to their hourly billing rates. In addition, publicly available billing rate information could not be found for New York or Pennsylvania attorneys. Therefore, a New Jersey estimate was developed from a survey of Michigan lawyers conducted annually by the Michigan Lawyers Weekly. As presented in Schedule 5, the average rate for each Michigan firm respondent was adjusted for the cost of living differential between their location and Trenton, New Jersey. The survey includes rates that were in effect at December 31, 2006—the midpoint of the 12 months ended June 30, 2007.

Management Consultants

The cost per hour for management consultants was developed from the 2006 annual survey performed by the Association of Management Consulting Firms—an industry trade organization. The first step in the calculation, presented in Schedule 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. This survey includes rates that were in effect during 2005 for firms in 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 2005 average rate was escalated to December 31, 2006—the midpoint of the 12 months ended June 30, 2007.

Certified Public Accountants

The average hourly rate for New Jersey certified public accountants was developed from a 2006 survey performed by the American Institute of Certified Public Accountants (AICPA). Hourly rates in the AICPA survey are the average of firms in New Jersey. The average hourly rate was calculated for a set of typical accountant positions, as shown in Schedule 7. Based on a typical staff assignment by each accountant position, a weighted average hourly rate was calculated. This survey covered hourly rates in effect during 2005, thus they had to be escalated to December 31, 2006—the midpoint of the 12 months ended June 30, 2007.

Professional Engineers

The Service Company provided hourly rate information for three outside engineering firms that were used by NJAWC in 2007. As presented in Schedule 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.

**New Jersey American
Estimated Billing Rates Of New Jersey Attorneys**

Billing rates as of December 31, 2006 (Note A)							Cost of Living Adjust (C)	Adjusted Rate
Firm	Michigan Location	Number Of Mich Lawyers	Billing Rate Range					
			Associate	Partner	Average			
Dickinson Wright PLLC	Detroit	218	\$ 223	\$ 395	\$ 309	80%	\$ 384	
Butzel Long	Detroit	212	\$ 283	\$ 385	\$ 334	80%	\$ 415	
Bodman LLP	Detroit	130	\$ 170	\$ 353	\$ 261	80%	\$ 325	
Jaffe Raitt Heuer & Weiss, PC	Southfield	95	\$ 195	\$ 363	\$ 279	92%	\$ 304	
Trott & Trott, PC	Bingham Farms	57	\$ 170	\$ 235	\$ 203	119%	\$ 170	
Brooks Kushman PC	Southfield	52	\$ 218	\$ 378	\$ 298	92%	\$ 324	
Kemp, Klein, Umphrey, Edelman & May PC	Troy	38	\$ 170	\$ 270	\$ 220	106%	\$ 208	
Pepper Hamilton LLP	Detroit	31	\$ 258	\$ 478	\$ 368	80%	\$ 457	
Hertz, Schram & Saretsky, PC	Bloomfield Hills	30	\$ 218	\$ 338	\$ 278	132%	\$ 211	
Strobl & Sharp, PC	Bloomfield Hills	26	\$ 160	\$ 250	\$ 205	132%	\$ 156	
Kupelian Ormond & Magy, PC	Southfield	24	\$ 180	\$ 278	\$ 229	92%	\$ 249	
Rader, Fishman & Grauer, PLLC	Bloomfield Hills	23	\$ 190	\$ 385	\$ 288	132%	\$ 218	
McShane & Bowie PLC	Grand Rapids	22	\$ 218	\$ 313	\$ 265	91%	\$ 291	
Overall Average at December 31, 2006								\$ 286
Average Billing Rate At December 31, 2006 - the midpoint of 12 months ended June 30, 2007								\$ 286

Note A: Source is Michigan Lawyers Weekly, April 2007

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

Note C: Source is Sperling's Best Places (<http://www.bestplaces.net/col/col.aspx>). This number represents the cost of living difference between the Michigan city and Trenton, NJ. A number over 100% indicates the Michigan city's cost of living is higher than Trenton. A number less than 100% indicates Trenton's cost of living is higher.

**New Jersey American
Billing Rates of U.S. Management Consultants**

A. Calculation of Average Hourly Billing Rate by Consultant Position
Survey billing rates were those in effect in 2005 (Note A)

		Average Hourly Rates (Note A)				
		Entry-Level Consultant	Associate Consultant	Senior Consultant	Junior Partner	Senior Partner
Average		\$ 141	\$ 186	\$ 234	\$ 320	\$ 350

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)		\$ 141	\$186	\$234	\$320	\$350	
Typical Percent of Time Spent on a Consulting Project		30%	30%	20%	10%	10%	Weighted Average
		\$ 42	\$ 56	\$ 47	\$ 32	\$ 35	\$ 212

Escalation to Test Year Mid-Point June 30, 2007 (Note B)

	CPI at December 31, 2005	196.8
	CPI at December 31, 2006	201.8
	Inflation/Escalation	2.5%
Estimated Average Hourly Billing Rate For New Jersey CPAs At December 31, 2006		\$ 217

Note A: source: "Operating Ratios For Management Consulting Firms, 2006 Edition" Association of Management Consulting Firms

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

New Jersey American
Estimated Billing Rates Of New Jersey Certified Public Accountants

A. Calculation of Average Hourly Billing Rate by Public Accounting Position Survey billing rates were those in effect in 2005 (Note A)				
	Average Hourly Billing Rate (Note A)			
Type of Firm	Staff Accountant	Senior Accountant	Manager	Partner
Average Hourly Rate	\$ 64	\$ 90	\$ 109	\$ 166
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)	\$ 64	\$ 90	\$ 109	\$ 166
Typical Percent of Time Spent on an Accounting Assignment	30%	30%	20%	20%
	\$ 19	\$ 27	\$ 22	\$ 33
				Weighted Average \$ 101
<u>Escalation to Test Year Mid-Point June 30, 2007 (Note B)</u>				
			CPI at December 31, 2005	196.8
			CPI at December 31, 2006	201.8
			Inflation/Escalation	2.5%
Estimated Average Hourly Billing Rate For New Jersey CPAs At December 31, 2006				\$ 104

Note A: Source is AICPA's 2006 National PCPS/TSCPA Management of an Accounting Practice Survey

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

**New Jersey American
Billing Rates Of New Jersey Engineers**

Note: Billing rates were those in effect in 2007

A. Calculation of Average Hourly Rate by Engineer Position

Name of Firm	Average Hourly Billing Rates			
	Technician	Engineer	Project Manager	Officer
	Senior Technician	Design Engineer Project Engineer	Sr. Mgr. Engineer	Principal Engineer
Firm #1	\$65	\$93	\$144	\$185
Firm #2	\$71	\$88	\$133	\$165
Firm #3	\$85	\$98	\$128	\$173
Firm #4	\$59	\$81	\$113	\$152
Firm #5	\$64	\$86	\$117	\$160

B. Calculation of Overall Average Engineering Hourly Billing Rate

	CAD Drafter	Engineer	Project Manager	Officer	Weighted Average
	Engineer Tech	Design Engineer Project Engineer Elect Proj Engineer	Project Associate Sr. Mgr. Engineer	Principal Engineer	
Average Hourly Billing Rate (From Above)	\$69	\$89	\$127	\$167	
Typical Percent of Time on an Engineering Assignment	30%	35%	25%	10%	
	\$21	\$31	\$32	\$17	\$100

Source: Information provided by American Water Works Service Company

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.

12 Months Ended June 30, 2007			
Service Provider	Service Company	Outside Provider	Difference-- Service Co. Greater(Less) Than Outside
Attorney	\$ 93	\$ 286	\$ (193)
Management Consultant	\$ 103	\$ 217	\$ (114)
Certified Public Accountant	\$ 71	\$ 104	\$ (33)
Professional Engineer	\$ 81	\$ 100	\$ (19)

Based on these cost per hour differentials and the number of managerial and professional services hours billed to NJAWC during the 12 months ended June 30, 2007, outside service providers would have cost almost \$9 million more than the Service Company (see table below). Thus, on average, outside provider's hourly rates are 66% higher than those of the Service Company (\$17,662,967 / \$26,691,726).

12 Months Ended June 30, 2007			
Service Provider	Hourly Rate Difference-- Service Co. Greater(Less) Than Outside	Service Company Hours Charged	Dollar Difference
Attorney	\$ (193)	13,140	\$ (2,533,145)
Management Consultant	\$ (114)	77,725	\$ (8,858,090)
Certified Public Accountant	\$ (33)	170,370	\$ (5,659,800)
Professional Engineer	\$ (19)	32,764	\$ (611,932)
Service Company Less Than Outside Providers			\$ (17,662,967)

If NJAWC were to use outside service providers rather than the Services 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 294,000 hours of work (almost 196 full-time equivalents at 1,500 billable hours per FTE) would add a significant workload to the existing NJAWC management team. Thus, it would be necessary for NJAWC to add at least two positions to supervise the outside firms and ensure they delivered quality and timely services. The individuals that would fill these positions 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 another \$304,000 per year to NJAWC's personnel expenses.

Cost of Adding Administrative Positions To NJAM's Staff

	Per Position	Total
New Positions' (2) Salary	\$ 100,000	\$ 200,000
Benefits (at 52%)	\$ 52,000	\$ 104,000
Total Cost of the New Positions		\$ 304,000

Thus, the total effect on the ratepayers of NJAWC of contracting all services now provided by Service Company would be an increase in their costs of **\$17,966,967** (\$17,662,967 + \$304,000).

Other Cost Comparisons

Every year, the Belleville Lab conducts a comparison of its cost for performing major tests to the cost of using outside testing laboratories. Over the past several years, these surveys have shown the following results been as follows:

Year	Number of Major Tests Surveyed	Percent Belleville Lower Than Outside Labs
2000	26	15%
2001	25	19%
2002	24	16%
2003	23	10%
2004	24	9%
2005	24	25%
2006	24	31%

These survey results provide further evidence that the Service Company arrangement is the lowest-cost alternative for NJAWC.

V – Customer Account Services Cost Comparison

Background

It is difficult to compare the cost of American Water’s National Call Center with outside providers of the same call center-related services. Call center survey data is proprietary and expensive to obtain. For this reason, NJAWC’s National Call Center costs are compared to those of neighboring electric utilities because the data necessary to make this comparison is readily available to the public.

Electric utility cost information comes from their FERC Form 1. FERC’s chart of accounts is defined in chapter 18, part 101 of Code of Federal Regulations. FERC accounts that contain call center-related expenses and are used in this study’s comparison are:

- Account 903 Customer Accounts Expense – Records and Collection Expense
- Account 905 Customer Accounts Expense – Miscellaneous Customer Accounts Expense.

In addition, 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).

Schedule 8 provides FERC’s description of what should be charged to these accounts. In questioning the controller of a large Southeastern electric utility, it was determined that expenses of the activities described below are recorded in the designated FERC accounts.

<p><u>903 Records and Collection Expense</u></p> <ul style="list-style-type: none">• 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 of customer payments received in the mail• Bill payment centers – locations where customers can pay their bills in person <p><u>905 Miscellaneous Customer Accounts Expense</u></p> <ul style="list-style-type: none">• Customer Information System IT – maintenance and support of the customer information system
--

This study assumes the FERC accounts for other electric and gas utilities contain expenses for the same activities.

**New Jersey American
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.

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.

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.

New Jersey	<ul style="list-style-type: none"> • Atlantic City Electric • Jersey Central Power 	<ul style="list-style-type: none"> • Public Service Electric & Gas • Rockland Electric
New York	<ul style="list-style-type: none"> • Central Hudson Gas & Electric • Consolidated Edison • New York State Electric & Gas 	<ul style="list-style-type: none"> • Niagara Mohawk Electric Power • Rochester Gas & Electric
Pennsylvania	<ul style="list-style-type: none"> • Duquesne Light • Metropolitan Edison • PECO Energy • Pennsylvania Electric 	<ul style="list-style-type: none"> • Pennsylvania Power • PPL Electric Utilities • West Penn Power
Delaware	<ul style="list-style-type: none"> • Delmarva Power & Light 	

Comparison Approach

The basis for this comparison is customer account services expenses per customer. NJAWC's cost pool was developed to include the same expenses included in electric utility's FERC accounts 903 and 905. As shown in the graphic below, NJAWC's resultant cost pool contains the expenses of Service Company locations and certain operating company expenses.

American Water
<u>Service Company</u> Pensacola & Alton Call Centers a. Customer contact b. Customer order processing c. Billing information processing d. Collections e. Correspondence processing f. Customer payment processing <u>IT Service Centers</u> a. Support expenses for the customer information system (ORCOM) <u>Operating Company</u> a. Postage and forms

Electric Utilities
FERC Acct 903 - Records and Collection Expense <u>and</u> FERC Acct 905 - Misc Customer Accounts Expense a. Customer contact b. Customer order processing c. Bill preparation and mailing d. Collections e. Payment processing f. Correspondence processing

NJAWC Cost Per Customer

In order to make a valid comparison to neighboring electric utilities, certain adjustments had to be made to the applicable Service Company charges to NJAWC. 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 1.28 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. As shown below, NJAWC's adjusted annual expense per customer is \$31.02—the number that can be compared to neighboring electric utilities' expenses.

New Jersey American 12-Months Ended June 30, 2007 Cost Per Customer

Cost Component	YE 6/30/07 Service Co Charges	Adjustment Fewer Calls For Water Cos. (A)	Adjusted
Service Company			
Call Centers	Call processing, order processing, credit, bill collection	\$ 7,972,957	\$ 15,572,181
Regional Offices		\$ 201,941	\$ 201,941
IT/Data Centers	Bill preparation/systems support	\$ 1,465,922	\$ 1,465,922
Service Company	Customer payment processing		\$ 592,816
Operating Company	Postage & forms		\$ 1,513,501
		Cost Pool Total	\$ 19,346,361
		Total Customers	623,754
		12 Months Ended June 30, 2007 Cost Per New Jersey American Customer	\$ 31.02

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 Period Call Center charges	\$ 7,972,957
Electric utility industry's avg calls/customer	2.50
American Water's avg calls/customer	1.28
Percent different	95%
Total Adjustment B	\$ 7,599,224

Note B: Estimated customer payment processing expenses

Number of customers	623,754
Number of payments/customer/year	9
Total payments processed/year	5,613,786
Bank charge per item	\$ 0.1056
Total estimated annual expense	\$ 592,816

Electric Utility Group Cost Per Customer

Schedule 9 shows the actual 2006 customer accounts expense per customer calculation for the electric utility comparison group. All of the underlying data was taken from the utilities' FERC Form 1.

Summary Of Results

As shown in the table below, NJAWC's cost per customer is close to the average of the electric utility comparison group. It can therefore be concluded that the customer accounts-related expenses, including those of the Alton and Pensacola Call Centers, assigned by the Service Company to NJAWC are reasonable.

Customer Account Services Expenses Per Customer	
Public Service Electric & Gas	\$ 12.22
West Penn Power Company	\$ 12.82
Duquesne Light Company	\$ 15.97
Metropolitan Edison Company	\$ 18.17
Jersey Central Power & Light Company	\$ 18.18
Pennsylvania Electric Company	\$ 18.24
Pennsylvania Power Company	\$ 18.88
PPL Electric Utilities Corporation	\$ 21.13
Rochester Gas & Electric Corporation	\$ 22.61
Comparison Group Average	\$ 28.90
New Jersey American Water	\$ 31.02
Niagra Mohawk Power Corporation	\$ 31.14
Central Hudson Gas & Electric Company	\$ 33.67
New York State Electric & Gas Corporation	\$ 34.00
Consolidated Edison Company	\$ 39.40
PECO Energy Company	\$ 46.18
Atlantic City Electric Company	\$ 47.65
Delmarva Power & Light Company	\$ 49.05
Rockland Electric Company	\$ 61.67

**New Jersey American
Comparison Group 2006 Actual Customer Accounts Expense Per Customer**

	New York					Rochester Gas & Electric
	Central Hudson Gas & Electric	Consolidated Edison	New York State Electric & Gas	Niagra Mohawk Power	Niagra Mohawk Power	Rochester Gas & Electric
\$	6,494,641	110,493,688	26,065,553	34,953,004	\$ 7,483,349	
\$	2,140,632	431,503	1,675,828	170,071	\$ 339,392	
\$	8,635,273	110,925,191	27,741,381	35,123,075	\$ 7,822,741	
\$	663,215	7,659,454	102,319	8,667,824	\$ 33,277	
\$	493,524	7,624,334	1,666,371	2,158,145	\$ 272,425	
\$	9,792,012	126,208,980	29,510,071	45,949,044	\$ 8,128,443	
	290,818	3,203,541	868,027	1,475,451	359,450	
\$	33,67	39,40	34,00	31,14	\$ 22,61	
\$	7,820,791	90,050,950	920,181	106,795,887	\$ 711,608	
\$	76,075,245	1,171,739,190	195,896,937	347,587,065	\$ 76,153,339	
\$	10.3%	7.7%	0.5%	30.7%	0.9%	
\$	6,451,295	99,684,499	21,782,630	28,211,045	\$ 3,561,117	
\$	663,215	7,659,454	102,319	8,667,824	\$ 33,277	
\$	6,451,295	99,684,499	21,782,630	28,211,045	\$ 3,561,117	
\$	7.65%	7.65%	7.65%	7.65%	7.65%	
\$	493,524	7,624,334	1,666,371	2,158,145	\$ 272,425	

Customer Account Management Cost Pool

FERC Account Balances:
Acct 903 - Customer Records & Collection (page 322, line 131)
Acct 905 - Misc Customer Accounts (page 322, line 133)
Subtotal

Add: Employee Benefits & Employer FICA (not included in above amounts)
Account 926 - Employee Pension & Benefits
Account 406 - Taxes Other Than Income (Employer's Portion of FICA)

Total Cost Pool

Total Customers (page 304, line 43)

Customer Account Management Expense per Customer

Note A: Calculation of Pension & Benefits Pertaining to Customer Acct Mgmt
Account 926 - Employee Pension & Benefits (page 323, line 187)
Total Payroll (page 355, line 96)

Total Benefits as Percent of Payroll

Payroll Charged to Customer Accts Expenses (page 354, line 7)
Pension & Benefits Pertaining to Customer Accts Expenses

Note B: Calculation of Employer's Payroll Taxes Pertaining to Cust. Acct Mgmt

Payroll Charged to Customer Accts Expenses (page 354, line 6)
Employer's Portion of FICA (6.20%) and Medicare (1.45%)

Estimated Employer's Portion of FICA and Medicare



**New Jersey American
Comparison Group 2006 Actual Customer Accounts Expense Per Customer**

	Pennsylvania						
	Duquesne Light	Metropolitan Edison	PECO Energy	Pennsylvania Electric	Pennsylvania Power	PPL Electric Utilities	West Penn Power
Customer Account Management Cost Pool							
FERC Account Balances:							
Acct 903 - Customer Records & Collection (page 322, line 131)	\$ 7,634,097	\$ 9,516,468	\$ 40,468,327	\$ 10,307,858	\$ 2,695,070	\$ 27,134,401	\$ 6,853,000
Acct 905 - Misc Customer Accounts (page 322, line 133)	\$ -	\$ 29,309	\$ 27,371,284	\$ 145,765	\$ 164,238	\$ 853,743	\$ -
Subtotal	\$ 7,634,097	\$ 9,545,777	\$ 67,839,611	\$ 10,453,623	\$ 2,859,308	\$ 27,988,144	\$ 6,853,000
Add: Employee Benefits & Employer FICA (not included in above amounts)							
Account 926 - Employee Pension & Benefits	\$ 942,864	\$ (156,116)	\$ 2,582,413	\$ (233,705)	\$ 20,983	\$ (421,998)	\$ 1,600,005
Account 406 - Taxes Other Than Income (Employer's Portion of FICA)	\$ 774,174	\$ 389,377	\$ 1,226,378	\$ 512,931	\$ 109,507	\$ 1,465,959	\$ 609,671
Total Cost Pool	\$ 9,351,135	\$ 9,779,038	\$ 71,648,402	\$ 10,732,849	\$ 2,989,797	\$ 29,032,104	\$ 9,062,676
Total Customers (page 304, line 43)	585,678	538,150	1,551,632	588,437	158,369	1,374,143	707,058
Customer Account Management Expense per Customer	\$ 15.97	\$ 18.17	\$ 46.18	\$ 18.24	\$ 18.88	\$ 21.13	\$ 12.82
Note A: Calculation of Pension & Benefits Pertaining to Customer Acct Mgmt							
Account 926 - Employee Pension & Benefits (page 323, line 187)	\$ 11,293,383	\$ (1,607,694)	\$ 36,771,159	\$ (2,325,076)	\$ 213,351	\$ (4,477,514)	\$ 16,519,390
Total Payroll (page 355, line 96)	\$ 121,213,914	\$ 52,416,051	\$ 228,267,677	\$ 66,706,308	\$ 14,555,089	\$ 203,323,024	\$ 82,282,405
Total Benefits as Percent of Payroll	9.3%	-3.1%	16.1%	-3.5%	1.5%	-2.2%	20.1%
Payroll Charged to Customer Accts Expenses (page 354, line 7)	\$ 10,119,924	\$ 5,089,896	\$ 16,031,080	\$ 6,704,976	\$ 1,431,461	\$ 19,162,860	\$ 7,969,557
Pension & Benefits Pertaining to Customer Accts Expenses	\$ 942,864	\$ (156,116)	\$ 2,582,413	\$ (233,705)	\$ 20,983	\$ (421,998)	\$ 1,600,005
Note B: Calculation of Employer's Payroll Taxes Pertaining to Cust. Acct Mgmt							
Payroll Charged to Customer Accts Expenses (page 354, line 6)	\$ 10,119,924	\$ 5,089,896	\$ 16,031,080	\$ 6,704,976	\$ 1,431,461	\$ 19,162,860	\$ 7,969,557
Employer's Portion of FICA (6.20%) and Medicare (1.45%)	\$ 774,174	\$ 389,377	\$ 1,226,378	\$ 512,931	\$ 109,507	\$ 1,465,959	\$ 609,671
Estimated Employer's Portion of FICA and Medicare							

Note A: Calculation of Pension & Benefits Pertaining to Customer Acct Mgmt
 Account 926 - Employee Pension & Benefits (page 323, line 187)
 Total Payroll (page 355, line 96)
 Total Benefits as Percent of Payroll
 Payroll Charged to Customer Accts Expenses (page 354, line 7)
 Pension & Benefits Pertaining to Customer Accts Expenses

Note B: Calculation of Employer's Payroll Taxes Pertaining to Cust. Acct Mgmt
 Payroll Charged to Customer Accts Expenses (page 354, line 6)
 Employer's Portion of FICA (6.20%) and Medicare (1.45%)
 Estimated Employer's Portion of FICA and Medicare



**New Jersey American
Comparison Group 2006 Actual Customer Accounts Expense Per Customer**

	New Jersey				Maryland		Group Average
	Atlantic City Electric	Jersey Central Power	Public Service Electric & Gas	Rockland Electric	Delmarva Power & Light		
\$	24,360,761	\$ 18,137,299	\$ 51,331,875	\$ 2,525,652	\$ 22,995,724	\$	409,450,767
\$	60,019	\$ 317,275	\$ (36,270,688)	\$ 1,101,219	\$ 132,342	\$	(3,338,068)
\$	24,420,780	\$ 18,454,574	\$ 13,061,187	\$ 3,626,871	\$ 23,128,066	\$	406,112,689
\$	947,498	\$ 228,567	\$ 9,333,579	\$ 753,502	\$ 1,435,423	\$	34,159,102
\$	191,087	\$ 910,077	\$ 3,341,394	\$ 43,024	\$ 582,624	\$	22,371,002
\$	25,559,366	\$ 19,593,218	\$ 25,736,160	\$ 4,423,397	\$ 25,146,113	\$	462,642,803
\$	536,415	\$ 1,077,948	\$ 2,106,886	\$ 71,726	\$ 512,673	\$	16,006,402
\$	47.65	\$ 18.18	\$ 12.22	\$ 61.67	\$ 49.05	\$	28.90
\$	21,744,878	\$ 2,299,610	\$ 108,710,276	\$ 12,688,468	\$ 13,589,355	\$	
\$	57,325,558	\$ 119,689,986	\$ 508,731,548	\$ 9,470,456	\$ 72,101,692	\$	
\$	37.9%	1.9%	21.4%	134.0%	18.8%	\$	
\$	2,497,870	\$ 11,896,435	\$ 43,678,354	\$ 562,401	\$ 7,615,995	\$	
\$	947,498	\$ 228,567	\$ 9,333,579	\$ 753,502	\$ 1,435,423	\$	
\$	2,497,870	\$ 11,896,435	\$ 43,678,354	\$ 562,401	\$ 7,615,995	\$	
\$	7.65%	7.65%	7.65%	7.65%	7.65%	\$	
\$	191,087	\$ 910,077	\$ 3,341,394	\$ 43,024	\$ 582,624	\$	
\$						\$	22,371,002

Customer Account Management Cost Pool

FERC Account Balances:
Acct 903 - Customer Records & Collection (page 322, line 131)
Acct 905 - Misc Customer Accounts (page 322, line 133)

Subtotal
Add: Employee Benefits & Employer FICA (not included in above amounts)
Account 926 - Employee Pension & Benefits
Account 406 - Taxes Other Than Income (Employer's Portion of FICA)

Total Cost Pool

Total Customers (page 304, line 43)

Customer Account Management Expense per Customer

Note A: Calculation of Pension & Benefits Pertaining to Customer Acct Mgmt
Account 926 - Employee Pension & Benefits (page 323, line 187)
Total Payroll (page 355, line 96)

Total Benefits as Percent of Payroll
Payroll Charged to Customer Accts Expenses (page 354, line 7)

Note B: Calculation of Employer's Payroll Taxes Pertaining to Cust. Acct Mgmt

Payroll Charged to Customer Accts Expenses (page 354, line 6)
Employer's Portion of FICA (6.20%) and Medicare (1.45%)
Estimated Employer's Portion of FICA and Medicare



VI - Need For Service Company Services

Analysis Of Service Company Services

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

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

Primarily Responsible Provides Support	P S	Performed By:						
		NJAWC	Customer Call Center	Regional/ Divisional Office	Shared Services	Central Services	IT Service Centers	Laboratory Services
Water Company Function								
Engineering and Construction Management								
CPS Preparation	P							
Five-Year System Planning	P		S					
Engineering Standards & Policies Development								
Project Design								
Major Projects (e.g., new treatment plant)	P							
Special Projects	P		S					
Minor Projects (e.g., pipelines)	P							
Construction Project Management								
Major Projects	P		S					
Special Projects	P		S					
Minor Projects	P							
Hydraulics Review	P							
Developers Extensions	P							
Tank Painting	P		S					
Water Quality and Purification								
Water Quality Standards Development	P		S					S
Research Studies	S		S					S
Water Quality Program Implementation	P		S					
Water Treatment Operations & Maintenance	P		S					
Compliance Sampling	P		S					
Testing/Other Sampling (2 Ps = different studies)	P		S					S
Transmission and Distribution								
Preventive Maintenance Program Development	P							
System Maintenance	P							
Leak Detection	P							
Customer Service								
Community Relations	P		S					
Customer Contact	S							
Call Processing	S							
Service Order Processing	P							
Customer Credit	S							
Meter Reading	P							
Customer Bill Preparation								
Bill Collection	S							S
Customer Payment Processing								
Meter Standards Development	S							
Meter Testing, Maintenance & Replacement	P		S					

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

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

**New Jersey American
Designation Of Responsibility For Water Utility Functions**

Water Company Function	NJAWC	Performed By:					
		Customer Call Center	Regional/ Divisional Office	Shared Services	Central Services	IT Service Centers	Laboratory Services
Primarily Responsible P Provides Support S							
Water Company Function							
Rates							
Rate Studies & Tariff Change Administration	S			S			
Rate Case Planning and Preparation	S			S			
Rate Case Administration	S						
Commission Inquiry Response	S				S		
Legal							
Purchasing and Materials Management							
Specification Development	S		S	S	P		
Bid Solicitation	S			P			
Contract Administration	S			P			
Ordering	P						
Inventory Management	P			S			
Human Resources Management							
Benefit Program Development			S		P		
Benefits Program Administration			P	S			
Management Compensation Administration			P		S		
Wage & Salary Program Design			S		P		
Wage & Salary Administration			P		S		
Labor Negotiations--Wages			P				
Labor Negotiations--Benefits			P		S		
Labor Negotiations-- Work Rules			P				
Training Program Development			P		S		
Training--Course Delivery			P				
Affirmative Action/EEO--Plan Development			P				
Affirmative Action/EEO--Implementation			P				
Information Systems Services							
Service Company Data Centers							
System Operations & Maintenance							P
Software Maintenance							P
Network Administration							P
PC Acquisition & Support							P
Help Desk							P

Governance Practices Associated With Service Company Charges

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

- **Company President Oversight** – The Company President of the state utility is responsible for the overall performance of each operating company in the state. As part of the management team, through the Executive Vice President of the Eastern Division, each state utility President has a significant voice in major business decisions of American Water and has the ability to monitor Service Company performance quality and spending.
- **Vice President & Treasurer** – The Vice President and Treasurer position retains the functions previously performed on behalf of the Northeast Region. The Vice President and Treasurer is responsible for the financial reporting, performance and internal controls of the New Jersey and New York operating companies. The Vice President and Treasurer monitor the performance and reporting from the Service Company and pushes back whenever the quality and service are not appropriate.
- **Operating Company Board Oversight** – The board of directors includes members of American Water's EMT, members of the state management team and business and community leaders from outside the Company. This helps ensure that NJAWC's needs are a factor in the delivery of Service Company services.
- **Service Company Budget Review/Approval** – Every operating company president sits 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.
- **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 Executive Vice President. The Executive Vice President, with significant input from the state President and local management team, has the ability to impact all new initiatives and projects before they are authorized.
- **Service Company Bill Scrutiny** – Operating company 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.
- **Service Company Budget Variance Reporting** – Each month, a summary variance analysis is prepared that explains differences between budgeted and actual Service Company spending. In addition, a more detailed monthly variance report, called the "Statement of Expenses and Billed Charges," is produced by Service Company location and shows budget versus actual spending for the month and year-to-date by cost category.
- **Operating Company Budget Variance Reporting** – The "Budget/Plan Analysis," produced monthly by each operating company, has a line item for Management Fees (i.e., Service Company charges). In this way, Service Company budget versus actual charges can be monitored for the month and year-to-date.
- **Capital Investment Management (CIM)** – CIM is one of American Water's primary business planning processes. It covers capital and asset planning and is employed throughout American Water and Thames Water. The current CIM process and procedures were established in 2003 as part of an initiative to implement leading water industry practices. 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 for all American Water companies, including all NJAWC operating units.

**Market Cost Comparison of Service Company Charges to
New Mexico-American Water Company
12-Months Ended December 31, 2007**



**New Mexico-American Water Company
Market Cost Comparison of Service Company Charges
12-Months Ended December 31, 2007**

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I - Introduction

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 New Mexico-American Water Company ("NMA"):

1. Were the Service Company's charges to NMA during the 12-months ended December 31, 2007 reasonable?
2. Was NMA charged the lower of cost or market for managerial and professional services provided by the Service Company during 2007?
3. Were the 2007 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 NMA receives from Service Company necessary?

Study Results

Concerning question 1, the following conclusions were reached:

- American Water's Service Company provides NMA with services similar to those provided by other utility service companies. This was determined based on service company information included in the Form 60, which must be filed with the Federal Energy Regulatory Commission ("FERC") by electric and combination electric/gas utility holding companies.
- American Water's 2007 cost per NMA customer was very reasonable compared to cost per customer for electric and combination electric/gas service companies. During 2007, NMA was charged \$68 per customer by the Service Company compared to an average of \$122 per customer for service companies reporting to the FERC.

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

- NMA was charged the lower of cost or market for managerial and professional services during the 12-months ended December 31, 2007.
- On average, the hourly rates for outside service providers are 52% 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 NMA without careful supervision on the part of NMA. If these services were contracted entirely to outside providers, NMA would have to add at least one half of 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 December 31, 2007, NMA and its ratepayers would have incurred more than \$610,000 in additional expenses. This amount includes the higher cost of outside providers and the cost of an additional one half NMA position needed to direct the outsourced work.

- This study's hourly rate comparison actually understates the cost advantages that accrue to NMA from its use of the Service Company. Outside service providers generally bill for every hour worked. Service Company exempt personnel, on the other hand, charge a maximum of 8 hours per day even when they work more hours. If 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 \$610,000 cited above. For instance, if Service Company overtime is conservatively estimated at 5% (2 hours per week), then that work would have cost an estimated \$26,800 in additional charges from outside providers.
- It would be difficult for NMA 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 NMA ratepayers.

Concerning question 3, it was determined that the cost of the Service Company's customer accounts services, including those provided by the National Call Center, is within a reasonable 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 NMA. During the 12-months ended December 31, 2007, the customer accounts cost for NMA customers was \$32.48 compared to the 2006 average of \$24.88 for neighboring electric utilities. The highest comparison group per customer cost was \$49.27 and the lowest \$8.82.

Concerning question 4, the following conclusions can be drawn:

- The services that the Service Company provides are necessary and would be required even if NMA were a stand-alone water utility.
- There is no redundancy or overlap in the services provided by the Service Company to NMA. For all of the services listed in Schedule 10, there was only one entity that was primarily responsible for the service.

II - Background

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 NMA, 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:

- 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 NMA, 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 and operations.
- 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 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 number, if transaction is a direct charge
- Formula number if transaction is allocated
- Employee hours worked
- Account number for non-labor charges

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

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:

- Operating company (for direct charge)
- Formula number (for allocation)
- Work order (where applicable)
- Authorization number (where applicable)

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 their 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 Western Region's professional labor is assigned to NMA 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 Western Region's accumulated professional and support labor is charged to NMA during the month, then 20% of that month's overhead expenses will be assigned to NMA.

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 NMA, then 2% of that office's office expenses would be assigned to NMA. 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

During the 12 months ended December 31, 2007, the Service Company billed NMA \$1,316,757 in O&M-related charges, \$112,539 in capital-related charges and \$7,844 other charges. Included in the O&M amount are certain non-recurring expenses and charges from non-Western regions, which are excluded from this market study. As calculated in the table below, net Service Company charges of \$1,252,897 were subjected to a market cost comparison.

	12 Months Ended December 31, 2007
Mgmt Fee Expense (O&M) per P&L	\$ 1,316,757
Less: Non-Recurring Expenses	
Business Change	\$ (3,341)
Divestiture & SOX	\$ (174,226)
Total Non-Recurring Expenses	\$ (177,567)
Less: Non-Western Regions	\$ (6,676)
Net Testable O&M	\$ 1,132,514
Total Capital	\$ 112,539
Total Other	\$ 7,844
Total Testable Service Co Charges	\$ 1,252,897

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

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

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

	12 Months Ended Dec. 31, 2007	
	Amount	Hours
Management and Professional Services	\$ 1,031,624	10,864
Customer Account Services	\$ 221,273	6,261
Total Service Company Charges	\$ 1,252,897	17,125

This study's first question—whether Service Company 2007 charges were reasonable—was determined by comparing NMA's net testable O&M Service Company charges per customer to those of electric and combination electric/gas utilities that file FERC Form 60 – Annual Report of Service Companies.

The second question—whether Service Company 2007 charges 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 NMA during the 12 months ended December 31, 2007. Outside providers' billing rates came from surveys or other information from professionals that could perform the services now provided by the Service Company.

The third question—whether Service Company 2007 customer account services charges, including those of the National Call Center costs, were comparable to other utilities—was addressed by comparing NMA’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 first investigated by determining the services provided to NMA. A determination was then made as to whether these services would be required if NMA were a stand-alone utility.

IV – Reasonableness Of Service Company Charges

NMA’s Service Company Cost Per Customer

During 2007, NMA was charged \$68 per customer in O&M expenses by the Service Company. As shown in the table below, this calculation is made using net testable O&M, which eliminates certain O&M items for which NMA has not requested cost recovery.

	2007
Net Testable Service Company O&M Expenses	\$ 1,132,514
NMA Customers (12/31/07)	16,774
NMA Cost Per Customer	\$ 68

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.

Twenty-three utility holding companies filed a Form 60 for 2007. All but two were included in the comparison group. The service company for PNM Resources, Inc. was excluded because its 2007 service company cost per regulated utility customer was clearly an anomaly as a negative number. This result is likely due to the unique manner by which PNM’s service company expenses are reported on Form 60. Duke Energy was also excluded from the comparison group because one of its two service companies did not provide numbers for its Form 60. Thus, it was not possible to develop Duke’s consolidated service company cost per customer for 2007.

Schedule 1 compares the services provided by American Water’s Service Company to the services provided by comparison group service companies. In general, the types of services provided by American Water’s Service Company are similar to those provided by comparison group service companies.

O&M expenses charged to utility affiliates for the comparison group service companies were obtained from Schedule XVII – Schedule of Expense Distribution by Department or Service Function (p. 305 to 305c) of each entity’s FERC Form 60. This schedule shows charges by category of service (e.g., accounting, information technology) and type of cost (e.g., labor, benefits, outside services). The following were eliminated from the comparison group’s total expenses because they are not in American Water Service Company’s 2007 charges to NMA:

- All electric- and gas-related services
- Income taxes (account 409), provision for deferred income taxes (account 410), provision for deferred income taxes – credit (account 411) and investment tax credit (account 411.5).
- Donations (account 426.1)
- Interest on long-term debt (account 427), interest on debt to associate companies (account 430) and other interest expense (account 431)

Comparison group service company 2007 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.

Schedule 2 shows NMA's 2007 Service Company cost per customer of \$68 to be considerably lower than the average of \$122 per customer for the comparison group service companies. Only 4 of 21 comparison group service companies had a lower 2007 cost per customer than NMA. Based on this result, it is possible to conclude that the Service Company's 2007 charges to NMA were reasonable.

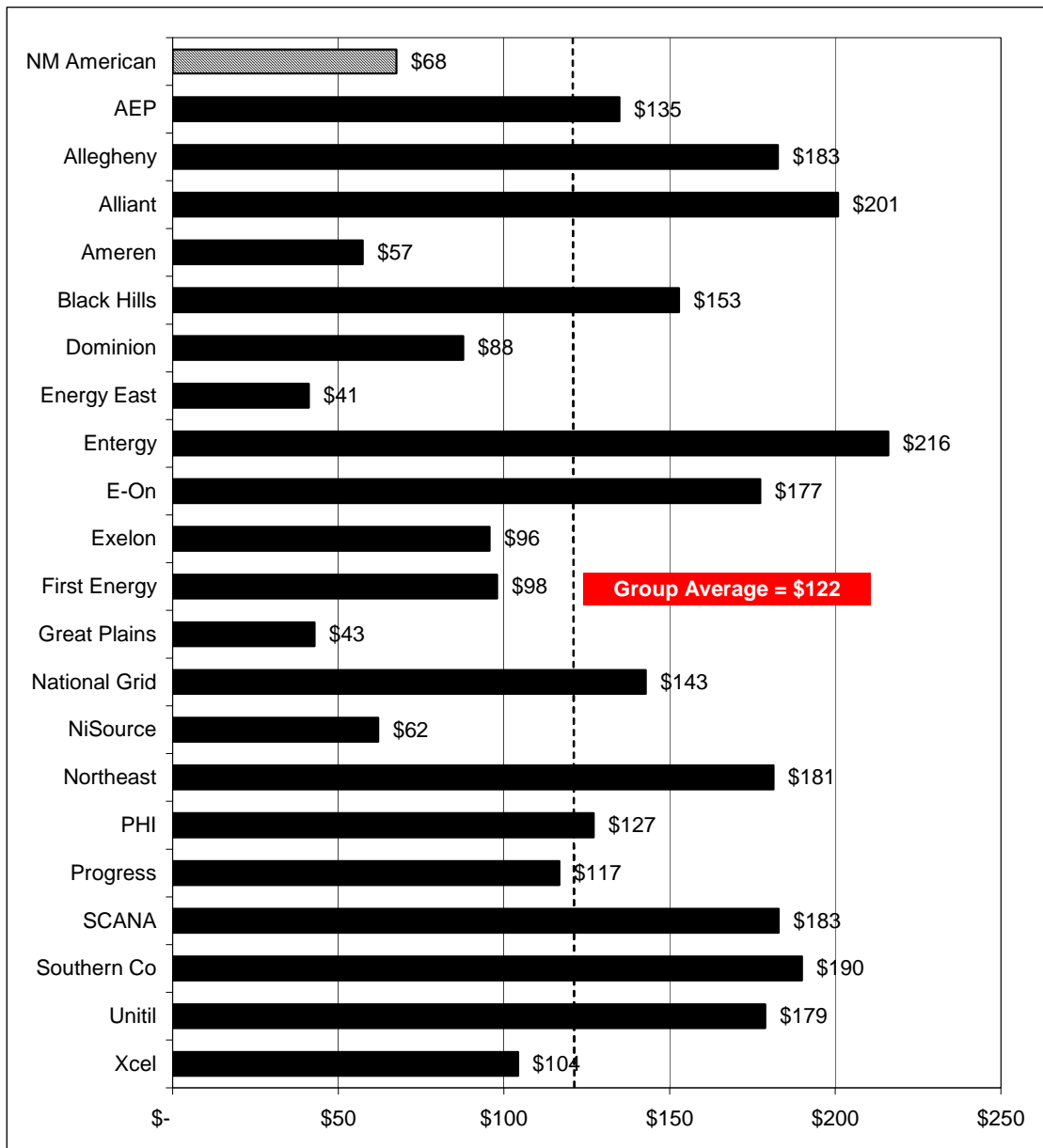
Exhibit Witness: PLB-1
Schedule 1

**New Mexico-American Water Company
Analysis of Service Company Services**

	American Water	17	17	15	16	14	15	17	8	7	19	14	17	14	17	8	19	20	16	10	13	13	11	11	7	17
	American Water	AFP	Allegheny	Alliant	Ameren	Black Hills	Dominion	Energy East	Energy	F-On	Exelon	First Energy	Great Plains	National Grid	NiSource	Northeast	PHI	Progress	SCANA	Southern Co	Unitil	Xcel				
Accounting	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Audit Services	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Corporate Planning	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Customer Service	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Engineering	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Environmental	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Executive	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
External Affairs	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Facilities Management	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Finance	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Human Resources	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Information Technology	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Investor Relations	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Legal	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Operations	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Regulatory Services	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Risk Management	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Security	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Service Co Overhead	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Shared Services	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Supply Chain	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Transportation Services	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Treasury	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Exhibit Witness: PLB-1
Schedule 2

New Mexico-American Water Company
Comparison of Service Company Annual Costs Per Customer



V – Managerial And Professional Services Hourly Rate Comparison

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 NMA during the 12 months ended December 31, 2007. 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 NMA during 2007, 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

Schedule 3 (page 14) details the assignment of 12 months ended December 31, 2007 management and professional Service Company charges by outsider provider category. Schedule 4 (page 15) shows the same assignment for Service Company management and professional hours charged to NMA during the 12 months ended December 31, 2007.

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 2007 test period non-labor Service Company charges:

- Contract Services – 12 months ended December 31, 2007 Service Company charges to NMA include almost \$54,000 in 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.
- Computer Hardware and Software Expenses – Included in the 12 months ended December 31, 2007 Service Company charges to NMA are charges for outside expenses related to leases and maintenance fees related to mainframe, server and network infrastructure, corporate business applications and the communications systems. An outside provider that would take over operation of a data center would recover these expenses over and above the labor necessary to operate the data center.

Schedule 5 (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 Schedules 3 and 4 and the excludable items shown in Schedule 5, the Service Company's equivalent costs per hour for the 12 months ended December 31, 2007 are calculated below.

	Attorney	Management Consultant	Certified Public Accountant	Professional Engineer	Total
Total management, professional & technical services charges	\$ 41,025	\$ 283,418	\$ 482,541	\$ 224,640	\$ 1,031,624
Less:					
Contract services	\$ 2,959	\$ 18,219	\$ 28,876	\$ 3,676	\$ 53,730
Travel expenses	\$ 1,187	\$ 14,602	\$ 11,767	\$ 11,499	\$ 39,054
Computer hardware/software	\$ 0	\$ 4,657	\$ 5,612	\$ 2,029	\$ 12,299
Net Service Charges (A)	\$ 36,879	\$ 245,939	\$ 436,285	\$ 207,437	\$ 926,540
Total Hours (B)	302	1,978	5,779	2,805	10,864
Average Hourly Rate (A / B)	\$ 122	\$ 124	\$ 75	\$ 74	

New Mexico-American Water Company
Analysis of 12 Months Ended December 31, 2007 Service Company Charges By Location And Function

Location	Function	12 Months Ended December 31, 2007 Service Company Charges				Total
		Attorney	Management Consultant	Certified Public Accountant	Professional Engineer	
Belleville Lab	Water Quality			\$ 24,664	\$ 24,664	
Call Center	Human Resources		\$ 4,829		\$ 4,829	
Corporate	Accounting			\$ 57,391	\$ 57,391	
	Administration	\$ -	\$ (11,390)	\$ -	\$ (11,390)	
	Audit			\$ 10,150	\$ 10,150	
	Communications				\$ 12,392	
	Engineering			\$ 2,188	\$ 2,188	
	Finance			\$ 28,416	\$ 28,416	
	Human Resources				\$ 39,391	
	Legal	\$ 14,211			\$ 14,211	
	Operations		\$ 27,363	\$ 13,464	\$ 40,827	
	Rates & Revenue			\$ 13,274	\$ 13,274	
	Risk Management		\$ 13,236		\$ 13,236	
	Water Quality			\$ 11,566	\$ 11,566	
Regional Offices	Accounting			\$ 8,120	\$ 8,120	
	Administration		\$ 53,688		\$ 53,688	
	Communications		\$ 27,001		\$ 27,001	
	Engineering			\$ 74,652	\$ 74,652	
	Finance			\$ 140,685	\$ 140,685	
	Human Resources		\$ 35,679		\$ 35,679	
	Legal	\$ 26,814			\$ 26,814	
	Operations		\$ 42,586	\$ 84,671	\$ 127,257	
	Risk Management		\$ 26,671		\$ 26,671	
	Water Quality			\$ 13,435	\$ 13,435	
Information Technology	Information Technology			\$ 128,829	\$ 128,829	
Shared Services	Accounting			\$ 74,530	\$ 74,530	
	Administration		\$ 11,973		\$ 11,973	
	Finance			\$ 6,541	\$ 6,541	
	Rates & Revenue			\$ 14,606	\$ 14,606	
	Total Dollars Charged	\$ 41,025	\$ 283,418	\$ 482,541	\$ 1,031,624	

Exhibit Witness: PLB-1
Schedule 4

New Mexico-American Water Company
Analysis of 12 Months Ended December 31, 2007 Service Company Hours By Location And Function

Location	Function	12 Months Ended December 31, 2007 Service Company Hours					Total
		Attorney	Management Consultant	Certified Public Accountant	Professional Engineer		
Belleville Lab	Water Quality				344		344
Call Center	Human Resources		59				59
Corporate	Accounting			508			508
	Administration		1				1
	Audit			56			56
	Communications		52				52
	Engineering				19		19
	Finance			153			153
	Human Resources		343				343
	Legal	41					41
	Operations		90		93		183
	Rates & Revenue			49			49
	Risk Management		59				59
	Water Quality				97		97
Regional Offices	Accounting			85			85
	Administration		140				140
	Communications		254				254
	Engineering				938		938
	Finance			1,784			1,784
	Human Resources		314				314
	Legal	260					260
	Operations		368		1,151		1,519
	Risk Management		227				227
	Water Quality				163		163
Information Technology	Information Technology			1,168			1,168
Shared Services	Accounting			1,608			1,608
	Administration		72				72
	Finance			159			159
	Rates & Revenue			208			208
	Total Hours Charged	302	1,978	5,779	2,805		10,864

12 Months Ended December 31, 2007 Service Company Charges Excludable From The Hourly Rate Calculation

New Mexico-American Water Company

Charges By Function	Exclusions From Hourly Rate Calculation			
	Contract Services	Travel Expenses	Computer HW/SW	Total
Accounting	\$ 14,355	\$ 2,045	\$ 399	\$ 16,799
Administration	\$ 2,949	\$ 5,313	\$ 524	\$ 8,787
Audit	\$ 1,289	\$ 196	\$ -	\$ 1,485
Communications	\$ 1,283	\$ 3,096	\$ 25	\$ 4,404
Engineering	\$ 2,363	\$ 4,436	\$ 399	\$ 7,198
Finance	\$ (417)	\$ 5,545	\$ 110	\$ 5,238
Human Resources	\$ 8,363	\$ 3,508	\$ 407	\$ 12,279
Information Technology	\$ 11,594	\$ 3,246	\$ 5,101	\$ 19,941
Legal	\$ 2,959	\$ 1,187	\$ 0	\$ 4,146
Operations	\$ 5,519	\$ 4,404	\$ 493	\$ 10,416
Rates & Revenue	\$ 2,055	\$ 736	\$ 2	\$ 2,793
Risk Management	\$ 458	\$ 3,957	\$ 3,458	\$ 7,873
Water Quality	\$ 958	\$ 1,387	\$ 1,380	\$ 3,725
Total	\$ 53,730	\$ 39,054	\$ 12,299	\$ 105,083

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	Total
Attorney	\$ 2,959	\$ 1,187	\$ 0	\$ 4,146
Management Consultant	\$ 18,219	\$ 14,602	\$ 4,657	\$ 37,479
Certified Public Accountant	\$ 28,876	\$ 11,767	\$ 5,612	\$ 46,256
Professional Engineer	\$ 3,676	\$ 11,499	\$ 2,029	\$ 17,203
Total	\$ 53,730	\$ 39,054	\$ 12,299	\$ 105,083

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.

Attorneys

The New Mexico Bar Association does not survey its members as to their hourly billing rates. In addition, publicly available billing rate information could not be found for New Mexico attorneys. Therefore, an estimate of New Mexico attorney rates was developed from a survey of Michigan lawyers conducted annually by the Michigan Lawyers Weekly. As presented in Schedule 6, the average rate for each Michigan firm respondent was adjusted for the cost of living differential between their location and Clovis, New Mexico. The survey includes rates that were in effect during 2007.

Management Consultants

The cost per hour for management consultants was developed from the 2007 annual survey performed by the Association of Management Consulting Firms—an industry trade organization. The first step in the calculation, presented in Schedule 7, was to determine an average rate by consultant position level. From these rates, a single weighted average hourly rate was calculated based upon the percent of time that is typically applied to a consulting assignment by each consultant position level. This survey includes rates that were in effect during 2006 for firms in 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 survey includes rates that were in effect at December 31, 2006. Thus, the 2006 average rate was escalated to June 30, 2007—the midpoint of the 12 months ended December 31, 2007.

Certified Public Accountants

The average hourly rate for New Mexico certified public accountants was developed from a 2006 survey conducted every two years by the American Institute of Certified Public Accountants (AICPA). Hourly rates in the AICPA survey are the average of firms in Arizona and Texas. The New Mexico Society of CPAs did not participate in the last AICPA survey so New Mexico-only data was not available. The average hourly rate was calculated for a set of typical accountant positions, as shown in Schedule 8. Based on a typical staff assignment by each accountant position, a weighted average hourly rate was calculated. This survey covered hourly rates in effect during 2005. Thus, the 2005 average rate was escalated to June 30, 2007—the midpoint of the 12 months ended December 31, 2007.

Professional Engineers

The Service Company provided hourly rate information for outside engineering firms that were used by American Water's Western Region during 2007. One firm is located in New Mexico and two are located in Arizona. As presented in Schedule 9, 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.

Schedule 6

**New Mexico-American Water Company
Estimated Billing Rates For New Mexico Attorneys Based On
Michigan Attorney Billing Rates**

Billing rates in effect during 2007 (Note A)									
Firm	Michigan Location	Number Of Mich Lawyers	Billing Rate Range				Mich Average	Cost of Living Adjust (B)	Adjusted Rate
			Associate		Partner				
			Low	High	Low	High			
Dickinson Wright PLLC	Detroit	229	\$ 170	\$ 275	\$ 260	\$ 530	\$ 309	113%	\$ 273
Dykema	Detroit	222	\$ 185	\$ 390	\$ 245	\$ 625	\$ 361	113%	\$ 319
Butzel Long	Detroit	209	\$ 165	\$ 400	\$ 220	\$ 550	\$ 334	113%	\$ 295
Bodman LLP	Detroit	128	\$ 125	\$ 215	\$ 210	\$ 495	\$ 261	113%	\$ 231
Jaffe Raitt Heuer & Weiss, PC	Southfield	100	\$ 165	\$ 225	\$ 225	\$ 500	\$ 279	127%	\$ 220
Trott & Trott, PC	Bingham Farms	64	\$ 170	\$ 170	\$ 235	\$ 235	\$ 203	160%	\$ 127
Brooks Kushman PC	Southfield	52	\$ 160	\$ 275	\$ 250	\$ 505	\$ 298	127%	\$ 234
Kemp, Klein, Umphrey, Edelman & May PC	Troy	36	\$ 150	\$ 190	\$ 200	\$ 340	\$ 220	144%	\$ 153
Pepper Hamilton LLP	Detroit	33	\$ 200	\$ 315	\$ 340	\$ 615	\$ 368	113%	\$ 325
Hertz, Schram & Saretsky, PC	Bloomfield Hills	29	\$ 175	\$ 260	\$ 275	\$ 400	\$ 278	175%	\$ 159
Strobl & Sharp, PC	Bloomfield Hills	28	\$ 110	\$ 210	\$ 200	\$ 300	\$ 205	175%	\$ 117
Kupelian Ormond & Magy, PC	Southfield	25	\$ 165	\$ 195	\$ 235	\$ 320	\$ 229	127%	\$ 180
Rader, Fishman & Grauer, PLLC	Bloomfield Hills	25	\$ 130	\$ 250	\$ 275	\$ 495	\$ 288	175%	\$ 164
McShane & Bowie PLC	Grand Rapids	22	\$ 160	\$ 275	\$ 250	\$ 375	\$ 265	126%	\$ 210
Average Billing Rate for 12 months ended December 31, 2007									\$ 215

Note A: Source is Michigan Lawyers Weekly, April 2008

Note B: Source is Sperling's Best Places (<http://www.bestplaces.net/col/col.aspx>). This number represents the cost of living difference between the Michigan city and Clovis, New Mexico. A number over 100% indicates the Michigan city's cost of living is higher than Clovis. A number less than 100% indicates Clovis' cost of living is higher.

Schedule 7

**New Mexico-American Water Company
Billing Rates of U.S. Management Consultants**

A. Calculation of Average Hourly Billing Rate by Consultant Position
Survey billing rates were those in effect in 2006 (Note A)

		Average Hourly Rates (Note A)				
		Entry-Level Consultant	Associate Consultant	Senior Consultant	Junior Partner	Senior Partner
Average		\$ 142	\$ 187	\$ 235	\$ 306	\$ 358

B. Calculation of Overall Average Hourly Billing Rate Based on a Typical Distribution
of Time on an Engagement

		Entry-Level Consultant	Associate Consultant	Senior Consultant	Junior Partner	Senior Partner	
Average Hourly Billing Rate (from above)		\$ 142	\$187	\$235	\$306	\$358	
Typical Percent of Time Spent on a Consulting Project		30%	30%	20%	10%	10%	Weighted Average
		\$ 43	\$ 56	\$ 47	\$ 31	\$ 36	\$ 212

Escalation to Midpoint of December 31, 2007 Test Period (Note B)

	CPI at December 31, 2006	201.8
	CPI at June 30, 2007	208.4
	Inflation/Escalation	3.3%
Average Hourly Billing Rate For Management Consultants At June 30, 2007		\$ 219

Note A: source: "Operating Ratios For Management Consulting Firms, 2007 Edition" Association of Management Consulting Firms

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

Schedule 8

**New Mexico-American Water Company
Estimated Billing Rates Of New Mexico Certified Public Accountants**

A. Calculation of Average Hourly Billing Rate by Public Accounting Position Survey billing rates were those in effect in 2005 (Note A)				
	Average Hourly Billing Rate (Note A)			
Type of Firm	Staff Accountant	Senior Accountant	Manager	Partner
Average Hourly Rate	\$ 80	\$ 98	\$ 119	\$ 169
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)	\$ 80	\$ 98	\$ 119	\$ 169
Typical Percent of Time Spent on an Accounting Assignment	30%	30%	20%	20%
	\$ 24	\$ 29	\$ 24	\$ 34
				\$ 111
<u>Escalation to Midpoint of December 31, 2007 Test Period (Note B)</u>				
			CPI at December 31, 2005	196.8
			CPI at June 30, 2007	208.4
			Inflation/Escalation	5.9%
			Average Hourly Billing Rate For CPAs At June 30, 2007	\$ 118

Note A: Source is AICPA's 2006 National PCPS/TSCPA Management of an Accounting Practice Survey (for states of Arizona and Texas)

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

Exhibit Witness: PLB-1
Schedule 9

**New Mexico-American Water Company
Estimated Billing Rates Of New Mexico/Arizona Engineers**

Note: Billing rates were those in effect in 2007

A. Calculation of Average Hourly Rate by Engineer Position

Engineering Firm	Average Hourly Billing Rates			
	Technician	Engineer	Project Manager	Officer
	Senior Technician	Design Engineer Project Engineer	Sr. Mgr. Engineer	Principal Engineer
Firm #1	\$53	\$65	\$84	\$96
Firm #2	\$89	\$98	\$139	\$181
Firm #3	\$80	\$105	\$155	\$198

B. Calculation of Overall Average Engineering Hourly Billing Rate

	CAD Drafter	Engineer	Project Manager	Officer	Weighted Average
	Engineer Tech	Design Engineer Project Engineer Elect Proj Engineer	Project Associate Sr. Mgr. Engineer	Principal Engineer	
Average Hourly Billing Rate (From Above)	\$74	\$89	\$126	\$158	
Typical Percent of Time on an Engineering Assignment	30%	35%	25%	10%	
	\$22	\$31	\$32	\$16	\$101

Source: Information provided by American Water Works Service Company

Service Company Versus Outside Provider Cost Comparison

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

Service Provider	12 Months Ended December 31, 2007		
	Service Company	Outside Provider	Difference-- Service Co. Greater(Less) Than Outside
Attorney	\$ 122	\$ 215	\$ (92)
Management Consultant	\$ 124	\$ 219	\$ (95)
Certified Public Accountant	\$ 75	\$ 118	\$ (42)
Professional Engineer	\$ 74	\$ 101	\$ (27)

Based on these cost per hour differentials and the number of managerial and professional services hours billed to NMA during the 12-months ended December 31, 2007, outside service providers would have cost \$535,895 more than the Service Company (see table below). Thus, on average, outside provider's hourly rates are almost 52% higher than those of the Service Company (\$535,895 / \$ 1,031,624).

Service Provider	12 Months Ended December 31, 2007		
	Hourly Rate Difference-- Service Co. Greater(Less) Than Outside	Service Company Hours Charged	Dollar Difference
Attorney	\$ (92)	302	\$ (27,890)
Management Consultant	\$ (95)	1,978	\$ (187,804)
Certified Public Accountant	\$ (42)	5,779	\$ (244,345)
Professional Engineer	\$ (27)	2,805	\$ (75,856)
Service Company Less Than Outside Providers			\$ (535,895)

If NMA 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 10,864 hours of work (more than 7 full-time equivalents at 1,500 "billable" hours per FTE per year) would add a significant workload to the existing NMA management team. Thus, it would be necessary for NMA to add at least one half of 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 another \$74,700 per year to NMA's personnel expenses.

Cost of Adding 1/2 of a Professional Position To NMA'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	\$ 149,400
Percent of Position Required	50%
Half Time Cost of Position	\$ 74,700

Thus, the total effect on the ratepayers of NMA of contracting all services now provided by Service Company would be an increase in their costs of \$610,595 (\$535,895 + \$74,700). Based on the results of this comparison, it is possible to conclude that the Service Company charged NMA at the lower of cost or market for services provided during 2007.

Other Cost Comparisons

Every year, the Belleville Lab conducts a comparison of its cost for performing major tests to the cost of using outside testing laboratories. Over the past several years, these surveys have shown the following results been as follows:

Year	Number of Major Tests Surveyed	Percent Belleville Lower Than Outside Labs
2000	26	15%
2001	25	19%
2002	24	16%
2003	23	10%
2004	24	9%
2005	24	25%
2006	24	31%

These studies provide additional evidence that the Service Company arrangement is the lowest-cost alternative for NMA.

VI – Customer Account Services Cost Comparison

Background

It is difficult to compare the cost of American Water's National Call Centers with outside providers of the same call center-related services. Call center survey data is proprietary and expensive to obtain. For this reason, NMA's National Call Center costs are compared to those of neighboring electric utilities because the data necessary to make this comparison is readily available to the public.

Electric utility cost information comes from their FERC Form 1. FERC's chart of accounts is defined in chapter 18, part 101 of Code of Federal Regulations. FERC accounts that contain call center-related expenses and are used in this study's comparison are:

- Account 903 Customer Accounts Expense – Records and Collection Expense
- Account 905 Customer Accounts Expense – Miscellaneous Customer Accounts Expense.

In addition, 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).

Schedule 10 provides FERC's description of what should be charged to these accounts. In questioning the controller of a large Southeastern electric utility, it was determined that expenses of the activities described below are recorded in the designated FERC accounts.

903 Records and Collection Expense

- 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 of customer payments received in the mail
- Bill payment centers – locations where customers can pay their bills in person

905 Miscellaneous Customer Accounts Expense

- Customer Information System IT – maintenance and support of the customer information system

This study assumes the FERC accounts for other electric and gas utilities contain expenses for the same activities.



**New Mexico-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.

**New Mexico-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.

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.

New Mexico	<ul style="list-style-type: none"> Public Service Company of New Mexico 	<ul style="list-style-type: none"> Texas New Mexico Power
Texas	<ul style="list-style-type: none"> Centerpoint Energy (formerly HL&P) 	<ul style="list-style-type: none"> El Paso Electric
Arizona	<ul style="list-style-type: none"> Arizona Public Service 	<ul style="list-style-type: none"> Tucson Electric
Colorado	<ul style="list-style-type: none"> Aquilla 	<ul style="list-style-type: none"> Public Service Company of Colorado
Oklahoma	<ul style="list-style-type: none"> Empire District Electric Oklahoma Gas & Electric 	<ul style="list-style-type: none"> Public Service Company of Oklahoma

It should be noted that Oncor Electric Delivery (formerly Texas Utilities) was not included in the comparison group because it has outsourced customer account services. As a result, much of its expenses related to this function are charged to FERC account 923 – Outside Services rather than FERC accounts 903 and 905. The customer accounts services' portion of FERC account 923 cannot be isolated from FERC Form 1 information. Thus, a customer accounts services cost comparison to Oncor was not possible.

Comparison Approach

The basis for this comparison is customer account services expenses per customer. NMA's cost pool was developed to include the same expenses included in electric utility's FERC accounts 903 and 905. As shown in the graphic below, NMA's resultant cost pool contains the expenses of Service Company locations and certain operating company expenses.

American Water	Electric Utilities
<u>Service Company</u> Pensacola & Alton Call Centers a. Customer contact b. Customer order processing c. Billing information processing d. Collections e. Correspondence processing f. Customer payment processing <u>Operating Company</u> a. Postage and forms	FERC Acct 903 - Records and Collection Expense and FERC Acct 905 - Misc Customer Accounts Expense a. Customer contact b. Customer order processing c. Bill preparation and mailing d. Collections e. Payment processing f. Correspondence processing

NMA Cost Per Customer

In order to make a valid comparison to neighboring electric utilities, certain adjustments had to be made to the applicable Service Company charges to NMA. 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 1.33 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. As shown below, NMA's adjusted annual expense per customer is \$32.48—the number that can be compared to neighboring electric utilities' expenses. NMA's 2007 unadjusted annual expense per customer is \$20.86.

New Mexico-American Water Company		Service Co	Adjustment Fewer Calls For Water Cos. (A)	Adjusted
Cost Component		Charges		
Service Company				
Call Centers	Call processing, order processing, credit, bill collection	\$ 221,037	\$ 194,910	\$ 415,947
Regional Offices		\$ 236		\$ 236
Service Company	Customer payment processing			\$ 14,160 (B)
Operating Company	Postage & forms			\$ 114,400
Cost Pool Total				\$ 544,743
Total Customers				16,774
12 Months Ended December 31, 2007 Cost Per New Mexico-American Customer				\$ 32.48

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 annualized Call Center charges	\$ 221,037	
Electric utility industry's avg calls/customer	2.50	
American Water's avg calls/customer	1.33	
Percent different	88%	88%
Total Adjustment B	\$ 194,910	

Note B: Estimated customer payment processing expenses

Number of customer bills	179,238
Bank charge per item	\$ 0.0790
Total estimated annual expense	\$ 14,160

Electric Utility Group Cost Per Customer

Schedule 11 shows the actual 2006 customer accounts expense per customer calculation for the electric utility comparison group. All of the underlying data was taken from the utilities' FERC Form 1.

Summary Of Results

As shown in the table below, NMA's cost per customer is within a reasonable range of the average of the neighboring electric utility comparison group. It can therefore be concluded that NMA's 2007 customer accounts-related expenses, including those of the Alton and Pensacola Call Centers, assigned by the Service Company to NMA were comparable to those of other utilities.

Annual Expense Per Customer	
Texas New Mexico Power	\$ 8.82
CenterPoint Energy (HL&P)	\$ 12.29
Public Service of New Mexico	\$ 18.50
Oklahoma Gas & Electric	\$ 19.93
Public Svc of Colorado	\$ 21.61
Comparison Group Average	\$ 24.88
Acquilla, Inc.	\$ 28.26
El Paso Electric	\$ 31.98
New Mexico-American Water	\$ 32.48
Empire District Electric Company	\$ 33.03
Tucson Electric	\$ 34.02
Public Svc of Oklahoma	\$ 35.55
Arizona Public Service Co	\$ 49.27

**New Mexico-American Water Company
Comparison Group 2006 Actual Customer Accounts Expense Per Customer**

	New Mexico		Texas		Arizona	
	Public Svc of New Mexico	Texas-New Mexico Power	CenterPoint Energy	El Paso Electric	Az Public Service Co	Tucson Electric
\$ 6,985,621	\$ 1,901,609	\$ 7,163,439	\$ 45,761,786	\$ 11,915,625		
\$ 402	\$ 130,500	\$ 498,787	\$ 1,117,449	\$ (31,254)		
\$ 6,986,023	\$ 2,032,109	\$ 7,662,226	\$ 46,879,235	\$ 11,884,371		
\$ 569,066	\$ 129,355	\$ 2,963,933	\$ 3,065,834	\$ 956,359		
\$ 403,373	\$ 156,680	\$ 435,512	\$ 1,884,588	\$ 368,128		
\$ 7,958,461	\$ 2,318,144	\$ 11,061,671	\$ 51,829,657	\$ 13,208,858		
\$ 430,211	\$ 262,929	\$ 1,992,812	\$ 1,051,895	\$ 388,307		
\$ 18.50	\$ 8.82	\$ 12.29	\$ 31.98	\$ 34.02		
\$ 18,878,471	\$ 2,151,168	\$ 34,913,362	\$ 77,941,202	\$ 19,935,891		
\$ 174,924,165	\$ 34,060,096	\$ 211,033,868	\$ 626,287,039	\$ 100,311,686		
10.8%	6.3%	22.7%	12.4%	19.9%		
\$ 6,467,683	\$ 4,125,007	\$ 7,440,377	\$ 30,581,605	\$ 6,021,884		
\$ -	\$ -	\$ -	\$ -	\$ -		
\$ 6,467,683	\$ 4,125,007	\$ 7,440,377	\$ 30,581,605	\$ 6,021,884		
\$ 6,985,621	\$ 1,901,609	\$ 19,023,675	\$ 45,761,786	\$ 11,915,625		
\$ 402	\$ 130,500	\$ -	\$ 1,117,449	\$ (31,254)		
\$ 6,986,023	\$ 2,032,109	\$ 19,023,675	\$ 46,879,235	\$ 11,884,371		
\$ 1,583,042	\$ 2,060,670	\$ 8,670,705	\$ 11,315,783	\$ 2,987,710		
\$ 8,569,065	\$ 4,092,779	\$ 27,694,380	\$ 58,195,018	\$ 14,872,081		
81.5%	49.7%	68.7%	80.6%	79.9%		
\$ 5,272,849	\$ 2,048,111	\$ 17,999,395	\$ 24,635,137	\$ 4,812,124		
\$ 569,066	\$ 129,355	\$ 4,081,833	\$ 3,065,834	\$ 956,359		
\$ 5,272,849	\$ 2,048,111	\$ 17,999,395	\$ 24,635,137	\$ 4,812,124		
7.65%	7.65%	7.65%	7.65%	7.65%		
\$ 403,373	\$ 156,680	\$ 1,376,954	\$ 1,884,588	\$ 368,128		

Note A
Note B

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 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

Exhibit Witness: PLB-1
Schedule 11
Page 2 of 2

**New Mexico-American Water Company
Comparison Group 2006 Actual Customer Accounts Expense Per Customer**

	Colorado		Oklahoma		Public Svc of Oklahoma	Group Average
	Acquilla	Public Svc of Colorado	Empire District Electric	Oklahoma Gas & Electric		
	\$ 10,189,732	\$ 21,294,135	\$ 4,190,902	\$ 10,601,169	\$ 17,452,301	\$ 156,479,976
	\$ 4,731	\$ 235,495	\$ 321,635	\$ 1,080,693	\$ 3,551	\$ 3,361,989
	\$ 10,194,463	\$ 21,529,630	\$ 4,512,537	\$ 11,681,862	\$ 17,455,852	\$ 159,841,965
Note A	\$ 2,324,990	\$ 5,283,449	\$ 707,574	\$ 2,613,341	\$ 588,329	\$ 23,284,062
Note B	\$ 608,226	\$ 1,653,996	\$ 197,862	\$ 670,885	\$ 330,608	\$ 8,086,812
Total Cost Pool	\$ 13,127,680	\$ 28,467,075	\$ 5,417,973	\$ 14,966,088	\$ 18,374,789	\$ 191,212,839
	\$ 464,588	\$ 1,317,016	\$ 164,035	\$ 751,043	\$ 516,875	\$ 7,685,640
	\$ 28.26	\$ 21.61	\$ 33.03	\$ 19.93	\$ 35.55	\$ 24.88
	\$ 36,457,466	\$ 63,731,780	\$ 11,984,335	\$ 41,929,023	\$ 11,493,366	\$ 367,253,506
	\$ 124,672,077	\$ 260,802,325	\$ 43,733,832	\$ 140,703,693	\$ 84,426,604	\$ 1,868,015,073
	29.2%	24.4%	27.4%	29.8%	13.6%	19.7%
	\$ 7,299,421	\$ 13,497,504	\$ 3,333,454	\$ 15,767,241	\$ 5,595,370	\$ 126,332,795
	\$ 4,347,912	\$ 12,600,944	\$ -	\$ -	\$ -	\$ 16,948,856
	\$ 11,647,333	\$ 26,098,448	\$ 3,333,454	\$ 15,767,241	\$ 5,595,370	\$ 143,281,651
	\$ 10,189,732	\$ 21,294,135	\$ 4,190,902	\$ 10,601,169	\$ 17,452,301	\$ 156,479,976
	\$ 4,731	\$ 235,495	\$ 321,635	\$ 1,080,693	\$ 3,551	\$ 3,361,989
	\$ 10,194,463	\$ 21,529,630	\$ 4,512,537	\$ 11,681,862	\$ 17,455,852	\$ 159,841,965
	\$ 4,739,910	\$ 4,458,697	\$ 1,303,329	\$ 9,321,119	\$ 5,144,623	\$ 539,374,56
	\$ 14,934,373	\$ 25,988,327	\$ 5,815,866	\$ 21,002,981	\$ 22,600,475	\$ 213,779,421
	68.3%	82.8%	77.6%	55.6%	77.2%	74.8%
	\$ 7,950,672	\$ 21,620,858	\$ 2,586,431	\$ 8,769,742	\$ 4,321,677	\$ 107,131,082
	\$ 2,324,990	\$ 5,283,449	\$ 707,574	\$ 2,613,341	\$ 588,329	\$ 21,062,071
	\$ 7,950,672	\$ 21,620,858	\$ 2,586,431	\$ 8,769,742	\$ 4,321,677	\$ 105,709,956
	7.65%	7.65%	7.65%	7.65%	7.65%	7.65%
	\$ 608,226	\$ 1,653,996	\$ 197,862	\$ 670,885	\$ 330,608	\$ 8,086,812

Customer Account Services Cost Pool
 FERC Account Balances:
 Acct 903 - Customer Records & Collection (page 322, line 131)
 Acct 905 - Misc Customer Accounts (page 322, line 133)
 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 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

VII - Need For Service Company Services

Analysis Of Services

The final aspect of this study was an assessment of whether the services that are provided to NMA by the Service Company would be necessary if NMA were a stand-alone water utility. The first step in this evaluation was to determine specifically what the Service Company does for NMA. Based on discussions with Service Company personnel, the matrix in Schedule 12 was created showing which entity—NMA or a Service Company location—is responsible for each of the functions NMA 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 Schedule 12, the following conclusions can be drawn:

- The services that the Service Company provides are necessary and would be required even if NMA were a stand-alone water utility.
- There is no redundancy or overlap in the services provided by the Service Company to NMA. For all of the services listed in Schedule 12, there was only one entity that was primarily responsible for the service.

Designation Of Responsibility For Water Utility Functions

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

Designation Of Responsibility For Water Utility Functions

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

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

**New Mexico-American Water Company
 Designation Of Responsibility For Water Utility Functions**

Water Company Function	Performed By:					
	Customer Call Center	Regional Office	Shared Services	Corporate Office	IT Service Centers	Belleville Lab
Primarily Responsible P Provides Support S						
Rates						
Rate Studies & Tariff Change Administration		P				
Rate Case Planning and Preparation		P				
Rate Case Administration		P				
Commission Inquiry Response		P		S		
Legal						
Purchasing and Materials Management						
Specification Development		S	S	P		
Bid Solicitation				P		
Contract Administration				P		
Ordering						
Inventory Management			S			
Human Resources Management						
Benefit Program Development				P		
Benefits Program Administration		P				
Management Compensation Administration				P		
Wage & Salary Program Design				P		
Wage & Salary Administration	S	P				
Labor Negotiations--Wages	S	P				
Labor Negotiations--Benefits						
Labor Negotiations-- Work Rules	S	P		P		
Training Program Development	S	S				
Training--Course Delivery	S	P				
Affirmative Action/EEO--Plan Development	S	P				
Affirmative Action/EEO--Implementation	S	P				
Information Systems Services						
Service Company Data Centers						
System Operations & Maintenance					P	
Software Maintenance					P	
Network Administration					P	
PC Acquisition & Support					P	
Help Desk			S		P	

Governance Practices Associated With Service Company Charges

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

- **Company President Oversight** – The Company President of the state utility is responsible for the overall performance of the each operating company or district in the state. Presently the Western States President is also the President of New Mexico-American. Through the Western States President, New Mexico-American has a significant voice in major business decisions of American Water and has the ability to monitor Service Company quality and spending.
- **Vice President Finance** – The VP Finance of the Western states is responsible for the financial reporting, performance and internal controls of each of the operating companies in the region. The VP Finance monitors the performance and reporting from the Service Company. The VP Finance attends monthly Business Plan Review sessions with the New Mexico-American General Manager and finance group to review actual results and address forecast modifications for the remainder of the year. The VP Finance reports on the quarterly financial results and forecast updates to New Mexico-American’s Board of Directors. The rates function reports to the VP Finance, who reviews and authorizes the filing of New Mexico-American rate cases and regularly monitors the status of cases. The operating subsidiary interacts with the VP Finance to discuss various issues.
- **Operating Company Board Oversight** – New Mexico-American’s board of directors includes a member of American Water’s senior executive team, members of the Division management team and two external Directors. This helps ensure that New Mexico-American’s needs are a factor in the delivery of Service Company services.
- **Service Company Budget Review/Approval** – The Western States President sits 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. New Mexico-American’s president is also on the local board.
- **Major Project Review And Approval** – Major projects undertaken by the Service Company must first be reviewed by American Water’s senior executive team, which includes the President of the Western States. The President, with input from the Division management team, has the ability to impact all new initiatives and projects before they are authorized.
- **Service Company Bill Scrutiny** – Western States Finance personnel review the monthly Service Company bill for accuracy and reasonableness on a monthly basis. New Mexico’s financial analyst has dialogue with regional office personnel concerning the monthly bill and any mistakes or overcharges are credited on a subsequent billing. The Western States’ Finance unit prepares an actual to budget comparison of management fees each month for use in identifying unusual variances. Service Company actual to budget comparison is included in the monthly Financial Review Package. Unusual variances are researched, explanations are provided and any corrections are made, as deemed necessary.
- **Service Company Budget Variance Reporting** – Each month, a summary variance analysis is prepared that explains differences between budgeted and actual Service Company spending. In addition, a more detailed monthly variance report, called the “Statement of Expenses and Billed Charges,” is produced by Service Company location and shows actual spending for the month.

- **Operating Company Budget Variance Reporting** – The “Budget/Plan Analysis,” produced monthly, has a line item for Management Fees (i.e., Service Company charges). In this way, Service Company budget versus actual charges can be monitored for the month and year-to-date. Additional information exists that allows more detailed analysis of "Regional" and "Corporate" Management Fees.
- **Capital Investment Management Committee (CIMC)** – CIMC is one of American Water’s primary business planning processes. It covers capital and asset planning and is employed throughout American Water. CIMC 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. CIMC 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
 - Effective controls are in place over budgets (through business plans) and individual capital projects (through appropriate authorization thresholds, management and reporting processes).

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

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

12-Months Ended December 31, 2006

**Ohio American Water Company
Market Cost Comparison of Service Company Charges
12-Months Ended December 31, 2006**

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I - Introduction

Purpose Of This Study

This study was undertaken to answer three questions concerning the services provided by American Water Works Service Company, Inc. (Service Company) to Ohio American Water Company (OAWC):

1. Was OAWC charged the lower of cost or market for managerial and professional services provided by the Service Company during 2006?
2. Were the 2006 cost of the Service Company's customer accounts services, including those of the National Call Centers, reasonable?
3. Are the services OAWC receives from Service Company necessary?

Study Results

Concerning question 1, the following conclusions can be drawn from this study:

- OAWC was charged the lower of cost or market for managerial and professional services during the 12-months ended December 31, 2006.
- On average, the hourly rates for outside service providers are **55% 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 OAWC without careful supervision on the part of OAWC. If these services were contracted entirely to outside providers, OAWC would have to add at least one position to manage activities of outside firms. These positions would be necessary to ensure the quality and timeliness of services provided.
- If all the managerial and professional services now provided by the Service Company had been out-sourced during the 12-months ended December 31, 2006, OAWC and its ratepayers would have incurred an **additional \$1.8 million** in expenses. This amount includes the higher cost of outside providers and the cost of an additional OAWC position needed to direct the outsourced work.
- This study's hourly rate comparison actually understates the cost advantages that accrue to OAWC from its use of the Service Company. Outside service providers generally bill for every hour worked. Service Company exempt personnel, on the other hand, charge a maximum 8 per day even when they work more. 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 \$1.8 million cited above. For instance, if Service Company overtime is conservatively estimated at 5% (2 hours per week), then that work would have cost an estimated \$84,000 in additional charges from outside providers.
- It would be difficult for OAWC 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 OAWC ratepayers.

Concerning question 2, it was determined that the cost of the Service Company's customer accounts services, including those provided by the National Call Center, **is within a reasonable range of the average of the comparison group of neighboring electric utilities.** 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 OAWC. During the 12-months ended December 31, 2006, the customer accounts cost for OAWC customers was \$31.70 compared to the 2005 average of \$26.45 for neighboring electric utilities. The highest comparison group per customer cost was \$46.94 and the lowest \$12.43.

Concerning question 3, the following conclusions can be drawn:

- The services that the Service Company provides are necessary and would be required even if OAWC were a stand-alone water utility.
- There is no redundancy or overlap in the services provided by the Service Company to OAWC. For all of the services listed in Schedule 10, there was only one entity that was primarily responsible for the service.

II - Background

Overview Of American Water Works Service Company

The Service Company maintains several types of offices from which it provides services to American Water operating companies. They include:

- 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 the second quarter of 2001 and a second in Pensacola, Florida that went into operation in April 2005. Prior to the establishment of these national call centers, customer service functions were performed by employees of OAWC, 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 and operations.
- 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 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 number, if transaction is a direct charge
- Formula number if transaction is allocated
- Employee hours worked
- Account number for non-labor charges

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

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:

- Operating company (for direct charge)
- Formula number (for allocation)
- Work order (where applicable)
- Authorization number (where applicable)

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 their 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 the Central Region's professional labor is assigned to OAWC 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 Central Region's accumulated professional and support labor is charged to OAWC during the month, then 20% of that month's overhead expenses will be assigned to OAWC.

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 OAWC, then 2% of that office's office expenses would be assigned to OAWC. 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

During 2006, the Service Company billed OAWC \$3,706,151 in O&M-related and \$504,356 in capital-related charges. Included in the O&M amount is \$364,509 for which OAWC will not seek recovery. As calculated in the table below, the net O&M and capital charges of \$3,845,998 were subjected to a market cost comparison.

Reconciliation to 2006 Testable Service Co Charges

O&M Per OAWC G/L	\$	3,706,151
Net O&M Adjustments	\$	(364,509)
Net Testable O&M	\$	3,341,642
Capital per OAWC G/L	\$	504,356
Net Testable SC Charges	\$	3,845,998

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

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

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

	2006	
	Amount	Hours
Management and Professional Services	\$ 3,082,016	35,958
Customer Account Services	\$ 763,982	25,291
Total Service Company Charges	\$ 3,845,998	61,249

This study's first question—whether the Service Company charges 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 OAWC during 2006. Outside providers' billing rates came from surveys or other information from professionals that could perform the services now provided by the Service Company.

The second question—reasonableness of the National Call Center costs—was addressed by comparing OAWC'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 third question—the necessity of Service Company services—was first investigated by determining the services provided to OAWC. A determination was then made as to whether these services would be required if OAWC were a stand-alone utility.

IV – Managerial And Professional Services Hourly Rate Comparison

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 OAWC during 2006. 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 OAWC during 2006, 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

Schedule 1 (page 10) details the assignment of 2006 management and professional Service Company charges by outsider provider category. Schedule 2 (page 10) shows the same assignment for Service Company management and professional hours charged to OAWC during 2006.

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 2006 test period non-labor Service Company charges:

- Contract Services – 2006 Service Company charges to OAWC include approximately \$289,000 in charges 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.
- Computer Hardware and Software Expenses – Included in 2006 Service Company charges to OAWC are charges for outside expenses related to leases and maintenance fees related to mainframe, server and network infrastructure, corporate business applications and the communications systems. An outside provider that would take over operation of a data center would recover these expenses over and above the labor necessary to operate the data center.

Schedule 3 (page 11) 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 Schedules 1 and 2 and the excludable items shown in Schedule 3, the Service Company's equivalent costs per hour for 2006 are calculated below.

	Attorney	Management Consultant	Certified Public Accountant	Professional Engineer	Total
Total management, professional & technical services charges	\$ 102,617	\$ 878,476	\$ 1,268,600	\$ 832,323	\$ 3,082,016
Less:					
Contract services	\$ 4,759	\$ 108,909	\$ 141,573	\$ 33,920	\$ 289,161
Travel expenses	\$ 502	\$ 14,926	\$ 5,095	\$ 14,571	\$ 35,094
Computer hardware/software	\$ 2	\$ 11,222	\$ 25,571	\$ 598	\$ 37,393
Net Service Charges (A)	\$ 97,353	\$ 743,418	\$ 1,096,362	\$ 783,234	\$ 2,720,368
Total Hours (B)	795	6,118	18,016	11,029	35,958
Average Hourly Rate (A / B)	\$ 122	\$ 122	\$ 61	\$ 71	

**Ohio American Water Company
Analysis of 2006 Service Company Charges By Location And Function**

Location	Function	2006 Service Company Charges				Total
		Attorney	Management Consultant	Certified Public Accountant	Professional Engineer	
Belleville Lab	Water Quality		\$ 19,350		\$ 80,721	\$ 80,721
Call Center	Human Resources			\$ 70,964		\$ 19,350
Corporate	Accounting					\$ 70,964
	Administration	\$ 8,207	\$ 158,164	\$ 104,816	\$ 72,261	\$ 343,448
	Audit			\$ 19,403		\$ 19,403
	Communications		\$ 34,096			\$ 34,096
	Finance			\$ 85,784		\$ 85,784
	Human Resources		\$ 84,344			\$ 84,344
	Legal	\$ 38,662				\$ 38,662
	Operations				\$ 90,107	\$ 90,107
	Rates & Revenue			\$ 55,796		\$ 55,796
	Risk Management		\$ 23,254			\$ 23,254
	Water Quality				\$ 23,285	\$ 23,285
Regional Offices	Accounting			\$ 13,469		\$ 13,469
	Administration	\$ 266,731				\$ 266,731
	Communications	\$ 56,337				\$ 56,337
	Customer Service					\$ -
	Engineering				\$ 199,845	\$ 199,845
	Finance			\$ 207,574		\$ 207,574
	Human Resources		\$ 162,949			\$ 162,949
	Legal	\$ 55,748				\$ 55,748
	Operations				\$ 235,146	\$ 235,146
	Risk Management		\$ 54,885			\$ 54,885
	Water Quality				\$ 130,958	\$ 130,958
Information Technology	Audit			\$ 8,048		\$ 8,048
	Information Technology			\$ 412,370		\$ 412,370
Shared Services	Accounting			\$ 211,947		\$ 211,947
	Administration		\$ 18,367			\$ 18,367
	Finance			\$ 21,070		\$ 21,070
	Rates & Revenue			\$ 57,362		\$ 57,362
	Total Dollars Charged	\$ 102,617	\$ 878,476	\$ 1,268,600	\$ 832,323	\$ 3,082,016

Exhibit Witness: PLB-1
Schedule 2

**Ohio American Water Company
Analysis of 2006 Service Company Hours By Location And Function**

Location	Function	2006 Service Company Hours					Total
		Attorney	Management Consultant	Certified Public Accountant	Professional Engineer		
Belleville Lab	Water Quality				1,197		1,197
Call Center	Human Resources		242				242
Corporate	Accounting			1,260			1,260
	Administration		281				281
	Audit			305			305
	Communications		118				118
	Finance			623			623
	Human Resources		924				924
	Legal	153					153
	Operations				695		695
	Rates & Revenue			178			178
	Risk Management		180				180
	Water Quality				372		372
Regional Offices	Accounting			229			229
	Administration		701				701
	Communications		808				808
	Customer Service						-
	Engineering				3,426		3,426
	Finance			5,222			5,222
	Human Resources		1,488				1,488
	Legal	643					643
	Operations				3,364		3,364
	Risk Management		1,235				1,235
	Water Quality				1,974		1,974
Information Technology	Audit			194			194
	Information Technology			3,803			3,803
Shared Services	Accounting			4,041			4,041
	Administration		141				141
	Finance			707			707
	Rates & Revenue			1,453			1,453
Total Hours Charged		795	6,118	18,016	11,029		35,958

Ohio American Water Company
2006 Service Company Charges Excludable From The Hourly Rate Calculation

Charges By Function	Exclusions From Hourly Rate Calculation				Total	Outside Service Provider Category
	Contract Services	Travel Expenses	Computer HW/SW	Computer HW/SW		
Accounting	\$ 75,609	\$ 704	\$ 509	\$ 509	\$ 76,821	Certified Public Accountant
Administration	\$ 23,091	\$ 5,340	\$ 4,837	\$ 4,837	\$ 33,268	Management Consultant
Audit	\$ (54)	\$ 216			\$ 162	Certified Public Accountant
Communications	\$ 10,521	\$ 1,277	\$ 193	\$ 193	\$ 11,991	Management Consultant
Engineering	\$ 4,177	\$ 6,383	\$ 185	\$ 185	\$ 10,745	Professional Engineer
Finance	\$ 17,803	\$ 1,415	\$ 315	\$ 315	\$ 19,532	Certified Public Accountant
Human Resources	\$ 39,727	\$ 1,822	\$ 641	\$ 641	\$ 42,190	Management Consultant
Information Technology	\$ 41,259	\$ 1,389	\$ 24,748	\$ 24,748	\$ 67,395	Certified Public Accountant
Legal	\$ 4,759	\$ 502	\$ 2	\$ 2	\$ 5,263	Attorney
Operations	\$ 34,964	\$ 8,417	\$ 377	\$ 377	\$ 43,758	Management Consultant, Professional Engineer
Rates & Revenue	\$ 6,957	\$ 1,372			\$ 8,328	Professional Engineer
Risk Management	\$ 2,407	\$ 2,872	\$ 5,511	\$ 5,511	\$ 10,790	Certified Public Accountant
Water Quality	\$ 27,942	\$ 3,386	\$ 77	\$ 77	\$ 31,404	Management Consultant
Total	\$ 289,161	\$ 35,094	\$ 37,393	\$ 37,393	\$ 361,648	

Recap By Outside Provider	Exclusions From Hourly Rate Calculation				Total
	Contract Services	Travel Expenses	Computer HW/SW	Computer HW/SW	
Attorney	\$ 4,759	\$ 502	\$ 2	\$ 2	\$ 5,263
Management Consultant	\$ 108,909	\$ 14,926	\$ 11,222	\$ 11,222	\$ 135,057
Certified Public Accountant	\$ 141,573	\$ 5,095	\$ 25,571	\$ 25,571	\$ 172,238
Professional Engineer	\$ 33,920	\$ 14,571	\$ 598	\$ 598	\$ 49,089
Total	\$ 289,161	\$ 35,094	\$ 37,393	\$ 37,393	\$ 361,648

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.

Attorneys

The Ohio Bar Association does not survey its members as to their hourly billing rates. In addition, publicly available billing rate information could not be found for Ohio attorneys. Therefore, an Ohio estimate was developed from a survey of Michigan lawyers conducted annually by the Michigan Lawyers Weekly. As presented in Schedule 4, the average rate for each Michigan firm respondent was adjusted for the cost of living differential between their location and Columbus, Ohio. The survey includes rates that were in effect at December 31, 2005. Thus, the 2005 average rate was escalated to June 30, 2006—the midpoint of 2006.

Management Consultants

The cost per hour for management consultants was developed from the 2006 annual survey performed by the Association of Management Consulting Firms—an industry trade organization. The first step in the calculation, presented in Schedule 5, was to determine an average rate by consultant position level. From these rates, a single weighted average hourly rate was calculated based upon the percent of time that is typically applied to a consulting assignment by each consultant position level. This survey includes rates that were in effect during 2005 for firms in 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 survey includes rates that were in effect at December 31, 2005. Thus, the 2005 average rate was escalated to June 30, 2006—the midpoint of 2006.

Certified Public Accountants

The average hourly rate for Ohio certified public accountants was developed from a 2006 survey conducted by the American Institute of Certified Public Accountants (AICPA) every two years. Hourly rates in the AICPA survey are the average of firms in Ohio. The average hourly rate was calculated for a set of typical accountant positions, as shown in Schedule 6. Based on a typical staff assignment by each accountant position, a weighted average hourly rate was calculated. The survey includes rates that were in effect at December 31, 2005. Thus, the 2005 average rate was escalated to June 30, 2006—the midpoint of 2006.

Professional Engineers

The Service Company provided hourly rate information for outside engineering firms that could have been utilized by OAWC during 2006. As presented in Schedule 7, 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.

Schedule 4

Ohio American Water Company
Estimated Billing Rates For Ohio Attorneys Based On Michigan Attorney Billing Rates

Billing rates as of December 31, 2005 (Note A)							Cost of Living Adjust (C)	Adjusted Rate
Firm	Michigan Location	Number Of Mich Lawyers	Billing Rate Range			Average		
			Associate	Partner				
Dykema	Detroit	228	\$ 250	\$ 408	\$ 329	82%	\$ 403	
Dickinson Wright PLLC	Detroit	218	\$ 208	\$ 385	\$ 296	82%	\$ 363	
Butzel Long	Detroit	212	\$ 283	\$ 385	\$ 334	82%	\$ 409	
Bodman LLP	Detroit	130	\$ 168	\$ 323	\$ 245	82%	\$ 300	
Jaffe Raitt Heuer & Weiss, PC	Southfield	95	\$ 160	\$ 358	\$ 259	94%	\$ 274	
Sommers Schwartz	Southfield	76	\$ 138	\$ 193	\$ 165	94%	\$ 175	
Trott & Trott, PC	Bingham Farms	57	\$ 188	\$ 250	\$ 219	148%	\$ 148	
Brooks Kushman PC	Southfield	52	\$ 218	\$ 375	\$ 296	94%	\$ 314	
Foley & Lardner LLP	Detroit	42	\$ 298	\$ 453	\$ 375	82%	\$ 460	
Kemp, Klein, Umphrey, Edelman & May PC	Troy	38	\$ 155	\$ 263	\$ 209	113%	\$ 184	
Pepper Hamilton LLP	Detroit	31	\$ 255	\$ 448	\$ 351	82%	\$ 431	
Hertz, Schram & Saretsky, PC	Bloomfield Hills	30	\$ 218	\$ 338	\$ 278	125%	\$ 222	
O'Reilly Rancilio PC	Sterling Heights	27	\$ 180	\$ 238	\$ 209	96%	\$ 217	
Thrun Law Firm	East Lansing	27	\$ 190	\$ 220	\$ 205	89%	\$ 229	
Strobl & Sharp, PC	Bloomfield Hills	26	\$ 145	\$ 275	\$ 210	125%	\$ 168	
Kupelian Ormond & Magy, PC	Southfield	24	\$ 173	\$ 263	\$ 218	94%	\$ 230	
Parmenter O'Toole	Muskegon	23	\$ 145	\$ 238	\$ 191	78%	\$ 244	
Rader, Fishman & Grauer, PLLC	Bloomfield Hills	23	\$ 208	\$ 373	\$ 290	125%	\$ 232	
Tanoury, Corbet, Shaw, Nauts & Essad PLLC	Detroit	22	\$ 120	\$ 180	\$ 150	82%	\$ 184	
Williams, Williams, Rattner & Plunkett, PC	Birmingham	22	\$ 200	\$ 313	\$ 256	112%	\$ 228	
Overall Average at December 31, 2005								\$ 271
<u>Escalation to Mid-Point of Year - June 30, 2006 (Note B)</u>								
CPI at December 31, 2005								196.8
CPI at June 30, 2006								202.9
Inflation/Escalation								3.1%
Average Billing Rate At June 30, 2006								\$ 279

Note A: Source is Michigan Lawyers Weekly, April 2006

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

Note C: Source is Sperling's Best Places (<http://www.bestplaces.net/col/col.aspx>). This number represents the cost of living difference between the Michigan city and Columbus, Oh. A number over 100% indicates the Michigan city's cost of living is higher than Columbus. A number less than 100% indicates Columbus' cost of living is higher.

Schedule 5

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

A. Calculation of Average Hourly Billing Rate by Consultant Position						
Survey billing rates were those in effect in 2005 (Note A)						
Average Hourly Rates (Note A)						
	Entry-Level Consultant	Associate Consultant	Senior Consultant	Junior Partner	Senior Partner	
Average	\$ 141	\$ 186	\$ 234	\$ 320	\$ 350	
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)	\$ 141	\$186	\$234	\$320	\$350	
Typical Percent of Time Spent on a Consulting Project	30%	30%	20%	10%	10%	Weighted Average
	\$ 42	\$ 56	\$ 47	\$ 32	\$ 35	\$ 212
<u>Escalation to Test Year Mid-Point June 30, 2006 (Note B)</u>						
						CPI at December 31, 2005
						196.8
						CPI at June 30, 2006
						202.9
						Inflation/Escalation
						3.1%
Estimated Average Hourly Billing Rate For Consultants At June 30, 2006						\$ 218

Note A: source: "Operating Ratios For Management Consulting Firms, 2006 Edition" Association of Management Consulting Firms

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

Schedule 6

Ohio American Water Company
Estimated Billing Rates Of Ohio Certified Public Accountants

A. Calculation of Average Hourly Billing Rate by Public Accounting Position Survey billing rates were those in effect in 2005 (Note A)				
	Average Hourly Billing Rate (Note A)			
Type of Firm	Staff Accountant	Senior Accountant	Manager	Partner
Average Hourly Rate	\$ 58	\$ 83	\$ 98	\$ 143
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)	\$ 58	\$ 83	\$ 98	\$ 143
Typical Percent of Time Spent on an Accounting Assignment	30%	30%	20%	20%
	\$ 17	\$ 25	\$ 20	\$ 29
				Weighted Average
				\$ 90
			CPI at December 31, 2005	196.8
			CPI at June 30, 2006	202.9
			Inflation/Escalation	3.1%
Estimated Average Hourly Billing Rate For Ohio CPAs At June 30, 2006				\$ 93

Note A: Source is AICPA's 2006 National PCPS/TSCPA Management of an Accounting Practice Survey

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

Exhibit Witness: PLB-1
Schedule 7

Ohio American Water Company
Billing Rates Of Ohio Engineers

Note: Billing rates were those in effect in 2006

A. Calculation of Average Hourly Rate by Engineer Position

Name of Firm (B)	Average Hourly Billing Rates			
	Technician Senior Technician	Engineer Design Engineer Project Engineer	Project Manager Sr. Mgr. Engineer	Officer Principal Engineer
Firm #1	\$65	\$99	\$154	\$200
Firm #2	\$73	\$96	\$145	\$175
Firm #3	\$66	\$82	\$134	\$162

B. Calculation of Overall Average Engineering Hourly Billing Rate

Average Hourly Billing Rate (From Above)	CAD Drafter Engineer Tech	Engineer	Project Manager	Officer	Weighted Average
		Design Engineer Project Engineer Elect Proj Engineer	Project Associate Sr. Mgr. Engineer	Principal Engineer	
	\$68	\$92	\$144	\$179	
Typical Percent of Time on an Engineering Assignment	30%	35%	25%	10%	
	\$20	\$32	\$36	\$18	\$107

Note A: source is information provided by American Water Works Service Company

Note B: billing rate information is considered confidential by the outside engineering firms,
thus their names are not shown

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.

12 Months Ended December 31, 2006			
Service Provider	Service Company	Outside Provider	Difference-- Service Co. Greater(Less) Than Outside
Attorney	\$ 122	\$ 279	\$ (157)
Management Consultant	\$ 122	\$ 218	\$ (97)
Certified Public Accountant	\$ 61	\$ 93	\$ (32)
Professional Engineer	\$ 71	\$ 107	\$ (36)

Based on these cost per hour differentials and the number of managerial and professional services hours billed to OAWC during the 12-months ended December 31, 2006, outside service providers would have cost \$1,692,642 more than the Service Company (see table below). Thus, on average, outside provider's hourly rates are almost 55% higher than those of the Service Company (\$1,692,642 / \$ 3,082,016).

12 Months Ended December 31, 2006			
Service Provider	Hourly Rate Difference-- Service Co. Greater(Less) Than Outside	Service Company Hours Charged	Dollar Difference
Attorney	\$ (157)	795	\$ (124,629)
Management Consultant	\$ (97)	6,118	\$ (592,219)
Certified Public Accountant	\$ (32)	18,016	\$ (583,167)
Professional Engineer	\$ (36)	11,029	\$ (392,628)
Service Company Less Than Outside Providers			\$ (1,692,642)

If OAWC were to use outside service providers rather than the Services 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 35,958 hours of work (about 24 full-time equivalents at 1,500 "billable" hours per FTE per year) would add a significant workload to the existing OAWC management team. Thus, it would be necessary for OAWC 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 another \$152,700 per year to OAWC's personnel expenses.

Cost of Adding Administrative Positions To OAWC's Staff

	<u>Total</u>
New Positions' Salary	\$ 100,000
Benefits (at 52.7%)	\$ 52,700
Total Cost of the New Position	\$ 152,700

Thus, the total effect on the ratepayers of OAWC of contracting all services now provided by Service Company would be an increase in their costs of **\$1,845,342** (\$1,692,642 + \$152,700).

Other Cost Comparisons

Every year, the Belleville Lab conducts a comparison of its cost for performing major tests to the cost of using outside testing laboratories. Over the past several years, these surveys have shown the following results been as follows:

Year	Number of Major Tests Surveyed	Percent Belleville Lower Than Outside Labs
2000	26	15%
2001	25	19%
2002	24	16%
2003	23	10%
2004	24	9%
2005	24	25%
2006	24	31%

These studies provide additional evidence that the Service Company arrangement is the lowest-cost alternative for OAWC.

V – Customer Account Services Cost Comparison

Background

It is difficult to compare the cost of American Water's National Call Centers with outside providers of the same call center-related services. Call center survey data is proprietary and expensive to obtain. For this reason, OAWC's National Call Center costs are compared to those of neighboring electric utilities because the data necessary to make this comparison is readily available to the public.

Electric utility cost information comes from their FERC Form 1. FERC's chart of accounts is defined in chapter 18, part 101 of Code of Federal Regulations. FERC accounts that contain call center-related expenses and are used in this study's comparison are:

- Account 903 Customer Accounts Expense – Records and Collection Expense
- Account 905 Customer Accounts Expense – Miscellaneous Customer Accounts Expense.

In addition, 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).

Schedule 9 provides FERC's description of what should be charged to these accounts. In questioning the controller of a large Southeastern electric utility, it was determined that expenses of the activities described below are recorded in the designated FERC accounts.

903 Records and Collection Expense

- 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 of customer payments received in the mail
- Bill payment centers – locations where customers can pay their bills in person

905 Miscellaneous Customer Accounts Expense

- Customer Information System IT – maintenance and support of the customer information system

This study assumes the FERC accounts for other electric and gas utilities contain expenses for the same activities.

Ohio 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.

Ohio 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.

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.

Ohio	<ul style="list-style-type: none"> • Cincinnati Gas & Electric • Cleveland Electric Illuminating • Columbus & Southern Power • Dayton Power & Light 	<ul style="list-style-type: none"> • Ohio Edison • Ohio Power • Toledo Edison
Michigan	<ul style="list-style-type: none"> • Consumers Energy • Detroit Edison 	<ul style="list-style-type: none"> • Indiana Michigan Power
Kentucky	<ul style="list-style-type: none"> • Kentucky Power • Kentucky Utilities 	<ul style="list-style-type: none"> • Louisville Gas & Electric • Union Light, Heat & Power
Pennsylvania	<ul style="list-style-type: none"> • Duquesne Light • Philadelphia Electric • Pennsylvania Electric 	<ul style="list-style-type: none"> • Pennsylvania Power • Pennsylvania Power & Light • West Penn Power
Indiana	<ul style="list-style-type: none"> • Indiana-Michigan Power • Indianapolis Power & Light 	<ul style="list-style-type: none"> • NIPSCO • Public Service of Indiana
West Virginia	<ul style="list-style-type: none"> • Wheeling Power 	

Some neighboring electric utilities could not be included in the comparison group because they did not submit the necessary FERC Form 1 data.

Comparison Approach

The basis for this comparison is customer account services expenses per customer. OAWC's cost pool was developed to include the same expenses included in electric utility's FERC accounts 903 and 905. As shown in the graphic below, OAWC's resultant cost pool contains the expenses of Service Company locations and certain operating company expenses.

American Water
<u>Service Company</u>
Pensacola & Alton Call Centers
a. Customer contact
b. Customer order processing
c. Billing information processing
d. Collections
e. Correspondence processing
f. Customer payment processing
<u>IT Service Centers</u>
a. Support expenses for the customer information system (ORCOM)
<u>Operating Company</u>
a. Postage and forms

Electric Utilities
FERC Acct 903 - Records and Collection Expense <u>and</u> FERC Acct 905 - Misc Customer Accounts Expense
a. Customer contact
b. Customer order processing
c. Bill preparation and mailing
d. Collections
e. Payment processing
f. Correspondence processing

OAWC Cost Per Customer

In order to make a valid comparison to neighboring electric utilities, certain adjustments had to be made to the applicable Service Company charges to OAWC. 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 1.28 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. As shown below, OAWC's adjusted annual expense per customer is \$31.70—the number that can be compared to neighboring electric utilities' expenses.

Ohio American 2006 Cost Per Customer

Cost Component		2006 Service Co Charges	Adjustment Fewer Calls For Water Cos. (A)	Adjusted
Service Company				
Call Centers	Call processing, order processing, credit, bill collection	\$ 669,645	\$ 638,256	\$ 1,307,901
Regional Offices		\$ 94,337		\$ 94,337
IT/Data Centers	Bill preparation and mailing	\$ 136,170		\$ 136,170
Service Company	Customer payment processing			\$ 92,058
Operating Company	Postage & forms			\$ 202,279
Cost Pool Total				\$ 1,832,744
Total Customers				57,811
2006 Cost Per Ohio American Customer				\$ 31.70

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 annualized Call Center charges	\$ 669,645
Electric utility industry's avg calls/customer	2.50
American Water's avg calls/customer	1.28
Percent different	95%
Total Adjustment B	\$ 638,256

Note B: Estimated customer payment processing expenses

Number of customers	57,811
Number of payments/customer/year	12
Total payments processed/year	693,732
Bank charge per item	\$ 0.1327
Total estimated annual expense	\$ 92,058

Electric Utility Group Cost Per Customer

Schedule 9 shows the actual 2005 customer accounts expense per customer calculation for the electric utility comparison group. All of the underlying data was taken from the utilities' FERC Form 1.

Summary Of Results

As shown in the table below, OAWC's cost per customer is near the average of the electric utility comparison group. It can therefore be concluded that the customer accounts-related expenses, including those of the Alton and Pensacola Call Centers, assigned by the Service Company to OAWC are within a reasonable range of the comparison group average.

Average Customer Accounts Expense Per Customer	
Louisville Gas & Electric	\$ 12.43
West Penn Power	\$ 13.83
Duquesne Light	\$ 15.52
Ohio Edison	\$ 16.68
Cleveland Electric Illuminating	\$ 17.15
Consumers Energy	\$ 18.72
Pennsylvania Electric	\$ 19.13
Pennsylvania Power	\$ 19.69
Dayton Power & Light	\$ 19.72
Toledo Edison	\$ 21.45
Indianapolis Power & Light	\$ 21.91
PPL Electric	\$ 22.28
Kentucky Utilities	\$ 24.87
Union Light, Heat & Power	\$ 25.64
Pub Service of Indiana	\$ 26.02
Comparison Group Average	\$ 26.45
Wheeling Power	\$ 29.20
Cin Gas & Electric	\$ 30.50
Detroit Edison	\$ 31.50
Indiana Michigan Power	\$ 31.50
Ohio American Water	\$ 31.70
Ohio Power	\$ 32.30
Indiana Michigan	\$ 33.29
Kentucky Power	\$ 34.25
Columbus Southern Power	\$ 35.49
NIPSCO	\$ 35.82
PECO Energy	\$ 46.94

Ohio American Water Company
Comparison Group 2005 Actual Customer Accounts Expense Per Customer

Ohio							
Cin Gas & Electric	Cleveland Electric Illum.	Columbus Southern Pwr	Dayton Power & Light	Ohio Edison	Ohio Power	Toledo Edison	
\$ 16,957,239	\$ 11,230,608	\$ 23,820,271	\$ 8,492,898	\$ 14,841,763	\$ 21,665,275	\$ 5,303,736	
\$ 330,392	\$ 548,454	\$ 43,621	\$ -	\$ 606,191	\$ 57,486	\$ 473,314	
\$ 17,287,631	\$ 11,779,062	\$ 23,863,892	\$ 8,492,898	\$ 15,447,954	\$ 21,722,761	\$ 5,777,050	
\$ 2,385,460	\$ 950,879	\$ 861,354	\$ 1,102,139	\$ 1,332,841	\$ 675,068	\$ 745,337	
\$ 994,470	\$ 333,890	\$ 447,526	\$ 491,627	\$ 471,882	\$ 497,301	\$ 183,541	
\$ 20,667,561	\$ 13,063,831	\$ 25,172,772	\$ 10,086,663	\$ 17,252,677	\$ 22,895,130	\$ 6,705,928	
\$ 677,662	\$ 761,559	\$ 709,305	\$ 511,595	\$ 1,034,352	\$ 708,823	\$ 312,698	
\$ 30.50	\$ 17.15	\$ 35.49	\$ 19.72	\$ 16.68	\$ 32.30	\$ 21.45	
\$ 47,475,767	\$ 15,685,439	\$ 12,034,999	\$ 15,099,058	\$ 18,208,700	\$ 17,071,647	\$ 9,733,958	
\$ 258,720,076	\$ 71,996,883	\$ 81,737,364	\$ 88,041,518	\$ 84,269,929	\$ 164,393,699	\$ 31,333,451	
18.4%	21.8%	14.7%	17.1%	21.6%	10.4%	31.1%	
\$ 12,999,608	\$ 4,364,576	\$ 5,850,008	\$ 6,426,492	\$ 6,168,392	\$ 6,500,661	\$ 2,399,227	
\$ 2,385,460	\$ 950,879	\$ 861,354	\$ 1,102,139	\$ 1,332,841	\$ 675,068	\$ 745,337	
\$ 12,999,608	\$ 4,364,576	\$ 5,850,008	\$ 6,426,492	\$ 6,168,392	\$ 6,500,661	\$ 2,399,227	
7.65%	7.65%	7.65%	7.65%	7.65%	7.65%	7.65%	
\$ 994,470	\$ 333,890	\$ 447,526	\$ 491,627	\$ 471,882	\$ 497,301	\$ 183,541	

Note A
Note B

Customer Account Services Cost Pool
FERC Account Balances:
Acct 903 - Customer Records & Collection (page 322, line 131)
Acct 905 - Misc Customer Accounts (page 322, line 133)
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 158)
Total Payroll (page 355, line 96)
Total Benefits as Percent of Payroll
Payroll Charged to Customer Accts Expenses (page 354, line 6)
Pension & Benefits Pertaining to Customer Accts Expenses
Calculation of Employer's FICA Pertaining to Customer Acct Mgmt
Payroll Charged to Customer Accts Expenses (page 354, line 6)
Employer's Portion of FICA (6.20%) and Medicare (1.45%)
Estimated Employer's Portion of FICA

Ohio American Water Company
Comparison Group 2005 Actual Customer Accounts Expense Per Customer

	Michigan			Kentucky			
	Consumers Energy	Detroit Edison	Indiana Mich Power	Kentucky Power	Kentucky Utilities	Louisville Gas & Electric	Union Light, Heat & Power
\$ 25,965,885	\$ 17,053,003	\$ 56,247,419	\$ 5,669,498	\$ 10,832,569	\$ 4,279,581	\$ 2,787,640	
\$ 653,028	\$ 44,548	\$ 338,973	\$ 15,566	\$ 130,794	\$ 276,482	\$ 96,072	
\$ 26,618,913	\$ 17,097,551	\$ 56,586,392	\$ 5,685,064	\$ 10,963,363	\$ 4,556,063	\$ 2,883,712	
\$ 4,513,941	\$ 718,820	\$ 12,494,278	\$ 180,973	\$ 1,641,361	\$ 265,773	\$ 279,291	
\$ 2,177,758	\$ 434,513	\$ 2,762,526	\$ 135,759	\$ 358,923	\$ 62,820	\$ 195,943	
\$ 33,310,612	\$ 18,250,885	\$ 71,843,196	\$ 6,001,796	\$ 12,963,648	\$ 4,884,656	\$ 3,358,947	
\$ 1,779,184	\$ 579,376	\$ 2,158,201	\$ 175,255	\$ 521,342	\$ 392,998	\$ 131,028	
\$ 18.72	\$ 31.50	\$ 33.29	\$ 34.25	\$ 24.87	\$ 12.43	\$ 25.64	
\$ 93,023,076	\$ 26,142,933	\$ 239,049,375	\$ 3,634,365	\$ 22,757,866	\$ 21,039,968	\$ 3,124,822	
\$ 586,655,410	\$ 206,573,891	\$ 690,909,887	\$ 35,638,655	\$ 65,053,063	\$ 65,008,192	\$ 28,657,418	
15.9%	12.7%	34.6%	10.2%	35.0%	32.4%	10.9%	
\$ 28,467,430	\$ 5,679,911	\$ 36,111,452	\$ 1,774,628	\$ 4,691,810	\$ 821,173	\$ 2,561,351	
\$ 4,513,941	\$ 718,820	\$ 12,494,278	\$ 180,973	\$ 1,641,361	\$ 265,773	\$ 279,291	
\$ 28,467,430	\$ 5,679,911	\$ 36,111,452	\$ 1,774,628	\$ 4,691,810	\$ 821,173	\$ 2,561,351	
7.65%	7.65%	7.65%	7.65%	7.65%	7.65%	7.65%	
\$ 2,177,758	\$ 434,513	\$ 2,762,526	\$ 135,759	\$ 358,923	\$ 62,820	\$ 195,943	

Note A
Note B

Customer Account Management Cost Pool
FERC Account Balances:
Acct 903 - Customer Records & Collection (page 322, line 131)
Acct 905 - Misc Customer Accounts (page 322, line 133)
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 158)
Total Payroll (page 355, line 96)
Total Benefits as Percent of Payroll
Payroll Charged to Customer Accts Expenses (page 354, line 6)
Pension & Benefits Pertaining to Customer Accts Expenses
Pertaining to Employer's FICA Pertaining to Customer Acct Mgmt
Note B: Calculation of Employer's FICA Pertaining to Customer Acct Mgmt
Payroll Charged to Customer Accts Expenses (page 354, line 6)
Employer's Portion of FICA (6.20%) and Medicare (1.45%)
Estimated Employer's Portion of FICA



**Ohio American Water Company
Comparison Group 2005 Actual Customer Accounts Expense Per Customer**

Pennsylvania						
Duquesne Light	PECO Energy	Pennsylvania Electric	Pennsylvania Power	PPL Electric	West Penn Power	
\$ 7,630,920	\$ 51,262,973	\$ 10,706,242	\$ 2,660,189	\$ 24,785,789	\$ 7,219,187	
\$ -	\$ 17,091,051	\$ 98,990	\$ 121,055	\$ 602,445	\$ -	
\$ 7,630,920	\$ 68,354,024	\$ 10,805,232	\$ 2,781,244	\$ 25,388,234	\$ 7,219,187	
\$ 729,457	\$ 2,946,156	\$ 11,831	\$ 227,639	\$ 3,320,449	\$ 1,860,894	
\$ 732,520	\$ 1,155,943	\$ 419,574	\$ 94,893	\$ 1,618,763	\$ 637,822	
\$ 9,092,897	\$ 72,456,123	\$ 11,236,637	\$ 3,103,776	\$ 30,327,466	\$ 9,717,903	
\$ 586,050	\$ 1,543,543	\$ 587,533	\$ 157,660	\$ 1,361,407	\$ 702,792	
\$ 15.52	\$ 46.34	\$ 19.13	\$ 19.69	\$ 22.28	\$ 13.83	
\$ 8,677,884	\$ 36,605,786	\$ 136,028	\$ 2,618,720	\$ 37,811,499	\$ 17,383,598	
\$ 113,912,649	\$ 187,745,320	\$ 63,058,697	\$ 14,269,687	\$ 240,965,158	\$ 77,885,393	
7.6%	19.5%	0.2%	18.4%	15.7%	22.3%	
\$ 9,575,422	\$ 15,110,369	\$ 5,484,627	\$ 1,240,430	\$ 21,160,563	\$ 8,337,540	
\$ 729,457	\$ 2,946,156	\$ 11,831	\$ 227,639	\$ 3,320,449	\$ 1,860,894	
\$ 9,575,422	\$ 15,110,369	\$ 5,484,627	\$ 1,240,430	\$ 21,160,563	\$ 8,337,540	
7.65%	7.65%	7.65%	7.65%	7.65%	7.65%	
\$ 732,520	\$ 1,155,943	\$ 419,574	\$ 94,893	\$ 1,618,763	\$ 637,822	

Note A
Note B

Customer Account Services Cost Pool
 FERC Account Balances:
 Acct 903 - Customer Records & Collection (page 322, line 131)
 Acct 905 - Misc Customer Accounts (page 322, line 133)
 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 158)
 Total Payroll (page 355, line 96)
 Total Benefits as Percent of Payroll
 Payroll Charged to Customer Accts Expenses (page 354, line 6)
 Pension & Benefits Pertaining to Customer Accts Expenses
Note B: Calculation of Employer's FICA Pertaining to Customer Acct Mgmt
 Payroll Charged to Customer Accts Expenses (page 354, line 6)
 Employer's Portion of FICA (6.20%) and Medicare (1.45%)
 Estimated Employer's Portion of FICA



**Ohio American Water Company
Comparison Group 2005 Actual Customer Accounts Expense Per Customer**

	Indiana			West Virginia		Group Average
	Indiana Michigan Pwr	Indianapolis Power & Light	NIPSCO	Pub Service of Indiana	Wheeling Power	
\$	17,053,003	7,326,360	14,221,619	14,922,938	1,124,907	\$ 384,061,512
\$	44,548	397,889	145,257	121,962	3,916	\$ 22,242,034
\$	17,097,551	7,724,249	14,366,876	15,044,900	1,128,823	\$ 406,303,546
Note A	\$ 718,820	\$ 1,899,860	\$ 1,155,339	\$ 3,726,773	\$ 45,742	\$ 44,790,477
Note B	\$ 434,513	\$ 514,872	\$ 470,395	\$ 977,535	\$ 31,178	\$ 16,636,507
Total Cost Pool	\$ 18,250,885	\$ 10,138,981	\$ 15,992,610	\$ 19,749,208	\$ 1,205,743	\$ 467,730,530
Total Customers (page 304, line 43)	579,376	462,837	446,495	758,912	41,294	17,681,277
Customer Account Services Expense per Customer	\$ 31.50	\$ 21.91	\$ 35.82	\$ 26.02	\$ 29.20	\$ 26.45
Note A: Calculation of Pension & Benefits Pertaining to Customer Acct Mgmt Account 926 - Employee Pension & Benefits (page 323, line 158)	\$ 26,142,933	\$ 32,170,538	\$ 31,993,279	\$ 62,558,153	\$ 486,262	\$ 800,666,653
Total Payroll (page 355, line 96)	\$ 206,573,891	\$ 113,965,747	\$ 170,274,964	\$ 214,497,393	\$ 4,332,473	\$ 3,866,470,808
Total Benefits as Percent of Payroll	12.7%	28.2%	18.8%	29.2%	11.2%	20.7%
Payroll Charged to Customer Accts Expenses (page 354, line 6)	\$ 5,679,911	\$ 6,730,350	\$ 6,148,956	\$ 12,778,240	\$ 407,551	\$ 217,470,678
Pension & Benefits Pertaining to Customer Accts Expenses (page 354, line 6)	\$ 718,820	\$ 1,899,860	\$ 1,155,339	\$ 3,726,773	\$ 45,742	\$ 45,033,709
Note B: Calculation of Employer's FICA - Pertaining to Customer Acct Mgmt Payroll Charged to Customer Accts Expenses (page 354, line 6)	\$ 5,679,911	\$ 6,730,350	\$ 6,148,956	\$ 12,778,240	\$ 407,551	\$ 217,470,678
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	\$ 434,513	\$ 514,872	\$ 470,395	\$ 977,535	\$ 31,178	\$ 16,636,507

Customer Account Services Cost Pool

FERC Account Balances:

- Acct 903 - Customer Records & Collection (page 322, line 131)
- Acct 905 - Misc Customer Accounts (page 322, line 133)

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 158)

Total Payroll (page 355, line 96)

Total Benefits as Percent of Payroll

Payroll Charged to Customer Accts Expenses (page 354, line 6)

Pension & Benefits Pertaining to Customer Accts Expenses

Note B: Calculation of Employer's FICA - Pertaining to Customer Acct Mgmt

Payroll Charged to Customer Accts Expenses (page 354, line 6)

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

Estimated Employer's Portion of FICA



VI - Need For Service Company Services

Analysis Of Services

The final aspect of this study was an assessment of whether the services that are provided to OAWC by the Service Company would be necessary if OAWC were a stand-alone water utility. The first step in this evaluation was to determine specifically what the Service Company does for OAWC. Based on discussions with Service Company personnel, the matrix in Schedule 10 was created showing which entity—OAWC or a Service Company location—is responsible for each of the functions OAWC 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 Schedule 10, the following conclusions can be drawn:

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

Designation Of Responsibility For Water Utility Functions

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

Designation Of Responsibility For Water Utility Functions

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

Note A: Projections are developed for certain cost types by Ohio American and by the Service Company for other cost types.

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

Water Company Function	OAWC	Performed By:					Belleville Lab
		Customer Call Center	Regional Office	Shared Services	Corporate Office	IT Service Centers	
Primarily Responsible P Provides Support S							
Water Company Function							
Rates							
Rate Studies & Tariff Change Administration			P				
Rate Case Planning and Preparation	S		P				
Rate Case Preparation	S		P	S			
Rate Case Administration	S		P				
Commission Inquiry Response	S		P				
Legal							
Purchasing and Materials Management							
Specification Development	S		S	S	P		
Bid Solicitation	S		P				
Contract Administration	P		S				
Ordering	P						
Inventory Management	P						
Human Resources Management							
Benefit Program Development					P		
Benefits Program Administration					P		
Management Compensation Administration					P		
Wage & Salary Program Design					P		
Wage & Salary Administration					P		
Labor Negotiations--Wages	P		S				
Labor Negotiations--Benefits	P		S				
Labor Negotiations-- Work Rules	P		S				
Training Program Development			P				
Training--Course Delivery	S		P		S		
Affirmative Action/EEO--Plan Development							
Affirmative Action/EEO--Implementation	P		S		P		
Information Systems Services							
Service Company Data Centers							P
System Operations & Maintenance							P
Software Maintenance							P
Network Administration							P
PC Acquisition & Support							P
Help Desk							P

Governance Practices Associated With Service Company Charges

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

- **Regional President Oversight** – The Regional President of the Central Region is on the Executive Management Team (EMT) of American Water. The Regional President is responsible for the overall performance of each operating company in the region, including OAWC. As part of the EMT, each Regional 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. The Regional President also serves as a Director on the Board of the Service Company.
- **Regional Vice President & Treasurer** – The Regional Vice President and Treasurer of the Central Region is responsible for the financial reporting, performance and internal controls of each of the operating companies in the region. The Regional Service Delivery and Finance Directors monitor the performance and reporting from the Service Company and pushes back whenever the quality and service are not appropriate.
- **Operating Company Board Oversight** – OAWC board of directors includes the Regional President, Vice President of Operations and Vice President of Finance.
- **Service Company Budget Review/Approval** – Every Regional President sits 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.
- **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 Regional President. The Regional President, with input from the regional management team has the ability to impact all new initiatives and projects before they are authorized. Projects ultimately must be accounted for in the Service Company Budget, approved by its Board.
- **Service Company Bill Scrutiny** – Operating company 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.
- **Service Company Budget Variance Reporting** – Each month, a summary variance analysis is prepared that explains differences between budgeted and actual Service Company spending. In addition, the monthly financial review meetings are held to review various aspects of the financial statements of the Service Company.
- **Operating Company Budget Variance Reporting** – The "Budget/Plan Analysis," produced monthly by each operating company, has a line item for Management Fees (i.e., Service Company charges). In this way, Service Company budget versus actual charges can be monitored for the month and year-to-date. The Regional President attends the monthly review of the Service Company which includes an analysis of variances in both operating and financial data.
- **Capital Investment Management (CIM)** – Capital investment within American Water is a significant and essential part of the business. It is necessary to maintain regulatory compliance, provide for reliable, efficient, and quality service, keep pace with growth, and

facilitate appropriate infrastructure renewal. American Water's CIM policy supports the following objectives:

- Capital investment plans are developed and aligned with business plan objectives
- Effective technical oversight and governance is in place for individual projects
- Establishes investment strategies that represent value enhancements for customers
- Periodically review investment performance against established objectives and make adjustments to meet business needs

The CIM process was designed to optimize the effectiveness of asset investment. The process is managed at three levels for all American Water companies, including OAWC.

**Market Cost Comparison of Service Company Charges
Provided to Tennessee American Water Company**

12-Months Ended June 30, 2006



**Tennessee American Water Company
Market Cost Comparison of Service Company Charges
12-Months Ended June 30, 2006**

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I - Introduction

Purpose Of This Study

This study was undertaken to answer three questions concerning the services provided by American Water Works Service Company, Inc. (Service Company) to Tennessee American Water Company (TAWC):

1. Was TAWC charged the lower of cost or market for managerial and professional services provided by the Service Company during the 12-months ended June 30, 2006?
2. Were the 12-months ended June 30, 2006 costs of the Service Company's customer accounts services, including those of the National Call Centers, reasonable?
3. Are the services TAWC receives from Service Company necessary?

Study Results

Concerning question 1, the following conclusions can be drawn from this study:

- TAWC was charged the lower of cost or market for managerial and professional services during the 12-months ended June 30, 2006.
- On average, the hourly rates for outside service providers are **34% 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 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 out-sourced during the 12-months ended June 30, 2006, TAWC and its ratepayers would have incurred an **additional \$1.6 million** in expenses. This amount includes the higher cost of outside providers and the cost of a 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 for every hour worked. Service Company personnel, on the other hand, charge a maximum 8 per day even when they work more. If the overtime hours of Service Company personnel had been factored into the hourly rate calculation, the Service Company would have had an even greater annual dollar advantage than the \$1.6 million cited above.
- 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 2, it was determined that the cost of the Service Company's customer accounts services, including those provided by the National Call Center, **is below the average of the comparison group of neighboring electric utilities.** 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 TAWC. During the 12-months ended June 30, 2006, the customer accounts cost for TAWC customers was \$28.32 compared to the 2005 average of \$31.73 for neighboring electric utilities. The highest comparison group 2005 per customer cost was \$65.51 and the lowest \$12.61.

Concerning question 3, 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 Schedule 10, there was only one entity that was primarily responsible for the service.

II - Background

Overview Of American Water Service Company

The Service Company maintains several types of offices from which it provides services to American Water operating companies. They include:

- 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 the second quarter of 2001 a second in Pensacola, Florida that went into operation in April 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. TAWC transitioned to the Alton Call Center during July and August 2003. During the test period, TAWC also utilized the Pensacola Call Center.
- National Shared Services Center – The Shared Services Center, located in Mount Laurel, New Jersey during 2005 and moved to Cherry Hill, New Jersey in January 2006, 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 have not been consolidated into the National Shared Services Center. Examples of regional office services include rates and revenues, engineering and operations. There are four regional offices—Northeast, Southeast, Central and West.
- 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 Voorhees, New Jersey, supports the IT infrastructure required to run corporate and operating company business applications and the email system. Two smaller data centers, located in Hershey, Pennsylvania and Richmond, Indiana host some Company servers and print customer bills. 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 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 number, if transaction is a direct charge
- Formula number if transaction is allocated
- Employee hours worked
- Account number for non-labor charges.

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.

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 (see example in Schedule 1) that shows:

- Operating company (for direct charge)
- Formula number (for allocation)
- Work order (where applicable)
- Authorization number (where applicable).

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 their 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 2% of the Voorhees Data Center's professional labor is assigned to TAWC during a month, then 2% of that office's monthly administrative labor charges also is assigned to the operating company.

The overhead cost category is next assigned based on professional and administrative labor costs. Thus, if 2% of the Corporate Office's accumulated professional and support labor is charged to TAWC during the month, then 2% 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 state rate case proceeding are charged directly to the operating company whose case is being heard.



Tennessee American Water Company
Sample Electronic Time Sheet

American Water Works Company (581020) - 1/26/06

File Edit Help

Week Ending: 1/23/06 Andes, Kathleen 17:00:09
 Dept: 036518 NE-Human Resources Emp#: 18507871
 View Mode

Totals:		8.00	8.00	8.00	8.00	8.00	40.00	Total	Meal	
Formula	Typ	1/17	1/18	1/19	1/20	1/21	1/22	1/23	Money	
100082	001	1.00	1.00	1.00	1.00	1.00	1.00	5.00	Hours	
Account:		Pay Type Desc: Regular							30.00	
100229	001	6.00	6.00	6.00	6.00	6.00		5.00		
Account:		Pay Type Desc: Regular								
100231	001	1.00	1.00	1.00	1.00	1.00		.00		
Account:		Pay Type Desc: Regular								
100229	250	Pay Type Desc: Sick							.00	
Account:		Pay Type Desc: Holiday							.00	
100229	300	Pay Type Desc: Vacation							.00	
Account:		Pay Type Desc: Vacation								
100229	400	Pay Type Desc: Vacation								
Account:		Pay Type Desc: Vacation								

OK Cancel Help

Disconnected, \\NJ5003\DJVORP

III – Service Company Cost Comparison Approach

During the 12-months ended June 30, 2006, Service Company charged TAWC \$4,536,342. For purposes of comparing these charges to outside benchmarks, Service Company services were placed into two categories:

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

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

	12-Months Ended June 30, 2006	
	Amount	Hours
Management and Professional Services	\$ 3,580,292	31,995
Customer Account Services	\$ 956,050	29,476
Total Charges	\$ 4,536,342	61,471

This study’s first question—whether the Service Company charges 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 June 30, 2006. Outside providers' billing rates came from surveys or other information from professionals that could perform the services now provided by the Service Company.

The second question—reasonableness of the National Call Center costs—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 third question—the necessity of Service Company services—was first investigated by determining the services provided to TAWC. A determination was then made as to whether these services would be required if TAWC were a stand-alone utility.

IV – Managerial And Professional Services Hourly Rate Comparison

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
- Professional Engineers – engineering, operations and water quality services.

It should be noted that 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 educational backgrounds as Service Company engineering personnel. In fact, many Belleville employees have engineering degrees. 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 June 30, 2006. 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 June 30, 2006, 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

Schedule 2 (pages 10-11) details the assignment of 2006 test period management and professional Service Company charges and hours to outsider provider categories.

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 2006 test period non-labor Service Company charges:

- Contract Services – 12-months ended June 30, 2006 Service Company charges to TAWC include over \$700,000 in charges associated with existing arrangements with

outside professional firms who 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.
- **Computer Hardware and Software Expenses** – Included in the 12-months ended June 30, 2006 Service Company charges to TAWC are charges for outside expenses related to leases and maintenance fees related to mainframe, server and network infrastructure, corporate business applications and the email system. An outside provider that would take over operation of a data center would recover these expenses over and above the labor necessary to operate the data center.
- **Severance Payments** – During the 12-months ended June 30, 2006, the Service Company instituted layoffs that resulted in severance payments to some departing employees. TAWC's portion of these payments are excluded from the hourly rate calculation because they are non-recurring items.

Schedule 3 (page 12) 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 Schedules 3 and 4, the Service Company's equivalent costs per hour for the 12-months ended June 30, 2006 are calculated below.

	Attorney	Management Consultant	Certified Public Accountant	Professional Engineer	Total
Total management, professional & technical services charges	\$ 169,849	\$ 1,324,057	\$ 1,408,453	\$ 677,933	\$ 3,580,292
Less:					
Contract services	4,748	395,354	300,437	12,653	713,192
Travel expenses	8,977	60,781	34,559	40,128	144,445
Computer hardware/software	(1)	44,399	40,436	6,575	91,409
Severance expenses		28,534			28,534
Net Service Charges (A)	\$ 156,124	\$ 794,989	\$ 1,033,021	\$ 618,577	\$ 2,602,711
Total Hours (B)	1,396	5,167	16,097	9,335	31,995
Average Hourly Rate (A / B)	\$ 112	\$ 154	\$ 64	\$ 66	

Exhibit Witness: PLB-1

Schedule 2

Page 1 of 2

Tennessee American Water Company
Analysis of 12-Months Ended June 30, 2006 Service Company Charges By Location And Function

Location	Function	12-Months Ended June 30, 2006 Service Company Charges				Total
		Attorney	Management Consultant	Certified Public Accountant	Professional Engineer	
Belleville Lab	Water Quality				\$ 103,764	\$ 103,764
Call Center	Human Resources		\$ 21,925			\$ 21,925
Corporate	Accounting			\$ 74,831		\$ 74,831
	Administration	\$ 14,063	\$ 627,448	\$ 84,973	\$ 51,499	\$ 777,983
	Audit			\$ 34,763		\$ 34,763
	Communications		\$ 41,968			\$ 41,968
	Finance			\$ 111,853		\$ 111,853
	Human Resources		\$ 157,104			\$ 157,104
	Legal	\$ 44,579				\$ 44,579
	Operations				\$ 99,126	\$ 99,126
	Rates & Revenue			\$ 68,440		\$ 68,440
	Risk Management		\$ 25,496			\$ 25,496
	Water Quality				\$ 24,829	\$ 24,829
	Central Region	Administration		\$ 2,463		
Communications			\$ 662			\$ 662
Engineering					\$ 801	\$ 801
Finance				\$ (109)		\$ (109)
Human Resources			\$ 752			\$ 752
Legal		\$ 347				\$ 347
Operations					\$ 171	\$ 171
Risk Management			\$ 375			\$ 375
Water Quality					\$ 280	\$ 280
Northeast Region	Administration		\$ 2,523			\$ 2,523
	Communications		\$ 321			\$ 321
	Engineering				\$ 92	\$ 92
	Finance			\$ 1,079		\$ 1,079
	Human Resources		\$ 696			\$ 696
	Legal	\$ 794				\$ 794
	Operations				\$ 2,503	\$ 2,503
	Risk Management		\$ 254			\$ 254
Southeast Region	Administration		\$ 193,214			\$ 193,214
	Communications		\$ 39,609			\$ 39,609
	Engineering				\$ 82,049	\$ 82,049
	Finance			\$ 150,046		\$ 150,046
	Human Resources		\$ 85,563			\$ 85,563
	Legal	\$ 109,758				\$ 109,758
	Operations				\$ 247,745	\$ 247,745
	Risk Management		\$ 36,345			\$ 36,345
Western Region	Administration		\$ 294			\$ 294
	Communications		\$ (78)			\$ (78)
	Engineering				\$ 208	\$ 208
	Finance			\$ 1,160		\$ 1,160
	Human Resources		\$ (13)			\$ (13)
	Legal	\$ 307				\$ 307
	Operations				\$ (1,754)	\$ (1,754)
	Risk Management		\$ (12)			\$ (12)
IT	Information Systems			\$ 517,967		\$ 517,967
	Supply Chain			\$ 80,842		\$ 80,842
Shared Services	Accounting			\$ 232,176		\$ 232,176
	Administration		\$ 87,148			\$ 87,148
	Finance			\$ 32,458		\$ 32,458
	Rates & Revenue			\$ 17,973		\$ 17,973
Total		\$ 169,849	\$ 1,324,057	\$ 1,408,453	\$ 677,933	\$ 3,580,292



Exhibit Witness: PLB-1

Schedule 2

Page 2 of 2

Tennessee American Water Company
Analysis of 12-Months Ended June 30, 2006 Service Company Hours By Location And Function

Location	Function	12-Months Ended June 30, 2006 Service Company Hours				
		Attorney	Management Consultant	Certified Public Accountant	Professional Engineer	Total
Belleville Lab	Water Quality				1,639	1,639
Call Center	Human Resources		228			228
Corporate	Accounting			24		24
	Administration		1,207			1,207
	Audit			345		345
	Communications		140			140
	Finance			578		578
	Human Resources		569			569
	Legal	198				198
	Operations				795	795
	Rates & Revenue			179		179
	Risk Management		285			285
	Water Quality				411	411
Central Region	Administration		-			-
	Communications					-
	Engineering				2	2
	Finance			6		6
	Human Resources		26			26
	Legal					-
	Operations					-
	Risk Management					-
Water Quality					-	
Northeast Region	Administration		2			2
	Communications					-
	Engineering					-
	Finance			1		1
	Human Resources		0			0
	Legal	2				2
	Operations				7	7
Risk Management					-	
Water Quality					-	
Southeast Region	Administration		621			621
	Communications		414			414
	Engineering				763	763
	Finance			2,692		2,692
	Human Resources		912			912
	Legal	1,195				1,195
	Operations				4,355	4,355
	Risk Management		557			557
Water Quality				1,364	1,364	
Western Region	Administration		-			-
	Communications					-
	Engineering				(1)	(1)
	Finance					-
	Human Resources					-
	Legal	1				1
	Operations					-
	Risk Management					-
Water Quality					-	
IT	Information Systems			4,583		4,583
Supply Chain	Accounting			1,480		1,480
Shared Services	Accounting			4,810		4,810
	Administration		204			204
	Finance			997		997
	Rates & Revenue			402		402
Total		1,396	5,167	16,097	9,335	31,995



**Tennessee American Water Company
12-Months Ended June 30, 2006 Service Company Charges Excludable From The Hourly Rate Calculation –
Contract Services, Travel Expenses and Computer Hardware/Software**

Charges By Function	Exclusions From Hourly Rate Calculation				Total
	Contract Services	Travel Expenses	Computer HW/SW	Severance Payments	
Accounting	\$ 160,062	\$ 4,463	\$ 707		\$ 165,232
Administration	\$ 326,061	\$ 39,485	\$ 42,017	\$ 28,347	\$ 435,910
Audit	\$ 8,568	\$ 3,262			\$ 11,830
Communications	\$ 16,882	\$ 4,541	\$ 89		\$ 21,512
Engineering		\$ 3,275			\$ 3,275
Finance	\$ 25,377	\$ 9,389	\$ 129		\$ 34,895
Human Resources	\$ 50,262	\$ 9,712	\$ 56	\$ 187	\$ 60,217
Information Systems	\$ 89,740	\$ 12,226	\$ 39,600		\$ 141,566
Legal	\$ 4,748	\$ 8,977	\$ (1)		\$ 13,724
Operations	\$ 10,275	\$ 31,039	\$ 1,130		\$ 42,444
Rates & Revenue	\$ 16,690	\$ 5,219			\$ 21,909
Risk Management	\$ 2,149	\$ 7,043	\$ 2,237		\$ 11,429
Water Quality	\$ 2,378	\$ 5,814	\$ 5,445		\$ 13,637
Total	\$ 713,192	\$ 144,445	\$ 91,409	\$ 28,534	\$ 977,580

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
Professional Engineer
Certified Public Accountant
Management Consultant
Professional Engineer

Recap By Outside Provider	Exclusions From Hourly Rate Calculation				Total
	Contract Services	Travel Expenses	Computer HW/SW	Severance Payments	
Attorney	\$ 4,748	\$ 8,977	\$ (1)	\$ -	\$ 13,724
Management Consultant	\$ 395,354	\$ 60,781	\$ 44,399	\$ 28,534	\$ 529,068
Certified Public Accountant	\$ 300,437	\$ 34,559	\$ 40,436	\$ -	\$ 375,432
Professional Engineer	\$ 12,653	\$ 40,128	\$ 6,575	\$ -	\$ 59,356
Total	\$ 713,192	\$ 144,445	\$ 91,409	\$ 28,534	\$ 977,580

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.

Attorneys

The Tennessee Bar Association does not survey its members as to their hourly billing rates. In addition, publicly available billing rate information could not be found for Tennessee attorneys. Therefore, a Tennessee estimate was developed from a survey of Michigan lawyers conducted annually by the Michigan Lawyers Weekly. As presented in Schedule 4, the average rate for each Michigan firm respondent was adjusted for the cost of living differential between their location and Chattanooga, Tennessee. The survey includes rates that were in effect at December 31, 2005—the midpoint of the 12-months ended 2006.

Management Consultants

The cost per hour for management consultants was developed from the 2005 annual survey performed by the Association of Management Consulting Firms—an industry trade organization. The first step in the calculation, presented in Schedule 5, was to determine an average rate by consultant position level. From these rates, a single weighted average hourly rate was calculated based upon the percent of time that is typically applied to a consulting assignment by each consultant position level. This survey includes rates that were in effect during 2004 for firms in 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 2004 average rate was escalated to December 31, 2005—the midpoint of 12-months ended June 30, 2006.

Certified Public Accountants

The average hourly rate for Tennessee certified public accountants was developed from a 2004 survey conducted by the American Institute of Certified Public Accountants (AICPA) every two years. Hourly rates in the AICPA survey are the average of firms in Tennessee. The average hourly rate was calculated for a set of typical accountant positions, as shown in Schedule 6. Based on a typical staff assignment by each accountant position, a weighted average hourly rate was calculated. This survey covered hourly rates in effect during 2003, thus they had to be escalated to December 31, 2005—the midpoint of 12-months ended June 30, 2006.

Professional Engineers

The Service Company provided hourly rate information for three outside engineering firms that were used by TAWC in 2005 and 2006. As presented in Schedule 7, 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.

Schedule 4

**Tennessee American Water Company
Estimated Billing Rates Of Tennessee Attorneys**

Billing rates as of December 31, 2005 (Note A)							Cost of Living	Adjusted Rate
Firm	Michigan Location	Number Of Michigan Lawyers	Billing Rate Range			Adjustment (C)		
			Low	High	Avg			
Dykema	Detroit	228	\$ 250	\$ 408	\$ 329	89.8%	\$ 295	
Dickinson Wright	Detroit	218	\$ 208	\$ 385	\$ 296	89.8%	\$ 266	
Butzel Long	Detroit	212	\$ 283	\$ 385	\$ 334	89.8%	\$ 300	
Bodman	Detroit	130	\$ 168	\$ 323	\$ 245	89.8%	\$ 220	
Jaffe Raitt Heuer & Weiss	Southfield	95	\$ 160	\$ 358	\$ 259	93.1%	\$ 241	
Sommers Schwartz	Southfield	76	\$ 138	\$ 193	\$ 165	93.1%	\$ 154	
Trott & Trott	Bingham Farms	57	\$ 188	\$ 250	\$ 219	79.4%	\$ 174	
Brooks Kushman	Southfield	52	\$ 218	\$ 375	\$ 296	93.1%	\$ 276	
Foley & Lardner	Detroit	42	\$ 298	\$ 453	\$ 375	89.8%	\$ 337	
Kemp, Klein, Umphrey, Edelman & May	Troy	38	\$ 155	\$ 263	\$ 209	89.1%	\$ 186	
Pepper Hamilton	Detroit	31	\$ 255	\$ 448	\$ 351	89.8%	\$ 315	
Hertz, Schram & Saretsky	Bloomfield Hills	30	\$ 218	\$ 338	\$ 278	80.3%	\$ 223	
O'Reilly Rancilio	Sterling Heights	27	\$ 180	\$ 238	\$ 209	91.6%	\$ 191	
Thrun Law Firm	East Lansing	27	\$ 190	\$ 220	\$ 205	90.2%	\$ 185	
Strobl & Sharp	Bloomfield Hills	26	\$ 145	\$ 275	\$ 210	80.3%	\$ 169	
Kuperlian Ormond & Magy	Southfield	24	\$ 173	\$ 263	\$ 218	93.1%	\$ 203	
Parmenter O'Toole	Muskegon	23	\$ 145	\$ 238	\$ 191	97.5%	\$ 187	
Rader, Fishman & Grauer	Bloomfield Hills	23	\$ 208	\$ 373	\$ 290	80.3%	\$ 233	
Tanoury, Corbet, Shaw, Nauts & Essad	Detroit	22	\$ 120	\$ 180	\$ 150	89.8%	\$ 135	
Williams, Williams, Ratner & Plunkett	Birmingham	22	\$ 200	\$ 313	\$ 256	64.3%	\$ 165	
Overall Average			\$ 195	\$ 314	\$ 254		\$ 223	
Estimated Average Hourly Billing Rate For Tennessee Attorneys At December 31, 2005							\$	223

Note A: Source is Michigan Lawyers Weekly, Michigan's Largest Law Firms (April 2006)

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

Note C: Represents Chattanooga's cost of living as a percent of the Michigan city in which the law firm is located. Source of this information is www.homefair.com.

Schedule 5

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

A. Calculation of Average Hourly Billing Rate by Consultant Position
Survey billing rates were those in effect in 2004 (Note A)

		Average Hourly Rates (Note A)				
		Entry-Level Consultant	Associate Consultant	Senior Consultant	Junior Partner	Senior Partner
Average		\$ 145	\$ 172	\$ 229	\$ 295	\$ 321

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)		\$ 145	\$172	\$229	\$295	\$321	
Typical Percent of Time Spent on a Consulting Project		30%	30%	20%	10%	10%	Weighted Average
		\$ 44	\$ 51	\$ 46	\$ 29	\$ 32	\$ 202

Escalation to Test Year Mid-Point December 31, 2005 (Note B)

	CPI at December 31, 2004	190.3
	CPI at December 31, 2005	196.8
	Inflation/Escalation	6.5%
Estimated Average Hourly Billing Rate For Consultants At December 31, 2005		\$ 216

Note A: source: "Operating Ratios For Management Consulting Firms, 2005 Edition" Association of Management Consulting Firms

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

Schedule 6

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

A. Calculation of Average Hourly Billing Rate by Public Accounting Position Survey billing rates were those in effect in 2003 (Note A)				
	Average Hourly Billing Rate (Note A)			
Type of Firm	Staff Accountant	Senior Accountant	Manager	Partner
Average Hourly Rate	\$ 72	\$ 77	\$ 120	\$ 160
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)	\$ 72	\$ 77	\$ 120	\$ 160
Typical Percent of Time Spent on an Accounting Assignment	30%	30%	20%	20%
	\$ 22	\$ 23	\$ 24	\$ 32
				Weighted Average
				\$ 101
<u>Escalation to Test Year Mid-Point December 31, 2005 (Note B)</u>				
			CPI at December 31, 2003	184.3
			CPI at December 31, 2005	196.8
			Inflation/Escalation	12.5%
Estimated Average Hourly Billing Rate For Tennessee CPAs At Dec. 31, 2005				\$ 113

Note A: Source is AICPA's 2004 National PCPS/TSCPA Management of an Accounting Practice Survey

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

Exhibit Witness: PLB-1
Schedule 7

Tennessee American Water Company
Billing Rates Of Tennessee Engineers

Note: Billing rates are the average for 2005 and 2006

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 Elect Proj Engineer	Project Manager Project Associate Sr. Mgr. Engineer	Officer Principal Engineer
Firm #1	\$59	\$99	\$122	\$133
Firm #2	\$67	\$78	\$125	\$149

B. Calculation of Overall Average Engineering Hourly Billing Rate

Average Hourly Billing Rate (From Above)	CAD Drafter Engineer Tech	Engineer Design Engineer Project Engineer Elect Proj Engineer	Project Manager Project Associate Sr. Mgr. Engineer	Officer Principal Engineer	Weighted Average
		\$63	\$88	\$123	
Typical Percent of Time on an Engineering Assignment	30%	35%	25%	10%	
	\$19	\$31	\$31	\$14	\$95

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

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.

12 Months Ended June 30, 2006			
Service Provider	Service Company	Outside Provider	Difference-- Service Co. Greater(Less) Than Outside
Attorney	\$ 112	\$ 223	\$ (111)
Management Consultant	\$ 154	\$ 216	\$ (62)
Certified Public Accountant	\$ 64	\$ 113	\$ (49)
Professional Engineer	\$ 66	\$ 95	\$ (29)

Based on these cost per hour differentials and the number of managerial and professional services hours billed to TAWC during the 12-months ended June 30, 2006, outside service providers would have cost \$1,530,452 more than the Service Company (see table below). Thus, on average, outside provider's hourly rates are almost 34% higher than those of the Service Company (\$1,530,452 / \$4,536,342).

12 Months Ended June 30, 2006			
Service Provider	Hourly Rate Difference-- Service Co. Greater(Less) Than Outside	Service Company Hours Charged	Dollar Difference
Attorney	\$ (111)	1,396	\$ (155,217)
Management Consultant	\$ (62)	5,167	\$ (321,083)
Certified Public Accountant	\$ (49)	16,097	\$ (785,939)
Professional Engineer	\$ (29)	9,335	\$ (268,213)
Net Service Co Less Than Outside Providers			\$ (1,530,452)

If TAWC were to use outside service providers rather than the Services 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 31,995 hours of work (around 21 full-time equivalents at 1,500 billable hours per FTE) 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 these positions 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 another \$121,400 per year to TAWC's personnel expenses.

Cost of Adding Administrative Positions To TAWC's Staff

	<u>Total</u>
New Positions' Salary	\$ 85,000
Benefits (at 52%)	\$ 36,400
Total Cost of the New Position	\$ 121,400

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 **\$1,651,852** (\$1,530,452 + \$121,400).

Other Cost Comparisons

Every year, the Belleville Lab conducts a comparison of its cost for performing major tests to the cost of using outside testing laboratories. Over the past several years, these surveys have shown the following results been as follows:

Year	Number of Major Tests Surveyed	Percent Belleville Lower Than Outside Labs
2000	26	15%
2001	25	19%
2002	24	16%
2003	23	10%
2004	24	9%
2005	24	25%

These studies present further evidence that the Service Company arrangement is the lowest-cost alternative for TAWC.

V – Customer Account Services Cost Comparison

Background

It is difficult to compare the cost of American Water's National Call Centers with outside providers of the same call center-related services. Call center survey data is proprietary and expensive to obtain. For this reason, TAWC's National Call Center costs are compared to those of neighboring electric utilities because the data necessary to make this comparison is readily available to the public.

Electric utility cost information comes from their FERC Form 1. FERC's chart of accounts is defined in chapter 18, part 101 of Code of Federal Regulations. FERC accounts that contain call center-related expenses and are used in this study's comparison are:

- Account 903 Customer Accounts Expense – Records and Collection Expense
- Account 905 Customer Accounts Expense – Miscellaneous Customer Accounts Expense.

In addition, 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).

Schedule 8 provides FERC's description of what should be charged to these accounts. In questioning the controller of a large Southeastern electric utility, it was determined that expenses of the activities described below are recorded in the designated FERC accounts.

<p><u>903 Records and Collection Expense</u></p> <ul style="list-style-type: none">• 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 of customer payments received in the mail• Bill payment centers – locations where customers can pay their bills in person <p><u>905 Miscellaneous Customer Accounts Expense</u></p> <ul style="list-style-type: none">• Customer Information System IT – maintenance and support of the customer information system
--

This study assumes the FERC accounts for other electric and gas utilities contain expenses for the same activities.

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.

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	
Kentucky	• Kentucky Power	• Louisville Gas & Electric
	• Kentucky Utilities	• Union Light, Heat & Power
Virginia	• Appalachian Power	• Virginia Electric Power
North Carolina	• Duke Power	• Progress Energy – Carolinas
Georgia	• Georgia Power	• Savannah Electric
Alabama	• Alabama Power	
Mississippi	• Entergy Mississippi	• Mississippi Power
Arkansas	• Entergy Arkansas	
Missouri	• Aquila	• Union Electric

Several neighboring electric utilities could not be included in the comparison group because they did not submit the necessary FERC Form 1 data.

Comparison Approach

The basis for this comparison is customer account services expenses per customer. TAWC's cost pool was developed to include the same expenses included in electric utility's FERC accounts 903 and 905. As shown in the graphic below, TAWC's resultant cost pool contains the expenses of Service Company locations and certain operating company expenses.

American Water
<u>Service Company</u>
Pensacola & Alton Call Centers
a. Customer contact
b. Customer order processing
c. Billing information processing
d. Collections
e. Correspondence processing
<u>IT Service Centers</u>
a. Support expenses for the customer information system (ORCOM)
<u>New Jersey American</u>
a. Payment processing

Electric Utilities
FERC Acct 903 - Records and Collection Expense <u>and</u> FERC Acct 905 - Misc Customer Accounts Expense
a. Customer contact
b. Customer order processing
c. Bill preparation and mailing
d. Collections
e. Payment processing
f. Correspondence processing

TAWC Cost Per Customer

In order to make a valid comparison to neighboring electric utilities, certain adjustments had to be made to the applicable Service Company charges to 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. As shown below, TAWC's adjusted annual expense per customer is \$28.32—the number that can be compared to neighboring electric utilities' expenses.

Year Ended June 30, 2006 TAWC Cost Per Customer			Tennessee American	
Cost Component			Actual	Adjusted
Service Company				
Call Centers	Call processing, order processing, credit, bill collection	Note A	\$ 866,197	\$ 1,640,525
Regional Offices	Customer service support		\$ 89,853	\$ 89,853
IT Services	Customer info system support, bill printing			\$ 245,314
Operating Company				
	Customer payment processing	Note B		\$ 107,702
	Cost Pool Total			\$ 2,083,394
	Average Number of Customers			73,567
	Year Ended June 30, 2006 Cost Per Customer			\$ 28.32

Note A: Adjustment for American Water's fewer calls per customer

Net Test Year Call Center Charges (above)		\$ 866,197
Electric Utility industry's avg calls/customer	2.50	
American Water's avg calls/customer	1.32	
	Multiplier	1.89
	Total estimated cost	\$ 1,640,525

Note B: Estimated customer customer payment processing expenses

Average number of customers	73,567
Average number of payments/customer/year	12
Total payments processed/year	882,804
Bank charge per item	\$ 0.1220
Total estimated annual expense	\$ 107,702

Electric Utility Group Cost Per Customer

Schedule 9 shows the actual 2005 customer accounts expense per customer calculation for the electric utility comparison group. All of the underlying data was taken from the utilities' FERC Form 1.

Summary Of Results

As shown in the table below, TAWC's cost per customer is below the average of the electric utility comparison group. It can therefore be concluded that the customer accounts-related expenses, including those of the Alton and Pensacola Call Centers, assigned by the Service Company to TAWC are reasonable.

Customer Account Services Expenses Per Customer	
Louisville Gas & Electric	\$ 12.61
Virginia Electric Power	\$ 15.77
Union Electric	\$ 22.38
Aquila	\$ 22.84
Duke Power	\$ 24.35
Union Light, Heat & Power	\$ 25.75
Kentucky Utilities	\$ 25.78
Progress Energy - Carolinas	\$ 27.09
Tennessee American Water	\$ 28.32
Comparison Group Average	\$ 31.73
Kingsport Power	\$ 32.18
Appalachian Power	\$ 32.40
Kentucky Power	\$ 34.25
Georgia Power	\$ 43.44
Alabama Power	\$ 48.50
Savannah Electric	\$ 54.72
Mississippi Power	\$ 58.93
Entergy Arkansas	\$ 60.77
Entergy Mississippi	\$ 65.51

Tennessee American Water Company
Comparison Group 2005 Actual Customer Accounts Expense Per Customer

Customer Accounts Cost Pool

FERC Account Balances:
Acct 903 - Customer Records & Collection (page 322, line 131)
Acct 905 - Misc Customer Accounts (page 322, line 133)

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 Accounts Expense per Customer

	Virginia			Kentucky			
	Appalachian Power	Virginia Electric Power	Kentucky Power	Kentucky Utilities	Louisville Gas & Electric	Union Light, Heat & Power	
(A)	\$ 28,324,797	\$ 27,065,213	\$ 5,669,498	\$ 10,832,569	\$ 4,279,581	\$ 2,787,640	
(B)	\$ 65,026	\$ -	\$ 15,566	\$ 130,794	\$ 276,482	\$ 96,072	
	\$ 28,389,823	\$ 27,065,213	\$ 5,685,064	\$ 10,963,363	\$ 4,556,063	\$ 2,883,712	
(A)	\$ 1,155,330	\$ 6,548,241	\$ 180,973	\$ 2,120,162	\$ 337,225	\$ 294,880	
(B)	\$ 850,432	\$ 2,461,320	\$ 135,759	\$ 358,923	\$ 62,820	\$ 195,943	
	\$ 30,395,584	\$ 36,064,774	\$ 6,001,796	\$ 13,442,448	\$ 4,956,108	\$ 3,374,536	
	\$ 938,029	\$ 2,287,193	\$ 175,255	\$ 521,342	\$ 392,998	\$ 131,028	
	\$ 32.40	\$ 15.77	\$ 34.25	\$ 25.78	\$ 12.61	\$ 25.75	
	\$ 17,426,702	\$ 130,305,500	\$ 3,634,365	\$ 22,757,866	\$ 21,039,968	\$ 3,124,822	
	\$ 167,682,274	\$ 640,242,951	\$ 35,638,655	\$ 50,361,993	\$ 51,234,200	\$ 27,142,406	
	10.4%	20.4%	10.2%	45.2%	41.1%	11.5%	
	\$ 11,116,753	\$ 32,174,121	\$ 1,774,628	\$ 4,691,810	\$ 821,173	\$ 2,561,351	
	\$ 1,155,330	\$ 6,548,241	\$ 180,973	\$ 2,120,162	\$ 337,225	\$ 294,880	
	\$ 11,116,753	\$ 32,174,121	\$ 1,774,628	\$ 4,691,810	\$ 821,173	\$ 2,561,351	
	7.65%	7.65%	7.65%	7.65%	7.65%	7.65%	
	\$ 850,432	\$ 2,461,320	\$ 135,759	\$ 358,923	\$ 62,820	\$ 195,943	

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

Account 926 - Employee Pension & Benefits (page 323, line 158)

Total Payroll (page 355, line 96)

Total Benefits as Percent of Payroll

Payroll Charged to Customer Accts Expenses (page 354, line 6)

Pension & Benefits Pertaining to Customer Accts Expenses

Note B: Calculation of Employer's FICA Pertaining to Customer Acct Mgmt

Payroll Charged to Customer Accts Expenses (page 354, line 6)

Employer's Portion of FICA

Estimated Employer's Portion of FICA



**Tennessee American Water Company
Comparison Group 2005 Actual Customer Accounts Expense Per Customer**

Customer Accounts Cost Pool

FERC Account Balances:
Acct 903 - Customer Records & Collection (page 322, line 131)
Acct 905 - Misc Customer Accounts (page 322, line 133)

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 Accounts Expense per Customer

	Georgia		Mississippi		North Carolina	
	Georgia Power	Savannah Electric	Energy Mississippi	Mississippi Power	Carolina Power & Light	Duke Power
	\$ 75,830,790	\$ 6,350,790	\$ 21,603,464	\$ 8,329,478	\$ 23,024,010	\$ 43,499,424
	\$ 721,329	\$ 5,674	\$ 850	\$ 1,431,145	\$ 7,101,028	\$ 3,497,590
	\$ 76,552,119	\$ 6,356,464	\$ 21,604,314	\$ 9,760,623	\$ 30,125,038	\$ 46,997,014
(A)	\$ 9,654,370	\$ 1,295,013	\$ 1,316,361	\$ 844,455	\$ 5,640,268	\$ 5,296,520
(B)	\$ 4,923,716	\$ 312,656	\$ 285,927	\$ 488,229	\$ 1,272,861	\$ 2,239,312
	\$ 91,130,205	\$ 7,964,134	\$ 23,206,603	\$ 11,073,307	\$ 37,038,167	\$ 54,532,846
	2,097,807	145,544	354,230	187,909	1,367,435	2,239,513
	\$ 43.44	\$ 54.72	\$ 65.51	\$ 58.93	\$ 27.09	\$ 24.35
	\$ 96,796,552	\$ 12,889,431	\$ 22,987,263	\$ 15,497,826	\$ 142,055,003	\$ 149,922,345
	\$ 645,308,750	\$ 40,678,526	\$ 65,268,940	\$ 112,328,864	\$ 419,060,053	\$ 828,569,320
	15.0%	31.7%	35.2%	13.8%	33.9%	18.1%
	\$ 64,362,306	\$ 4,087,010	\$ 3,737,614	\$ 6,120,641	\$ 16,638,704	\$ 29,272,048
	\$ 9,654,370	\$ 1,295,013	\$ 1,316,361	\$ 844,455	\$ 5,640,268	\$ 5,296,520
	\$ 64,362,306	\$ 4,087,010	\$ 3,737,614	\$ 6,120,641	\$ 16,638,704	\$ 29,272,048
	7.65%	7.65%	7.65%	7.65%	7.65%	7.65%
	\$ 4,923,716	\$ 312,656	\$ 285,927	\$ 488,229	\$ 1,272,861	\$ 2,239,312

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

Account 926 - Employee Pension & Benefits (page 323, line 158)

Total Payroll (page 355, line 96)

Total Benefits as Percent of Payroll

Payroll Charged to Customer Accts Expenses (page 354, line 6)

Pension & Benefits Pertaining to Customer Accts Expenses

Note B: Calculation of Employer's FICA Pertaining to Customer Acct Mgmt

Payroll Charged to Customer Accts Expenses (page 354, line 6)

Employer's Portion of FICA

Estimated Employer's Portion of FICA



Exhibit Witness: PLB-1
Schedule 9
Page 3 of 3

**Tennessee American Water Company
Comparison Group 2005 Actual Customer Accounts Expense Per Customer**

	Tennessee		Missouri		Alabama	Arkansas	Group Average
	Kingsport Power	Aquilla	Union Electric	Alabama Power	Entergy Arkansas		
	\$ 1,433,975	\$ 8,536,953	\$ 21,732,269	\$ 58,210,665	\$ 27,300,865	\$ 374,801,981	
	\$ 2,709	\$ 182,261	\$ 467,706	\$ -	\$ 303,672	\$ 14,297,904	
	\$ 1,436,684	\$ 8,719,214	\$ 22,199,975	\$ 58,210,665	\$ 27,604,537	\$ 389,099,885	
(A)	\$ 19,249	\$ 1,241,896	\$ 3,189,312	\$ 5,848,557	\$ 6,224,256	\$ 51,207,068	
(B)	\$ 22,989	\$ 483,132	\$ 1,012,104	\$ 3,467,698	\$ 611,803	\$ 19,165,626	
Total Cost Pool	\$ 1,478,923	\$ 10,444,242	\$ 26,401,390	\$ 67,526,920	\$ 34,440,596	\$ 459,472,579	
	45,960	457,368	1,179,621	1,392,352	566,699	14,480,283	
Customer Accounts Expense per Customer	\$ 32.18	\$ 22.84	\$ 22.38	\$ 48.50	\$ 60.77	\$ 31.73	
	\$ 260,234	\$ 27,719,175	\$ 92,704,386	\$ 48,267,265	\$ 69,049,690	\$ 876,438,393	
	\$ 4,062,743	\$ 140,961,291	\$ 384,562,394	\$ 374,096,694	\$ 88,720,642	\$ 4,075,920,696	
	6.4%	19.7%	24.1%	12.9%	77.8%	21.5%	
	\$ 300,515	\$ 6,315,455	\$ 13,230,112	\$ 45,329,390	\$ 7,997,429	\$ 250,531,060	
	\$ 19,249	\$ 1,241,896	\$ 3,189,312	\$ 5,848,557	\$ 6,224,256	\$ 51,207,068	
	\$ 300,515	\$ 6,315,455	\$ 13,230,112	\$ 45,329,390	\$ 7,997,429	\$ 250,531,060	
	7.65%	7.65%	7.65%	7.65%	7.65%	7.65%	
	\$ 22,989	\$ 483,132	\$ 1,012,104	\$ 3,467,698	\$ 611,803	\$ 19,165,626	

Customer Accounts Cost Pool

FERC Account Balances:

Acct 903 - Customer Records & Collection (page 322, line 131)
Acct 905 - Misc Customer Accounts (page 322, line 133)

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 Accounts Expense per Customer

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

Account 926 - Employee Pension & Benefits (page 323, line 158)

Total Payroll (page 355, line 96)

Total Benefits as Percent of Payroll

Payroll Charged to Customer Accts Expenses (page 354, line 6)

Pension & Benefits Pertaining to Customer Accts Expenses

Note B: Calculation of Employer's FICA Pertaining to Customer Acct Mgmt

Payroll Charged to Customer Accts Expenses (page 354, line 6)

Employer's Portion of FICA

Estimated Employer's Portion of FICA



VI - Need For Service Company Services

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 Schedule 10 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 Schedule 10, 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 Schedule 10, there was only one entity that was primarily responsible for the service.

Designation Of Responsibility For Water Utility Functions

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

Designation Of Responsibility For Water Utility Functions

Water Company Function	Performed By:						
	Tennessee American	Customer Call Centers	Regional Office	Shared Services	Corporate Office	IT Service Centers	Belleville Lab
Primarily Responsible	P						
Provides Support	S						
Financial Management							
Financial Planning	S		P		S		
Financings—Equity					S		
Financings--Long Term Debt & Preferred (A)	S		P				
Short Term Lines of Credit Arrangements (A)	S		P				
Investor Relations			S		P		
Insurance Program Administration					P		
Loss Control/Safety Program Administration	S		P		S		
Pension Fund Asset Management					P		
Cash Management/Disbursements				P			
Internal Auditing							
Budgeting and Variance Reporting							
Corporate Guidelines & Instructions					P		
Regional Guidelines & Instructions			P				
Budget Preparation			P				
Revenue	S						
O&M	P						
Depreciation and Interest Expense	S						
Budget Preparation--Service Company Charges				P			
Capital Budget Preparation—Projects	P		P	S	S	S	S
Capital Budget Preparation--Non-Project Work	P		S				
Prepare Monthly Budget Variance Report ("Budget/Plan Analysis")	S		P				
Prepare Capital Project Budget Status Report	P		S				
Year-End Projections	P		S				
Accounting and Taxes							
Accounts Payable Accounting	S			P			
Payroll Accounting	S			P			
Work Order Accounting	S			P			
Fixed Asset Accounting	S			P			
Journal Entry Preparation--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	S			P			
Gross Receipts Taxes	S			P			

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

Tennessee American Water Company
Designation Of Responsibility For Water Utility Functions

Water Company Function	Performed By:						
	Tennessee American	Customer Call Centers	Regional Office	Shared Services	Corporate Office	IT Service Centers	Belleville Lab
Primarily Responsible P							
Provides Support S							
Water Company Function							
Rates							
Rate Studies & Tariff Change Administration	S		P				
Rate Case Planning and Preparation	S		P				
Rate Case Administration	S		P				
Commission Inquiry Response	S		P		S		
Legal							
Purchasing and Materials Management							
Specification Development	S		S	S	P		
Bid Solicitation	S			P			
Contract Administration	S			P			
Ordering	P						
Inventory Management	P			S			
Human Resources Management							
Benefit Program Development					P		
Benefits Program Administration	P		S				
Management Compensation Administration					P		
Wage & Salary Program Design					P		
Wage & Salary Administration	P		S				
Labor Negotiations--Wages	P		S				
Labor Negotiations--Benefits					P		
Labor Negotiations--Work Rules	P		S				
Training Program Development	S		S				
Training--Course Delivery	P						
Affirmative Action/EEO--Plan Development	P		S				
Affirmative Action/EEO--Implementation	P						
Information Systems Services							
Service Company Data Centers							P
System Operations & Maintenance							P
Software Maintenance							S
Network Administration			P				S
PC Acquisition & Support			P				S
Help Desk			S				P

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.

- **Regional President Oversight** – The Regional President of the Southeast Region is on the Executive Management Team (EMT) of American Water. The Regional President is responsible for the overall performance of each operating company in the region, including PAWC, VAWC, WVAWC, KAWC, TAWC, MAWC. As part of the EMT, each Regional 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.
- **Regional Vice President & Treasurer** – The Regional Vice President and Treasurer of the Southeast Region is responsible for the financial reporting, performance and internal controls of each of the operating companies in the region. The Vice President and Treasurer monitor the performance and reporting from the Service Company **to insure the timely and accurate support.**
- **Operating Company Board Oversight** – TAWC board of directors includes members of American Water’s EMT, members of the regional management team and business and community leaders from outside the Company. This helps ensure that Tennessee American’s needs are a factor in the delivery of Service Company services.
- **Service Company Budget Review/Approval** – Every operating company president sits 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.
- **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 Regional President. The Regional President, with input from the regional management team has the ability to impact all new initiatives and projects before they are authorized.
- **Service Company Bill Scrutiny** – Regional office 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 a line item for Management Fees (i.e., Service Company charges). In this way, Service Company budget versus actual charges can be monitored for the month and year-to-date.

- **Capital Investment Management (CIM)** – CIM is one of American Water's primary business planning processes. It covers capital and asset planning and is employed throughout American Water and Thames Water. The current CIM process and procedures were established in 2003 as part of an initiative to implement leading water industry practices. 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 for all American Water companies, including all Tennessee American Operating Units.

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

12-Months Ended September 30, 2007

**Virginia American Water Company
Market Cost Comparison of Service Company Charges
12-Months Ended September 30, 2007**

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I - Introduction

Purpose Of This Study

This study was undertaken to answer three questions concerning the services provided by American Water Works Service Company, Inc. (Service Company) to Virginia American Water Company (VAWC):

1. Was VAWC charged the lower of cost or market for managerial and professional services provided by the Service Company during the 12 months ended September 30, 2007?
2. Was the 12 months ended September 30, 2007 cost of the Service Company's customer accounts services, including those of the National Call Centers, reasonable?
3. Are the services VAWC receives from Service Company necessary?

Study Results

Concerning question 1, the following conclusions can be drawn from this study:

- VAWC was charged the lower of cost or market for managerial and professional services during the 12-months ended September 30, 2007.
- On average, the hourly rates for outside service providers are 46% 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 VAWC without careful supervision on the part of VAWC. If these services were contracted entirely to outside providers, VAWC would have to add at least one position to manage activities of outside firms. These positions would be necessary to ensure the quality and timeliness of services provided.
- If all the managerial and professional services now provided by the Service Company had been out-sourced during the 12-months ended September 30, 2007, VAWC and its ratepayers would have incurred more than \$1.2 million in additional expenses. This amount includes the higher cost of outside providers and the cost of an additional VAWC position needed to direct the outsourced work.
- This study's hourly rate comparison actually understates the cost advantages that accrue to VAWC from its use of the Service Company. Outside service providers generally bill for every hour worked. Service Company exempt personnel, on the other hand, charge a maximum 8 per day even when they work more. 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 \$1.2 million cited above. For instance, if Service Company overtime is conservatively estimated at 5% (2 hours per week), then that work would have cost an estimated \$56,000 in additional charges from outside providers.
- It would be difficult for VAWC 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 VAWC ratepayers.

Concerning question 2, it was determined that the cost of the Service Company's customer accounts services, including those provided by the National Call Center, is within a reasonable 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 VAWC. During the 12-months ended September 30, 2007, the customer accounts cost for VAWC customers was \$31.03 compared to the 2006 average of \$28.57 for neighboring electric utilities. The highest comparison group per customer cost was \$74.21 and the lowest \$13.46.

Concerning question 3, the following conclusions can be drawn:

- The services that the Service Company provides are necessary and would be required even if VAWC were a stand-alone water utility.
- There is no redundancy or overlap in the services provided by the Service Company to VAWC. For all of the services listed in Schedule 10, there was only one entity that was primarily responsible for the service.

II - Background

Overview Of American Water Works Service Company

The Service Company maintains several types of offices from which it provides services to American Water operating companies. They include:

- 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 VAWC, 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 and operations.
- 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 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 number, if transaction is a direct charge
- Formula number if transaction is allocated
- Employee hours worked
- Account number for non-labor charges

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

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:

- Operating company (for direct charge)
- Formula number (for allocation)
- Work order (where applicable)
- Authorization number (where applicable)

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 their 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 the Southeast Region's professional labor is assigned to VAWC 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 VAWC during the month, then 20% of that month's overhead expenses will be assigned to VAWC.

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 VAWC, then 2% of that office's office expenses would be assigned to VAWC. 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

During the 12 months ended September 30, 2007, the Service Company billed VAWC \$4,458,383 in O&M-related charges, \$265,518 in capital-related charges and \$8,293 other charges. Included in the O&M amount are certain non-recurring expenses and charge from non-Southeast Region charges for which VAWC is not seeking recovery. As calculated in the table below, net Service Company charges of \$3,296,676 were subjected to a market cost comparison.

	12 Months Ended September 30, 2007
Total Management Fees (O&M)	\$ 4,458,383
JE to reclass pension expense	\$ (862,993)
Mgmt Fee Expense per P&L	\$ 3,595,390
Less: Non-Recurring Expenses	
Divestiture & SOX	\$ (516,068)
Business Change	\$ (12,590)
Write-Off of Svc Co Bldg	\$ (8,293)
Net O&M Adjustments	\$ (536,952)
Less: Non-Central Regions	\$ (36,574)
Net Testable O&M	\$ 3,021,865
Total Capital	\$ 266,518
Total Other	\$ 8,293
Total Testable SC Charges	\$ 3,296,676

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

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

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

	12 Months Ended Sept. 30, 2007	
	Amount	Hours
Management and Professional Services	\$ 2,474,926	24,399
Customer Account Services	\$ 821,750	22,311
Total Service Company Charges	\$ 3,296,676	46,711

This study's first question—whether the Service Company charges 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 VAWC during the 12 months ended September 30, 2007. Outside providers' billing rates came from surveys or other information from professionals that could perform the services now provided by the Service Company.

The second question—reasonableness of the National Call Center costs—was addressed by comparing VAWC'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 third question—the necessity of Service Company services—was first investigated by determining the services provided to VAWC. A determination was then made as to whether these services would be required if VAWC were a stand-alone utility.

IV – Managerial And Professional Services Hourly Rate Comparison

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 VAWC during the 12 months ended September 30, 2007. 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 VAWC during 2006, 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

Schedule 1 (page 10) details the assignment of 12 months ended September 30, 2007 management and professional Service Company charges by outsider provider category. Schedule 2 (page 10) shows the same assignment for Service Company management and professional hours charged to VAWC during the 12 months ended September 30, 2007.

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 2007 test period non-labor Service Company charges:

- Contract Services – 12 months ended September 30, 2007 Service Company charges to VAWC include approximately \$88,000 in 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.
- Computer Hardware and Software Expenses – Included in the 12 months ended September 30, 2007 Service Company charges to VAWC are charges for outside expenses related to leases and maintenance fees related to mainframe, server and network infrastructure, corporate business applications and the communications systems. An outside provider that would take over operation of a data center would recover these expenses over and above the labor necessary to operate the data center.

Schedule 3 (page 11) 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 Schedules 1 and 2 and the excludable items shown in Schedule 3, the Service Company's equivalent costs per hour for the 12 months ended September 30, 2007 are calculated below.

	Attorney	Management Consultant	Certified Public Accountant	Professional Engineer	Total
Total management, professional & technical services charges	\$ 79,237	\$ 928,973	\$ 1,020,240	\$ 446,476	\$ 2,474,926
Less:					
Contract services	\$ 1,027	\$ 22,660	\$ 47,621	\$ 16,842	\$ 88,150
Travel expenses	\$ 5,721	\$ 89,271	\$ 110,141	\$ 48,969	\$ 254,101
Computer hardware/software	\$ 0	\$ 12,915	\$ 26,698	\$ 1,880	\$ 41,493
Net Service Charges (A)	\$ 72,488	\$ 804,127	\$ 835,780	\$ 378,785	\$ 2,091,181
Total Hours (B)	372	5,573	12,770	5,684	24,399
Average Hourly Rate (A / B)	\$ 195	\$ 144	\$ 65	\$ 67	

Virginia American Water Company
Analysis of 12 Months Ended September 30, 2007 Service Company Charges By Location And Function

Location	Function	12 Months Ended September 30, 2007 Service Company Charges				Total
		Attorney	Management Consultant	Certified Public Accountant	Professional Engineer	
Belleville Lab	Water Quality			\$ 75,843	\$ 75,843	\$ 75,843
Call Center	Human Resources	\$ 15,541				\$ 15,541
Corporate	Accounting		\$ 126,492			\$ 126,492
	Administration	\$ 204,189				\$ 204,189
	Audit		\$ 20,392			\$ 20,392
	Communications	\$ 34,533				\$ 34,533
	Engineering					\$ -
	Finance		\$ 57,035			\$ 57,035
	Human Resources	\$ 78,804				\$ 78,804
	Legal	\$ 37,011				\$ 37,011
	Operations	\$ 58,678		\$ 17,731		\$ 76,409
	Rates & Revenue		\$ 43,615			\$ 43,615
	Risk Management	\$ 29,910				\$ 29,910
	Water Quality			\$ 18,762		\$ 18,762
Regional Offices	Accounting		\$ 11,427			\$ 11,427
	Administration	\$ 207,652				\$ 207,652
	Communications	\$ 59,289				\$ 59,289
	Engineering			\$ 99,171		\$ 99,171
	Finance		\$ 137,488			\$ 137,488
	Human Resources	\$ 62,735				\$ 62,735
	Legal	\$ 42,226				\$ 42,226
	Operations	\$ 81,049		\$ 198,101		\$ 279,150
	Risk Management	\$ 39,501				\$ 39,501
	Water Quality			\$ 36,868		\$ 36,868
Information Technology	Information Technology		\$ 425,025			\$ 425,025
Shared Services	Accounting		\$ 166,019			\$ 166,019
	Administration	\$ 57,093				\$ 57,093
	Finance		\$ 21,678			\$ 21,678
	Rates & Revenue		\$ 11,069			\$ 11,069
	Total Dollars Charged	\$ 79,237	\$ 928,973	\$ 1,020,240	\$ 446,476	\$ 2,474,926

Exhibit Witness: PLB-1
Schedule 2

Virginia American Water Company
Analysis of 12 Months Ended September 30, 2007 Service Company Hours By Location And Function

		12 Months Ended September 30, 2007 Service Company Hours					
Location	Function	Attorney	Management Consultant	Certified Public Accountant	Professional Engineer	Total	
Belleville Lab	Water Quality		186		1,080	1,080	
Call Center	Human Resources					186	
Corporate	Accounting			1,489		1,489	
	Administration		1			1	
	Audit			202		202	
	Communications		144			144	
	Engineering				47	47	
	Finance			468		468	
	Human Resources			881		881	
	Legal		141			141	
	Operations			287		296	
	Rates & Revenue				112	112	
	Risk Management			235		235	
	Water Quality				300	300	
	Regional Offices	Accounting			173		173
		Administration		859			859
	Communications		732			732	
	Engineering				1,525	1,525	
	Finance			2,259		2,259	
	Human Resources		734			734	
	Legal	231				231	
	Operations		611		2,053	2,664	
	Risk Management		689			689	
	Water Quality				383	383	
Information Technology	Information Technology			3,803		3,803	
Shared Services	Accounting			3,478		3,478	
	Administration		213			213	
	Finance			621		621	
	Rates & Revenue			165		165	
Total Hours Charged		372	5,573	12,770	5,684	24,399	

Virginia American Water Company
12 Months Ended September 30, 2007 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	\$ 2,318	\$ 30,909	\$ 970	\$ 34,197
Administration	\$ 9,507	\$ 22,812	\$ 476	\$ 32,795
Audit	\$ -	\$ 232	\$ 2,844	\$ 3,077
Communications	\$ 4,971	\$ 11,303	\$ -	\$ 16,274
Engineering	\$ 285	\$ 619	\$ (4)	\$ 900
Finance	\$ 931	\$ 31,155	\$ 1	\$ 32,087
Human Resources	\$ 2,111	\$ 32,475	\$ 392	\$ 34,978
Information Technology	\$ 44,372	\$ 35,464	\$ 22,888	\$ 102,723
Legal	\$ 1,027	\$ 5,721	\$ 0	\$ 6,749
Operations	\$ 3,860	\$ 59,413	\$ 13,209	\$ 76,482
Rates & Revenue	\$ -	\$ 12,381	\$ (5)	\$ 12,375
Risk Management	\$ 2,994	\$ 16,623	\$ 159	\$ 19,776
Water Quality	\$ 15,775	\$ (5,005)	\$ 563	\$ 11,332
Total	\$ 88,150	\$ 254,101	\$ 41,493	\$ 383,745

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	Total
Attorney	\$ 1,027	\$ 5,721	\$ 0	\$ 6,749
Management Consultant	\$ 22,660	\$ 89,271	\$ 12,915	\$ 124,845
Certified Public Accountant	\$ 47,621	\$ 110,141	\$ 26,698	\$ 184,459
Professional Engineer	\$ 16,842	\$ 48,969	\$ 1,880	\$ 67,691
Total	\$ 88,150	\$ 254,101	\$ 41,493	\$ 383,745

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.

Attorneys

The Virginia Bar Association does not survey its members as to their hourly billing rates. In addition, publicly available billing rate information could not be found for Virginia attorneys (Virginia Lawyers Weekly used to ask for hourly rates in its annual survey but eliminated that question a few years ago). Therefore, an estimate of Virginia attorney rates was developed from a survey of Michigan lawyers conducted annually by the Michigan Lawyers Weekly. As presented in Schedule 3, the average rate for each Michigan firm respondent was adjusted for the cost of living differential between their location and Richmond, Virginia. The survey includes rates that were in effect at December 31, 2006. Thus, the 2006 average rate was escalated to March 31, 2007—the midpoint of the 12 months ended September 30, 2007.

Management Consultants

The cost per hour for management consultants was developed from the 2006 annual survey performed by the Association of Management Consulting Firms—an industry trade organization. The first step in the calculation, presented in Schedule 5, was to determine an average rate by consultant position level. From these rates, a single weighted average hourly rate was calculated based upon the percent of time that is typically applied to a consulting assignment by each consultant position level. This survey includes rates that were in effect during 2005 for firms in 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 survey includes rates that were in effect at December 31, 2006. Thus, the 2006 average rate was escalated to March 31, 2007—the midpoint of the 12 months ended September 30, 2007.

Certified Public Accountants

The average hourly rate for Virginia certified public accountants was developed from a 2006 survey conducted by the American Institute of Certified Public Accountants (AICPA) every two years. Hourly rates in the AICPA survey are the average of firms in Virginia. The average hourly rate was calculated for a set of typical accountant positions, as shown in Schedule 4. Based on a typical staff assignment by each accountant position, a weighted average hourly rate was calculated. This survey covered hourly rates in effect during 2005. Thus, the 2005 average rate was escalated to March 31, 2007—the midpoint of the 12 months ended September 30, 2007.

Professional Engineers

The Service Company provided hourly rate information for outside engineering firms that could have been utilized by VAWC during 2007. As presented in Schedule 7, 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.

Schedule 4

**Virginia American Water Company
Estimated Billing Rates For Virginia Attorneys Based On Michigan Attorney Billing Rates**

Billing rates as of December 31, 2006 (Note A)									
Firm	Michigan Location	Number Of Mich Lawyers	Billing Rate Range				Average	Cost of Living Adjust (C)	Adjusted Rate
			Associate		Partner				
			Low	High	Low	High			
Dickinson Wright PLLC	Detroit	218	\$ 170	\$ 275	\$ 260	\$ 530	\$ 309	85%	\$ 365
Butzel Long	Detroit	212	\$ 165	\$ 400	\$ 220	\$ 550	\$ 334	85%	\$ 395
Bodman LLP	Detroit	130	\$ 125	\$ 215	\$ 210	\$ 495	\$ 261	85%	\$ 309
Jaffe Raitt Heuer & Weiss, PC	Southfield	95	\$ 165	\$ 225	\$ 225	\$ 500	\$ 279	97%	\$ 289
Trott & Trott, PC	Bingham Farms	57	\$ 170	\$ 170	\$ 235	\$ 235	\$ 203	125%	\$ 162
Brooks Kushman PC	Southfield	52	\$ 160	\$ 275	\$ 250	\$ 505	\$ 298	97%	\$ 308
Kemp, Klein, Umphrey, Edelman & May PC	Troy	38	\$ 150	\$ 190	\$ 200	\$ 340	\$ 220	111%	\$ 198
Pepper Hamilton LLP	Detroit	31	\$ 200	\$ 315	\$ 340	\$ 615	\$ 368	85%	\$ 435
Hertz, Schram & Saretsky, PC	Bloomfield Hills	30	\$ 175	\$ 260	\$ 275	\$ 400	\$ 278	139%	\$ 200
Strobl & Sharp, PC	Bloomfield Hills	26	\$ 110	\$ 210	\$ 200	\$ 300	\$ 205	139%	\$ 148
Kupelian Ormond & Magy, PC	Southfield	24	\$ 165	\$ 195	\$ 235	\$ 320	\$ 229	97%	\$ 237
Rader, Fishman & Grauer, PLLC	Bloomfield Hills	23	\$ 130	\$ 250	\$ 275	\$ 495	\$ 288	139%	\$ 207
McShane & Bowie PLC	Grand Rapids	22	\$ 160	\$ 275	\$ 250	\$ 375	\$ 265	96%	\$ 277
Overall Average at December 31, 2006									\$ 271
<u>Escalation to Midpoint of September 30, 2007 Test Period (Note B)</u>									
								CPI at December 31, 2006	201.8
								CPI at March 31, 2007	205.4
								Inflation/Escalation	1.8%
Average Billing Rate At March 31, 2007 - midpoint of 12 months ended September 30, 2007									\$ 276

Note A: Source is Michigan Lawyers Weekly, April 2007

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

Note C: Source is Sperling's Best Places (<http://www.bestplaces.net/col/col.aspx>). This number represents the cost of living difference between the Michigan city and Richmond, Va. A number over 100% indicates the Michigan city's cost of living is higher than Richmond. A number less than 100% indicates Richmond's cost of living is higher.

Schedule 5

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

A. Calculation of Average Hourly Billing Rate by Consultant Position
Survey billing rates were those in effect in 2006 (Note A)

		Average Hourly Rates (Note A)				
		Entry-Level Consultant	Associate Consultant	Senior Consultant	Junior Partner	Senior Partner
Average		\$ 142	\$ 187	\$ 235	\$ 306	\$ 358

B. Calculation of Overall Average Hourly Billing Rate Based on a Typical Distribution
of Time on an Engagement

		Entry-Level Consultant	Associate Consultant	Senior Consultant	Junior Partner	Senior Partner	
Average Hourly Billing Rate (from above)		\$ 142	\$187	\$235	\$306	\$358	
Typical Percent of Time Spent on a Consulting Project		30%	30%	20%	10%	10%	Weighted Average
		\$ 43	\$ 56	\$ 47	\$ 31	\$ 36	\$ 212

Escalation to Midpoint of September 30, 2007 Test Period (Note B)

	CPI at December 31, 2006	201.8
	CPI at March 31, 2007	205.4
	Inflation/Escalation	1.8%
Average Hourly Billing Rate For Management Consultants At March 31, 2007		\$ 216

Note A: source: "Operating Ratios For Management Consulting Firms, 2007 Edition" Association of Management Consulting Firms

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

Schedule 6

Virginia American Water Company
Estimated Billing Rates Of Virginia Certified Public Accountants

A. Calculation of Average Hourly Billing Rate by Public Accounting Position Survey billing rates were those in effect in 2005 (Note A)				
	Average Hourly Billing Rate (Note A)			
Type of Firm	Staff Accountant	Senior Accountant	Manager	Partner
Average Hourly Rate	\$ 70	\$ 87	\$ 125	\$ 160
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)	\$ 70	\$ 87	\$ 125	\$ 160
Typical Percent of Time Spent on an Accounting Assignment	30%	30%	20%	20%
	\$ 21	\$ 26	\$ 25	\$ 32
				\$ 104
<u>Escalation to Midpoint of September 30, 2007 Test Period (Note B)</u>				
			CPI at December 31, 2005	196.8
			CPI at March 31, 2007	205.4
			Inflation/Escalation	4.4%
Estimated Average Hourly Billing Rate For Virginia CPAs At March 31, 2007				\$ 109

Note A: Source is AICPA's 2006 National PCPS/TSCPA Management of an Accounting Practice Survey

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

Exhibit Witness: PLB-1
Schedule 7

Virginia American Water Company
Billing Rates Of Virginia Engineers

Note: Billing rates were those in effect in 2007

A. Calculation of Average Hourly Rate by Engineer Position

Name of Firm	Average Hourly Billing Rates			
	Technician	Engineer	Project Manager	Officer
	Senior Technician	Design Engineer Project Engineer	Sr. Mgr. Engineer	Principal Engineer
Firm #1	\$71	\$85	\$133	\$168
Firm #2	\$58	\$65	\$90	na
Firm #3	\$53	\$66	\$110	\$148
Firm #4	\$73	\$104	\$130	\$150
Firm #5	\$63	\$90	\$119	\$154

B. Calculation of Overall Average Engineering Hourly Billing Rate

	CAD Drafter	Engineer	Project Manager	Officer	Weighted Average
	Engineer Tech	Design Engineer Project Engineer Elect Proj Engineer	Project Associate Sr. Mgr. Engineer	Principal Engineer	
Average Hourly Billing Rate (From Above)	\$63	\$82	\$116	\$155	
Typical Percent of Time on an Engineering Assignment	30%	35%	25%	10%	
	\$19	\$29	\$29	\$15	\$92

Source: Information provided by American Water Works Service Company

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 September 30, 2007		
	Service Company	Outside Provider	Difference-- Service Co. Greater(Less) Than Outside
Attorney	\$ 195	\$ 276	\$ (82)
Management Consultant	\$ 144	\$ 216	\$ (72)
Certified Public Accountant	\$ 65	\$ 109	\$ (43)
Professional Engineer	\$ 67	\$ 92	\$ (26)

Based on these cost per hour differentials and the number of managerial and professional services hours billed to VAWC during the 12-months ended September 30, 2007, outside service providers would have cost \$1,127,069 more than the Service Company (see table below). Thus, on average, outside provider's hourly rates are almost 46% higher than those of the Service Company (\$1,127,069 / \$ 2,474,926).

Service Provider	12 Months Ended September 30, 2007		
	Hourly Rate Difference-- Service Co. Greater(Less) Than Outside	Service Company Hours Charged	Dollar Difference
Attorney	\$ (82)	372	\$ (30,356)
Management Consultant	\$ (72)	5,573	\$ (400,089)
Certified Public Accountant	\$ (43)	12,770	\$ (551,278)
Professional Engineer	\$ (26)	5,684	\$ (145,346)
Service Company Less Than Outside Providers			\$ (1,127,069)

If VAWC were to use outside service providers rather than the Services 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 24,399 hours of work (more than 16 full-time equivalents at 1,500 "billable" hours per FTE per year) would add a significant workload to the existing VAWC management team. Thus, it would be necessary for VAWC 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 another \$152,700 per year to VAWC's personnel expenses.

Cost of Adding Administrative Positions To VAWC's Staff

	<u>Total</u>
New Positions' Salary	\$ 100,000
Benefits (at 52.7%)	\$ 52,700
Total Cost of the New Position	\$ 152,700

Thus, the total effect on the ratepayers of VAWC of contracting all services now provided by Service Company would be an increase in their costs of **\$1,279,769** (\$1,127,069 + \$152,700).

Other Cost Comparisons

Every year, the Belleville Lab conducts a comparison of its cost for performing major tests to the cost of using outside testing laboratories. Over the past several years, these surveys have shown the following results been as follows:

Year	Number of Major Tests Surveyed	Percent Belleville Lower Than Outside Labs
2000	26	15%
2001	25	19%
2002	24	16%
2003	23	10%
2004	24	9%
2005	24	25%
2006	24	31%

These studies provide additional evidence that the Service Company arrangement is the lowest-cost alternative for VAWC.

V – Customer Account Services Cost Comparison

Background

It is difficult to compare the cost of American Water's National Call Centers with outside providers of the same call center-related services. Call center survey data is proprietary and expensive to obtain. For this reason, VAWC's National Call Center costs are compared to those of neighboring electric utilities because the data necessary to make this comparison is readily available to the public.

Electric utility cost information comes from their FERC Form 1. FERC's chart of accounts is defined in chapter 18, part 101 of Code of Federal Regulations. FERC accounts that contain call center-related expenses and are used in this study's comparison are:

- Account 903 Customer Accounts Expense – Records and Collection Expense
- Account 905 Customer Accounts Expense – Miscellaneous Customer Accounts Expense.

In addition, 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).

Schedule 9 provides FERC's description of what should be charged to these accounts. In questioning the controller of a large Southeastern electric utility, it was determined that expenses of the activities described below are recorded in the designated FERC accounts.

<p><u>903 Records and Collection Expense</u></p> <ul style="list-style-type: none">• 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 of customer payments received in the mail• Bill payment centers – locations where customers can pay their bills in person <p><u>905 Miscellaneous Customer Accounts Expense</u></p> <ul style="list-style-type: none">• Customer Information System IT – maintenance and support of the customer information system
--

This study assumes the FERC accounts for other electric and gas utilities contain expenses for the same activities.

Virginia 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.

Ohio 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.

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.

Virginia	• Appalachian Power	• Virginia Electric Power
Kentucky	• Duke Energy Kentucky • Kentucky Power	• Kentucky Utilities • Louisville Gas & Electric
Tennessee	• Kingsport Power	
Maryland	• Baltimore Gas & Electric • Delmarva Power & Light	• Potomac Electric
West Virginia	• Wheeling Power	
North Carolina	• Duke Energy Carolinas	• Progress Energy Carolinas

Comparison Approach

The basis for this comparison is customer account services expenses per customer. VAWC's cost pool was developed to include the same expenses included in electric utility's FERC accounts 903 and 905. As shown in the graphic below, VAWC's resultant cost pool contains the expenses of Service Company locations and certain operating company expenses.

American Water	Electric Utilities
<u>Service Company</u> Pensacola & Alton Call Centers a. Customer contact b. Customer order processing c. Billing information processing d. Collections e. Correspondence processing f. Customer payment processing <u>Operating Company</u> a. Postage and forms	FERC Acct 903 - Records and Collection Expense and FERC Acct 905 - Misc Customer Accounts Expense a. Customer contact b. Customer order processing c. Bill preparation and mailing d. Collections e. Payment processing f. Correspondence processing

VAWC Cost Per Customer

In order to make a valid comparison to neighboring electric utilities, certain adjustments had to be made to the applicable Service Company charges to VAWC. 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 1.33 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. As shown below, VAWC's adjusted annual expense per customer is \$31.03—the number that can be compared to neighboring electric utilities' expenses.

Virginia American Water Company		Service Co	Adjustment Fewer Calls For Water Cos. (A)	Adjusted
Cost Component		Charges		
Service Company				
Call Centers	Call processing, order processing, credit, bill collection	\$ 739,456	\$ 652,049	\$ 1,391,505
Regional Offices		\$ 82,294		\$ 82,294
Service Company	Customer payment processing			\$ 40,805 Note B
Operating Company	Postage & forms			\$ 168,786
			Cost Pool Total	\$ 1,683,390
			Total Customers	54,247
				\$ 31.03

12 Months Ended September 30, 2007 Cost Per Virginia American Customer

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 annualized Call Center charges	\$ 739,456	
Electric utility industry's avg calls/customer	2.50	
American Water's avg calls/customer	1.33	
Percent different	88%	88%
Total Adjustment B	\$ 652,049	

Note B: Estimated customer payment processing expenses

Number of customers	54,247
Number of payments/customer/year	4.3
Total payments processed/year	233,262
Bank charge per item	\$ 0.1749
Total estimated annual expense	\$ 40,805

Electric Utility Group Cost Per Customer

Schedule 9 shows the actual 2006 customer accounts expense per customer calculation for the electric utility comparison group. All of the underlying data was taken from the utilities' FERC Form 1.

Summary Of Results

As shown in the table below, VAWC's cost per customer is within a reasonable range of the average of the neighboring electric utility comparison group. It can therefore be concluded that the customer accounts-related expenses, including those of the Alton and Pensacola Call Centers, assigned by the Service Company to VAWC are reasonable.

Average Customer Accounts Expense Per Customer	
Louisville Gas & Electric	\$ 13.46
Virginia Electric Power	\$ 14.89
Duke Power	\$ 22.16
Prog Energy - Carolinas	\$ 24.75
Kentucky Utilities	\$ 27.14
Comparison Group Average	\$ 28.57
Wheeling Power	\$ 29.48
Virginia American Water	\$ 31.03
Baltimore Gas & Electric	\$ 31.26
Appalachian Power	\$ 33.43
Kingsport Power	\$ 33.56
Kentucky Power	\$ 35.75
Duke Energy Kentucky	\$ 39.46
Delmarva Power & Light	\$ 50.81
Potomac Electric	\$ 74.21

Virginia American Water Company
Comparison Group 2006 Actual Customer Accounts Expense Per Customer

	Virginia		Kentucky			Tennessee	
	Appalachian Power	Virginia Electric Power	Duke Energy Kentucky	Kentucky Power	Kentucky Utilities	Louisville Gas & Electric	Kingsport Power
	\$ 29,331,456	\$ 27,749,294	\$ 3,332,632	\$ 5,947,615	\$ 11,543,567	\$ 4,361,172	\$ 1,511,496
	\$ 11,100	\$ -	\$ 6,343	\$ 2,104	\$ 70,757	\$ 248,889	\$ 394
	\$ 29,342,556	\$ 27,749,294	\$ 3,338,975	\$ 5,949,719	\$ 11,614,324	\$ 4,610,061	\$ 1,511,890
Note A	\$ 1,619,469	\$ 5,512,149	\$ 1,031,926	\$ 232,836	\$ 2,465,044	\$ 652,046	\$ 23,327
Note B	\$ 632,616	\$ 1,409,136	\$ 274,415	\$ 94,616	\$ 249,993	\$ 87,152	\$ 15,342
Total Cost Pool	\$ 31,594,641	\$ 34,670,579	\$ 4,645,316	\$ 6,277,171	\$ 14,329,361	\$ 5,349,259	\$ 1,550,560
Total Customers (page 304, line 43)	945,079	2,328,219	117,722	175,571	527,907	397,331	46,208
Customer Account Services Expense per Customer	\$ 33.43	\$ 14.89	\$ 39.46	\$ 35.75	\$ 27.14	\$ 13.46	\$ 33.56
	\$ 20,536,170	\$ 151,939,229	\$ 8,999,663	\$ 3,888,690	\$ 28,229,324	\$ 24,717,445	\$ 207,762
	\$ 104,863,983	\$ 507,738,955	\$ 31,284,068	\$ 20,656,477	\$ 37,423,258	\$ 43,185,745	\$ 1,786,218
	19.6%	29.9%	28.8%	18.8%	75.4%	57.2%	11.6%
	\$ 10,675,980	\$ 25,718,017	\$ 4,748,608	\$ 1,496,370	\$ 4,588,293	\$ 1,637,430	\$ 260,452
	\$ 10,675,980	\$ 25,718,017	\$ 2,925,473	\$ 1,496,370	\$ 4,588,293	\$ 880,094	\$ 260,452
	\$ -	\$ -	\$ 1,823,135	\$ -	\$ -	\$ 757,336	\$ -
	\$ 29,331,456	\$ 27,749,294	\$ 3,332,632	\$ 5,947,615	\$ 11,543,567	\$ 4,361,172	\$ 1,511,496
	\$ 11,100	\$ -	\$ 6,343	\$ 2,104	\$ 70,757	\$ 248,889	\$ 394
	\$ 29,342,556	\$ 27,749,294	\$ 3,338,975	\$ 5,949,719	\$ 11,614,324	\$ 4,610,061	\$ 1,511,890
	\$ 8,538,999	\$ 10,994,121	\$ 1,081,142	\$ 1,248,628	\$ 4,692,871	\$ 2,015,982	\$ 451,535
	\$ 37,881,455	\$ 38,743,415	\$ 4,420,117	\$ 7,198,347	\$ 16,307,195	\$ 6,626,043	\$ 1,963,425
	77.5%	71.6%	75.5%	82.7%	71.2%	69.6%	77.0%
	\$ 8,269,496	\$ 18,420,080	\$ 3,587,118	\$ 1,236,809	\$ 3,267,878	\$ 1,139,240	\$ 200,555
	\$ 1,619,469	\$ 5,512,149	\$ 1,031,926	\$ 232,836	\$ 2,465,044	\$ 652,046	\$ 23,327
	\$ 8,269,496	\$ 18,420,080	\$ 3,587,118	\$ 1,236,809	\$ 3,267,878	\$ 1,139,240	\$ 200,555
	\$ 632,616	\$ 1,409,136	\$ 274,415	\$ 94,616	\$ 249,993	\$ 87,152	\$ 15,342
	7.65%	7.65%	7.65%	7.65%	7.65%	7.65%	7.65%

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 355, line 66)

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

Exhibit Witness: PLB-1
Schedule 9
Page 2 of 2

Virginia American Water Company
Comparison Group 2006 Actual Customer Accounts Expense Per Customer

	Maryland		West Virginia		North Carolina		Group Average
	Baltimore Gas & Delmarva Power Electric	Potomac Electric	Wheeling Power	Prog Energy Carolinas	Duke Energy Carolinas		
\$	24,951,967	\$ 22,955,724	\$ 1,141,812	\$ 45,691,330	\$ 23,621,392	\$	244,788,523
\$	2,055,350	\$ 132,342	\$ -	\$ 885	\$ 4,198,373	\$	9,756,883
\$	27,007,317	\$ 23,088,066	\$ 1,142,697	\$ 49,889,703	\$ 26,651,738	\$	254,545,406
\$	8,600,814	\$ 2,458,773	\$ 11,804,990	\$ 57,485	\$ 3,433,604	\$	43,005,220
\$	2,206,236	\$ 502,937	\$ 1,219,591	\$ 19,421	\$ 842,363	\$	9,090,242
\$	37,814,367	\$ 26,049,777	\$ 55,673,647	\$ 1,219,603	\$ 56,538,884	\$	306,640,868
\$	1,209,559	\$ 512,673	\$ 750,260	\$ 41,371	\$ 2,284,274	\$	10,732,128
\$	31.26	\$ 50.81	\$ 74.21	\$ 29.48	\$ 24.75	\$	28.57
\$	46,781,318	\$ 13,589,355	\$ 40,935,859	\$ 381,452	\$ 173,527,451	\$	612,370,286
\$	156,864,023	\$ 36,335,641	\$ 55,282,932	\$ 1,684,579	\$ 681,652,343	\$	1,995,077,140
\$	29.8%	\$ 37.4%	\$ 74.0%	\$ 22.6%	\$ 25.5%	\$	31.2%
\$	22,532,516	\$ 7,615,995	\$ 17,351,748	\$ 343,548	\$ 23,342,805	\$	133,273,498
\$	11,481,793	\$ 1,343,999	\$ -	\$ -	\$ -	\$	15,406,263
\$	34,014,309	\$ 8,959,994	\$ 17,351,748	\$ 343,548	\$ 23,342,805	\$	148,679,761
\$	24,951,967	\$ 22,955,724	\$ 42,649,066	\$ 1,141,812	\$ 45,691,330	\$	244,788,523
\$	2,055,350	\$ 132,342	\$ -	\$ 885	\$ 4,198,373	\$	9,756,883
\$	27,007,317	\$ 23,088,066	\$ 42,649,066	\$ 1,142,697	\$ 49,889,703	\$	254,545,406
\$	4,845,852	\$ 8,378,025	\$ 3,770,383	\$ 403,661	\$ 8,095,094	\$	65,482,882
\$	31,853,169	\$ 31,466,091	\$ 46,419,449	\$ 1,546,358	\$ 57,984,797	\$	320,028,288
\$	84.8%	\$ 73.4%	\$ 91.9%	\$ 73.9%	\$ 86.0%	\$	1005.9%
\$	28,839,681	\$ 6,574,345	\$ 15,942,366	\$ 253,868	\$ 20,083,982	\$	118,826,693
\$	8,600,814	\$ 2,458,773	\$ 11,804,990	\$ 57,485	\$ 5,112,756	\$	36,472,743
\$	28,839,681	\$ 6,574,345	\$ 15,942,366	\$ 253,868	\$ 20,083,982	\$	118,826,693
\$	7.65%	\$ 7.65%	\$ 7.65%	\$ 7.65%	\$ 7.65%	\$	7.65%
\$	2,206,236	\$ 502,937	\$ 1,219,591	\$ 19,421	\$ 1,536,425	\$	9,090,242

Note A: Calculation of Pension & Benefits Pertaining to Customer Acct Mgmt
Account 926 - Employee Pension & Benefits (page 322, 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
Total Payroll
Customer Account Services Portion of Total Payroll
Employer's Portion of FICA (6.20% and Medicare (1.45%))
Estimated Employer's Portion of FICA

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

Total Cost Pool
Total Customers (page 304, line 43)
Customer Account Services Expense per Customer

Customer Account Services Cost Pool
FERC Account Balances:
Acct 903 - Customer Records & Collection (page 322, line 131)
Acct 905 - Misc Customer Accounts (page 322, line 133)
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)

VI - Need For Service Company Services

Analysis Of Services

The final aspect of this study was an assessment of whether the services that are provided to VAWC by the Service Company would be necessary if VAWC were a stand-alone water utility. The first step in this evaluation was to determine specifically what the Service Company does for VAWC. Based on discussions with Service Company personnel, the matrix in Schedule 10 was created showing which entity—VAWC or a Service Company location—is responsible for each of the functions VAWC 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 Schedule 10, the following conclusions can be drawn:

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

Designation Of Responsibility For Water Utility Functions

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

Designation Of Responsibility For Water Utility Functions

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

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

Virginia American Water Company
Designation Of Responsibility For Water Utility Functions

Water Company Function	Performed By:					
	Customer Call Center	Regional Office	Shared Services	Corporate Office	IT Service Centers	Belleville Lab
Primarily Responsible P Provides Support S						
Water Company Function						
Rates						
Rate Studies & Tariff Change Administration		P				
Rate Case Planning and Preparation		P				
Rate Case Administration		P				
Commission Inquiry Response		P		S		
Legal						
Purchasing and Materials Management						
Specification Development		S	S	P		
Bid Solicitation		S		P		
Contract Administration				P		
Ordering						
Inventory Management			S			
Human Resources Management						
Benefit Program Development				P		
Benefits Program Administration		P				
Management Compensation Administration				P		
Wage & Salary Program Design				P		
Wage & Salary Administration		P				
Labor Negotiations--Wages		P				
Labor Negotiations--Benefits						
Labor Negotiations-- Work Rules		P		P		
Training Program Development		S				
Training--Course Delivery		P				
Affirmative Action/EEO--Plan Development		P				
Affirmative Action/EEO--Implementation		P				
Information Systems Services						
Service Company Data Centers						
System Operations & Maintenance					P	
Software Maintenance					P	
Network Administration					P	
PC Acquisition & Support					P	
Help Desk			S		P	



Governance Practices Associated With Service Company Charges

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

- **Company President Oversight** – The Company President of the state utility is responsible for the overall performance of the each operating company or district in the state. Through the Executive Vice President of the Eastern Division, each state utility President in the division has a significant voice in major business decisions of American Water and has the ability to monitor Service Company quality and spending.
- **Vice President Finance** – The VP Finance of the Southeast states is responsible for the financial reporting, performance and internal controls of each of the operating companies in the region. The VP Finance monitors the performance and reporting from the Service Company. The VP Finance attends monthly Business Plan Review sessions with the VAWC President and finance group to review actual results and address forecast modifications for the remainder of the year. The VP Finance reports on the quarterly financial results and forecast updates to VAWC's Board of Directors. The rates function reports to the VP Finance, who reviews and authorizes the filing of VAWC rate cases and regularly monitors the status of cases. The operating subsidiary interacts with the VP Finance to discuss various issues.
- **Operating Company Board Oversight** – VAWC's board of directors includes members of American Water's senior executive team and members of the Division management team. This helps ensure that VA American's needs are a factor in the delivery of Service Company services.
- **Service Company Budget Review/Approval** – VAWC's President and the Executive VP 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. VA American's president is also on the local board.
- **Major Project Review And Approval** – Major projects undertaken by the Service Company must first be reviewed by American Water's senior executive team, which includes the Executive VP. The Executive VP, with input from the Division management team (including the president of VAWC), has the ability to impact all new initiatives and projects before they are authorized.
- **Service Company Bill Scrutiny** – Southeast Finance personnel review the monthly Service Company bill for accuracy and reasonableness on a monthly basis. VAWC's financial analyst has dialogue with regional office personnel concerning the monthly bill and any mistakes or overcharges are credited on a subsequent billing. The Southeast Finance unit prepares an actual to budget comparison of management fees each month for use in identifying unusual variances. Service Company actual to budget comparison is included in the monthly FRP. Unusual variances are researched, explanations are provided and any corrections are made, as necessary.
- **Service Company Budget Variance Reporting** – Each month, a summary variance analysis is prepared that explains differences between budgeted and actual Service Company spending. In addition, a more detailed monthly variance report, called the "Statement of Expenses and Billed Charges," is produced by Service Company location and shows actual spending for the month.

- **Operating Company Budget Variance Reporting** – The “Budget/Plan Analysis,” produced monthly, has a line item for Management Fees (i.e., Service Company charges). In this way, Service Company budget versus actual charges can be monitored for the month and year-to-date. Additional information exists that allows more detailed analysis of "Regional" and "Corporate" Management Fees.

- **Capital Investment Management (CIM)** – CIMC is one of American Water’s primary business planning processes. It covers capital and asset planning and is employed throughout American Water. CIMC 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. CIMC 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 CIMC process was designed to optimize the effectiveness of asset investment. The process is managed at three levels for all American Water companies, including all VAWC Operating Units. Monthly meetings of the CIMC are held to review capital spending compared to plan, review new project requests, and review updates or modifications to existing projects. The President of VAWC, VP Finance, and others participate as necessary (e.g. VAWC operations managers and Rates Manager) and provide the data used in the monthly review schedules.

**Market Cost Comparison of Service Company Charges to
West Virginia-American Water Company
12-Months Ended December 31, 2007**

**West Virginia-American Water Company
Market Cost Comparison of Service Company Charges
12-Months Ended December 31, 2007**

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I - Introduction

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 West Virginia-American Water Company ("WV American"), each of which bears on the reasonableness of those charges as incurred during the 2007 test in Case No. 08-0900-W-42-T pending before the Public Service Commission of West Virginia:

1. Was WV American charged the lower of cost or market for managerial and professional services provided by the Service Company during 2007?
2. Was the 2007 cost of the Service Company's customer accounts services, including those of the National Call Centers, comparable to those of other utilities?
3. Are the services WV American receives from Service Company necessary?
4. Were the Service Company's charges to WV American during the 12-months ended December 31, 2007 reasonable by other comparative measures?

Study Results

Concerning question 1, the following conclusions can be drawn from this study:

- WV American was charged the lower of cost or market for managerial and professional services during the 12-months ended December 31, 2007.
- On average, the hourly rates for outside service providers are 44% 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 WV American without careful supervision on the part of WV American. If these services were contracted entirely to outside providers, WV American 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 December 31, 2007, WV American and its ratepayers would have incurred more than \$3,354,359 in additional expenses. This amount includes the higher cost of outside providers and the cost of an additional one half WV American position needed to direct the outsourced work.
- This study's hourly rate comparison actually understates the cost advantages that accrue to WV American from its use of the Service Company. Outside service providers generally bill for every hour worked. Service Company exempt personnel, on the other hand, charge a maximum of 8 hours per day even when they work more hours. If 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 \$3,354,359 cited above. For instance, if Service Company overtime is conservatively estimated at 5% (2 hours per week), then that work would have cost an estimated \$160,000 in additional charges from outside providers.

- It would be difficult for WV American 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 WV American ratepayers.

Concerning question 2, it was determined that the cost of the Service Company's customer accounts services, including those provided by the National Call Center, is within a reasonable 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 WV American. During the 12-months ended December 31, 2007, the customer accounts cost for WV American customers was \$33.31 compared to the 2007 average of \$31.27 for neighboring electric utilities. The highest comparison group per customer cost was \$70.37 and the lowest \$13.71.

Concerning question 3, the following conclusions can be drawn:

- The services that the Service Company provides are necessary and would be required even if WV American were a stand-alone water utility.
- There is no redundancy or overlap in the services provided by the Service Company to WV American. For all of the services listed in Schedule 10, there was only one entity that was primarily responsible for the service.

Concerning question 4, the following conclusions were reached:

- The Service Company provides WV American with services similar to those provided by other utility service companies. This was determined based on service company information included in the Form 60, which must be filed with the Federal Energy Regulatory Commission ("FERC") by electric and combination electric/gas utility holding companies.
- American Water's 2007 cost per WV American customer was reasonable compared to cost per customer for electric and combination electric/gas service companies. During 2007, WV American was charged an average of \$55 per customer by the Service Company compared to an average of \$122 per customer for service companies reporting to the FERC.

II - Background

Overview Of American Water Works Service Company

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

- Purchasing Economies – Common expenses (e.g., insurance, chemicals, piping) can be procured on a much larger scale thereby providing greater bargaining power for the combined entity compared to individual utility operating companies. A service company facilitates corporate-wide purchasing programs through its procurement and contract administration functions.
- Operating Economies of Scale – A service company is able to deliver services more efficiently because workloads can be balanced across more persons and facilities. For instance, American Water's Service Company is able to maintain one principal data center for the entire corporation. This is much more cost-efficient than each operating utility funding its own data center with 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 WV American, 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:

- 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 WV American, 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 and operations.
- 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 American Water's 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 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 number, if transaction is a direct charge
- Formula number if transaction is allocated
- Employee hours worked
- Account number for non-labor charges

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

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:

- Operating company (for direct charge)
- Formula number (for allocation)
- Work order (where applicable)
- Authorization number (where applicable)

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 their 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 WV American 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 WV American during the month, then 20% of that month's overhead expenses will be assigned to WV American.

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 WV American, then 2% of that office's office expenses would be assigned to WV American. 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

During the 12 months ended December 31, 2007, the Service Company billed WV American \$10,909,934 in O&M-related charges, \$673,657 in capital-related charges and \$11,283 in other charges. Included in the O&M amount are certain non-recurring expenses and non-Southeast Region charges which are excluded from this market study. As calculated in the table below, net Service Company charges of \$9,909,212 were subjected to a market cost comparison.

	12 Months Ended December 31, 2007
Mgmt Fee Expense (O&M)	\$ 10,909,934
Less: Non-Recurring Expenses	
Business Change	\$ 3,590
Divestiture & SOX	\$ (1,607,454)
Total Non-Recurring Expenses	\$ (1,603,864)
Less: Non-Southeast Regions	\$ (81,799)
Net Testable O&M	\$ 9,224,272
Total Capital	\$ 673,657
Total Other	\$ 11,283
Total Testable SC Charges	\$ 9,909,212

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

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

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

	12 Months Ended Dec. 31, 2007	
	Amount	Hours
Management and Professional Services	\$ 7,338,635	71,137
Customer Account Services	\$ 2,570,577	73,349
Total Service Company Charges	\$ 9,909,212	144,486

This study's first question—whether Service Company 2007 charges 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 WV American during the 12 months ended December 31, 2007. Outside providers' billing rates came from surveys or other information from professionals that could perform the services now provided by the Service Company.

The second question—whether Service Company 2007 customer account services charges, including those of the National Call Center costs, were comparable to other utilities—was addressed by comparing WV American'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 third question—the necessity of Service Company services—was first investigated by determining the services provided to WV American. A determination was then made as to whether these services would be required if WV American were a stand-alone utility.

The fourth question—whether Service Company 2007 charges were reasonable by other comparative measures—was determined by comparing WV American's net testable O&M Service Company charges per customer to those of electric and combination electric/gas utilities that file FERC Form 60 – Annual Report of Service Companies.

IV – Managerial And Professional Services Hourly Rate Comparison

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.

The Service Company's hourly rate were calculated for each of the four outside service provider categories, based on the dollars and hours charged to WV American during the 12 months ended December 31, 2007. 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 WV American during 2007, 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, then 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

Schedule 1 (page 11) details the assignment of 12 months ended December 31, 2007 management and professional Service Company charges by outsider provider category. Schedule 2 (page 12) shows the same assignment for Service Company management and professional hours charged to WV American during the 12 months ended December 31, 2007.

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 2007 test period non-labor Service Company charges:

- Contract Services – 12 months ended December 31, 2007 Service Company charges to WV American include almost \$432,000 in 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.
- **Computer Hardware and Software Expenses** – Included in the 12 months ended December 31, 2007 Service Company charges to WV American are charges for outside expenses related to leases and maintenance fees related to mainframe, server and network infrastructure, corporate business applications and the communications systems. An outside provider that would take over operation of a data center would recover these expenses over and above the labor necessary to operate the data center.

Schedule 3 (page 13) 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 Schedules 1 and 2 and the excludable items shown in Schedule 3, the Service Company's equivalent costs per hour for the 12 months ended December 31, 2007 are calculated below.

	Attorney	Management Consultant	Certified Public Accountant	Professional Engineer	Total
Total management, professional & technical services charges	\$ 376,485	\$ 2,443,080	\$ 3,318,764	\$ 1,200,306	\$ 7,338,635
Less:					
Contract services	\$ 9,241	\$ 105,513	\$ 303,907	\$ 13,634	\$ 432,295
Travel expenses	\$ 6,090	\$ 81,313	\$ 51,406	\$ 40,671	\$ 179,480
Computer hardware/software	\$ 1	\$ 31,987	\$ 56,482	\$ 18,759	\$ 107,229
Net Service Charges (A)	\$ 361,154	\$ 2,224,266	\$ 2,906,968	\$ 1,127,242	\$ 6,619,630
Total Hours (B)	2,418	16,815	39,098	12,807	71,137
Average Hourly Rate (A / B)	\$ 149	\$ 132	\$ 74	\$ 88	

West Virginia American Water Company
Analysis of 12 Months Ended December 31, 2007 Service Company Charges By Location And Function

Location	Function	12 Months Ended December 31, 2007 Service Company Charges				Total
		Attorney	Management Consultant	Certified Public Accountant	Professional Engineer	
Belleville Lab	Water Quality		\$ 48,872	\$	\$ 253,900	\$ 253,900
Call Center	Human Resources			\$ 486,358		\$ 486,358
Corporate	Accounting		\$ 308,042	\$	\$ 81,810	\$ 308,042
	Administration					\$ 81,810
	Audit		\$ 102,810			\$ 102,810
	Communications				\$ 32,691	\$ 32,691
	Engineering			\$ 194,551		\$ 194,551
	Finance		\$ 312,413			\$ 312,413
	Human Resources					\$ 116,264
	Legal	\$ 116,264				\$ 116,264
	Operations		\$ 218,864		\$ 109,688	\$ 328,552
	Rates & Revenue			\$ 109,540		\$ 109,540
Risk Management		\$ 124,667			\$ 124,667	
Water Quality				\$ 78,538	\$ 78,538	
Regional Offices	Accounting			\$ 35,904		\$ 35,904
	Administration		\$ 150,210			\$ 150,210
	Communications		\$ 223,821			\$ 223,821
	Engineering				\$ 324,467	\$ 324,467
	Finance			\$ 381,629		\$ 381,629
	Human Resources		\$ 121,944			\$ 121,944
	Legal	\$ 260,220				\$ 260,220
	Operations		\$ 455,277		\$ 214,148	\$ 669,425
	Risk Management		\$ 254,126			\$ 254,126
	Water Quality				\$ 186,874	\$ 186,874
Information Technology	Information Technology			\$ 1,393,970		\$ 1,393,970
Shared Services	Accounting			\$ 527,951		\$ 527,951
	Administration		\$ 122,034			\$ 122,034
	Finance			\$ 71,213		\$ 71,213
	Rates & Revenue			\$ 35,838		\$ 35,838
Total Dollars Charged		\$ 376,485	\$ 2,443,080	\$ 3,318,764	\$ 1,200,306	\$ 7,338,635

West Virginia American Water Company
Analysis of 12 Months Ended December 31, 2007 Service Company Hours By Location And Function

Location	Function	12 Months Ended December 31, 2007 Service Company Hours				Total
		Attorney	Management Consultant	Certified Public Accountant	Professional Engineer	
Belleville Lab	Water Quality		602		3,527	3,527
Call Center	Human Resources			4,984		602
Corporate	Accounting		6			4,984
	Administration			576		6
	Audit					576
	Communications		530			530
	Engineering				227	227
	Finance			1,388		1,388
	Human Resources		2,716			2,716
	Legal	421				421
	Operations		940		941	1,882
	Rates & Revenue			353		353
	Risk Management		781			781
	Water Quality				948	948
Regional Offices	Accounting			557		557
	Administration		697			697
	Communications		2,533			2,533
	Engineering				3,390	3,390
	Finance			3,359		3,359
	Human Resources		869			869
	Legal	1,996				1,996
	Operations		3,439		1,900	5,339
	Risk Management		2,968			2,968
	Water Quality				1,872	1,872
Information Technology	Information Technology			14,433		14,433
Shared Services	Accounting			11,268		11,268
	Administration		736			736
	Finance			1,732		1,732
	Rates & Revenue			448		448
	Total Hours Charged	2,418	16,815	39,098	12,807	71,137

West Virginia American Water Company
12 Months Ended December 31, 2007 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	\$ 132,594	\$ 12,962	\$ 4,041	\$ 149,596
Administration	\$ 19,515	\$ 13,224	\$ (1,279)	\$ 31,460
Audit	\$ 14,635	\$ 2,004	\$ -	\$ 16,640
Communications	\$ 13,125	\$ 7,679	\$ 176	\$ 20,980
Engineering	\$ (523)	\$ 3,269	\$ 277	\$ 3,023
Finance	\$ 26,949	\$ 6,655	\$ 273	\$ 33,877
Human Resources	\$ 65,469	\$ 15,689	\$ 4,132	\$ 85,290
Information Technology	\$ 108,932	\$ 22,340	\$ 52,145	\$ 183,417
Legal	\$ 9,241	\$ 6,090	\$ 1	\$ 15,331
Operations	\$ 6,917	\$ 60,281	\$ 7,658	\$ 74,856
Rates & Revenue	\$ 20,797	\$ 7,445	\$ 24	\$ 28,266
Risk Management	\$ 3,316	\$ 9,086	\$ 26,087	\$ 38,489
Water Quality	\$ 11,328	\$ 12,757	\$ 13,696	\$ 37,781
Total	\$ 432,295	\$ 179,480	\$ 107,229	\$ 719,005

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	Total
Attorney	\$ 9,241	\$ 6,090	\$ 1	\$ 15,331
Management Consultant	\$ 105,513	\$ 81,313	\$ 31,987	\$ 218,814
Certified Public Accountant	\$ 303,907	\$ 51,406	\$ 56,482	\$ 411,796
Professional Engineer	\$ 13,634	\$ 40,671	\$ 18,759	\$ 73,064
Total	\$ 432,295	\$ 179,480	\$ 107,229	\$ 719,005

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 below.

It should be noted that professionals working for 3 of the 4 outside providers may be licensed to practice by state regulatory bodies. However, not every professional working for these firms is licensed. For instance, among certified public accounting firms within West Virginia’s region, only partner/owners are predominantly CPAs, as shown in the table below. Some employees of the Service Company 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	Firm Size		
	Small	Medium	Large
Partners/Owners	90.1%	93.0%	98.4%
Directors (over 10 years experience)	42.9%	60.9%	78.6%
Managers (6-10 years experience)	37.5%	51.2%	86.6%
Sr Associates (4-5 years experience)	0.0%	60.9%	64.5%
Associates (1-3 years experience)	0.0%	17.9%	19.2%
New Professionals	0.0%	0.0%	7.9%

Attorneys

The West Virginia Bar Association does not survey its members as to their hourly billing rates. In addition, publicly available billing rate information could not be found for West Virginia attorneys. Therefore, an estimate of West Virginia attorney rates was developed from a survey of Michigan lawyers conducted annually by the Michigan Lawyers Weekly. As presented in Schedule 4, the average rate for each Michigan firm respondent was adjusted for the cost of living differential between their location and Charleston, West Virginia. The survey includes rates that were in effect during 2007.

Management Consultants

The cost per hour for management consultants was developed from the 2007 annual survey performed by the Association of Management Consulting Firms, an industry trade organization. The first step in the calculation, presented in Schedule 5, was to determine an average rate by consultant position level. From these rates, a single weighted average hourly rate was calculated based upon the percent of time that is typically applied to a consulting assignment by each consultant position level. This survey includes rates that were in effect during 2006 for firms in 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 survey includes rates that were in effect at December 31, 2006. Thus, the 2006 average rate was escalated to June 30, 2007—the midpoint of the 12 months ended December 31, 2007.

Certified Public Accountants

The average hourly rate for West Virginia certified public accountants was developed from a 2006 survey performed by the American Institute of Certified Public Accountants (AICPA). Hourly rates in the AICPA survey are the average of firms in the south Atlantic region. The average hourly rate was calculated for a set of typical accountant positions, as shown in Schedule 6. Based on a typical staff assignment by each accountant position, a weighted average hourly rate was calculated. This survey covered hourly rates in effect during 2005. Thus, the 2005 average rate was escalated to June 30, 2007, the midpoint of 2007.

Professional Engineers

The Service Company provided hourly rate information for outside engineering firms that could have been used by WV American in 2007. As presented in Schedule 7, 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.

Schedule 4

**West Virginia American Water Company
Estimated Billing Rates For West Virginia Attorneys Based On
Michigan Attorney Billing Rates**

Billing rates as of December 31, 2007 (Note A)									
Firm	Michigan Location	Number Of Mich Lawyers	Billing Rate Range				Average	Cost of Living Adjust (C)	Adjusted Rate
			Associate		Partner				
			Low	High	Low	High			
Dickinson Wright PLLC	Detroit	229	\$ 170	\$ 275	\$ 260	\$ 530	\$ 309	96%	\$ 320
Dykema	Detroit	222	\$ 185	\$ 390	\$ 245	\$ 625	\$ 361	96%	\$ 375
Butzel Long	Detroit	209	\$ 165	\$ 400	\$ 220	\$ 550	\$ 334	96%	\$ 346
Bodman LLP	Detroit	128	\$ 125	\$ 215	\$ 210	\$ 495	\$ 261	96%	\$ 271
Jaffe Raitt Heuer & Weiss, PC	Southfield	100	\$ 165	\$ 225	\$ 225	\$ 500	\$ 279	110%	\$ 253
Trott & Trott, PC	Bingham Farms	64	\$ 170	\$ 170	\$ 235	\$ 235	\$ 203	143%	\$ 142
Brooks Kushman PC	Southfield	52	\$ 160	\$ 275	\$ 250	\$ 505	\$ 298	110%	\$ 270
Kemp, Klein, Umphrey, Edelman & May PC	Troy	36	\$ 150	\$ 190	\$ 200	\$ 340	\$ 220	127%	\$ 174
Pepper Hamilton LLP	Detroit	33	\$ 200	\$ 315	\$ 340	\$ 615	\$ 368	96%	\$ 381
Hertz, Schram & Saretsky, PC	Bloomfield Hills	29	\$ 175	\$ 260	\$ 275	\$ 400	\$ 278	158%	\$ 176
Strobl & Sharp, PC	Bloomfield Hills	28	\$ 110	\$ 210	\$ 200	\$ 300	\$ 205	158%	\$ 130
Kupelian Ormond & Magy, PC	Southfield	25	\$ 165	\$ 195	\$ 235	\$ 320	\$ 229	110%	\$ 208
Rader, Fishman & Grauer, PLLC	Bloomfield Hills	25	\$ 130	\$ 250	\$ 275	\$ 495	\$ 288	158%	\$ 182
McShane & Bowie PLC	Grand Rapids	22	\$ 160	\$ 275	\$ 250	\$ 375	\$ 265	109%	\$ 243
Overall Average 2007 Billing Rate									\$ 248

Note A: Source is Michigan Lawyers Weekly, April 2007

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

Note C: Source is Sperling's Best Places (<http://www.bestplaces.net/col/col.aspx>). This number represents the cost of living difference between the Michigan city and Charleston, West Virginia. A number over 100% indicates the Michigan city's cost of living is higher than Charleston. A number less than 100% indicates Charleston's cost of living is higher.

Schedule 5

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

A. Calculation of Average Hourly Billing Rate by Consultant Position						
Survey billing rates were those in effect in 2006 (Note A)						
Average Hourly Rates (Note A)						
	Entry-Level Consultant	Associate Consultant	Senior Consultant	Junior Partner	Senior Partner	
Average	\$ 142	\$ 187	\$ 235	\$ 306	\$ 358	
B. Calculation of Overall Average Hourly Billing Rate Based on a Typical Distribution of Time on an Engagement						
	Entry-Level Consultant	Associate Consultant	Senior Consultant	Junior Partner	Senior Partner	
Average Hourly Billing Rate (from above)	\$ 142	\$187	\$235	\$306	\$358	
Typical Percent of Time Spent on a Consulting Project	30%	30%	20%	10%	10%	Weighted Average
	\$ 43	\$ 56	\$ 47	\$ 31	\$ 36	\$ 212
<u>Escalation to Midpoint of December 31, 2007 Test Period (Note B)</u>						
						CPI at December 31, 2006
						201.8
						CPI at June 30, 2007
						208.4
						Inflation/Escalation
						3.3%
Average Hourly Billing Rate For Management Consultants At June 30, 2007						\$ 219

Note A: source: "Operating Ratios For Management Consulting Firms, 2007 Edition" Association of Management Consulting Firms

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

Schedule 6

**West Virginia American Water Company
Billing Rates Of West Virginia Certified Public Accountants**

A. Calculation of Average Hourly Billing Rate by Public Accounting Position
Survey billing rates were those in effect in 2005 (Note A)

Type of Firm	Average Hourly Billing Rate (Note A)			
	Staff Accountant	Senior Accountant	Manager	Partner
Average Hourly Rate	\$ 71	\$ 89	\$ 112	\$ 164

B. Calculation of Overall Average Accountant Billing Rate Based Upon Typical Distribution of Time on an Engagement

	Staff Accountant	Senior Accountant	Manager	Partner	Weighted Average
	Average Hourly Billing Rate (From Above)	\$ 71	\$ 89	\$ 112	
Typical Percent of Time Spent on an Accounting Assignment	30%	30%	20%	20%	
	\$ 21	\$ 27	\$ 22	\$ 33	\$ 103

CPI at December 31, 2005	196.8
CPI at June 30, 2007	208.4
Inflation/Escalation	5.9%
Average Hourly Billing Rate For West Virginia CPAs At June 30, 2007	\$ 109

Exhibit PLB-1
Schedule 7

**West Virginia American Water Company
Billing Rates Of West Virginia Engineers**

Note: Billing rates were those in effect in 2007

A. Calculation of Average Hourly Rate by Engineer Position

Name of Firm	Average Hourly Billing Rates			
	Technician	Engineer	Project Manager	Officer
	Senior Technician	Design Engineer Project Engineer	Sr. Mgr. Engineer	Principal Engineer
Firm #1	\$73	\$108	\$163	\$87
Firm #2	\$55	\$70	\$124	\$163
Firm #3	\$65	\$93	\$152	\$200
Firm #4	\$73	\$85	\$136	\$175
Firm #5	\$76	\$84	\$134	\$164
Firm #6	\$83	\$98	\$143	\$200
Firm #7	\$60	\$80	\$127	\$162
Firm #8	\$70	\$73	\$112	\$160
Firm #9	\$55	\$86	\$139	\$190
Firm #10	\$63	\$65	\$90	na

B. Calculation of Overall Average Engineering Hourly Billing Rate

	CAD Drafter	Engineer	Project Manager	Officer	Weighted Average
	Engineer Tech	Design Engineer Project Engineer Elect Proj Engineer	Project Associate Sr. Mgr. Engineer	Principal Engineer	
Average Hourly Billing Rate (From Above)	\$67	\$84	\$132	\$167	
Typical Percent of Time on an Engineering Assignment	30%	35%	25%	10%	
	\$20	\$29	\$33	\$17	\$99

Source: Information provided by American Water Works Service Company

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.

12 Months Ended December 31, 2007			
Service Provider	Service Company	Outside Provider	Difference-- Service Co. Greater(Less) Than Outside
Attorney	\$ 149	\$ 244	\$ (95)
Management Consultant	\$ 132	\$ 219	\$ (87)
Certified Public Accountant	\$ 74	\$ 109	\$ (35)
Professional Engineer	\$ 88	\$ 99	\$ (11)

Based on these cost per hour differentials and the number of managerial and professional services hours billed to WV American during the 12-months ended December 31, 2007, outside service providers would have cost \$3,204,959 more than the Service Company (see table below). Thus, on average, outside provider's hourly rates are almost 44% higher than those of the Service Company (\$3,204,959 / \$ 1,031,624).

12 Months Ended December 31, 2007			
Service Provider	Hourly Rate Difference-- Service Co. Greater(Less) Than Outside	Service Company Hours Charged	Dollar Difference
Attorney	\$ (95)	2,418	\$ (228,648)
Management Consultant	\$ (87)	16,815	\$ (1,462,293)
Certified Public Accountant	\$ (35)	39,098	\$ (1,370,273)
Professional Engineer	\$ (11)	12,807	\$ (143,746)
Service Company Less Than Outside Providers			\$ (3,204,959)

If WV American 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 71,137 hours of work (more than 47 full-time equivalents at 1,500 "billable" hours per FTE per year) would add a significant workload to the existing WV American management team. Thus, it would be necessary for WV American to add at least one half of 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 another \$149,400 per year to WV American's personnel expenses.

Cost of Adding a Professional Position To WVA's Sta

	Total
New Positions' Salary	\$ 100,000
Benefits (at 49.4%)	\$ 49,400
Office Expenses (15.2%)	\$ 15,200
Total Cost of Full Time Position	\$ 149,400

Thus, the total effect on the ratepayers of WV American of contracting all services now provided by the Service Company would be an increase in their costs of \$3,354,359 (\$3,204,959 + \$149,400). Based on the results of this comparison, it is possible to conclude that the Service Company charged WV American at the lower of cost or market for services provided during 2007.

Other Cost Comparisons

Every year, the Belleville Lab conducts a comparison of its cost for performing major tests to the cost of using outside testing laboratories. Over the past several years, these surveys have shown the following results been as follows:

Year	Number of Major Tests Surveyed	Percent Belleville Lower Than Outside Labs
2000	26	15%
2001	25	19%
2002	24	16%
2003	23	10%
2004	24	9%
2005	24	25%
2006	24	31%

These studies provide additional evidence that the Service Company arrangement is the lowest-cost alternative for WV American.

V – Customer Account Services Cost Comparison

Background

It is difficult to compare the cost of American Water's National Call Centers with outside providers of the same call center-related services. Call center survey data is proprietary and expensive to obtain. For this reason, WV American's National Call Center costs are compared to those of neighboring electric utilities because the data necessary to make this comparison is readily available to the public.

Electric utility cost information comes from the FERC Form 1 that each must file. FERC's chart of accounts is defined in chapter 18, part 101 of Code of Federal Regulations. FERC accounts that contain call center-related expenses and are used in this study's comparison are:

- Account 903 Customer Accounts Expense – Records and Collection Expense
- Account 905 Customer Accounts Expense – Miscellaneous Customer Accounts Expense.

In addition, 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).

Schedule 8 provides FERC's description of what should be charged to these accounts. In questioning the controller of a large Southeastern electric utility, it was determined that expenses of the activities described below are recorded in the designated FERC accounts.

903 Records and Collection Expense

- 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 of customer payments received in the mail
- Bill payment centers – locations where customers can pay their bills in person

905 Miscellaneous Customer Accounts Expense

- Customer Information System IT – maintenance and support of the customer information system

This study assumes the FERC accounts for other electric and gas utilities contain expenses for the same activities.

**West Virginia 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.

**West Virginia 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.

Comparison Group

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

West Virginia	• Wheeling Power	
Kentucky	• Kentucky Power • Kentucky Utilities	• Louisville Gas & Electric • Union Light, Heat & Power
Virginia	• Appalachian Power	• Virginia Electric Power
Ohio	• Cincinnati Gas & Electric • Cleveland Electric • Columbus Southern Power • Dayton Power & Light	• Ohio Edison • Ohio Power • Toledo Edison
Pennsylvania	• Duquesne Light • PECO Energy • Pennsylvania Electric	• Pennsylvania Power • PPL Electric
Maryland	• Baltimore Gas & Electric • Delmarva Power & Light	• Potomac Electric

Comparison Approach

The basis for this comparison is customer account services expenses per customer. WV American’s cost pool was developed to include the same expenses included in electric utility’s FERC accounts 903 and 905. As shown in the graphic below, WV American’s resultant cost pool contains the expenses of Service Company locations and certain operating company expenses.

American Water
<u>Service Company</u> Pensacola & Alton Call Centers a. Customer contact b. Customer order processing c. Billing information processing d. Collections e. Correspondence processing f. Customer payment processing
<u>Operating Company</u> a. Postage and forms

Electric Utilities
FERC Acct 903 - Records and Collection Expense <u>and</u> FERC Acct 905 - Misc Customer Accounts Expense a. Customer contact b. Customer order processing c. Bill preparation and mailing d. Collections e. Payment processing f. Correspondence processing

WV American Cost Per Customer

In order to make a valid comparison to neighboring electric utilities, certain adjustments had to be made to the applicable Service Company charges to WV American. 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 1.33 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. As shown below, WV American's adjusted annual expense per customer is \$32.48—the number that can be compared to neighboring electric utilities' expenses. WV American's 2007 unadjusted annual expense per customer is \$21.90.

West Virginia American Water Company		Service Co	Adjustment Fewer Calls For	Adjusted
Cost Component		Charges	Water Cos. (A)	
Service Company				
Call Centers	Call processing, order processing, credit, bill collection	\$ 2,174,942	\$ 1,917,855	\$ 4,092,797
Regional Offices		\$ 395,635		\$ 395,635
Service Company	Customer payment processing			\$ 102,473 Note B
Operating Company	Postage & forms			\$ 1,007,341
			Cost Pool Total	\$ 5,598,246
			Total Customers	168,060
				\$ 33.31

12 Months Ended December 31, 2007 Cost Per WV American Customer

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 annualized Call Center charges		\$ 2,174,942
Electric utility industry's avg calls/customer	2.50	
American Water's avg calls/customer	1.33	
Percent different	88%	88%
Total Adjustment B		\$ 1,917,855

Note B: Estimated customer payment processing expenses

Number of customers	168,060
Number of payments/customer/year	4.3
Total payments processed/year	722,658
Bank charge per item	\$ 0.1418
Total estimated annual expense	\$ 102,473

Electric Utility Group Cost Per Customer

Schedule 9 shows the actual 2007 customer accounts expense per customer calculation for the electric utility comparison group. All of the underlying data were taken from each utility's FERC Form 1.

Summary Of Results

As shown in the table below, WV American's cost per customer is within a reasonable range of the average of the neighboring electric utility comparison group. It can therefore be concluded that WV American's 2007 customer accounts-related expenses, including those of the Alton and Pensacola Call Centers, assigned by the Service Company to WV American were comparable to those of other utilities.

Average Customer Accounts Expense Per Customer		
Louisville Gas & Electric	\$	13.71
Pennsylvania Electric	\$	13.97
Virginia Electric Power	\$	15.89
Duquesne Light	\$	17.18
Pennsylvania Power	\$	17.24
Ohio Edison	\$	19.04
Dayton Power & Light	\$	19.15
Cleveland Electric Illuminating	\$	21.33
Toledo Edison	\$	25.77
Kentucky Utilities	\$	25.91
PPL Electric	\$	27.14
Wheeling Power	\$	28.08
Comparison Group Average	\$	31.27
Baltimore Gas & Electric	\$	32.50
West Virginia American Water	\$	33.31
Duke Energy Kentucky	\$	34.88
Appalachian Power	\$	34.99
Ohio Power	\$	35.00
Duke Energy Ohio	\$	36.10
Kentucky Power	\$	37.59
Columbus Southern Power	\$	38.57
PECO Energy	\$	55.42
Delmarva Power & Light	\$	61.87
Potomac Electric	\$	70.37

West Virginia American Water Company
Comparison Group 2007 Actual Customer Accounts Expense Per Customer

	West Virginia			Kentucky			Maryland		
	Wheeling Power	Duke Energy Kentucky	Kentucky Power	Kentucky Utilities	Louisville Gas & Electric	Baltimore Gas & Delmarva Power & Light	Potomac Electric		
	\$ 1,083,477	\$ 3,247,759	\$ 6,205,360	\$ 11,681,015	\$ 4,642,565	\$ 26,325,591	\$ 46,795,233		
	\$ 1,480	\$ 75,852	\$ 2,888	\$ 173,641	\$ 215,534	\$ 2,886,642	\$ 6,566		
	\$ 1,084,957	\$ 3,323,611	\$ 6,208,248	\$ 11,854,656	\$ 4,858,099	\$ 29,212,233	\$ 46,795,233		
Note A	\$ 55,868	\$ 1,080,370	\$ 285,983	\$ 1,738,946	\$ 542,390	\$ 8,173,002	\$ 5,348,590		
Note B	\$ 19,665	\$ 264,982	\$ 111,009	\$ 230,888	\$ 94,002	\$ 2,300,977	\$ 1,108,174		
Total Cost Pool	\$ 1,160,489	\$ 4,668,963	\$ 6,605,240	\$ 13,824,490	\$ 5,494,491	\$ 39,686,212	\$ 53,251,997		
	\$ 41,332	\$ 133,868	\$ 175,705	\$ 533,512	\$ 400,703	\$ 1,221,284	\$ 756,711		
Customer Account Services Expense per Customer	\$ 28.08	\$ 34.88	\$ 37.59	\$ 25.91	\$ 13.71	\$ 32.50	\$ 61.87		
	\$ 369,460	\$ 9,725,767	\$ 4,466,809	\$ 22,618,725	\$ 20,138,689	\$ 44,787,999	\$ 21,362,833		
	\$ 1,699,949	\$ 31,182,162	\$ 22,664,819	\$ 39,257,367	\$ 45,624,056	\$ 164,827,958	\$ 57,858,348		
	21.7%	31.2%	19.7%	57.6%	44.1%	27.2%	36.9%		
	\$ 357,852	\$ 1,323,882	\$ 1,702,053	\$ 4,110,913	\$ 960,068	\$ 23,435,975	\$ 15,271,688		
	\$ 357,852	\$ 4,436,687	\$ 1,702,053	\$ 4,110,913	\$ 1,731,124	\$ 35,443,224	\$ 9,540,622		
	\$ 1,083,477	\$ 3,247,759	\$ 6,205,360	\$ 11,681,015	\$ 4,642,565	\$ 26,325,591	\$ 46,795,233		
	\$ 1,480	\$ 75,852	\$ 2,888	\$ 173,641	\$ 215,534	\$ 2,886,642	\$ 6,566		
	\$ 1,084,957	\$ 3,323,611	\$ 6,208,248	\$ 11,854,656	\$ 4,858,099	\$ 29,212,233	\$ 46,795,233		
	\$ 425,426	\$ 933,492	\$ 1,073,679	\$ 4,292,201	\$ 1,986,061	\$ 5,210,641	\$ 9,171,909		
	\$ 1,510,383	\$ 4,257,103	\$ 7,281,927	\$ 16,146,857	\$ 6,844,160	\$ 34,422,874	\$ 49,333,524		
	\$ 257,057	\$ 78.1%	\$ 85.3%	\$ 73.4%	\$ 77.0%	\$ 84.9%	\$ 94.9%		
	\$ 55,868	\$ 1,080,370	\$ 285,983	\$ 1,738,946	\$ 542,390	\$ 8,173,002	\$ 5,348,590		
	\$ 257,057	\$ 3,463,816	\$ 1,451,095	\$ 3,018,139	\$ 1,228,781	\$ 30,078,131	\$ 14,485,935		
	\$ 19,665	\$ 264,982	\$ 111,009	\$ 230,888	\$ 94,002	\$ 2,300,977	\$ 1,108,174		

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 355, line 65)
Benefits as Percent of Payroll

Payroll Applicable to Customer Account Services
Total Payroll Charged to Customer Accounts F function
Electric (page 354, line 7)
Gas (page 354, line 37)

Total Payroll Charged to Customer Accounts
Percent Applicable to Customer Accounts
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

Note B: Calculation of Employer's FICA Pertaining to Customer Accounts Services
Pension & Benefits 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

West Virginia American Water Company
Comparison Group 2007 Actual Customer Accounts Expense Per Customer

		Ohio							
	Cleveland Electric Illum.	Columbus Southern Pwr	Dayton Power & Light	Duke Energy - Ohio	Ohio Edison	Ohio Power	Toledo Edison		
	\$ 14,571,985	\$ 27,013,658	\$ 8,528,580	\$ 18,251,514	\$ 20,280,096	\$ 23,346,691	\$ 6,786,566		
	\$ 493,177	\$ 30,647	\$ -	\$ 7,279	\$ 507,437	\$ 36,717	\$ 156,298		
	\$ 15,065,162	\$ 27,044,305	\$ 8,528,580	\$ 18,258,793	\$ 20,787,533	\$ 23,383,408	\$ 6,942,864		
Note A	\$ 836,948	\$ 1,264,559	\$ 991,292	\$ 5,237,196	\$ (1,424,285)	\$ 1,098,295	\$ 982,446		
Note B	\$ 274,236	\$ 428,016	\$ 333,191	\$ 1,290,860	\$ 450,184	\$ 418,833	\$ 150,795		
	\$ 16,176,347	\$ 28,736,880	\$ 9,853,063	\$ 24,786,849	\$ 19,813,432	\$ 24,900,536	\$ 8,076,105		
	758,319	745,133	514,405	686,578	1,040,662	711,406	313,413		
	\$ 21,333	\$ 38,577	\$ 19,155	\$ 36,103	\$ 19,044	\$ 35,000	\$ 25,777		
	\$ 7,650,920	\$ 11,597,859	\$ 18,464,446	\$ 52,482,158	\$ (11,505,519)	\$ 22,732,455	\$ 7,749,820		
	\$ 32,770,179	\$ 51,314,234	\$ 81,127,271	\$ 169,094,889	\$ 47,537,720	\$ 113,320,078	\$ 15,549,239		
	23.3%	22.6%	22.8%	31.0%	-24.2%	20.1%	49.8%		
	\$ 4,890,691	\$ 6,589,685	\$ 6,193,463	\$ 8,774,665	\$ 8,447,511	\$ 6,727,321	\$ 2,640,178		
	\$ 4,890,691	\$ 6,589,685	\$ 6,193,463	\$ 22,336,017	\$ 8,447,511	\$ 6,727,321	\$ 2,640,178		
	\$ 14,571,985	\$ 27,013,658	\$ 8,528,580	\$ 18,251,514	\$ 20,280,096	\$ 23,346,691	\$ 6,786,566		
	\$ 493,177	\$ 30,647	\$ -	\$ 7,279	\$ 507,437	\$ 36,717	\$ 156,298		
	\$ 15,065,162	\$ 27,044,305	\$ 8,528,580	\$ 18,258,793	\$ 20,787,533	\$ 23,383,408	\$ 6,942,864		
	\$ 5,488,077	\$ 4,808,046	\$ 3,599,111	\$ 5,910,289	\$ 9,052,734	\$ 5,348,894	\$ 2,356,336		
	\$ 20,553,239	\$ 31,852,351	\$ 12,127,691	\$ 24,169,082	\$ 29,840,267	\$ 28,732,302	\$ 9,299,200		
	73.3%	84.9%	70.3%	75.5%	69.7%	81.4%	74.7%		
	\$ 3,584,790	\$ 5,594,986	\$ 4,355,441	\$ 16,873,984	\$ 5,884,763	\$ 5,474,942	\$ 1,971,180		
	\$ 836,948	\$ 1,264,559	\$ 991,292	\$ 5,237,196	\$ (1,424,285)	\$ 1,098,295	\$ 982,446		
	\$ 3,584,790	\$ 5,594,986	\$ 4,355,441	\$ 16,873,984	\$ 5,884,763	\$ 5,474,942	\$ 1,971,180		
	7.65%	7.65%	7.65%	7.65%	7.65%	7.65%	7.65%		
	\$ 274,236	\$ 428,016	\$ 333,191	\$ 1,290,860	\$ 450,184	\$ 418,833	\$ 150,795		

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 355, line 66)
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 (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
Customer Account Services Portion of Total Payroll
Employee's Portion of FICA (6.20%) and Medicare (1.45%)
Estimated Employer's Portion of FICA

West Virginia American Water Company
Comparison Group 2007 Actual Customer Accounts Expense Per Customer

	Virginia		Pennsylvania					Group Average
	Appalachian Power	Virginia Electric Power	Duquesne Light	PECO Energy	Pennsylvania Electric	Pennsylvania Power	PPL Electric	
Customer Account Services Cost Pool								
FERC Account Balances:								
Acct 903 - Customer Records & Collection (page 322, line 131)	\$ 31,314,061	\$ 32,253,336	\$ 6,737,679	\$ 44,969,347	\$ 10,340,968	\$ 2,890,828	\$ 28,563,240	\$ 406,513,413
Acct 905 - Misc Customer Accounts (page 322, line 133)	\$ 18,238	\$ -	\$ -	\$ 34,562,550	\$ 129,987	\$ 120,019	\$ 990,261	\$ 40,415,213
Subtotal	\$ 31,332,299	\$ 32,253,336	\$ 6,737,679	\$ 79,531,897	\$ 10,470,955	\$ 3,010,847	\$ 29,553,501	\$ 446,928,626
Add: Employee Benefits & Employer FICA (not included in above amounts)								
Account 926 - Employee Pension & Benefits	\$ 1,429,385	\$ 3,831,664	\$ 2,882,751	\$ 5,141,143	\$ (2,549,675)	\$ (352,049)	\$ 6,625,261	\$ 43,896,801
Account 408 - Taxes Other Than Income (Employer's Portion of FICA)	\$ 534,319	\$ 1,451,975	\$ 443,792	\$ 1,524,935	\$ 303,672	\$ 82,837	\$ 1,414,208	\$ 13,793,475
Total Cost Pool	\$ 33,296,003	\$ 37,536,975	\$ 10,064,222	\$ 86,197,975	\$ 8,224,953	\$ 2,741,635	\$ 37,592,970	\$ 504,617,902
Total Customers (page 304, line 43)	951,693	2,362,318	585,837	1,555,342	588,871	158,987	1,385,081	16,137,218
Customer Account Services Expense per Customer	\$ 34.99	\$ 15.89	\$ 17.18	\$ 55.42	\$ 13.97	\$ 17.24	\$ 27.14	\$ 31.27
Note A: Calculation of Pension & Benefits Pertaining to Customer Acct Mgmt								
Account 926 - Employee Pension & Benefits (page 323, line 187)	\$ 21,499,955	\$ 120,865,073	\$ 31,719,047	\$ 32,224,495	\$ (23,125,715)	\$ (2,234,231)	\$ 32,626,364	\$ 449,796,480
Total O&M Payroll (page 355, line 65)	\$ 105,057,647	\$ 598,702,458	\$ 63,830,893	\$ 124,944,222	\$ 36,004,272	\$ 6,872,052	\$ 91,036,928	\$ 1,939,183,183
Benefits as Percent of Payroll	20.5%	20.2%	49.7%	25.8%	-64.2%	-32.5%	35.8%	23.2%
Payroll Applicable to Customer Account Services								
Total Payroll Charged to Customer Accounts Function	\$ 8,227,618	\$ 25,945,148	\$ 9,475,692	\$ 19,294,311	\$ 6,944,688	\$ 1,675,705	\$ 20,006,926	\$ 191,105,562
Electric (page 354, line 7)				\$ 4,308,224				\$ 35,191,779
Gas (page 354, line 37)								
Total Payroll Charged to Customer Accounts	\$ 8,227,618	\$ 25,945,148	\$ 9,475,692	\$ 23,602,535	\$ 6,944,688	\$ 1,675,705	\$ 20,006,926	\$ 226,297,341
Percent Applicable to Customer Accounts Services (903 and 905):								
Acct 903 - Customer Records & Collection (page 322, line 161)	\$ 31,314,061	\$ 32,253,336	\$ 6,737,679	\$ 44,969,347	\$ 10,340,968	\$ 2,890,828	\$ 28,563,240	\$ 406,513,413
Acct 905 - Misc Customer Accounts (page 322, line 163)	\$ 18,238	\$ -	\$ -	\$ 34,562,550	\$ 129,987	\$ 120,019	\$ 990,261	\$ 40,415,213
Subtotal - Total Charges Applicable to Customer Accounts Services	\$ 31,332,299	\$ 32,253,336	\$ 6,737,679	\$ 79,531,897	\$ 10,470,955	\$ 3,010,847	\$ 29,553,501	\$ 446,928,626
Acct 902 - Meter Reading Expenses (page 322, line 160)	\$ 5,576,254	\$ 11,835,960	\$ 4,267,657	\$ 14,637,596	\$ 7,847,777	\$ 1,648,497	\$ 2,430,838	\$ 110,439,766
Total Charges Applicable to Customer Accounts Svcs & Meter Reading	\$ 36,908,553	\$ 44,089,296	\$ 11,005,336	\$ 94,169,493	\$ 18,318,732	\$ 4,659,344	\$ 31,984,339	\$ 557,368,392
Percent Applicable to Customer Accounts Services (903 and 905)	84.9%	73.2%	61.2%	84.5%	57.2%	64.6%	92.4%	80.2%
Customer Account Services Portion of Total Payroll	\$ 6,984,565	\$ 18,980,062	\$ 5,801,201	\$ 19,933,785	\$ 3,969,571	\$ 1,082,833	\$ 18,486,382	\$ 180,306,864
Pension & Benefits Pertaining to Customer Accounts Services								
Customer Account Services Portion of Total Payroll	\$ 1,429,385	\$ 3,831,664	\$ 2,882,751	\$ 5,141,143	\$ (2,549,675)	\$ (352,049)	\$ 6,625,261	\$ 41,822,451
Employer's Portion of FICA (6.20% and Medicare (1.45%))								
Estimated Employer's Portion of FICA	\$ 6,984,565	\$ 18,980,062	\$ 5,801,201	\$ 19,933,785	\$ 3,969,571	\$ 1,082,833	\$ 18,486,382	\$ 180,306,864
	7.65%	7.65%	7.65%	7.65%	7.65%	7.65%	7.65%	7.65%
	\$ 534,319	\$ 1,451,975	\$ 443,792	\$ 1,524,935	\$ 303,672	\$ 82,837	\$ 1,414,208	\$ 13,793,475

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

VI - Need For Service Company Services

Analysis Of Services

The third aspect of this study was an assessment of whether the services that are provided to WV American by the Service Company would be necessary if WV American were a stand-alone water utility. The first step in this evaluation was to determine specifically what the Service Company does for WV American. Based on discussions with Service Company personnel, the matrix in Schedule 10 was created showing which entity—WV American or a Service Company location—is responsible for each of the functions WV American 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 Schedule 10, the following conclusions can be drawn:

- The services that the Service Company provides are necessary and would be required even if WV American were a stand-alone water utility.
- There is no redundancy or overlap in the services provided by the Service Company to WV American. For all of the services listed in Schedule 12, there was only one entity that was primarily responsible for the service.

Designation Of Responsibility For Water Utility Functions

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

Designation Of Responsibility For Water Utility Functions

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

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

West Virginia American Water Company
Designation Of Responsibility For Water Utility Functions

Water Company Function	Performed By:					
	Customer Call Center	Regional Office	Shared Services	Corporate Office	IT Service Centers	Belleville Lab
Primarily Responsible P						
Provides Support S						
Rates						
Rate Studies & Tariff Change Administration		P				
Rate Case Planning and Preparation		P				
Rate Case Administration		P				
Commission Inquiry Response		P		S		
Legal						
Purchasing and Materials Management						
Specification Development		S	S	P		
Bid Solicitation		S		P		
Contract Administration				P		
Ordering						
Inventory Management			S			
Human Resources Management						
Benefit Program Development				P		
Benefits Program Administration		P				
Management Compensation Administration				P		
Wage & Salary Program Design				P		
Wage & Salary Administration		P		P		
Training Program Development		S		P		
Training--Course Delivery		P				
Affirmative Action/EEO--Plan Development		P				
Affirmative Action/EEO--Implementation		P				
Information Systems Services						
Service Company Data Centers						
System Operations & Maintenance					P	
Software Maintenance					P	
Network Administration					P	
PC Acquisition & Support					P	
Help Desk			S		P	



Governance Practices Associated With Service Company Charges

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

- **Company President Oversight** – The Company President of the state utility is responsible for the overall performance of the each operating company or district in the state. Through the Executive Vice President of the Western Division, each state utility President in the division has a significant voice in major business decisions of American Water and has the ability to monitor Service Company quality and spending.
- **Vice President Finance** – The VP Finance of the Western states is responsible for the financial reporting, performance and internal controls of each of the operating companies in the region. The VP Finance monitors the performance and reporting from the Service Company. The VP Finance attends monthly Business Plan Review sessions with the WV American President and finance group to review actual results and address forecast modifications for the remainder of the year. The VP Finance reports on the quarterly financial results and forecast updates to WV American's Board of Directors. The rates function reports to the VP Finance, who reviews and authorizes the filing of WV American rate cases and regularly monitors the status of cases. The operating subsidiary interacts with the VP Finance to discuss various issues.
- **Operating Company Board Oversight** – WV American's board of directors includes members of American Water's senior executive team and members of the Division management team. This helps ensure that WV American's needs are a factor in the delivery of Service Company services.
- **Service Company Budget Review/Approval** – WV American's President and the Executive VP 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. WV American's president is also on the local board.
- **Major Project Review And Approval** – Major projects undertaken by the Service Company must first be reviewed by American Water's senior executive team, which includes the Executive VP. The Executive VP, with input from the Division management team (including the president of WV American), has the ability to impact all new initiatives and projects before they are authorized.
- **Service Company Bill Scrutiny** – Western Region Finance personnel review the monthly Service Company bill for accuracy and reasonableness on a monthly basis. WV American's financial analyst has dialogue with regional office personnel concerning the monthly bill and any mistakes or overcharges are credited on a subsequent billing. The Western Region Finance unit prepares an actual to budget comparison of management fees each month for use in identifying unusual variances. Service Company actual to budget comparison is included in the monthly FRP. Unusual variances are researched, explanations are provided and any corrections are made, as necessary.
- **Service Company Budget Variance Reporting** – Each month, a summary variance analysis is prepared that explains differences between budgeted and actual Service Company spending. In addition, a more detailed monthly variance report, called the "Statement of Expenses and Billed Charges," is produced by Service Company location and shows actual spending for the month.

- **Operating Company Budget Variance Reporting** – The “Budget/Plan Analysis,” produced monthly, has a line item for Management Fees (i.e., Service Company charges). In this way, Service Company budget versus actual charges can be monitored for the month and year-to-date. Additional information exists that allows more detailed analysis of "Regional" and "Corporate" Management Fees.

- **Capital Investment Management (“CIM”)** – CIM is one of American Water’s primary business planning processes. It covers capital and asset planning and is employed throughout American Water. 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 for all American Water companies, including all WV American Operating Units. Monthly meetings of the CIM are held to review capital spending compared to plan, review new project requests, and review updates or modifications to existing projects. The President of WV American, VP Finance, and others participate as necessary (e.g. WV American operations managers and Rates Manager) and provide the data used in the monthly review schedules.

VII – Other Comparative Measures Of Reasonableness Of Service Company Charges

WV American’s Service Company Cost Per Customer

During 2007, WV American was charged \$55 per customer in O&M expenses by the Service Company. As shown in the table below, this calculation is based on net testable O&M, which eliminates certain O&M items for which WV American has not requested cost recovery.

	<u>2007</u>
Net Testable Service Company O&M Expenses	\$ 9,224,272
WV American Customers (12/31/07)	<u>168,060</u>
WV American Cost Per Customer	\$ 55

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.

Twenty-three utility holding companies filed a Form 60 for 2007. All but two were included in the comparison group. The service company for PNM Resources, Inc. was excluded because its 2007 service company cost per regulated utility customer was clearly an anomaly as a negative number. This result is likely due to the unique manner by which PNM’s service company expenses are reported on Form 60. Duke Energy was also excluded from the comparison group because one of its two service companies did not provide numbers for its Form 60. Thus, it was not possible to develop Duke’s consolidated service company cost per customer for 2007.

Schedule 11 compares the services provided by American Water’s Service Company to the services provided by comparison group service companies. In general, the types of services provided by American Water’s Service Company are similar to those provided by comparison group service companies.

O&M expenses charged to utility affiliates for the comparison group service companies were obtained from Schedule XVII – Schedule of Expense Distribution by Department or Service Function (p. 305 to 305c) of each entity’s FERC Form 60. This schedule shows charges by category of service (e.g., accounting, information technology) and type of cost (e.g., labor, benefits, outside services). The following were eliminated from the comparison group’s total expenses because they are not in American Water Service Company’s 2007 charges to WV American:

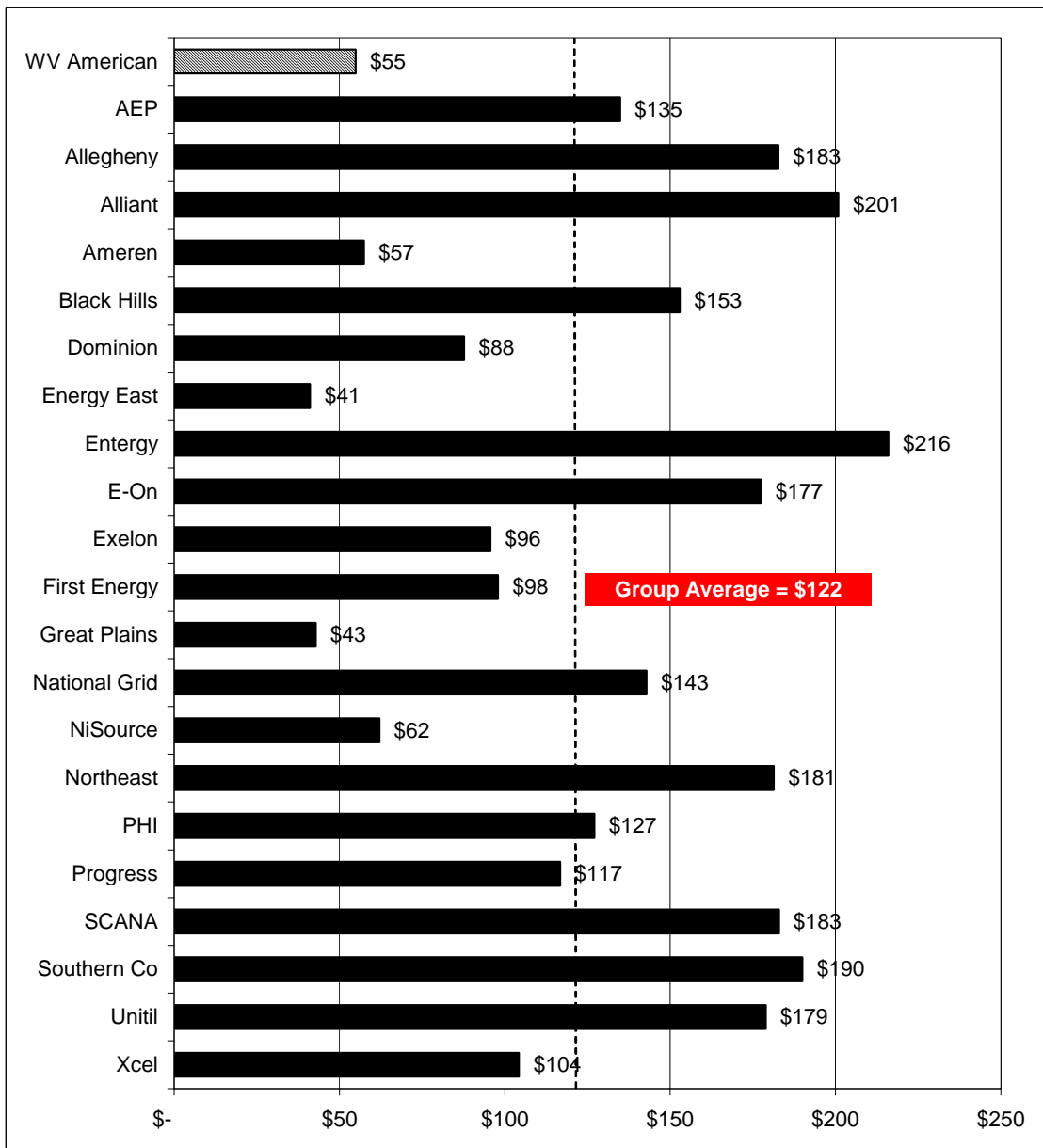
- All electric- and gas-related services
- Income taxes (account 409), provision for deferred income taxes (account 410), provision for deferred income taxes – credit (account 411) and investment tax credit (account 411.5).
- Donations (account 426.1)
- Interest on long-term debt (account 427), interest on debt to associate companies (account 430) and other interest expense (account 431)

Comparison group service company 2007 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.

Schedule 12 shows WV American's 2007 Service Company cost per customer of \$55 to be considerably lower than the average of \$122 per customer for the comparison group service companies. Only 2 of 21 comparison group service companies had a lower 2007 cost per customer than WV American. These results further support the conclusion that the Service Company's 2007 charges to WV American were reasonable.

West Virginia American Water Company
Analysis of Service Company Services

	American Water	AFP	Allegheny	Alliant	Ameren	Black Hills	Dominion	Energy East	Energy	F-On	Exelon	First Energy	Great Plains	National Grid	NiSource	Northeast	PHI	Progress	SCANA	Southern Co	Unitil	Xcel
Accounting	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Audit Services	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Corporate Planning	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Customer Service	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Engineering	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Environmental	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Executive	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
External Affairs	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Facilities Management	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Finance	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Human Resources	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Information Technology	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Investor Relations	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Legal	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Operations	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Regulatory Services	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Risk Management	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Security	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Service Co Overhead	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Shared Services	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Supply Chain	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Transportation Services	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Treasury	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	17	17	15	16	14	15	17	8	7	19	14	17	8	19	20	16	10	13	13	11	7	17



1. INTRODUCTION AND APPROACH TO ANALYSIS

Tennessee American Water Company (TAWC) retained Booz Allen Hamilton (“Booz Allen”) to provide an independent assessment of the costs incurred by the American Water Works Service Company (AWWSC) that are subject to potential allocation to TAWC. This report responds to the Tennessee Regulatory Authority’s (“TRA” or “Commission”) order requiring an independent assessment of service company costs, expressed in Director Pat Miller’s Motion (TRA Dockets 06-00290), which was adopted unanimously. Specifically, this report is designed to address the part of the Motion that “TAWC have a management audit performed in compliance with Sarbanes-Oxley requirements and to submit the audit results concurrent with the next rate case filing. This audit should determine whether all costs allocated to TAWC were incurred as a result of prudent or imprudent management decisions by TAWC's parent and should address the reasonableness of the methodology used to allocate costs to TAWC.”¹ The accompanying exhibits form a critical element of our analysis and should be reviewed in conjunction with the report.

The framework of our analysis began with an understanding of the organizational elements through which TAWC obtains support services and of overall cost trends. Through the establishment of this baseline, we developed an understanding of the structure of the enterprise as well as the principal drivers of costs and cost changes. With these basic components in mind, we were able to undertake an objective appraisal of TAWC’s costs from AWWSC, both direct and allocated.

Having established a baseline, we developed a comprehensive evaluative framework within which to undertake our overall AWWSC cost assessment. This framework led to the identification of several specific questions which served as evaluative attributes (or criteria) to guide the overall cost analysis. These included the following:

- Are the activities performed necessary for the enterprise?
- Do the activities performed provide demonstrated benefits?
- Is there duplication or overlap of activities among responsible entities?
- Does the budgeting process provide for effective control?
- Do ongoing control processes provide for effective cost management?
- Are cost allocation principles reasonable?
- Are costs comparable to those of other companies?

¹ Tennessee Regulatory Authority – Pat Miller’s Motion. 5/14/07. Docket 06-00290.

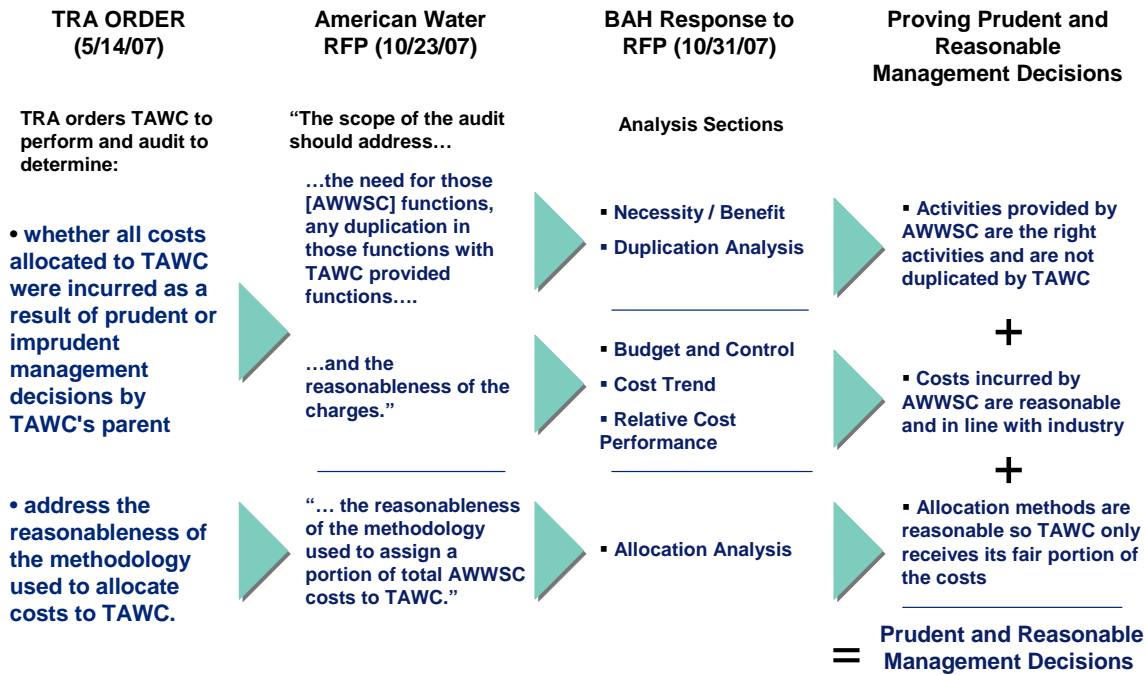
The above criteria were also supplemented in each analysis section of our report with more explicit criteria for that area of analysis.

Throughout the study, Booz Allen worked directly with AWWSC and TAWC personnel to understand the cost drivers impacting each function, the business impacts resulting in changes in costs between 2005 and 2006, the disaggregation of individual cost pools, and the apportionment of costs from AWWSC to TAWC. We conducted more than 30 interviews with both AWWSC and TAWC management to corroborate information discovered through the analytical work described above and to develop an understanding of the control processes in place to manage the relationship between AWWSC and TAWC. Discussion topics during the interviews included, but were not limited to:

- Organizational structure of AWWSC and its interfaces with TAWC
- Activities performed by AWWSC on behalf of TAWC
- Potential duplication of effort between AWWSC and TAWC activities
- Underlying reasons for cost changes within practice areas
- AWWSC's budgeting process and how it is applied in each functional area
- AWWSC's long term planning process and how it is applied in each practice area
- Formal and informal mechanisms for TAWC to provide input into AWWSC budgets and cost levels
- Development and management of service level arrangements ("SLAs") between AWWSC and TAWC
- AWWSC cost assignment and allocation processes, methods, and factors

The insights gained from these analyses and interviews enabled subsequent analysis and data collection related to comparative cost benchmarking, cost allocation, and budget and control processes. The formal analyses performed and the insights gained through the interviews provided the basis for the conclusions reached in each of the framework elements. Our approach to the analysis is directly related to both the order of the Tennessee Regulatory Authority as well as the RFP issued by TAWC. **Figure 1-1** illustrates this relationship.

**Figure 1-1
 Approach to Analysis**



The remainder of this report will describe each of the framework elements in greater detail and state the conclusions reached as a result of the analyses performed. The report is organized as follows:

- Executive Summary
- Organization Overview
- Necessity and Benefits Analysis
- Overlap and Duplication Analysis
- AWWSC Cost Allocation
- Budget and Control
- Cost Trends
- Relative Cost Performance

2. EXECUTIVE SUMMARY

Booz Allen undertook this study, at the request of AWWSC, under an order by the TRA to provide an independent assessment of the reasonableness of AWWSC charges to TAWC. This report has been prepared to be submitted concurrent with TAWC's next rate case filing with the TRA and responds to the Authority's request for a management audit, as set forth in its Orders in the most recent TAWC case (TRA Dockets 06-00290).

Our evaluation was conducted with the full cooperation of TAWC and its service company provider, AWWSC. We were provided with broad access to TAWC and AWWSC personnel as well as their documents and records. In performing our analysis, we utilized techniques and methodologies that we have employed in previous similar analyses.

The framework of our analysis began with an understanding of the organizational elements through which TAWC obtains support services and of overall cost trends. To provide a framework for the more specific evaluative analyses, several criteria were defined to guide the assessment of relevant AWWSC charges:

- Are the activities performed necessary for the enterprise?
- Do the activities performed provide demonstrated benefits?
- Is there duplication or overlap of activities among responsible entities?
- Does the budgeting process provide for effective control?
- Do ongoing control processes provide for effective cost management?
- Can evidence of effective cost control be demonstrated?
- Are cost allocation principles reasonable?
- Are costs comparable to those of other companies?

A brief summary of each of these elements of our analysis and the associated conclusions follows.

Organization Overview: Section 3

TAWC is an operating subsidiary of American Water that engages in the production and delivery of water to customers. To facilitate the procurement, delivery, and management of support services that its operating subsidiaries commonly require, American Water formed a collection of organizations that together act as the American Water Works Service Company (AWWSC), whose

function is to provide necessary support services on a shared basis. AWWSC represents a service company model that is commonly used in the utility industry, and performs functions that are similar to those performed by service companies of other comparable utilities.

Several benefits flow from the consolidation of support services into AWWSC. Among other things, it has allowed TAWC to realize cost efficiencies while obtaining necessary services. It has also improved the quality of management information, enhanced implementation of best practices and enabled standardization of processes and activities. Currently, AWWSC consists of fourteen functions within two cost centers.

Necessity and Benefits Analysis: Section 4

Our evaluation of AWWSC's activities focused on the necessity for performing them as well as the benefits that flowed from such performance. In conducting this assessment, we evaluated whether the activities that gave rise to TAWC costs serve a necessary, useful and legitimate business purpose; are consistent with activities performed by other utilities; and provide benefits to TAWC. We determined which activities gave rise to costs incurred at the service company level; we identified the activities performed by each AWWSC function; we evaluated the AWWSC organizational structure; we determined how activities are defined and performed within AWWSC; and we used our experience in defining the activities of service companies, such as AWWSC, at other utilities.

We then evaluated the necessity of each such activity according to six separate attributes: corporate governance, regulatory mandates, legal compliance, management control, operational execution and strategic planning. Based upon our analysis, we concluded that the AWWSC activities were necessary to the operation, management and conduct of TAWC's business.

In addition to being necessary, we concluded that AWWSC activities provide distinct benefits to the organization. We identified six separate potential benefits that may arise from the activities we examined: risk reduction, increased employee productivity, improved management information, corporate performance enhancement, cost reduction or avoidance, and increased reliability. At least one of these benefits (and in many cases more than one) can be linked to each activity performed by AWWSC.

To further validate our conclusions regarding the necessity and benefit of AWWSC activities and to provide an additional frame of reference, we reviewed each activity to determine its appropriateness for performance within a service company (or similar organization) versus an individual operating company. To do this, we reviewed FERC Form 60's for several peer utility companies in the power industry. Based on our review, we determined that services provided by

AWWSC on behalf of TAWC were typical of services provided by other utility service companies. This is important to recognize, as it indicates that the centralization of such functions within service companies is generally accepted as necessary and beneficial to the enterprise, creating economies of scale and procurement efficiencies.

Overlap and Duplication Analysis: Section 5

Performance of certain operational, managerial, and back office activities in a centralized manner using a common business services' entity across an enterprise is not only an effective and cost efficient method of providing services, but also, by its nature, mitigates duplication of activities across an organization.

To confirm this general observation, we tested whether any activities undertaken by AWWSC were duplicative of, or overlapping with, functions that TAWC also performed. We evaluated whether a particular activity was being performed in a centralized or decentralized manner and whether, if potential duplication did exist, adequate differentiation in scope eliminated the possibility of overlap. Our investigation consisted of, among other things, review of internal documents, management interviews, and past PUC filings.

Figure 2-1 summarizes the results of our assessment and provides the delineation between the types of activities being performed at each "level." There are three different organizational "levels" discussed in this section and four different activity "delineations":

Three different organizational levels:

- **Corporate:** This level includes the Shared Services Center (SSC) and is a part of the AWWSC along with all of the Regional levels (explained below). It is the part of the AWWSC that is not assigned to a specific region, but works across regions.
- **Southeast Region:** This level is the part of the AWWSC that performs services only on behalf of entities in the Southeast Region, which includes operations in Kentucky, Pennsylvania, Tennessee, Virginia, Maryland, and West Virginia.
- **TAWC:** This level is the actual Tennessee American Water Company. It is the local Tennessee operating company for which this report is being written.

Four different activity delineations:

- **SPG:** Strategy, Policy, Governance; Activities that are considered to be SPG provide strategy and direction for the given function, set policies and goals for the function, or provide governance for the overall function. SPG activities also include national level and enterprise-wide issues and initiatives, as well as providing expertise and developing standard practices and processes to be implemented throughout all of American Water.
- **Mgmt:** Management; Activities that are considered to be Mgmt are activities that provide oversight, guidance, and review and disseminate policies and standardized processes that were developed by SPG activities. These activities are also designed to provide support and coordination for the day to day operations of the actual function.
- **Ops:** Operations; Activities in which the actual day to day operations of the function are performed. This is where the actual job of the function is performed.
- **T:** Touch Point; Activities in which employees act as “Touch Points” or points of contact if there are questions, issues, or needs, such as data gathering for that function or to perform a minor role at a more localized level.

**Figure 2-1
 Overlap and Duplication Analysis Areas**

Function	Corporate	Southeast Region	TAWC
Accounting	SPG, Mgmt, Ops	T	T
Administration	SPG, Mgmt	Ops	T
Audit	SPG, Mgmt, Ops	T	T
Communications	SPG	Mgmt	Ops
Legal	SPG	Mgmt, Ops	
Engineering		SPG, Mgmt, Ops	T
Finance			
All Finance Activities except for Rates and Regulations	SPG	Mgmt, Ops	Ops, T
Rates and Regulations	T	SPG, Mgmt, Ops	Ops, T
Human Resources	SPG	Mgmt	Ops
Information Systems	SPG, Mgmt, Ops	Ops	
Operations			
Production, Network, Maintenance	SPG	Mgmt, Ops	Ops
Business Development	SPG, Mgmt	Ops	T
Rates & Revenues	SPG, Mgmt, Ops		
Risk Management	SPG	Mgmt, Ops	Ops
Water Quality	SPG	Mgmt, Ops	Ops
Customer Service			
All Customer Service activities except AR	SPG, Ops	Mgmt	T
Accounts Receivable	SPG, Mgmt, Ops		T

Note: Please see section on cross-functional duplication regarding Rates and Regulation as a part of Finance vs. the Rates and Revenues' Function as these functions are complementary rather than duplicative.

As shown in the Figure above, our detailed review of the particular activities confirms that each group has a defined scope of activities that was discrete and non-duplicative. Based upon our investigation of these activities performed by the Corporate, Southeast Regional, and TAWC levels, we concluded that no duplication of effort exists within AWWSC and TAWC.

AWWSC Cost Allocation: Section 6

We analyzed the allocation of costs from AWWSC to TAWC to determine whether TAWC was charged only an appropriate share of AWWSC costs. In conducting this analysis, we interviewed management, investigated the allocation methods employed to assess whether they reflect cost causation principles, and analyzed the allocation factors used by AWWSC in relation to those used at other similar service companies in the power industry.

Our evaluation found that:

- Charges to TAWC from AWWSC are allocated under a 1989 agreement that has been approved and in use in all jurisdictions of American Water's operating companies.
- AWWSC costs are directly charged to the entity that specifically demands the services that give rise to the cost, when costs can be identified and traced to a particular entity. In 2006, direct billed charges increased to 23% of total charges, up from 16% in 2005 showing a continued effort to direct charge as many costs as possible.
- AWWSC costs that cannot be directly traced to a particular entity (and not directly charged) are allocated on the basis of number of customers served by the operating company relative to total number of customers served by all of American Water, which was found to be a reasonable cost causative allocation factor.

As a check on the allocation process used by AWWSC, we reviewed the level of AWWSC billings to TAWC as compared to TAWC's relative presence in the overall enterprise, as reflected by headcount. This was done because in looking at the activities which have costs that are indirectly allocated, headcount and customers were the two most cost causative factors. TAWC's current total of indirectly allocated costs was 2.24% as compared to 2.37% if headcount were the allocation factor that was chosen to allocate indirect costs.

In sum, we concluded that the processes used to allocate AWWSC costs to TAWC were appropriate and yielded outcomes that were reasonable.

Budget and Control: Section 7

Our assessment included a review of the AWWSC budget process to determine whether the structure and execution of that process served as an effective means of controlling AWWSC O&M costs. To conduct our assessment, we reviewed (a) the planning process to understand how overall targets are established; (b) the budgeting process to assess its effectiveness in justifying and limiting planned costs; (c) the involvement of the various business units in the budgeting process to assess the nature and extent of the interface between AWWSC and its internal customers; and (d) cost control mechanisms to determine whether costs are properly managed.

Our review focused on how an operating company interfaced with AWWSC throughout the budget and cost control process. Of particular relevance to our analysis were the mechanisms by which an operating company monitors and manages AWWSC billings.

With respect to planning, the framework and overall direction of an operating company are established in conjunction with regular planning exercises undertaken on behalf of the enterprise as a whole. These include strategic and long-range planning, financial planning, and business planning. Such planning not only exerts pressure on each business unit to improve efficiency, but also serves as a discipline to management to ensure that capital was allocated appropriately and effectively.

Utilizing the plans developed on a strategic, financial, and business basis, the functions, in conjunction with AWWSC, develop detailed annual budgets. Concurrently, AWWSC works in an iterative and interactive process with operating companies to provide and obtain input for development of the AWWSC budget, which provides each operating company the opportunity to review and challenge proposed AWWSC budget amounts that relate to activities performed by AWWSC that are ultimately directly charged or allocated to a particular operating company. The budget development process is the primary mechanism by which an operating company is able to challenge service company costs. Once the initial budget is approved by Corporate Finance, it is then sent on to the Board of Directors for senior management review and approval. Presidents of the operating companies are members of the AWWSC Board of Directors, providing an additional opportunity to assess the budget and its drivers.

AWWSC has established several mechanisms to provide operating companies with oversight of AWWSC cost levels including Service Level Agreements, formal management processes to track performance against budget, monthly AWWSC management reviews of performance, and the monitoring of costs by senior leadership of operating companies.

American Water follows a Capital Investment Management Committee ("CIMC") process, as well as national Commercial Development Process ("CDP") for all major Fixed Asset investment, Material Contracts, Financial Investments, Joint Ventures, and Consultancy Contracts. All projects developed by the respective departments are subject to evaluation using the national Commercial Development Process.

In sum, rigorous budgeting and cost control processes support management's objectives to control costs. In addition, these process elements are being regularly executed throughout the business. The budgeting process provides adequate opportunities for an operating company to influence the extent to which costs are incurred on its behalf, demonstrating that it is not a "price taker" as AWWSC services and costs are established. Finally, an ongoing cost control process is in place that allows for monitoring throughout the year to ensure that expenditures are consistent with the budget and variances are discussed and challenged as appropriate. For these reasons, the budget and control processes

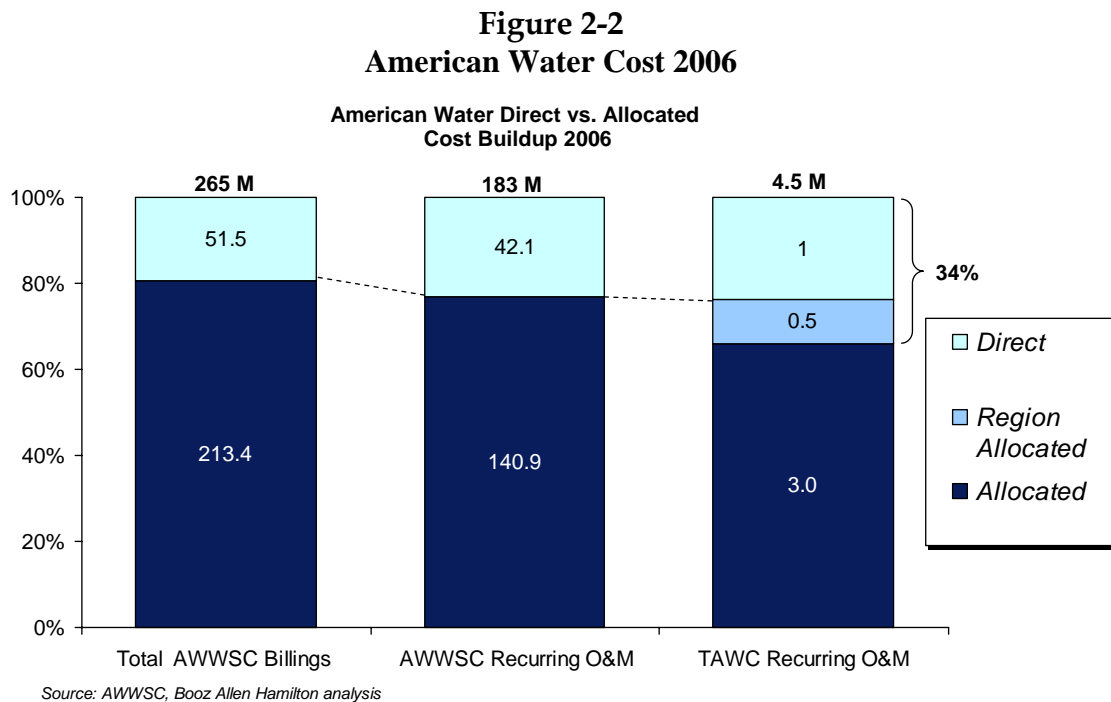
are effective in ensuring that AWWSC charges are appropriately and efficiently incurred.

Cost Trends: Section 8

To understand TAWC costs and their relationship with AWWSC, we performed analyses to determine the business drivers that impacted AWWSC as a whole, between 2005 and 2006, with respect to the nature of costs that were incurred, and consequently, how costs were charged.

In 2006, AWWSC incurred \$265 million in total charges for services provided. Of this amount, \$183 million was accounted for as AWWSC recurring O&M. The remaining \$82 million incurred by AWWSC was for one time extraordinary items, non-operating and maintenance costs, as well as amounts that have been capitalized on the balance sheet. TAWC incurred \$4.5 million in charges from AWWSC.

Figure 2-2 depicts 2006 total AWWSC costs incurred for the American Water enterprise as a whole, total recurring O&M costs billed to operating companies, and AWWSC costs billed to TAWC accounts, broken down by direct and allocated charges.

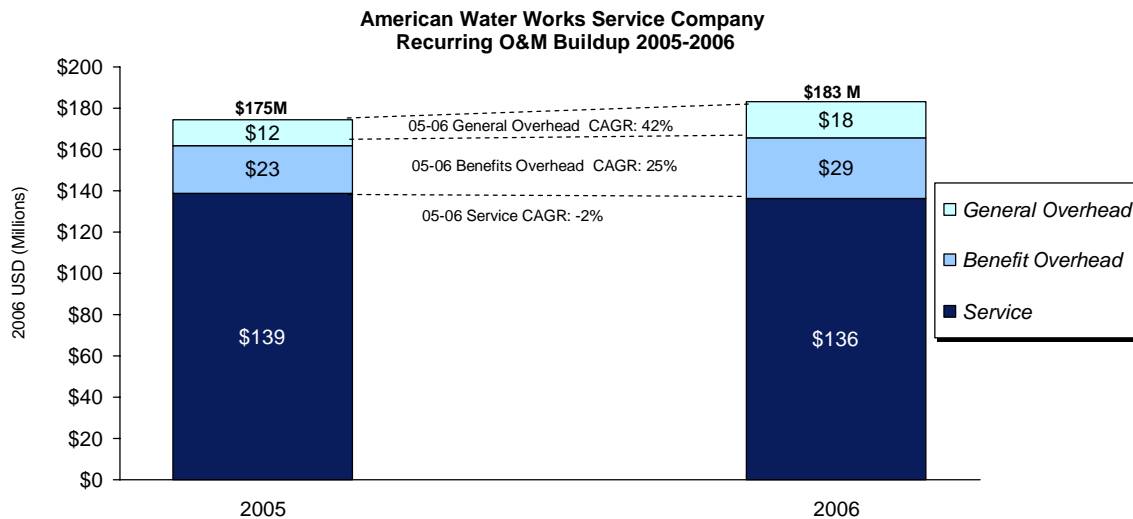


In 2005, AWWSC incurred \$240 million (\$2006), compared to \$265 million in 2006. Services provided are categorized into 14 functions, that will be discussed in Section 3 of this report. The growth in 2006 AWWSC total billings from 2005 represent a real increase of \$25 million in 2006 dollars (\$2006), i.e., inflation adjusted growth of 10% .

AWWSC incurred approximately \$183 million in recurring O&M in 2006 and \$175 million (\$2006) in 2005. Recurring O&M provides a perspective on the actual cost required to perform services. As a result of the business structure defined by management, recurring O&M provides insight into the ongoing cost to do business.

Moreover, as **Figure 2-3** demonstrates, the difference between 2005 and 2006 AWWSC recurring O&M represents a real increase of \$8.4 million, i.e., inflation adjusted growth of 4.8% over 2005. Recurring O&M service charges decreased by \$2.5 million, a 2% decline in 2006. Recurring O&M Benefit overhead increased by \$5.7 million, a 25% increase, to \$29 million in 2006. Recurring O&M General overhead increased by \$5.2 million, a 42% increase to \$18 million in 2006.

Figure 2-3
Recurring O&M Difference 2005 - 2006



Source: AWWSC, Booz Allen Hamilton analysis

The real 4.8% increase in AWWSC cost from 2005 to 2006 suggests that cost control mechanisms in place at AWWSC have been instituted to control spending as business operations have grown. Although total AWWSC costs increased, those increases were driven by normal business changes such as call center expansions resulting in service and overhead increases, as more fully explained in Section 8 of this document.

Relative Cost Performance: Section 9

A benchmarking analysis was conducted to compare AWWSC cost levels to those of a number of a selected peer group. We compared AWWSC's costs on various per unit bases with those of a peer group consisting of twenty holding company systems with more than 10 service offerings.

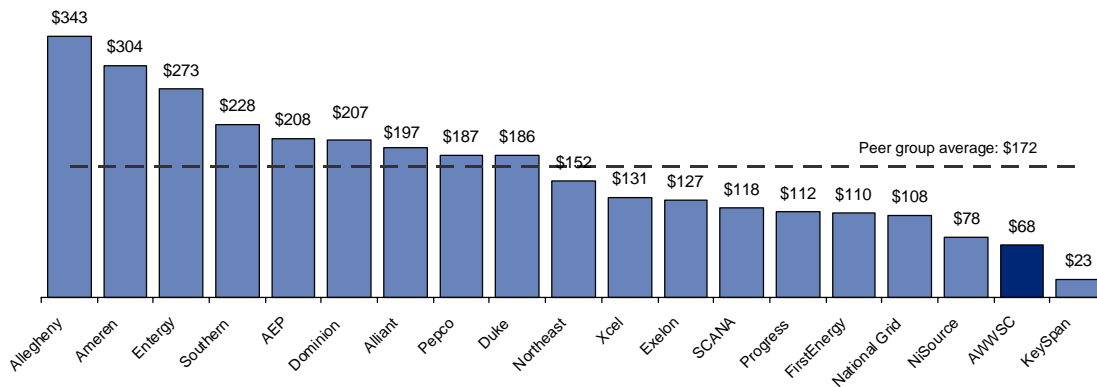
The results of these analyses show that AWWSC compares favorably to the peer utility service companies. Performance is generally average or below average (*i.e.*, lower cost). The results of the AWWSC comparison are set forth in **Figure 2-4**. This figure shows that AWWSC performed at or better than average with respect to six of the seven metrics measured.

Figure 2-4
Summary of Benchmarking Results using 2006 FERC Form 60 Data

Benchmark	AWWSC Performance vs. Average
Service Co O&M as percentage of total assets	Below average cost
Service Co O&M as percentage of total company O&M	Below average cost
Service Co O&M as percentage of revenue	Average cost
Service Co O&M per customer	Below average cost
Service Co O&M per total company FTE	Below average cost
Service Co O&M per Service Co FTE	Below average cost
Service Co O&M Expense 2005 to 2006 Change	Above average cost change

As an example of the FERC Form 60 benchmarking analysis, we compared AWWSC O&M expense per customer to the peer group. Service company O&M includes such costs as salaries and wages, outside services, overhead costs, and rents. **Figure 9-3** shows that AWWSC's benchmark of \$68 per customer compares favorably to the peer group average of \$172.

Figure 2-5
2006 Service Company O&M Expense per Customer



Source: Energy Velocity data, 2006 FERC Form 60 filings, Booz Allen Hamilton analysis.
 Note: Statistical Outliers removed using the Inner Quartile Range Method

CONCLUSION

Overall, our assessment is that AWWSC provides necessary services to TAWC, and that they are provided in a manner that results from prudent management decisions on the part of TAWC's parent. Further, we believe that the methodology used to allocate costs to TAWC is reasonable.

Based on our analysis, we determined that each of the activities performed by AWWSC on behalf of TAWC was necessary and provided specific benefits. Additionally, we noted that, while some activities performed by AWWSC and TAWC may appear similar, the scope and responsibilities of such activities were distinct, leading us to conclude that there was no duplication of efforts that would result in excess cost. We also found that whenever possible, AWWSC charges TAWC directly for services and used a reasonable allocation method when necessary. Our review of the budgeting and cost control processes revealed a thorough system that effectively plans for and controls spending at AWWSC. Analysis of the cost trends at AWWSC between 2005 and 2006 further indicated that costs were managed appropriately. Finally, our benchmarking analysis revealed that AWWSC costs were generally at or better than average.

As a result of our comprehensive assessment, we concluded that TAWC receives necessary services that were provided in an effective, cost controlled manner by AWWSC. Further, we found that the method used to allocate costs from AWWSC to TAWC was reasonable.

3. ORGANIZATION OVERVIEW

American Water Works Company, Inc. (“American Water”) is a water utility holding company whose principal operating subsidiaries operate 22 water companies in four regions (northeast, southeast, central and west) that all provide water services, which are all regulated by the local Public Utility Commissions (PUC) in each state. American Water also has several non-regulated entities including its Contract Operations Group, its Applied Water Management Group, and its Homeowner Services Group.

TAWC is a wholly-owned subsidiary of American Water and is engaged in providing water services to customers.

To facilitate the procurement, delivery, and management of support services that its operating subsidiaries commonly require, American Water formed a collection of entities that together act as the American Water Works Service Company (AWWSC). Those entities included Corporate Services, Shared Services Center, and four Regional Service Companies (Central, Northeast, Southeast, and Western). The Corporate Services and Shared Services Center provide services to all regulated and non-regulated entities, while the Regional Service Companies provide services only to regulated entities within their respective region. TAWC is a part of the Southeast Region. In many instances, Corporate Services provides strategic direction, policies, and governance which the Regional Service Companies and the operating companies themselves implement, manage, and operate throughout their regions. The function of AWWSC is to provide necessary support services to American Water’s operating subsidiaries, including TAWC, on a common and consistent basis. Several benefits flow to TAWC from the consolidation of support services into AWWSC, including the realization of substantial cost efficiencies. Additionally, with AWWSC primarily responsible for the coordination, delivery, and administration of support services, operating management, including that of TAWC, is allowed an increased opportunity to focus on operational, high-value, essential, and crucial activities, including focusing upon providing water service in a reliable manner.

Currently, AWWSC bills for services utilizing 14 primary functions and is structured into two cost centers as described in **Figure 3-1**:

**Figure 3-1
 American Water Works Service Company Overview**

American Water Works Service Company (AWWSC)			
Functions			Overhead Cost Centers
Accounting	Engineering	Rates and Revenue	General
Administration	Finance	Risk Management	Benefit
Audit	Human Resources	Water Quality	
Communications	Information Systems	Customer Service	
Legal	Operations		

While the activities of most of the functions can be understood from their title alone, a full description of the functions is contained in the activity summary in **Exhibit 3-1**. The Overhead Cost Centers are explained below:

- **General:** office expenses that include office rent, equipment leases, telephone, power, office supplies, property taxes, and office maintenance.
- **Benefits:** labor related expenses that include employee benefit costs (payroll taxes, medical coverage, pensions, disability insurance) and other general expenses.

AWWSC represents a service company model that is commonly used in the utility industry, and AWWSC performs functions that are similar to those currently performed by service companies of other comparable utilities in the power industry, as depicted in Figure 3-2:

Figure 3-2
Service Company Comparison

Services*	Allegheny	Alliant	Ameren	AEP	Black Hills	Dominion	Duke	Energy East	E.ON	Energy	Exelon	First Energy	Great Plains	KeySpan	National Grid	NISource	Northeast	Pepero	PNM	Progress	SCANA	Southern	Unitil	Xcel	AWWSC
Accounting	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Audit	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Business & Administrative Services	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Commercial Operations	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Customer Operations/Service	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Distribution	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Engineering & Environmental Operations	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Executive / Overhead	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Finance	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Facilities	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Fuel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Generation Operations	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
HR	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Investor Relations	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
IT	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Legal	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Logistics and supply chain	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Marketing/sales	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Planning/Budgeting	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Communications	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Regulatory Relations	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Risk Management	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Strategy-Corporate	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Security	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Shared or General Services	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Transmission	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Transmission Ops/Planning (reported jointly)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Treasury	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Utility Operations	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Utility Operations Planning	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
External Affairs	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Other	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Number of Services Provided	21	19	19	24	17	17	20	9	25	11	13	23	6	20	18	19	14	17	5	12	15	13	9	22	23

Source: 2006 FERC Form 60, Booz Allen Hamilton analysis. Note: "Other" refers to "Investment Management" for First Energy, "Right of Way" for Duke/Cinergy and "Competitive Group" for NE Utilities

AWWSC delivers its services to TAWC, and to the other American Water subsidiaries, through an Agreement dated January 1, 1989. The Agreement outlines all services that are to be provided to TAWC from AWWSC if TAWC elects to use AWWSC. The method for determining the charges to TAWC for those services and how those charges were billed are also described in detail. The agreement also provides that TAWC is not bound to use the Service Company for those services and is free to use its own personnel or engage another company to perform the services.

4. NECESSITY AND BENEFITS ANALYSIS

Our evaluation of AWWSC's activities focused on the necessity of the activity performance, as well as the benefits that flowed from such performance. In conducting this assessment, we evaluated whether the activities that gave rise to AWWSC charges serve a necessary, useful, and legitimate business purpose; were discretionary and could be avoided by management; were consistent with activities performed by other utilities; and provided benefits to TAWC.

In conducting this qualitative analysis, we undertook a broad array of activities, including the following:

- Reviewed AWWSC activities which gave rise to costs incurred at the service company level and were subsequently passed onto TAWC;
- Reviewed prior PUC filings with various states to gain an understanding of the different activities that AWWSC performed for each of its regulated entities, including TAWC;
- Evaluated the AWWSC and TAWC organizational structure and alignment by conducting interviews of AWWSC and TAWC personnel and analyzing their respective organization charts;
- Interviewed department leaders to validate assumptions and findings;
- Leveraged Booz Allen experience in defining the activities of service companies, such as AWWSC, at other utilities.

Based upon our analysis, we concluded that the AWWSC activities, including those giving rise to costs attributed to TAWC as a result of those activities, were necessary to the operation, management, and conduct of TAWC's business. The majority of these expenses arise out of activities required to satisfy responsibilities to governmental entities and customers (*e.g.*, customer services, operations, corporate governance, legal compliance, and regulatory mandates) and, as such, AWWSC costs incurred in connection with these activities were non-discretionary and unavoidable. In fact, the services provided by AWWSC were services that TAWC would have to conduct on its own if it were not a part of American Water and are services that are comparable to those performed by other similar companies.

Exhibit 4-1 sets forth our detailed analysis of the 75 distinct activities giving rise to recurring O&M expenses incurred by TAWC. It describes the nature of the particular activity and identifies the necessity for such expenditure according to six separate attributes: corporate governance, regulatory mandate, legal compliance, management control, operational execution, and strategic planning.

Figure 4-1 sets forth the definitions for each of these necessity attributes:

Figure 4-1
Necessity Attributes Description

Necessity Attributes	Definitions
Corporate Governance	Activities that are necessary to ensure that corporate and portfolio fiduciary responsibilities and enterprise-wide management and operation is effectively executed. Examples include performing shareholder activities, managing cross-business issues, performing risk management activities and evaluating internal controls
Regulatory Mandate	Activities that are required to fulfill statutory, regulatory and other commitments or mandates. Examples include submitting SEC filings, filing IRS documents and complying with other regulatory requirements
Legal Compliance	Costs incurred and activities performed as a direct result of legal proceedings, avoidance of legal proceedings, or compliance with legal requirements. Examples include performing litigation activities and responding to discovery requests
Management Control	Activities performed specifically to provide analysis, decision support data and results to management personnel. Examples include managing projects and reporting results and developing management reports
Operational Execution	Includes fundamental functions performed on a daily basis. Examples include performing maintenance activities, performing general accounting, and tracking employee information.
Strategic Planning	Activities that encompass business unit planning and activities directed at providing enterprise-wide direction. Examples include monitoring marketplace activities, performing strategic planning, and providing business planning assistance

These attributes encompass established and accepted views of why these types of centralized activities are undertaken and are necessary to the proper functioning of a business enterprise. They have been established through similar assessments that Booz Allen has conducted in the utility sector in other jurisdictions. We tested these attributes against the more than 75 discrete activities performed on behalf of TAWC, summarized in **Exhibit 3-1** and discussed further in **Exhibit 4-1**. Based on our analysis, we concluded that each of the 75 identified activities is necessary.

Examples of how we applied this methodology for each attribute are set forth below:

Corporate Governance: The Finance function formulates the SOX controls to ensure that American Water meets its corporate responsibilities of complying with Sarbanes-Oxley. By ensuring that American Water meets its corporate responsibilities, the Finance function provides Corporate Governance. As part of providing enterprise wide management and ensuring operation is effectively executed, the Communications' function also fulfills Corporate Governance by providing internal communications to ensure that all American Water employees are current on company policies, issues, and practices. The Engineering function provides governance and implements

standard best operating practices for all of its projects ensuring enterprise wide operation is effectively executed as part of Corporate Governance.

Regulatory Mandate: The Accounting function ensures that Property, Plant, and Equipment are properly accounted for in its Fixed Asset / Job Costing activity, which provides regulators with an accurate calculation of the rate base, which is required for regulatory filings. Regulatory mandates require accurate accounting for Property, Plant, and Equipment. Similarly, the Rates and Revenue function provides rate case support in which they gather all necessary data for filing rate cases, preparing testimony, putting together work papers, and performing analysis as part of rate case requirements. Rate case requirements are a regulatory mandate.

Legal Compliance: The Legal function performs, manages, or supervises the majority of all legal work done for the operating companies, including handling lawsuits, reviewing contracts, and handling the legal aspects of rate cases, which are all aspects of Legal Compliance. Similarly, the Risk Management function develops and implements policies that are designed to ensure health and safety in the work place, which is a requirement of labor laws and thus meeting Legal Compliance. The Water Quality function tests and treats water to ensure that it meets all governmental water quality standards; many substances must be tested for by law, thus also meeting Legal Compliance.

Management Control: The Administration function performs regional business administration, in which it consolidates all of the operating companies' operational information and data to provide oversight to the operating companies and to provide management reports to Corporate; this includes benchmarking data, Key Performance Indicator (KPI) data, etc. providing management with important decision support data as part of Management Control. In addition, the Audit function performs operational audits in which it tests the functionality of the entire business to ensure it is performing optimally and as designed. After the audit is finished, it provides key decision support data to management that management uses to make improvements as part of Management Control.

Operational Execution: The Information Systems function designs, installs, and handles all information technology work, such as ensuring users have the necessary computer hardware to perform their jobs. Servicing the information technology of American Water is a fundamental function performed on a daily basis as part of Operational Execution. The Customer Service function actively works to manage accounts receivable by working to collect all money that American Water is owed, which is a fundamental function of American Water.

Strategic Planning: The Human Resources function continually plans its human resources strategy to ensure that the appropriate number of human resources is available to handle all of the activities that American Water must perform. Part of that planning includes monitoring and strategically handling turnover, which is particularly important in today’s high turnover, aging workforce environments. As part of its work, the Operations function seeks regulated acquisition and other related growth opportunities providing enterprise wide direction as part of Strategic Planning.

In addition to being necessary, we concluded that AWWSC activities provide benefits to the organization. For purposes of this assessment, Booz Allen identified six separate potential benefits that may arise from the activities we examined, which are described in **Figure 4-2**.

**Figure 4-2
Benefits Attributes Description**

Benefits Attributes	Definitions
Reduce Risk	Actions designed to reduce liability and mitigate exposure to financial, operational, fiduciary and other types of risk through activities such as implementing safety programs, performing internal audit, and developing policies, procedures and manuals
Increase Employee Productivity	Programs that enhance employees' abilities to perform their jobs more productively. Examples include implementing certain automated systems, providing certain types of training, implementing and administering employee health awareness programs, developing procedures, policies and practice manuals, developing employee communications and implementing and administering quality programs
Provide Management Information	Activities conducted primarily to provide decision support data and analysis to management personnel. Examples include developing budgets, monitoring operational and financial performance, performing corporate development, conducting strategic assessments and developing integrated information systems
Enhance Corporate Performance	Activities performed to enhance the abilities and effectiveness of management with respect to the business, including developing strategic plans, managing the performance review process, maintaining the inter / intranet and conducting benchmarking studies
Reduce or Avoid Costs	Activities performed to improve the cost effectiveness of operations. Activities include implementing certain automated systems, negotiating discounts with outside vendors and performing certain credit and collections activities
Increase Reliability	Activities performed to increase the reliability of water distribution / production and to minimize the impact of disruptions

We tested these attributes against the 75 discrete activities identified as being performed on behalf of TAWC, summarized in **Exhibit 3-1** and discussed further in **Exhibit 4-1**. As **Exhibit 4-1** shows, we concluded that each of the activities provides direct and indirect benefits to TAWC.

An example of how we applied this methodology for each attribute is set forth below:

Reduce Risk: The Audit function performs financial audits to ensure that financial reporting controls required by Sarbanes-Oxley laws are functioning correctly, reducing financial risk. The Water Quality function reduces the operational risk of harmful chemicals infiltrating the waters delivered to customers by American Water operating companies.

Increase Employee Productivity: The Human Resources function works with the Information Services function to develop automated human resource systems that allow employees to spend less time on administrative HR related issues, which allows them to concentrate on their jobs. The Information Systems function puts together, obtains, manages, and designs technology systems including technical and functional applications, telecommunications, automated systems, computers, and much more, which are all designed to enhance the employees' abilities to perform their jobs more productively. The Customer Service function manages automated billing systems that allow employees to concentrate on billing issues, such as billing exceptions or corrections, instead of having to perform continually repeated processes.

Provide Management Information: The Finance group provides management with budgets and forecasts which are necessary decision support information. The Rates and Revenue function gathers data and performs analysis to provide management information used to construct rate case documentation and support.

Enhance Corporate Performance: The Operations function develops best operating practices providing management with the best tools and processes by which to run their respective groups thus enhancing corporate performance. The Administration function conducts performance reporting on the Shared Services Center. Obtaining a clear picture of performance increases management's effectiveness by allowing them to understand where improvement is necessary. The Communications function is responsible for building and marketing the American Water brand, providing a better connection between the company and its customers, which enhances overall corporate performance.

Reduce or Avoid Costs: Strategic sourcing is undertaken as a part of supply chain operations; by procuring resources as an entire company as opposed to just TAWC doing it alone, American Water can achieve large economies of scale savings, which it then passes on to its operating companies, such as TAWC. The Legal function actively works to protect the company against lawsuits or to work out favorable results, therefore reducing costs.

Increase Reliability: The Engineering function uses the best operating practices developed by the Operations function to deliver various projects. By using best operating practices, the reliability of the system is greatly increased. The Risk Management function performs an activity called Business Continuity in which the sole purpose is to provide emergency and contingency planning to ensure 24 hours a day, 7 day a week reliability.

To further validate our conclusions and provide an additional frame of reference, we reviewed each activity performed by AWWSC to determine its appropriateness for performance within a service company (or similar organization) rather than performance within an individual operating company. To do this, we reviewed FERC Form 60s² for several peer utility companies which capture the activities of such service companies in the utility industry. Based on our review, we determined that services provided by AWWSC on behalf of TAWC are typical of services provided by utility service companies as previously reflected in **Figure 3-2**. This is important to recognize, as it indicates that the centralization of such functions within such service companies is generally accepted as being necessary and as providing benefits to the enterprise (*e.g.*, economies of scale and procurement efficiencies).

CONCLUSIONS

Activities undertaken by AWWSC satisfy several operational, legal, and regulatory needs for a water utility. All functions were required either to satisfy responsibilities to customers and governmental entities or support the operations of the enterprise and were not avoidable. When compared against the specific attributes used to establish necessity of performance, at least one of these attributes applied to each of the 75 activities reviewed.

These functions also provided direct and indirect benefits, such as standardization to improve productivity or provision of technical support to improve decision-making, that enhanced the effective management and efficiency of TAWC as again demonstrated by the applicability of the attributes used to evaluate whether benefits were derived. Most specifically, centralized performance of these functions created economic benefits which were realized by TAWC and the other operating companies. These functions were also consistent with, and similar to, functions provided by other utility service companies and other businesses outside of the industry.

² The FERC Form 60 is a form that is required under the Public Utility Holding Company Act of 2005 and that contains detailed service company functional data, including descriptions of cost allocation approaches.

5. OVERLAP AND DUPLICATION ANALYSIS

Performance of certain common operational, managerial, and back-office activities in a centralized manner using a single business services entity is generally considered an effective and cost efficient method of providing services. This type of structure, by its nature, limits the amount of duplication of activities across an organization even where similar types of activities may be performed. In performing our analysis of any potential duplication among AWWSC and TAWC, we evaluated whether the activity was being performed in a centralized or decentralized manner and whether, if the potential for overlap did exist, there was adequate differentiation in scope among these entities.

Our investigation into any possible duplication of effort consisted of the following steps:

- Reviewed organizational charts for TAWC and AWWSC to provide an initial baseline for understanding the responsibility and focus of the activities performed within each entity.
- Defined the role that each functional area performs and assessed whether, based on such descriptions, the potential for activity overlap existed.
- Conducted individual interviews with management representatives within the TAWC and AWWSC functions to fully understand the activities that each area performs and assess whether differences in purpose, focus, or content of the activities in question existed.

We reviewed each of the activities of AWWSC previously described in detail in the activity summary in **Exhibit 3-1**, as well as functional activities of TAWC. Our detailed review of the activities of TAWC and AWWSC confirmed that the activities of each entity were not duplicative. While some activities require the participation of multiple levels of the organization, such as the preparation of budgets, this does not constitute duplication.

Figure 5-1 summarizes the results of our assessment and provides the delineation between the types of activities being performed at each “level.” There are three different organizational “levels” discussed in this section and four different activity “delineations”:

Three different organizational levels:

- **Corporate:** This level includes the Shared Services Center (SSC) and is a part of the AWWSC along with all of the Regional levels (explained below). It is the part of the AWWSC that is not assigned to a specific region, but works across regions.

- **Southeast Region:** This organization within AWWSC performs services only on behalf of entities in the Southeast Region, which includes operations in Kentucky, Pennsylvania, Tennessee, Virginia, Maryland, and West Virginia.
- **TAWC:** This level is the actual Tennessee American Water Company. It is the local Tennessee operating company for which this report is being written.

Four different activity delineations:

- **SPG:** Strategy, Policy, Governance; Activities that were considered to be SPG, provide strategy and direction for the given function, set policies and goals for the function, or provide governance for the overall function. SPG activities also include national level and enterprise-wide issues and initiatives, as well as providing expertise and developing standard practices and processes to be implemented throughout all of American Water.
- **Mgmt:** Management; Activities that were considered to be Mgmt are activities that provide oversight, guidance, review and disseminate policies and standardized processes that were developed by SPG activities. These activities are also designed to provide support and coordination for the day to day operations of the actual function.
- **Ops:** Operations; Activities in which the actual day to day operations of the function are performed. This is where the actual job of the function is performed.
- **T:** Touch Point; Activities in which employees act as “Touch Points” or points of contact if there are questions, issues, or needs, such as data gathering for that function or to perform a minor role at a more localized level.

As **Figure 5-1** demonstrates, our thorough review revealed that while, in some cases, similar broad functional descriptions exist across two or more entities, the actual activities performed by each entity were different in scope and were not duplicative. In some cases, Ops occur at multiple organizational levels such as appearing in both Corporate and Regional. There were two reasons this occurred. The first reason was that the Ops’ activities being performed at one level were completely different activities within the same function as those being performed at the other level. The other reason was that some specialist employees, such as in the case of employees working on Non-Revenue water, which is a part of the work done for the Network, perform their Ops’ activity at two or more operating companies so they actually reside within the Southeast Regional level. Many of the employees that perform the Ops’ related activities within Network, however, were held at TAWC because they only perform work

for that level causing Ops' activities to show up at the Southeast Regional level and at the TAWC level. In short, the nature of activities performed within Corporate, Southeast Region, and TAWC was sufficiently delineated, distinct and focused on the requirements of the individual business.

**Figure 5-1
 Delineation of Roles and Responsibilities**

Function	Corporate	Southeast Region	TAWC
Accounting	SPG, Mgmt, Ops	T	T
Administration	SPG, Mgmt	Ops	T
Audit	SPG, Mgmt, Ops	T	T
Communications	SPG	Mgmt	Ops
Legal	SPG	Mgmt, Ops	
Engineering		SPG, Mgmt, Ops	T
Finance			
All Finance Activities except for Rates and Regulations	SPG	Mgmt, Ops	Ops, T
Rates and Regulations	T	SPG, Mgmt, Ops	Ops, T
Human Resources	SPG	Mgmt	Ops
Information Systems	SPG, Mgmt, Ops	Ops	
Operations			
Production, Network, Maintenance	SPG	Mgmt, Ops	Ops
Business Development	SPG, Mgmt	Ops	T
Rates & Revenues	SPG, Mgmt, Ops		
Risk Management	SPG	Mgmt, Ops	Ops
Water Quality	SPG	Mgmt, Ops	Ops
Customer Service			
All Customer Service activities except AR	SPG, Ops	Mgmt	T
Accounts Receivable	SPG, Mgmt, Ops		T

SPG = Strategy, Policy, Governance **Mgmt** = Management **Ops** = Operations **T** = Touch Point

Note: Please see section on cross functional duplication regarding Rates and Regulations as a part of Finance vs. the Rates and Revenues Function as these functions are complementary rather than duplicative

Each of these areas is discussed separately and in more detail below.

Accounting:

All activities that were billed through the Accounting function were performed at the Corporate level. The main interaction that the Accounting function had with the Southeast Regional level was to provide the reports to the Regional Finance Director for review; however, those activities performed at the Southeast Regional Level were billed through the Finance function and were, therefore, included as part of the Finance function for the purposes of this report. Otherwise, TAWC had one individual responsible for acting as a Touch Point for the Corporate level. That individual was responsible for answering any questions the Accounting function had in regards to TAWC, and that individual provided the necessary data that the Accounting function required from TAWC. There is further review of potential cross functional duplication between Accounting and Finance later on in this section under "Cross Functional Duplication."

Administration:

Administration at the Corporate level consisted of three major activities, which are Executive Oversight, Business Liaisons, and Project Management (see **Exhibit 3-1**). Executive Oversight was responsible for providing overall executive oversight and strategic direction to American Water, making this a SPG activity. Business Liaison was a Corporate level activity that supported the Shared Services Center (SSC) through customer monitoring and performance analysis, which is a Mgmt activity because it provides review of business performance. Project Management was another Corporate level activity that managed continuous improvement project initiatives and other projects for the SSC making it another Mgmt activity.

Southeast Regional Administration was responsible for putting together reports for its operating companies on such things as Key Performance Indicators (KPIs) and compiling benchmarking data to provide benchmarks to Corporate. The day to day operations of Administration were therefore performed at the regional level, meaning that the Southeast Regional level performed the Ops' activities.

Audit:

All Audit activities were performed at the Corporate level. Audit had interaction with the Southeast Regional level and with TAWC while audits were being performed, requiring people from the Southeast Regional level and from TAWC to act as Touch Points to answer questions or gather necessary data for the audit to be performed.

Communications:

Communications at the Corporate level was responsible for handling all national level communications' activities. The Corporate level was also responsible for setting policy and providing governance for local government affairs. The Corporate level was in charge of marketing the American Water brand at a national level. Policy, strategy, and guidance for media relations and customer communications were provided at the Corporate level. The Corporate level was also responsible for providing internal communications such as company wide emails or newsletters that provide the company with enterprise wide communications. These were all SPG activities.

Communications at the Southeast Regional level was in charge of working closely with and managing local operating company Communications' Specialists. The Southeast Regional level disseminated Corporate policies to the operating companies and ensured their enforcement. It provided support, coordination, and expertise for the operating company Communications' groups and reviewed different communications' documents created by the operating companies. These were all Mgmt activities.

TAWC's Communications' group consisted of one person who created all local media relations documents, built relationships with local government officials, and made public appearances. TAWC Communications was responsible for the day to day activities of the Communications' functions making these all Ops' activities.

Legal:

Legal at the Corporate level provided legal support to all of American Water, while also setting ethics and compliance policies. It set overall legal policy and developed standardized contracts. It also handled all national level legal matters. Therefore, all activities within the Legal function at the Corporate level were SPG activities.

Legal at the Southeast Regional level was responsible for handling and coordinating all legal work at each operating company within the Southeast Region. It either performed or managed all legal work for TAWC and the rest of the operating companies within the Southeast Regional level, therefore handling all Mgmt and Ops' related Legal activities.

Engineering:

In rare circumstances, such as building very large projects that were outside the expertise of both TAWC and the Southeast Regional level or helping to standardize certain company reoccurring projects and best operating practices, did the Corporate level get involved in Engineering. The majority of

Engineering work was performed at the Southeast Regional level due to the uniqueness of each system, geography, and needs. The Southeast Regional level therefore provided all levels of work for the Engineering function, including SPG, Mgmt, and Ops' activities.

Finance:

Finance is one of the more complicated functions within American Water and required further division than just examining it at the Functional level to examine potential duplication. To better explain potential duplication in Finance, the function was split into two primary sub-functions: "All Finance Activities except for Rates and Regulations" and "Rates and Regulations."

All Finance Activities except for Rates and Regulations:

Corporate level Finance was responsible largely for setting policy and providing governance on items such as accounting, planning, budgeting, and forecasting. It also handled national level investor relations in preparation for the initial public offering (IPO) of its common equity. It also set the strategy for and the actual financing of all work done at American Water. These were all SPG activities because they provide governance, strategy, and policies and perform enterprise wide activities.

Southeast Regional Finance was largely in charge of ensuring these efforts were implemented throughout all operating companies in the region. The Southeast Region put consolidated regional budgets together after using TAWC as a Touch Point to gather all of the necessary data. The Southeast Region also performed regional planning and forecasting. It ensured that SOX controls designed by the Corporate level were implemented throughout the region. It was in charge of coordinating and performing all day to day functions of the Finance function for TAWC. Therefore, most Southeast Regional Finance activities were Mgmt and Ops related.

For the Finance function, TAWC was a Touch Point for all activities with one exception. It gathered and provided the necessary data for items such as budgeting and forecasting. The one exception is CSR, where TAWC actually performed the day to day operations of community relations and service work thus performing the Ops' activities of CSR.

Rates and Regulations:

The only exception to the delineations within all of the rest of Finance is the Rates and Regulations activity. For this activity, the Corporate Rates and Regulations group, within the Shared Services Center, provided historical information from the records to the Regional Rates group. This group also

provided assistance and analysis regarding SSC and Corporate level expenses during the rate case and supplied other necessary data which is based on the financial and accounting records maintained at the SSC. By providing data, the Corporate Rates and Regulations Group performed Touch Point activities, and by performing analysis, which was limited to Corporate level expenses, they also performed Ops' activities.

The Southeast Regional level of Rates and Regulations' activity was responsible for all aspects of rate case filings from gathering local operating data, to managing the strategy for filing rate cases, to hiring and managing outside consultants. Therefore, the SPG, Mgmt, and Ops' work were mostly done at the Regional level for Rates and Regulations with Corporate and TAWC serving as Touch Points.

Once again, TAWC acted as a Touch Point for Rates and Regulations by helping to gather data, answer questions, and offer information to the Rates and Regulations group to build the rate cases.

Human Resources:

Corporate Human Resources provided enterprise wide activities such as formulating job descriptions and designing performance appraisals. It provided strategy for union negotiations for all local operating companies and for workforce replenishment strategy. It provided governance through standardizing processes for treating employees and setting leave program policies and diversity initiatives. It did national level work by negotiating with national unions. These were all SPG activities.

Southeast Regional Human Resources maintained the applicant tracking system for the Southeast Regional level. It also helped to manage, direct, and provide support for Human Resources employees at the operating companies. Therefore it provided the Mgmt Activities to TAWC for the Human Resources function.

TAWC Human Resources was responsible for actually recruiting, hiring, and dealing with actual TAWC employee issues. These encompassed the actual day to day operations of the function. TAWC Human Resources reported to the Southeast Regional Human Resources function.

Information Systems:

Almost all Information Systems work was performed at the Corporate level. At the Corporate level, standard practices and definitions were created, policies were set, and the overall Information Technology (IT) infrastructure and IT solutions were developed to meet business requirements, which were all SPG activities. IT Project Management and managing day to day IT operations, such

as the service desk and information systems installation, were also both performed at the Corporate level and were both Mgmt activities. Installing the actual hardware and software and even providing the help desk for phone support on IT related issues were also performed at the Corporate level, which are both Ops' related activities. Therefore, the Corporate level performs SPG, Mgmt, and Ops' activities.

There was a small amount of Information Systems work performed at the Southeast Regional level. This consisted only of face to face PC support, providing assistance with programming for local operating company information systems, and help in writing queries for different computer programs at the local operating companies. The Southeast Regional level provided face to face support for the Regional operating companies, supporting day to day operations of the Information Systems function making the activities Ops related.

Operations:

Operations is one of the largest functions within American Water and required the most understanding. To better explain potential duplication in Operations, the function was split into two primary sub-functions: "Production, Network, and Maintenance" and "Business Development", which is billed under Operations on the service company bill, but is separately managed.

Production, Network, and Maintenance:

This activity was where the actual business of water delivery was performed. At the Corporate level there was one group in charge of working across all operating companies to develop best operating practices ("BOP") and standardizing them across the company. The Corporate level also provided expertise and assistance in large construction and technical projects. This level also set up policies and procedures for the capital project approval process and provided strategic handling of assets and capital. These were all projects of an SPG nature.

The Southeast Regional level implemented and standardized many of the BOP's developed at the Corporate level across the operating companies. This level also monitored performance and consolidated reports from each operating company, including TAWC, which were all Mgmt activities.

TAWC was responsible for actually doing the "on the ground" work of maintaining the network, the production, and keeping the entire water system working and functioning, which were all Ops' activities.

Business Development:

Many activities at the Corporate level for Business Development were of a SPG nature. It included developing overall strategy for growth by analyzing potential regulated acquisition targets developed by the Southeast Regional level, developing an overall strategy to understand the types of regulated acquisition targets it should be pursuing, and performing enterprise wide acquisition integration. The Corporate level also performed the Mgmt activities of business development by coordinating efforts across regions and supporting each region in its research.

The Southeast Regional level was in charge of performing the due diligence on an identified acquisition target or other business development opportunities. This level was also in charge of developing the opportunities all the way to the stage of making a formal proposal for approved acquisition targets and helping to perform the "on the ground" integration work, which were all Ops' activities of the Business Development activity.

Rates and Revenues:

All Rates and Revenues activities were performed at the Corporate level. This function was reviewed for the potential of "cross functional duplication," which is discussed later in this section.

Risk Management:

The Corporate level was responsible for health and safety strategy and planning on an enterprise wide basis; it set security policy and strategy such as where will security badges be required; it monitored IT firewalls on an enterprise wide basis; and, it developed contingency planning as well for all operating companies. All of these activities are SPG.

The Southeast Regional level ensured all of the Corporate initiatives that were developed were actually implemented at the operating companies through support and guidance, which were the Mgmt activities of this function. This level also performed facilities auditing, which is one of the Ops' activities of this function.

TAWC was responsible for actually performing the remaining Ops' activities of Risk Management, including handling claims such as Workman's compensation claims, ensuring OSHA compliance, and monitoring facilities for compliance, which were all Ops' activities.

Water Quality:

The Corporate level was in charge of setting the environmental initiatives for all of American Water and performed several enterprise wide activities, such as inorganic / organic compound testing performed at the Belleville Laboratories for water samples coming from all operating companies. The Corporate level also monitored all national regulations, as well as provided a unified voice for all operating companies to provide advocacy in national regulatory issues on environmental compliance. It also performed applied research looking at products and services that could benefit all operating companies. All of these activities were SPG activities.

The Southeast Regional level monitored local environmental regulations and issues, and implemented some standardization of processes and new beneficial products developed or discovered at the Corporate level. This level also implemented Environmental Management Plans (EMPs) across the region. All of those activities were Mgmt activities. This level also performed one Ops' related activity by performing environmental audits of the operating companies within its region.

TAWC ensured the quality of the water as it left the production plant by monitoring production efforts, analyzing chemical levels, and performing quality control. These were all Ops' activities.

Customer Service:

Customer Service is another complex function to explain as a whole. The Corporate level provided all SPG related activities for Customer Service, but when the Mgmt and Ops' related activities were examined, it is much easier to explain the potential for duplication within the function by breaking it into two sub-functions: "All Customer Service Activities except AR" and "Accounts Receivable."

All Customer Service Activities except AR:

Customer Service at the Corporate level for all activities except AR, performed the Ops' related activities of actually interacting with customers, creating the work orders, sending out bills after receiving the information from the Southeast Regional level, and managing credit and collections.

The Mgmt activities of Customer Service were performed at the Southeast Regional Level. The actual call center employees were managed at the Corporate level, however at the Southeast Regional level, they were responsible for receiving service orders from the Call Centers and then scheduling the actual service and closing the service order. The Southeast Regional level also scheduled meter reads and uploaded those reads so they could be passed onto to

the Corporate level to generate the bills. The Southeast Regional level also performed quality assurance to review new premises being created in the billing system to ensure proper functionality and SOX compliance. In short, they were in charge of coordinating, managing, and providing support and guidance for all customer service activities for TAWC except for emergency after-hours service.

TAWC employees acted as a Touch Point to help gather billing data and investigate meter read exceptions. TAWC employees within the Network, Maintenance, and Production groups (described in the Operations portion earlier in this section) actually performed the service, but since they were a part of Operations, they were not also considered a part of Customer Service for the purposes of this analysis and were therefore also qualified only as Touch Points.

Accounts Receivable:

All Accounts Receivables activities were performed at the Corporate level. Therefore, there was no potential for duplication.

Cross-Functional Duplication:

In some cases analysis was required to ensure activities were not being duplicated across functions. Some more obvious areas included comparing activities such as accounting performed in the Finance portion of the service company bill, to accounting billed in the Accounting portion. This was considered to have potential "Cross-Functional Duplication," and each area where this possibility existed is discussed below:

Accounting - Finance:

The SSC General Accounting activity performed certain aspects of tax, including gross Receipts Tax, Property Tax, Franchise Tax, and all tax activities with the exception of Corporate Income Tax and payroll related taxes, which were performed through Corporate Accounting, which is allocated and billed through the Finance function; so, therefore, there is no duplication of tax work. The SSC General Accounting activity performed as a part of the Accounting function is responsible for actually generating the operating company's financial statements and performed all accounting work for the actual operating companies. This is performed on behalf of and under the management of the Regional Finance Director. Corporate Accounting is responsible for accounting policies and governance for the operating companies, reviewing regulatory policies such as FASB, and creating accounting white papers. Also, Corporate Accounting, billed in the Finance function, was in charge of consolidating all of the operating companies' financials for consolidated reporting.

Finance – Rates & Revenues:

In the Finance function, there was an activity called Rates and Regulations in which almost all aspects of putting together a rate case for local operating companies were performed at the Southeast Regional Level. We reviewed the potential duplication of work done in this activity with activities performed in the Rates and Revenues function, which performed two major activities which were to handle broad, national issues and to look for means of recovering expenses. The Rates and Regulations activity within the Finance function also provided rate case support acting as a Touch Point for all Corporate level questions related to Corporate level expenses in a rate case. It should be noted that the Rates and Revenues function consisted of only four employees and was a relatively small function that primarily was concerned with broad national issues as opposed to local operating company issues, which were covered by Rates and Regulations allocated through the Finance function. Therefore, there was no cross functional duplication.

CONCLUSIONS

Based upon our investigation of substantive activities performed by Corporate, the Southeast Region and TAWC, we concluded that no duplication of effort existed among the business areas. Our initial review of the structure and organization of each entity identified several areas where potential overlap might exist, but our review of the particular activities satisfied us that each group had a defined scope of activities that was discrete and non-duplicative.

Moreover, the AWWSC organization model provides for effective centralization of resources without duplicating or overlapping activities performed within TAWC. By centralizing activities within AWWSC, we noted that the potential for duplication was actually reduced, providing greater evidence that costs were not replicated in multiple locations.

The analysis in this section should be viewed together with the Necessity and Benefits Analysis in Section 4. When taken together, these two analyses indicated that AWWSC and the operating companies were performing required activities in a reasonable manner and that their structure and execution minimized the costs of performance by avoiding duplication of efforts.

6. COST ALLOCATION

The allocation of costs from AWWSC to TAWC must be analyzed to determine that TAWC is charged only an appropriate share of AWWSC costs. In conducting this assessment, we evaluated whether the allocation methods were fully documented and consistently applied. This section discusses the process and methodology used to allocate AWWSC costs to American Water operating companies, including TAWC, and assesses whether that process and methodology were reasonable and appropriate.

Our evaluation of the cost allocation process involved multiple elements:

- Interviewed responsible AWWSC and TAWC management to understand the nature and application of the allocation methodology employed;
- Investigated the allocation processes to assess whether they were in alignment with the cost causative nature of the service provided (i.e., do the allocation methods used bear a reasonable and direct relationship to the actual activities performed on behalf of TAWC); and
- Evaluated the allocation methodology of electric utility service companies to determine whether customer count is an allocation metric used by electric utility service companies.

In our experience we normally see a broad range of cost allocation approaches to distribute costs. The primary purpose of cost allocation is to identify payment responsibility across multiple entities with respect to cost sharing based on the nature of the cost incurred. There are cost implications of different allocation approaches, but the intent should be to assign costs in accordance with the cause of their incurrence. An example of some common allocation factors include:

1. Customer Bills Ratio
2. Customers Ratio
3. Delivery Services Gross Plant Ratio
4. Employee Ratio
5. Invoice Transaction Ratio
6. Labor Dollars Ratio
7. Meters Ratio
8. Modified Massachusetts Formula (MMF)
9. Revenue ratio
10. Square Footage Ratio
11. Total Assets Ratio

We note that customers are used as a metric by most utility service companies; however, they are generally used as one of several allocation factors. In fact none of the companies that file a Form 60 use a single factor to allocate service

company costs. Often an allocation approach includes multiple allocation factors applied to cost. However, the customers' allocation method is utilized by other regulated water utilities as an allocation method. Furthermore the Pennsylvania Public Utility Commission Bureau of Audits concluded that "... there is merit in using the number of customers to distribute most costs among regulated water utilities."³

The AWWSC cost allocation process is well-structured, implemented in conformance with underlying objectives and results in a fair representation of underlying cost causation principles. Charges to TAWC are allocated from AWWSC under the agreement dated January 1, 1989. Furthermore, the cost allocation approach was consistent throughout the operating companies and jurisdictions of the regulated American Water.

The agreement between regulated operating companies and the AWWSC has been approved in all jurisdictions which require that approval. Furthermore this agreement has been in place for several years. The application of the provisions of the agreement results in each operating company paying the cost for services provided to that company. Direct charges can be made for services provided to an identifiable operating company, or for employees performing transactional services.

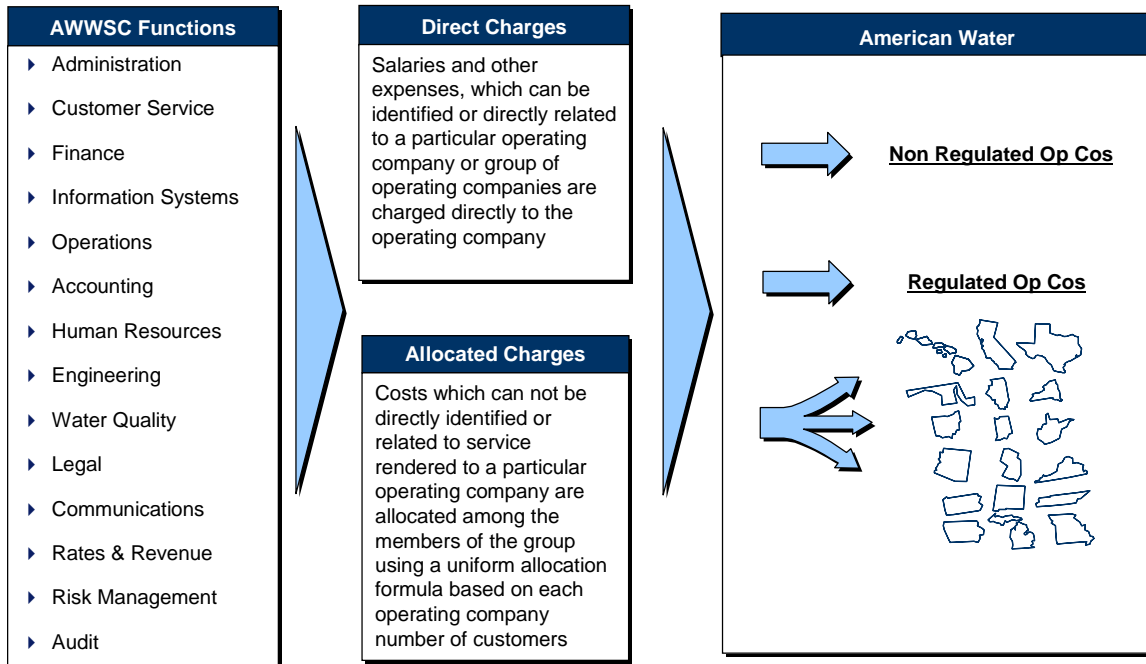
In addition, each regulated operating company pays its proportional share of all common costs that remain after all direct charges have been made. The common costs are allocated on the basis of number of customers served by the operating company relative to the total number of customers served by all of American Water. This method of cost sharing is utilized to allocate common costs that remain after the AWWSC has directly charged both regulated and non-regulated operating companies to the extent possible and has allocated the costs of providing services to non-regulated operating company.

Current procedures support the allocation process. Specifically, operating companies were billed based on services performed by employees of AWWSC. Each employee of AWWSC charged his /her hours directly to each subsidiary for which they performed work, when possible. Where costs could not be directly traced and assigned to a particular entity, those costs were allocated based on the number of customers of each subsidiary in relation to the total customers of the regulated companies. If the function being performed was common to all operating companies or to a group of subsidiaries, the cost associated with the function was allocated across the group of operating companies. As an example within the Water Quality function, charges for routine

³ Focused Management and Operations Audit of Aqua Pennsylvania, Inc. prepared by The Pennsylvania Public Utility Commission Bureau of Audits, issued October 2006 Docket No. D-05MGT022

water testing required nationally for all regulated entities were allocated across the group. Irregular or one time water testing charges required for a specific locality were directly charged to the locality requiring the service. **Figure 6-1** illustrates the way that costs were charged to operating companies.

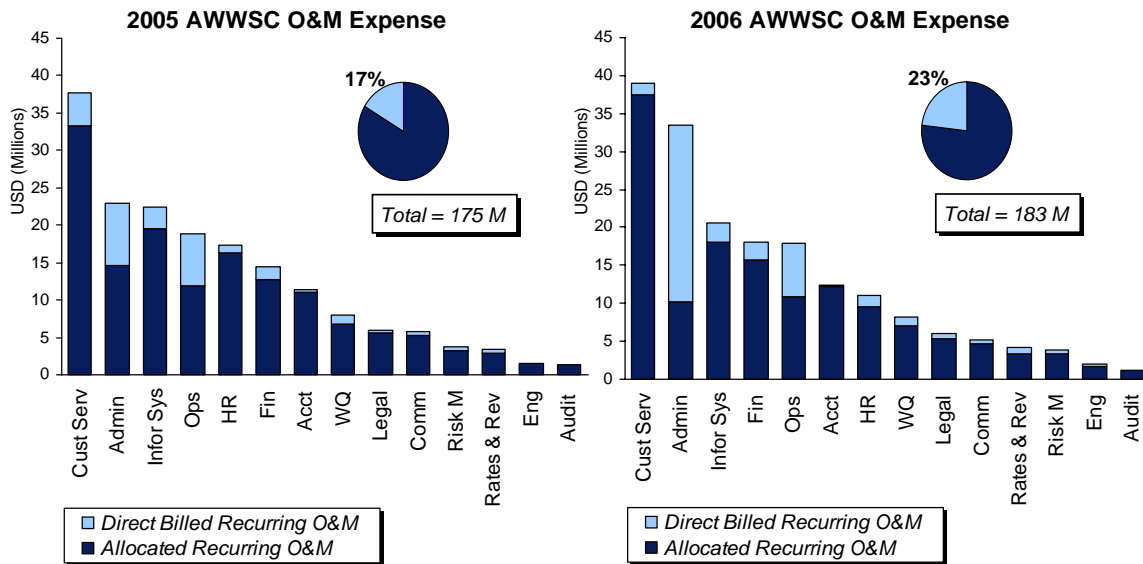
Figure 6-1
AWWSC Service and Overhead Charges Allocation Process



Overhead charges are allocated using a slightly different allocation method. Benefits overhead and general overhead are allocated using ratios of total labor billed to operating companies. Total labor includes non administrative personnel cost associated with services rendered. Benefits overhead include payroll taxes, pensions, OPEB, and 401k. General overhead includes leases, rents, depreciation, interest, and IT maintenance. For example, each service company location’s office expenses are allocated to operating companies based on how professional labor charges for the office have been assigned. Also, support administrative personnel charge their time to the activity General overhead. Their labor charges are allocated to operating companies based upon how their office’s professional personnel labor charges are assigned. For instance the administrative personnel charges supporting the SSC would be allocated based on the SSC professional labor charges. If 2% of the SSC professional personnel charges were charged to an operating company, then 2% of the administrative personnel charges supporting the SSC would be also charged to the operating company.

AWWSC follows defined procedures to direct charge and allocate costs. Each AWWSC function costs are directly charged, where practical, to the entity that specifically demands the services that give rise to the cost. In our opinion, AWWSC attempts, and prefers, to charge costs directly to the entity that caused the cost to be incurred. AWWSC direct charges when costs can be identified and traced to a particular entity. As illustrated in **Figure 6-2**, in 2006, AWWSC direct billed charges increased to 23% of the total charges, up from 17% in 2005.

Figure 6-2
O&M Expense Allocation Analysis

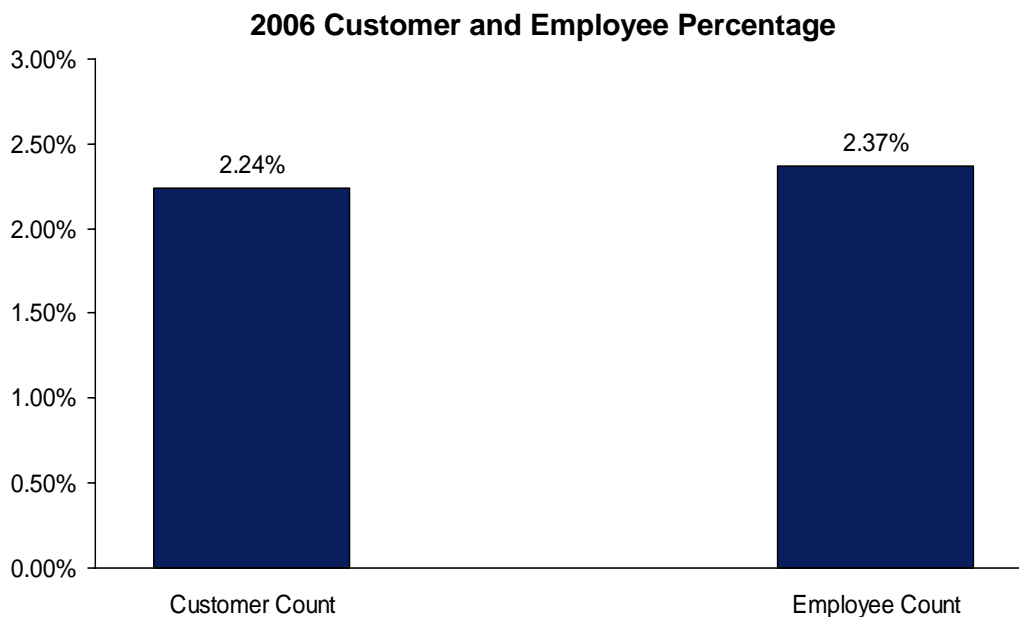


Source: AWWSC, Booz Allen Hamilton analysis

To assess the reasonableness of using customers as an allocation methodology, we looked at the functions that account for a majority of the allocable costs from AWWSC. Looking at the analysis of the Recurring O&M costs from AWWSC by function indicates the significant majority, 83%, of the O&M charges, are incurred within the following functions; Customer Service, Administration, Information Systems, Finance, Operations, Accounting and Human Resources. These functions are directly linked to the number of employees and /or the number of customers serviced by the operating company. As a share of the regulated water business of American Water, TAWC customers represent 2.24%. As a percentage of all operating company employees, TAWC employees represent 2.37%. Therefore, in the case of TAWC, because customers are such a close proxy for employees (within 10%), the customer allocation method does reflect cost causation principles. For example, providing call handling and billing services are direct causes for charges within Customer Service. These call

handling and billing charges are causally related to the number of customers being served. The Administration function, provides oversight and project management. A reasonable driver for business administration cost is the number of employees required by the organization. Within Information Systems, the information technology infrastructure is required to service customers and employees and, as such, the incurrence of information system cost is driven by both customers and employees. Finance and Accounting functions are largely a reflection of revenue. Because of the regulated nature of TAWC's business, revenue is effectively a function of customers. Operations costs, which represent maintenance and general operational activities, are driven by customers. Human Resources services, such as compensation, benefits administration and recruitment, are provided in direct proportion to the number of operating company employees. **Figure 6-3** shows the percentage of American Water customers and employees represented by TAWC.

Figure 6-3
TAWC Customer and Employee Share of Regulated AWWSC



CONCLUSIONS

AWWSC charges were allocated to TAWC in a reasonable manner. Depending on the nature of the cost, AWWSC was able to select the most appropriate charging methodology - direct charge, or allocation formula. Where practical, AWWSC directly charged costs to TAWC. In 2006, AWWSC direct billed charges increased to 23% of the total charges.

There was a recent trend toward increasing the level of direct charges to TAWC. Additionally, the allocation methodology reflects the effective application of cost causation principles within the AWWSC cost distribution process. As a result of these analyses, we believe the processes used to allocate AWWSC costs to TAWC were reasonable and yielded outcomes that were appropriate.

Based upon our experience, we would have expected to see the use of multiple allocation factors to directly link the incurred services to the allocated charges. However, based upon our review, including a comparison of the allocation methods of other utilities that use a centralized service company model to those that TAWC and AWWSC employ, we concluded that the method used to allocate AWWSC costs to TAWC was reasonable. The customer based allocation method simplifies the data requirement for charges and has been approved in all jurisdictions. Additionally, we have found that the customer allocation metric has been upheld for water utilities in other jurisdictions. Furthermore there would be limited impact through the use of a complex multifactor allocation process, and, in fact, would likely increase AWWSC costs due to the additional administrative cost to maintain multiple allocation factors.

7. BUDGET AND CONTROL

Our assessment included a review of the AWWSC budget process to determine whether the structure and execution of that process served as an effective means of controlling AWWSC O&M costs. To conduct our assessment, we reviewed (a) the planning process to understand how overall targets are established; (b) the budgeting process to assess its effectiveness in justifying and limiting planned costs; (c) the involvement of the various business units in the budgeting process to assess the nature and extent of the interface between AWWSC and its internal customers; and (d) cost control mechanisms to determine whether costs are properly managed.

Our review focused on how an operating company interfaced with AWWSC throughout the budget and cost control process. Of particular relevance to our analysis were the mechanisms by which an operating company monitors and manages AWWSC billings.

With respect to planning, the framework and overall direction of an operating company are established in conjunction with regular planning exercises undertaken on behalf of the enterprise as a whole. These include strategic and long-range planning, financial planning, and business planning. Such planning not only exerts pressure on each business unit to improve efficiency, but also serves as a discipline to management to ensure that capital is allocated appropriately and effectively.

Utilizing the plans developed on a strategic, financial, and business basis, the functions, in conjunction with AWWSC, develop detailed annual budgets. Concurrently, AWWSC works in an iterative and interactive process with operating companies to provide and obtain input for development of the AWWSC budget. Each AWWSC function works with the operating companies, to understand their needs and priorities.

This process also provides each operating company the opportunity to review and challenge proposed AWWSC budget amounts that relate to activities performed by AWWSC that are ultimately directly charged or allocated to a particular operating company. The budget development process is the primary mechanism by which an operating company is able to challenge service company costs. Several built-in, front-end features of the process – such as formal dialogues and project specific reviews – allow operating companies to have visibility into AWWSC costs and to influence the level of costs budgeted. Once the initial budget is approved by Corporate Finance, it is then sent on to the Board of Directors for senior management review and approval. The Presidents of the operating companies, including John Watson, President of TAWC, are

members of the AWWSC Board of Directors on a rotating basis, providing an additional opportunity to assess the budget and its drivers.

AWWSC has established several mechanisms to provide operating companies with oversight of AWWSC cost levels. One such mechanism is the various Service Level Agreements, which set forth detailed descriptions of AWWSC services to be provided to operating companies, as well as the basis for any cost allocation. This process ensures that performance expectations are clearly defined and operating companies can measure the service levels against agreed-upon expectations.

Another oversight mechanism was formal management processes that are in place to track performance against the budget. AWWSC management reviewed performance monthly, which involved reviewing actual performance at the line-item level against the budget for each entity. Senior leadership of operating companies was actively engaged in monitoring costs in an effort to assure that functions were performed in an efficient and cost-effective manner. For example, a monthly bill from AWWSC is received for the actual services delivered to an operating company for the month. These reports provide a budget vs. actual comparison which permit the operating company's management to drill down into the back-up data if it needs to do so to question the variance. Utilizing this information, management demonstrated accountability and ensures that the service company charges are actually being delivered, were needed, and provided budget appropriate value to operating company customers.

American Water follows the CIMC process, as well as uses the national Commercial Development Process (CDP) for all major Fixed Asset investment, Material Contracts, Financial Investments, Joint Ventures and Consultancy Contracts. All projects developed by the respective departments are subject to evaluation using the National Commercial Development Process. All projects require CDP approval at the departmental level using the standard National CDP guidelines. To proceed beyond this review level, sign-off must be attained by several departmental representatives referred to as the Business Unit Management Committee. The management committee includes operating company Presidents.

CONCLUSION

Rigorous budgeting and cost control processes support management's objectives to control costs. In addition, these process elements were being regularly executed throughout the business. The budgeting process provides adequate opportunities for an operating company to influence the extent to which costs are incurred on its behalf, demonstrating that it is not a "price taker" as AWWSC services and costs are established. Finally, an ongoing cost control process is in place that allows for monitoring throughout the year to ensure that expenditures

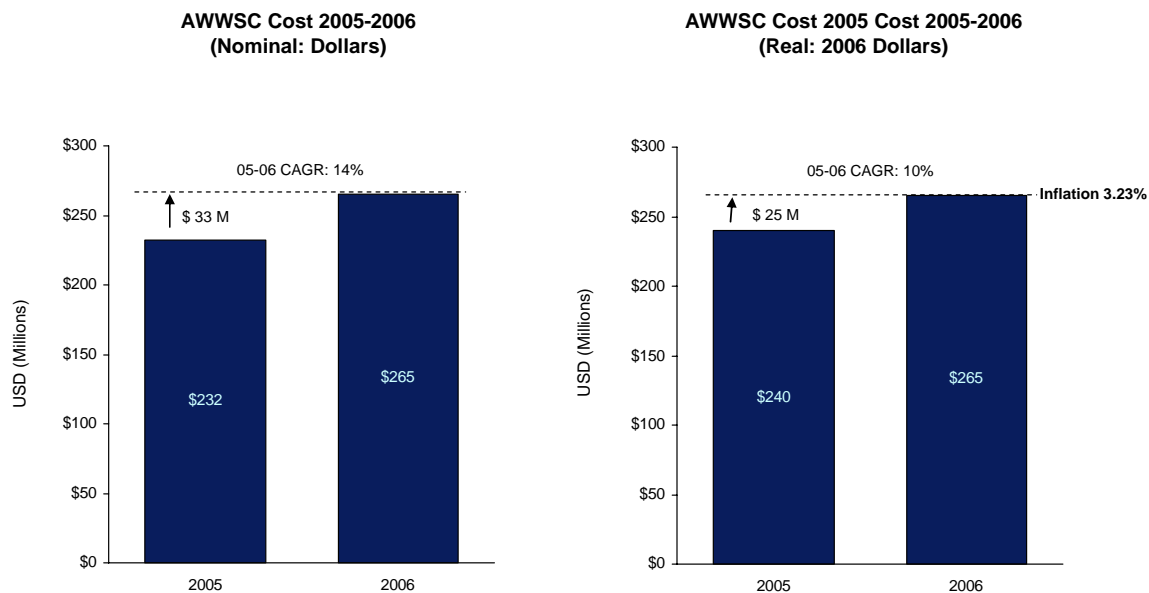
are consistent with the budget and variances are discussed and challenged as appropriate. For these reasons, the budget and control processes were effective in ensuring that AWWSC charges were appropriately and efficiently incurred.

8. COST TRENDS

To understand TAWC costs and their relationship with AWWSC, we performed analyses to determine the business drivers that impacted AWWSC as a whole between 2005 and 2006 with respect to the type of cost that were incurred, and consequently, how costs were charged. In conducting this assessment, we analyzed the drivers of cost trends of AWWSC. This section discusses the methodology used to analyze AWWSC costs trends and the results of the analysis.

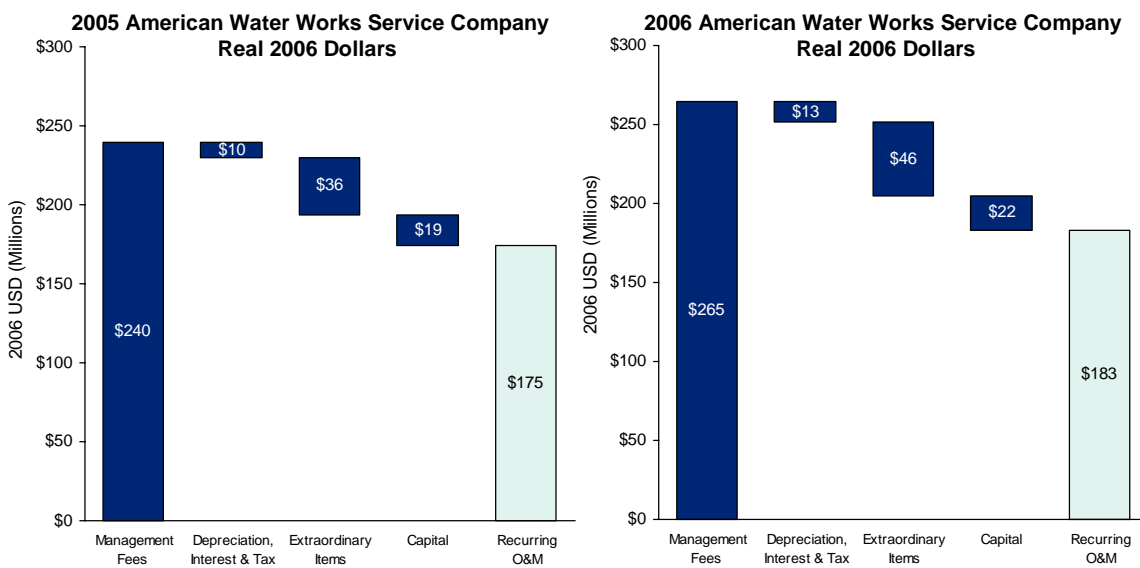
AWWSC billed \$265 million in 2006 and \$232 million in 2005 for services provided to operating companies. These services are categorized into 14 functions, including Administration, Customer Service, Finance, Information Systems, Operations, Accounting, Human Resources, Engineering, Water Quality, Legal, Communications, Rates & Revenue, Risk Management, and Audit. A detailed review of the services is provided in Section 3 of this report. To understand the determinants of the increase, AWWSC billed cost must be inflation adjusted. An inflation rate of 3.23% from 2005 to 2006 was calculated using a standard CPI inflation calculation. Hence AWWSC real cost in 2005 inflation adjusted is \$240 million. The growth in 2006 AWWSC billings from 2005 represent a real increase of \$25 million in 2006 dollars (\$2006), i.e., inflation adjusted growth of 10%.

Figure 8-1
AWWSC Cost Trend (2005 - 2006)



AWWSC incurred approximately \$183 million in recurring O&M in 2006 and \$175 million (2006\$) in 2005. Recurring O&M provides a perspective on the actual cost required to perform services. As a result of the business structure defined by management, recurring O&M provides insight on the ongoing cost to do business. To calculate recurring O&M, AWWSC total costs were adjusted to exclude depreciation, interest, tax, capital and one time extraordinary items. Total excluded items equal \$82 million and \$65 million in 2006 and 2005 respectively. These excluded items were primarily attributable to extraordinary items.

**Figure 8-2
 Recurring O&M by Year**



Note: Capital excludes capital cost associated with Extraordinary Items, Depreciation, Interest and Tax .
 Source: AWWSC, Booz Allen Hamilton analysis

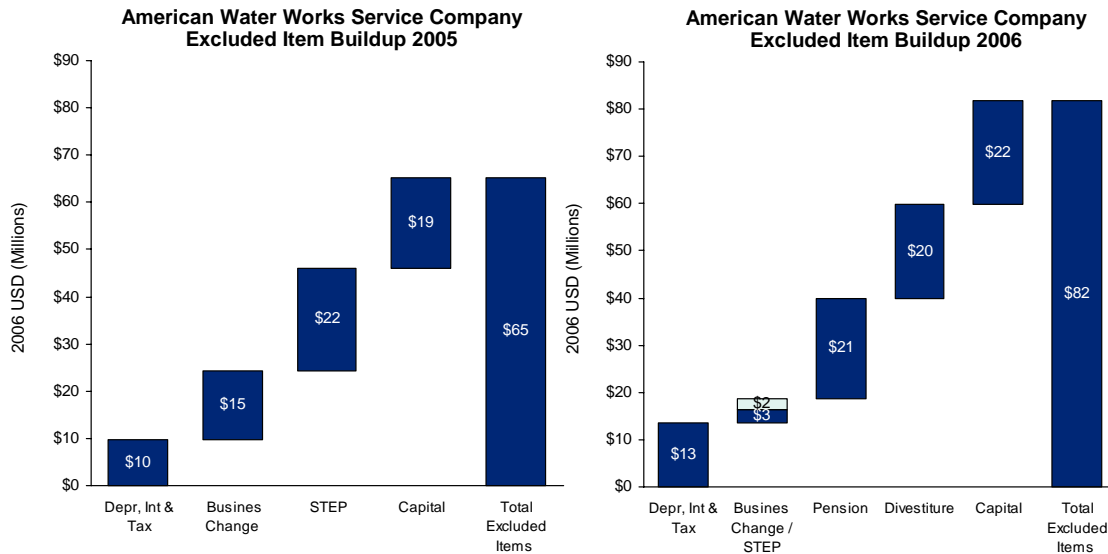
The recurring O&M costs above are subject to further analysis throughout the remainder of this report; however, a brief description of the excluded extraordinary items is warranted:

- **Business Change (BC)** was a formal initiative of AWWSC during the period 2003 to 2006, including numerous different programs. The goal of the Business Change initiative was to re-engineer business processes and systems, change the culture of the business, and create a business environment that embraced change. The objective was to deliver sustainable service and efficiency benefits for customers and other key stakeholders of the business over the long term. There were a number of initiatives which took place as part of the Business Change program. The more significant initiatives were Ideas into Action, Procurement (which became Supply Chain, a regular AWWSC activity), License to Manage, Business Process Blueprinting, Energy Management Strategy, and the

- Diversity Recognition program. In 2005, \$15M costs were incurred and \$3M in 2006.
- A number of BC initiatives are continuing as part of several AWWSC groups, namely Innovation & Environmental Stewardship, Best Operating Practices, Supply Chain, and in the ITS function.
 - **Pension** extraordinary cost occurred due to the AWWSC transition from ERISA to FAS 87 pension recording. In Dec 2006, a \$21M charge was billed to the operating companies. Prior to this charge, the subsidiaries had recorded a payable on their books for pension costs billed from AWWSC. As most operating companies were moving to, or already being regulated on a FAS 87 basis, it was determined that instead of billing the subsidiaries on an accrual basis, AWWSC would bill the receivable in 12/06. Because the subsidiaries had payables on their books, this charge resulted in virtually no expense to the subsidiaries as they credited cash and debited the payable, while AWWSC debited cash and credited the receivables.
 - **Divestiture** extraordinary costs included efforts performed in preparation for divestiture. Significant effort began in 2006 regarding the American Water's return to a publicly traded entity, primarily in the area of SOX compliance. The consulting firm Ernst and Young was contracted to assist American Water in identifying and resolving any control weakness in its financial reporting processes. Those efforts were intensified throughout 2007. In addition to being SOX compliant, a return to a publicly traded company required regulatory approvals from 13 of the States in which American Water operated regulated subsidiaries. Significant effort was under-taken, primarily in-house, to obtain the approvals in each jurisdiction. By the end of the third quarter 2007, all approvals had been received. In 2006, \$20M in divestiture costs were incurred. Divestiture related extraordinary costs were not billed to regulated water operating companies during this period.
 - **The Standardized Technology Enabled Processes (STEP)** program was designed as a multiyear program to be undertaken by American Water to improve the delivery of service to its customers. STEP featured a series of technology-based programs designed to leverage the capabilities of today's technology to streamline business processes and to enable employees to better serve customers and, in some instances, to allow customers to serve themselves more efficiently and effectively. Fundamental to the success of this program was the underlying intention that many of the technologies included in STEP be implemented in a structured fashion, as there were dependencies between certain components of the solutions. As a result of the postponement of the

proposed ERP implementation, several projects that were originally planned have been postponed. Costs of \$22M in 2005 and \$2M in 2006 were incurred for STEP.

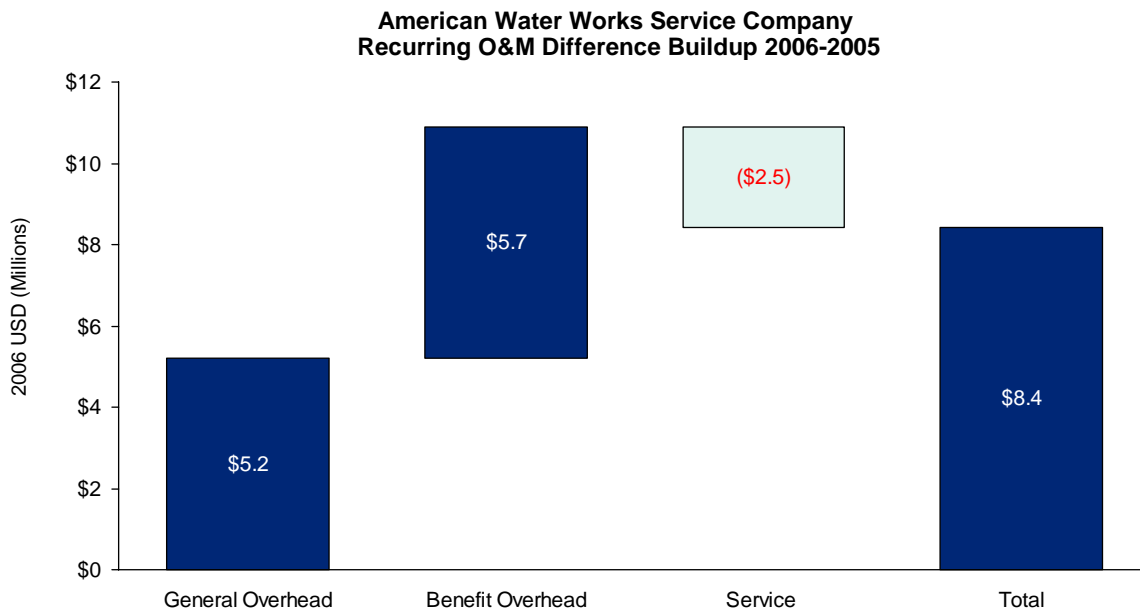
Figure 8-3
Excluded Item Build-Up



Note: Capital excludes capital cost associated with STEP, Business Change, Depreciation, Interest and Tax.
Source: AWWSC, Booz Allen Hamilton analysis

As mentioned, the difference between 2005 and 2006 AWWSC recurring O&M represents a real increase of \$8.4 million, i.e., inflation adjusted growth of 4.8% over 2005. Recurring O&M represents the ongoing cost of the business and is composed of Service, General overhead and Benefit overhead. Service costs are primarily composed of cost associated with labor, incentive pay, and contract services. Benefit overhead includes group insurance, payroll taxes and pension cost. General overhead costs include rent, miscellaneous maintenance cost and labor from administrative support personnel.

Figure 8-4
Recurring O&M Difference 2005 – 2006



Source: AWWSC, Booz Allen Hamilton analysis

- In 2006, the recurring O&M Service charges decreased by \$2.5 million, a 1.8% decline. Major drivers included:
 - **Labor \$3.8 million:** Over the 2005 – 2006 time period, the total Service Company headcount (system wide) increased by 330. Of these, 191 were attributable to a new Customer Call Center that was opened in Pensacola, FL. The increasing demands of the CSC function, including responding to customer inquiries and concerns, made it necessary to open a second call center location to provide quality customer service. This second site provides business continuity, disaster recovery and improved customer service response times. The CSC also has other benefits such as multilingual operators (along with a contractor, Language Line Services, which can interpret 161 languages, representing approximately 99% of customer requests).

Within Finance, 53 additional employees were added, 16 of which were directly attributable to regions outside of the southeast. In addition, over the two year period, 4 additional employees were added to the Planning group. Also, 7 employees were added to the Corporate income tax group, 4 in reporting and compliance and 2 in investor relations.

Within Human Resources, 9 employees were added over the time period. The primary reason for the increase was the relocation of the Benefits Center from SSC to Corporate.

In researching the drivers of the AWWSC cost increase, our analysis did discover a need for a record detailing the rationale for new positions. The rationale should be based upon required services outlined in the service agreement. The increases were included in the AWWSC budgeting process which was fully reviewed as to its impact on AWW and the operating companies.

- **Incentive Plan Payouts \$1 million:** There has been an increase in the incentive pay based on the long and short term financial performance of American Water. The long term performance payout is based on a 3 year cycle that represents the performance of the company, while the short term is based on annual figures. These payouts are agreed upon based on whether performance targets are met and not atypical in the industry.
- **Contract Services (\$3.3) million:** In 2005, \$820 thousand was incurred for executive search, recruitment and executive management costs not incurred in 2006. Promenix IVR (AP) costs in 2005 were \$516 higher than in 2006. In 2006, there was a reversal of a December 2005 accrual for ITS in the amount of \$1 million causing a \$2 million total difference 2005 – 2006.
- **Other Expenses (\$2.5) million:** In 2005, AWWSC incurred higher costs in accounts which include Other Welf Maint, and P-Card Undistributed accounts. These types of accounts fluctuate with the natural business cycle account expense. Examples include rent paid for one of the Thames Water expatriate employees. The P-Card Undistributed account is used to accrue for the use of the company purchasing card, transactions that have been incurred at the end of an accounting period, but have not been posted to the ledger yet. It is merely a timing or clearing type account.
- **Relocation Expenses (\$1.2) million:** A large portion of the new employees added in 2005 – 2006 were added prior to June of 2005. Since relocation expenses are typically associated with new hires vs. transfers, the wave of new hires in 2005 incurred greater Relocation Expense than in 2006.
- In 2006, the Recurring O&M Benefit overhead increased by \$5.7 million, a 25% increase, to \$29 million.
 - **Pension \$5.3 million:** There has been a fundamental change in AWWSC pension charges in 2006, as a result of the new recording

approach, there was an accounting difference represented within this change.

- **Group Insurance \$1.2 million:** American Water is essentially self-insured for employee medical costs with the exception of a Stop Loss Premium for extreme cases. Blue Cross / Blue Shield administers the program. Rates are set in two ways: 1) An external consultant examines claims experience as well as lends expertise regarding future costs, and 2) American Water makes contributions to a VEBA Trust for active insurance rates, with tax deductions limited to incurred claims. Therefore anticipated claims and the balance in the Trust account can affect costs.
- In 2006, the Recurring O&M General overhead increased by \$5.2 million, a 42% increase to \$18 million.
 - **Miscellaneous maintenance expense \$2.4 million:** A \$2.4 million Misc. Maintenance increase was primarily the result of an increase in software maintenance agreement charges. Maintenance agreements were required for new programs such as Mercury, ITRON, SAP, GLOBAL, and IMAGE.
 - **Rents \$1.6 million:** A \$1.6 million increase in rent can be attributed to 3 new offices. A new call center facility was added in Pensacola, FL. Additional offices were also added to the Woodcrest facility in Cherry Hill, NJ, to accommodate AWWSC employees transferred from Mt Laurel. Additional functional space was also required in the central region due to expanded employee requirements, which did not impact TAWC.
 - **Labor \$0.8 million:** An \$800 thousand increase in labor in general overhead was attributable to an increase in the labor of Admin personnel associated with the increase in service labor.
 - **Insurance \$0.7 million:** A \$700,000 increase in Insurance cost was directly attributable to the exposure (estimated annual payroll and number of vehicles) and average five year loss history. AWWSC loss history was fairly stable in 2005 and 2006; the increase in payroll was the primary reason for the corresponding increase in premium.

The real 4.8% increase in AWWSC cost from 2005 to 2006 suggests that cost control mechanisms in place at AWWSC have been instituted to control spending as business operations have grown. Although total AWWSC costs increased, those increases were driven by normal business changes such as call center expansions resulting in direct service and overhead increases. Prior sections of this report described additional tests Booz Allen performed to understand the design and effectiveness of those cost control mechanisms.

9. RELATIVE COST PERFORMANCE

The purpose of this section is to compare AWWSC cost levels to those of their peers. This process is typically referred to as “benchmarking” which is a commonly used method to gain an understanding of one company’s relative performance across a spectrum of relevant metrics, and provides some insight into the reasonableness of costs incurred. One important benchmarking consideration is to ensure that the peer groups selected are, in fact, comparable and that consistent data is used. It is also important to make the comparison to the group along metrics that will provide a true insight into a company’s performance.

Generally speaking, performance at or better than the average can be viewed as good in benchmarking. In the case of a service company, costs which are at or better than average of these peers provide an indication that a company is providing services in a cost effective manner. However, it is not appropriate to expect that all of a company’s costs will be better than average. There can be many extraneous factors that affect a particular company’s costs – geography, operating model, customer density, customer mix, system age, collective bargaining agreements, etc. – that contribute to increased expenses and are not practically surmountable or controllable. Measurement of a company’s performance relative to peers should reflect these factors. Better than average cost or even top quartile performance relative to peers should also reflect the starting position of a company and the relative rate of change or cost trend relative to business changes.

While better than average costs across all functions is a desired goal, it is very difficult to consistently expect such results across all functions within an enterprise. There are many factors in a business that cause functional performance to change or require trade-offs that may preclude consistent cost performance above the peer group average. For example, a company may focus on improving its performance along metrics such as system reliability. In such a case, it may spend more than its peers to obtain improved performance in customer satisfaction metrics. It is also therefore unreasonable, and potentially unwise, to expect a business to perform in the top quartile in cost performance because overall service delivery performance may be greatly affected.

Benchmarking results are also directional, rather than absolute, and do not, in and of themselves, indicate real opportunity for performance improvement, nor do they signify poor performance. Many factors may affect relative comparison and these need to be recognized and understood before conclusions are reached about the comparative results. There can be many explanatory factors that affect any comparisons among companies, some of which may be indigenous to the

situation and beyond management control, and others not readily identifiable, even though legitimate.

Regardless of the issues that often exist in regulatory proceedings around the use of benchmarking data, it still serves a very relevant purpose when assessing cost reasonableness. When used appropriately, it provides additional insight to regulators to aid in understanding how a company is performing relative to its peers.

Key Questions

To initially assess the relative cost performance of AWWSC and TAWC, a number of initial characteristics were defined to guide the analysis. These considerations (expressed as questions) offer a basis for evaluation and are presented below:

- Are relevant costs consistent with those of similar companies?
- How do costs compare with similar companies?
- Are there unique factors that influence cost?

Peer Groups

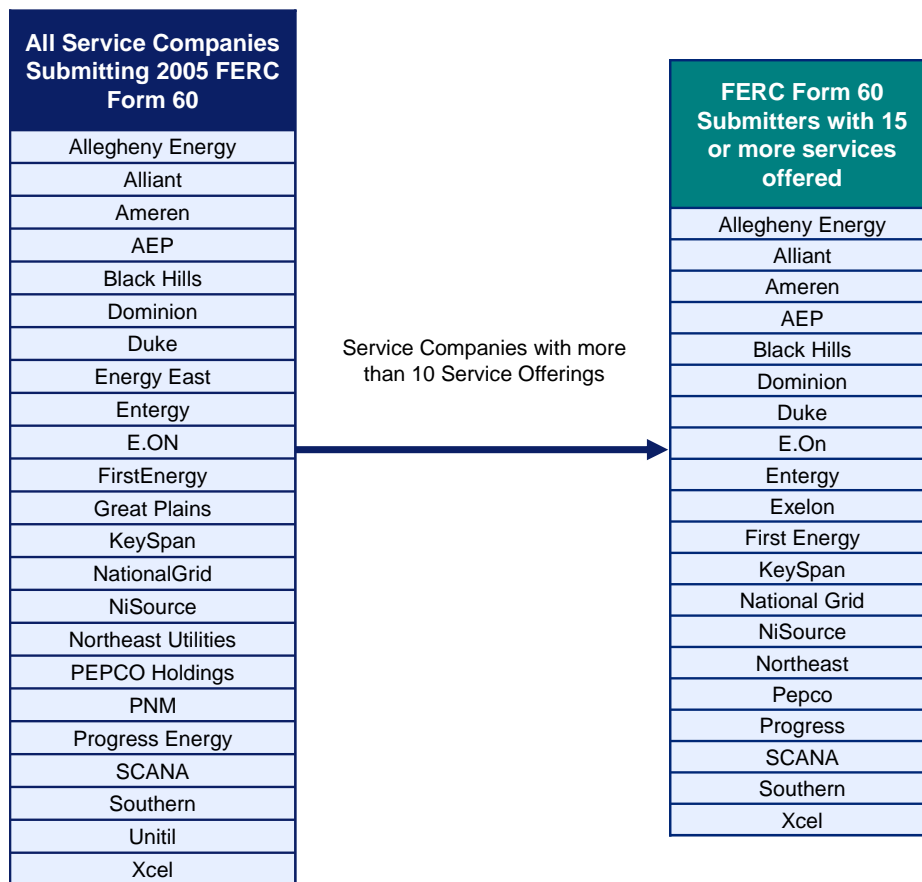
Our analysis consists of analyzing the AWWSC cost levels against utility service companies that file the FERC Form 60. Based on the limited public water utility service company peer data (2), we structured the peer group analysis to include electric utilities. Electric utilities are appropriate peers since their service companies perform similar services, as seen in **Figure 3-2**, making them comparable. The FERC Form 60 is filed annually by regulated energy utilities and is a reporting requirement by the Securities and Exchange Commission resulting from the Public Utilities Holding Company Act (PUHCA)⁴. This report contains detailed service company functional data during the annual reporting period including information describing cost allocation methodologies and cost distribution. Since the data provided in FERC Form 60 is provided on a non-uniform basis with differing levels of granularity and different levels of aggregation, benchmarking must be performed using aggregate service company O&M data. To gain insight into the relative cost position of AWWSC against other service companies, it is again important not to compare total costs, but rather costs that are calculated on a per-unit basis. Since each company can differ in the type and quantity of services it performs or obtains from its service company, similar per-unit comparison bases were developed to determine if scale differences affect the overall results. While American Water is a water

⁴ Recently the Federal Energy Regulatory Commission (FERC) was given reduced jurisdiction previously held by the SEC.

utility and the FERC Form 60 is designed for electric and gas utility service companies, the type of services offered are very similar as seen in **Figure 3-2**, and the cost for such services should be comparable.

We selected a peer group for the Form 60 service company cost analysis as shown in **Figure 9-1**. The peer group chosen was based on the number of services provided by a Service Company so as to use the most comparable group. Since we are analyzing the Form 60 data at an aggregate level as opposed to by function, it is important to use companies with a similar number and type of services. Since the type of services is generally similar among all of the Service companies, the only exclusion that was made was based upon the number of services offered.

Figure 9-1: Service Company Peer Group



For the Form 60 analysis, we developed factors to compare O&M cost levels on a per-unit basis or as a change compared to the previous year. All service company O&M costs were included in this analysis for each service company with the exception of uncontrollable or non-comparable costs such as depreciation, interest, and tax (for a full listing of accounts that were removed from the O&M costs used for benchmarking, please see the backup

documentation on benchmarking in Appendix 1). Service company O&M costs were compared against seven different factors – change from 2005, percentage of total company O&M, percentage of revenue, per customer, per total company full-time equivalent (“FTE”), per service company FTE, and percentage of total assets – to reflect a comprehensive basis from which to compare AWWSC cost performance against these peers.

Across the benchmarking analyses, we summarize results as average, above average or below average. Average is defined as being 10% above or below the average cost calculated for the peer group.

Results of AWWSC Cost Analysis

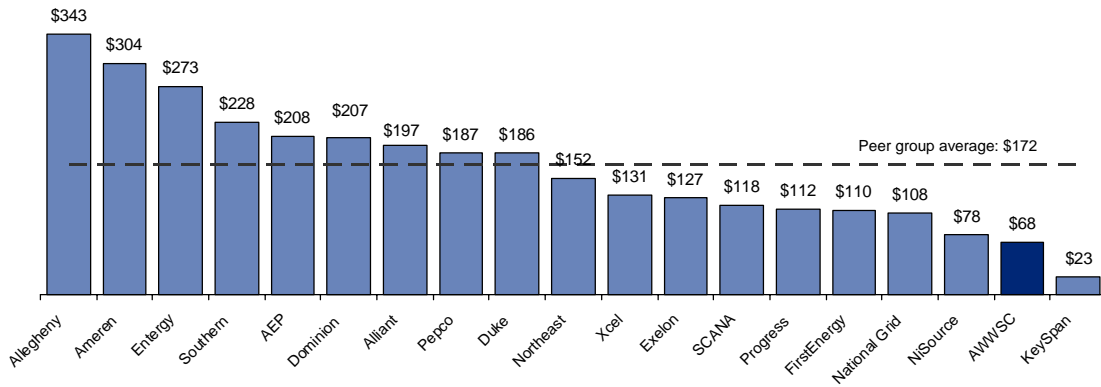
Figure 9-2 summarizes the results of the AWWSC cost comparison. **Figure 9-2** shows that for the majority of the metrics evaluated (6 of 7 metrics measured), AWWSC performed at or better than average compared to the service company peers.

Figure 9-2
Summary of Benchmarking Results using 2006 FERC Form 60 Data

Benchmark	AWWSC Performance vs. Average
Service Co O&M as percentage of total assets	Below average cost
Service Co O&M as percentage of total company O&M	Below average cost
Service Co O&M as percentage of revenue	Average cost
Service Co O&M per customer	Below average cost
Service Co O&M per total company FTE	Below average cost
Service Co O&M per Service Co FTE	Below average cost
Service Co O&M Expense 2005 to 2006 Change	Above average cost change

As an example of the FERC Form 60 benchmarking analysis, we compared AWWSC O&M expense per customer to the peer group. Service company O&M includes such costs as salaries and wages, outside services, injuries and damages, and rents. **Figure 9-3** shows that AWWSC’s benchmark of \$68 per customer compares favorably to the peer group average of \$172.

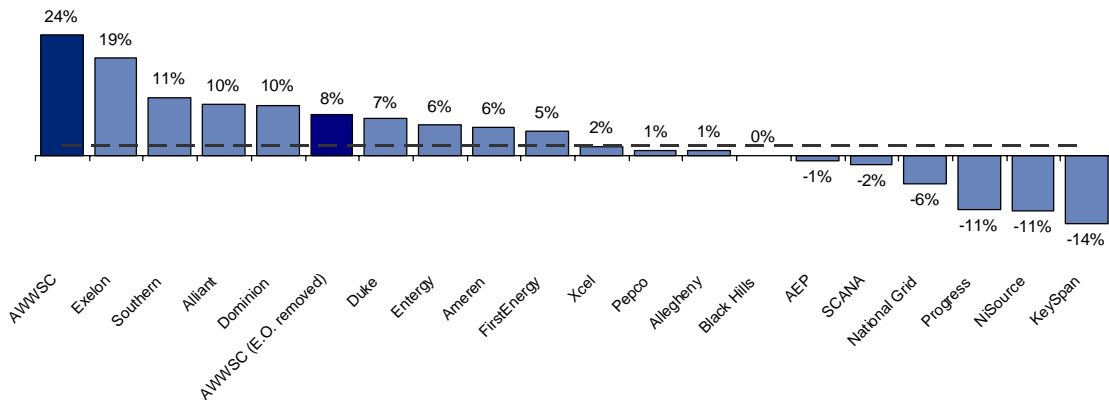
Figure 9-3
2006 Service Company O&M Expense per Customer



Source: Energy Velocity data, 2006 FERC Form 60 filings, Booz Allen Hamilton analysis.
 Note: Statistical Outliers removed using the Inner Quartile Range Method

On the one metric that AWWSC performs above average cost change, titled "Service Company O&M Expense 2005 to 2006 Change," if extraordinary items (discussed in Section 8 of this report) are not removed, as they weren't for other service companies, then AWWSC year over year cost increases are 24%. The 24% increase is calculated based on removing all capital expenditures along with depreciation, interest, and tax from total American Water expenses. As previously mentioned, these are costs that can consistently be identified and removed from the set of peer companies and should not be considered in comparing the cost of providing services. If however, extraordinary items are also removed from both 2005 and 2006, then AWWSC year over year nominal costs increases are actually 8%, as shown in **Figure 9-4**. These costs, however, cannot be removed from each peer company because they require detailed insight into the operations of a company that is not available from public data.

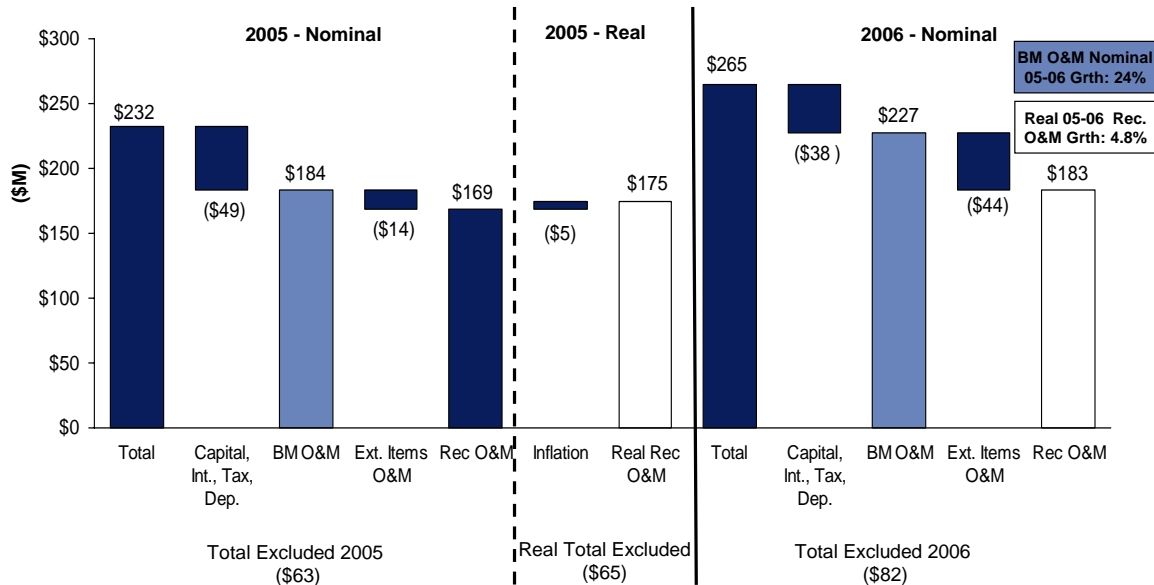
Figure 9-4
Service Company O&M Expense 2005 to 2006 Change



Source: 2006 FERC Form 60 filings, Booz Allen Hamilton analysis.
 Note: Statistical Outliers removed using the Inner Quartile Range Method

As explained in the Cost Trends section of this report, year over year real costs increased by 4.8% after adjusting for inflation. The reason that the real recurring O&M year over year change that was calculated in the Cost Trends section was not used in this benchmark was so that the numbers would be comparable to the numbers used in the peer set benchmarking. The difference in the numbers used to calculate the 24% variance used in this benchmark and the 4.8% variance explained in the Cost Trends section is shown below in Figure 9-5.

Figure 9-5
Service Company O&M Expense Changes



Note: Rec stands for "Recurring"; BM stands for Benchmarking

While AWWSC had a rate of increase that was higher than the average, this benchmark does not account for whether or not the number or the scope of services provided by service companies increased or decreased between 2005 and 2006, which could have a significant effect on costs; the overall costs for the companies for those services may not have changed, but the costs may have been moved out of or into the service company. For a detailed explanation of the cost increases for AWWSC, please see Section 8: Cost Trends.

The full results of the FERC Form 60 benchmarking analysis are included as **Exhibit 9-1**.

CONCLUSIONS

Based on the analyses conducted, AWWSC costs compared favorably to those of the respective peer groups and were at or better than average across most measures. The multiple metrics used to compare the costs provided a comprehensive basis from which to assess relative cost performance. Regardless of the metric selected, AWWSC costs were reasonable when compared to similar peer groups.

Exhibit 3-1

Exhibit 3-1: AWWSC Activity Summary

- As mentioned in Section 3 – Organization Overview, Booz Allen identified 75 distinct activities being performed by AWWSC. This exhibit provides a summary of those activities within each function. Please refer to the report for overall conclusions.

Activities by Function

Accounting	<i>See activities below</i>
Strategic Sourcing	Procures products and services; monitors purchases at operating companies; maintains relationship with vendors
Accounts Payable	Performs invoice processing ; handles p-card issues; handles reconciliations from accounts payable to general ledger
SSC General Accounting	Maintains books and records for all operating companies; performs external financial reporting; prepares annual reports; provides single point of contact to Regional VP of Finance and has responsibility and accountability for quality of financial reporting in a SOX environment; maintains and updates service company allocation modules
Tax	Prepares Gross Receipts Tax, Property Tax, Franchise Tax; performs all tax activities except corporate income tax and payroll related taxes; plans tax strategies for the taxes it is responsible for
Fixed Asset / Job Costing	Accounts for property, plant, and equipment; processes disposal of assets
Employee Services	Performs payroll processing; files payroll related taxes
Supply Chain Management	Evaluates performance, quality, and cost with objective of continuous improvement; performs fleet management and energy management

Activities by Function

Administration	<p><i>See activities below</i></p>
Executive Oversight	<p>Provides overall executive oversight and leadership to all of American Water; provides strategic direction for the entire company</p>
Business Liaisons	<p>Supports SSC and Business Partner Organizations through customer monitoring, performance analysis and training; measures and reports on the performance of the SSC through the application of business performance measurement tools and techniques; manages the budget process to ensure adherence to plan</p>
Project Management	<p>Manages continuous improvement project initiatives and ensures successful project implementation</p>
Regional Business Administration	<p>Pulls all operational information and data together and reports it to the Corporate level; performs operational reporting; reports on the Key Performance Indicators (KPI's); performs benchmarking</p>
Audit	<p><i>See activities below</i></p>
Financial Audit	<p>Certifies financial statements of the operating companies; ensures compliance with GAAP, IRS and other requirements; performs SOX testing</p>
Operational Audit	<p>Audits entire business model; audits functional operations; tests different aspects of the business to ensure proper functionality</p>

Activities by Function

Communications	<p><i>See activities below</i></p>
Government Affairs	<p>Maintains communication with government entities on a national level; sets policy and provides governance for all other government communication at the operating company level</p>
Advertising	<p>Markets the American Water Brand for all of American Water</p>
External Communications	<p>Sets policy, strategy & governance for media relations, customer awareness and communications; handles national level external communications</p>
Internal Communications	<p>Provides communications for the benefit of AW employees such as newsletters, emails, and different talking points for conference calls on topics such as company policies and changes across entire company</p>
Regional Communications	<p>Informs community and state leadership about company plans, news, capital improvement programs and other activities; works closely with local communications specialists for rate case communications; drafts testimony; ensures communications is performed consistently across all states within region; provides counsel to locals; shares overall American Water talking points; approves local external communications and gets further approval from Corporate when necessary; regional internal communications such as biweekly talking points are also provided</p>
Legal	<p><i>See activities below</i></p>
Legal Support, Governance, and General Counsel	<p>Provides legal support to operating companies; provides ethics and compliance policy; assists in larger, more complex lawsuits; sets legal policy; develops standardized contracts for typical contracts</p>
Legal	<p>Performs or coordinates all of the regional legal work (including court claims, real estate, any claims not covered by insurance, lawsuits); acts as supervisor for legal aspects of all local regulatory work; reviews contracts, in particular a lot of contract review for SOX compliance; take minutes for Board Meetings</p>

Activities by Function

Engineering	<i>See activities below</i>
Project Delivery and Developer Services	Provides governance for, policy for, and oversees all aspects of project delivery; employs standard, best operating practices; developer services provides guidance and performs analysis of systems to determine the ability to serve to see what sort of systems are needed
Capital Administration	Pulls together all capital budgets for all state operations (state operations put together budgets and provide them to regional to manage at a regional level; regional helps operating companies identify and handle problems); provides capital investment management process for multiple state regions; reviews documentation for capital projects from operating companies and then presents them to Corporate
Technical Services	Works on anything that requires higher level of expertise than normal project delivery (example of normal is replacing pipe); looks at overall standards of the company and provides unique expertise on more complicated processes or work (such as large or complex water treatment process); provides work as needed; planning engineers look at the system to understand future needs for budgeting reasons

Activities by Function

Finance	<i>See activities below</i>
Planning, Budgeting Forecasting	Analyzes monthly results; provides governance for preparing budgets and forecasts and for the capital spending program; identifies potential spending issues
Internal Controls	Advises and assists in the establishment and maintenance of Sarbanes-Oxley compliant systems of internal control in order to ensure proper financial reporting and safeguarding of company assets
Corporate Accounting	Produces accounting governance for the operating companies; puts together accounting policies and white papers; researches and interprets accounting pronouncements and / or dictates of regulatory agencies such as the Financial Accounting Standards Board ("FASB"); creates consolidated financials; accounts for benefit plans
Investor Relations	Prepares for requirements of American Water to become a Publicly Traded Company (expected to occur in 2008); communicates strategy and financial highlights of the company to the general public allowing the subsidiaries to lower their cost of equity and cost of debt
Income Tax	Accounts for income taxes and ensures compliance through preparation of income tax returns and payments for operating companies; researches and interprets regulations of the Internal Revenue Service ("IRS") and the various state taxing authorities
Corporate Social Responsibility	Develops programs including green initiatives, diversity, etc; handles community relations on national level
Cash Management	Performs debt administration, funding and assessment; performs check printing for payroll and AP checks and all cash receipts reconciliation; acts as in house bank for all subsidiaries; is responsible for payment of debt and accrual debt; provides short term financing and long term financing with parent; views and analyzes the cash that is coming into bank from main accounts from customers of the subsidiaries and moves cash over to one account for concentration and funding; uses American Water Capital Corp to handle disbursements and receipts; manages physical movement of funds

Activities by Function

Finance (cont'd)

See *activities below*

Debt Compliance

Ensures long term debt balances out; ensures the debt payments are made in timely manner; acts as trustee

Capital Markets

Raises capital through American Water Capital Corp (“AWCC”); provides long and short term debt financing to the regulated entities; drafts financing plans for TAWC and secures Corporate and TAWC approval; after IPO, will aggregate all regulated subsidiary financing requirements and enter the capital markets to secure cost effective long-term financing; has AWCC Commercial Paper program utilized to provide cost effective short term liquidity to regulated subsidiaries

Rates and Regulations

Gets information from regional company on capital budgets, operational items, vacancies, org charts; works with SSC group who gets data from accounting systems; adds pro forma adjustments to data; manages rate case filing; provides testimony in rate cases; hires and manages consultants and outside experts

Performance, Planning, and Reporting

Prepares capital expenditure budgets; handles requests for new employees; puts budget together and reviews it; performs monthly actual vs. budget variance analysis; coordinates budgets with each operating company by dept and coordinates that with SSC; makes quarterly forecasts and re-forecasts for year; performs performance analysis; reports information for quarterly board meetings; manages journal entries

Activities by Function

Human Resources	See <i>activities below</i>
Compensation	Formulates job descriptions and pricing and performance metrics; negotiates benefits with unions; designs performance appraisals for merit pay increases and follows guidelines for promotional increases for nonunion employees; has approval control for special management requests
Organization and Talent Development	Develops training and development programs; develops and manages all training programs; conducts only some of the training programs; performs organizational development such as workforce replenishment strategy; performs succession planning; monitors turnover
Labor Relations	Sets labor strategy; designs strategy for union negotiations at local level; works with national unions; performs contract negotiations for nonunion employees; provides assistance in unfair labor practice issues; ensures consistency in treating employees and handling labor relations
Service Company Center Staffing	Performs all recruitment and hiring for the service company staff
HR Systems and Processes	Works with IT to design HR systems; sets policies on such programs like leave programs, diversity programs, etc., and presents them to the board
Benefits Administration	Addresses employee and retiree questions and concerns about benefits; provide administrative services for benefits
Hiring Process Oversight	Maintains applicant tracking system for the SE Region; helps manage, direct, and provide support for HR employees at the operating companies

Activities by Function

Information Systems	<i>See activities below</i>
IT Capital Program Management	Places orders, ensures receipt of systems, installs and configures all IT equipment and change orders
IT Help and Training	Operates Service Desk that provides telephone support to all computer users of utility subsidiaries and service company employees; provides face to face assistance with IT issues; provides planned training throughout the year for staff as necessary
IT Project Management	Consolidates and orchestrates all project planning and execution activities in a consistent manner; helps the business and IT deliver quality projects; examines processes to ensure projects are delivered on time, budget and per specifications
IT Infrastructure	Provides secure, highly available, optimized and supportable shared computing, storage and communication; provides telecommunications
IT Operations	Performs operations and maintenance for all data centers, systems, related equipment and services; handles data base administration; provides server administration and large hardware service
Business Solutions	Provides solutions (such as quality assurance) that meet the information and technology needs of business; standardizes processes across the enterprise
Applications	Handles all software applications across the enterprise including functional applications (business analysis, business reports specialists) and technical applications (developers, webosphere, intranet); develops Business Information Model (BIM) ensures processes and definitions are standardized
Develop IT Infrastructure	Develops effective architectural infrastructure designs and technologies that deliver standardized, secure, well performing, cost-effective and supportable technology solutions meeting business requirements
SE ITS Client Relations	Provides PC Support, works on hardware, network, software for regional operating companies; provides assistance with programming and writing queries

Activities by Function

Operations	<i>See activities below</i>
Business Development	Develops overall growth strategy by identifying traits to look for in acquisitions and other related growth opportunities; performs acquisition integration; performs overall market research in the water industry
Best Practices	Identifies and develops best practices across the company in all areas of operations
Capital Project Management	Sets up policies and procedures for project approval; reviews exceptionally large projects; provides strategic handling of assets and capital
Regional Production Management	Standardizes practices for Production based upon best operating practices for all of SE Regional Production; provides governance, guidance, and support for all of Production operations in Southeast Region; collects performance data and creates reports for business reporting and regulatory purposes
Network Policy Setting and Administration	Provides standardization of processes such as implementing best operating practices across operating companies ; sets goals for Network operations for all of the operating companies; develops and implements plans to reduce Non Revenue Water; researches for new technologies that will help the operating companies; performed the Service First Project – getting laptop computers into all of the customer service vehicles; ensures regulatory compliance through such things as meter change out programs; reports on the Network on a regional basis
Regional Maintenance Oversight	Provides maintenance oversight; works on developing preventive maintenance; manages SCADA systems and security systems
Client Executive	Identifies and qualifies specific business development opportunities that could help grow the company to reach a company's goals and objectives; develops the opportunities to a preliminary agreement stage; promotes market awareness to facilitate lead development; monitors the general business environment for each of operating companies
Regional Business Developer	Performs due diligence once a viable opportunity is identified and deal structure determined; interfaces with the Client Executive; deals with engineers, operations, water quality and legal staff to get deal to point of formal proposal; develops and coordinates a final implementation plan
Large Project Design	Designs large non-reoccurring capital projects; provides governance for reoccurring projects; manages build of large non-reoccurring capital projects designed by technical services

Activities by Function

Rates & Revenue

See *activities below*

Regulatory Management

Handles broad, national issues, pushing initiatives, and look at other means of recovering expenses; assists with more difficult regulatory situations at the local level; appears on NARUC programs and advocates for regulatory improvements

Rate Case Support

Puts together rate case work papers; prepares testimony relative to Service Company expenses; loads test rate changes in systems; assists regional rates group with data and analysis needed for rate case; collects historical data for the operating company and service company and performs analysis

Risk Management

See *activities below*

Health and Safety

Formulates health and safety strategy; provides governance of workman's compensation claims and accidents, employee safety, training courses, and OSHA

Physical Security

Sets security policy and strategy (e.g., where badges are used); manages nationwide contract with ADT

IT Security

Monitors firewalls; ensures user access is properly handled

Business Continuity

Develops emergency and contingency planning to ensure 24 / 7 reliability

Loss Control

Implements health and safety plans, provide training; performs building and facility auditing including noise samplings; driver certification; manages local and regional security

Claims

Handles workers compensation claims; handles and investigates insurance claims and reports them to the carrier (Traveler's Insurance); involved in litigation claims; handles public liability claims

Activities by Function

Water Quality	<i>See activities below</i>
Research Group	Performs applied research; looks at products and best practices to analyze what would benefit utility
Environmental Management	Stays on top of all national regulations (Clean Water Act, Clean Air Act); fights against unfair regulations; interfaces with Government Orgs; puts together environmental audit program
Water Quality	Performs chemical analysis of water samples for regulated and unregulated chemical compounds as requested by EPA or internal customers; does not do routine water treatment
Regional Environmental Management	Provides regulatory insight for water quality compliance; performs some standardization of processes; designed and implemented Environmental Management Plans (EMP); performs environmental audits; provided some training to the operating companies

Activities by Function

Customer Service	<i>See activities below</i>
Call Handling	Handles customer care; receives customer calls; initiates service orders
Billing	Generates bills after receiving information from Southeast Region, resolves billing exceptions, handles special accounts, creates standardization throughout billing; runs daily, weekly, monthly integrity reports
Accounts Receivable	Works to reduce and management of AR; maintains relationship with collection agencies; disputes resolution on collection accounts
Customer Relations	Field Resource Coordination Center in charge of receiving work orders from Corporate call center, scheduling available resources to perform the work order, coach and assist Field Tech, improve service quality; Service Support that does back office follow up to work performed by the Field Techs which may assist in the proper closing of the pending work request initiated by the customer; Meter Management creates monthly meter reading schedules and uploads reads and prints into billing system; Meter Exceptions investigates and performs follow up work on meter exceptions; Quality Assurance as a part of SOX reviews new premises being created in the billing system to ensure proper functionality; review incoming payments and open service orders pending for termination of non payment and perform follow up

Exhibit 4-1

Corporate Cost Justification Definitions

Necessity Attributes

Definitions

Corporate Governance

Activities that are necessary to ensure that corporate and portfolio fiduciary responsibilities and enterprise-wide management and operation is effectively executed. Examples include performing shareholder activities, managing cross-business issues, performing risk management activities and evaluating internal controls

Regulatory Mandate

Activities that are required to fulfill statutory, regulatory and other commitments or mandates. Examples include submitting SEC filings, filing IRS documents and complying with other regulatory requirements

Legal Compliance

Costs incurred and activities performed as a direct result of legal proceedings, avoidance of legal proceedings, or compliance with legal requirements. Examples include performing litigation activities and responding to discovery requests

Management Control

Activities performed specifically to provide analysis, decision support data and results to management personnel. Examples include managing projects and reporting results and developing management reports

Operational Execution

Includes fundamental functions performed on a daily basis. Examples include performing maintenance activities, performing general accounting, and tracking employee information.

Strategic Planning

Activities that encompass business unit planning and activities directed at providing enterprise-wide direction. Examples include monitoring marketplace activities, performing strategic planning, and providing business planning assistance

Corporate Cost Justification Definitions

Benefits Attributes

Definitions

Reduce Risk

Actions designed to reduce liability and mitigate exposure to financial, operational, fiduciary and other types of risk through activities such as implementing safety programs, performing internal audit, and developing policies, procedures and manuals

Increase Employee Productivity

Programs that enhance employees' abilities to perform their jobs more productively. Examples include implementing certain automated systems, providing certain types of training, implementing and administering employee health awareness programs, developing procedures, policies and practice manuals, developing employee communications and implementing and administering quality programs

Provide Management Information

Activities conducted primarily to provide decision support data and analysis to management personnel. Examples include developing budgets, monitoring operational and financial performance, performing corporate development, conducting strategic assessments and developing integrated information systems

Enhance Corporate Performance

Activities performed to enhance the abilities and effectiveness of management with respect to the business, including developing strategic plans, managing the performance review process, maintaining the inter / intranet and conducting benchmarking studies

Reduce or Avoid Costs

Activities performed to improve the cost effectiveness of operations. Activities include implementing certain automated systems, negotiating discounts with outside vendors and performing certain credit and collections activities

Increase Reliability

Activities performed to increase the reliability of water distribution / production and to minimize the impact of disruptions

Exhibit 4-1: Necessity Analysis

Activity	Necessity Attributes					
	Corporate Governance	Regulatory Mandate	Legal Compliance	Management Control	Operational Execution	Strategic Planning
Accounting						
Strategic Sourcing						
Accounts Payable						
General Accounting						
Tax						
Fixed Asset / Job Costing						
Employee Services						
Supply Chain Management						
Administration						
Executive Oversight						
Business Liaisons						
Project Management						
Regional Business Administration						
Audit						
Financial Audit						
Operational Audit						

 Indicates underlying activity causation

Exhibit 4-1: Necessity Analysis

Activity	Necessity Attributes					
	Corporate Governance	Regulatory Mandate	Legal Compliance	Management Control	Operational Execution	Strategic Planning
Communications						
Government Affairs						
Advertising						
External Communications						
Internal Communications						
Regional Communications						
Legal						
Legal Support, Governance, and General Counsel						
Legal						
Engineering						
Project Delivery and Developer Services						
Capital Administration						
Technical Services						

 Indicates underlying activity causation

Exhibit 4-1: Necessity Analysis

Activity	Necessity Attributes					
	Corporate Governance	Regulatory Mandate	Legal Compliance	Management Control	Operational Execution	Strategic Planning
Finance						
Planning, budgeting forecasting						
Internal Controls						
Corporate Accounting						
Investor Relations						
Income Tax						
Corporate Social Responsibility						
Cash Management						
Debt Compliance						
Capital Markets						
Rates and Regulations						
Performance, Planning, and Reporting						

 Indicates underlying activity causation

Exhibit 4-1: Necessity Analysis

Activity	Necessity Attributes					
	Corporate Governance	Regulatory Mandate	Legal Compliance	Management Control	Operational Execution	Strategic Planning
Human Resources						
Compensation						
Organization and Talent Development						
Labor Relations						
Service Company Center Staffing						
HR Systems and Processes						
Benefits Administration						
Hiring Process Oversight						
Information Systems						
IT Capital Program Mgmt						
IT Help and Training						
IT Project Management						
IT Infrastructure						
IT Operations						
Business Solutions						
Applications						
Develop IT Infrastructure						
Regional IT Support						



Indicates underlying activity causation

Exhibit 4-1: Necessity Analysis

Activity	Necessity Attributes					
	Corporate Governance	Regulatory Mandate	Legal Compliance	Management Control	Operational Execution	Strategic Planning
Operations						
Business Development	///					///
Best Practices	///				///	///
Capital Project Management	///					///
Regional Production Management	///			///		
Network Policy Setting and Administration	///			///		
Regional Maintenance Oversight	///			///	///	
Client Executive						///
Regional Business Developer						///
Large Project Design					///	
Rates & Revenue						
Regulatory Management		///			///	///
Rate Case Support		///			///	

 Indicates underlying activity causation

Exhibit 4-1: Necessity Analysis

Activity	Necessity Attributes					
	Corporate Governance	Regulatory Mandate	Legal Compliance	Management Control	Operational Execution	Strategic Planning
Risk Management						
Health and Safety	///	///	///			///
Physical Security	///					///
IT Security	///					///
Business Continuity	///					///
Loss Control			///		///	
Claims			///			
Water Quality						
Research Group					///	///
Environmental Management	///		///			///
Water Quality		///	///			
Regional Environmental Management	///				///	
Customer Service						
Call Handling					///	
Billing					///	
Accounts Receivable					///	
Customer Relations				///	///	

 Indicates underlying activity causation

Exhibit 4-1: Benefits Analysis

Activity	Benefit Attributes					
	Reduce Risk	Increase Employee Productivity	Provide Management Information	Enhance Corporate Performance	Reduce or Avoid Costs	Increase Reliability
Accounting						
Strategic Sourcing	///				///	
Accounts Payable	///				///	
General Accounting	///		///			
Tax					///	
Fixed Asset / Job Costing			///			
Employee Services		///			///	
Supply Chain Management			///	///		///
Administration						
Executive Oversight				///		
Business Liaisons		///		///		
Project Management		///		///		
Regional Business Administration			///	///		
Audit						
Financial Audit	///				///	
Operational Audit	///			///		

 Indicates underlying activity causation

Exhibit 4-1: Benefits Analysis

Activity	Benefit Attributes					
	Reduce Risk	Increase Employee Productivity	Provide Management Information	Enhance Corporate Performance	Reduce or Avoid Costs	Increase Reliability
Communications						
Government Affairs						
Advertising						
External Communications						
Internal Communications						
Regional Communications						
Legal						
Legal Support, Governance, and General Counsel						
Legal						
Engineering						
Project Delivery and Developer Services						
Capital Administration						
Technical Services						

Indicates underlying activity causation

Exhibit 4-1: Benefits Analysis

Activity	Benefit Attributes					
	Reduce Risk	Increase Employee Productivity	Provide Management Information	Enhance Corporate Performance	Reduce or Avoid Costs	Increase Reliability
Finance						
Planning, Budgeting Forecasting			///		///	
Internal Controls	///					
Corporate Accounting	///	///			///	
Investor Relations	///			///		
Income Tax					///	
Corporate Social Responsibility				///		
Cash Management		///	///	///	///	
Debt Compliance	///				///	
Capital Markets				///	///	
Rates and Regulations			///	///	///	
Performance, Planning, and Reporting			///	///		

 Indicates underlying activity causation

Exhibit 4-1: Benefits Analysis

Activity	Benefit Attributes					
	Reduce Risk	Increase Employee Productivity	Provide Management Information	Enhance Corporate Performance	Reduce or Avoid Costs	Increase Reliability
Human Resources						
Compensation		///		///	///	
Organization and Talent Development	///	///		///		
Labor Relations	///			///	///	
Service Company Center Staffing					///	
HR Systems and Processes		///		///		
Benefits Administration		///				
Hiring Process Oversight		///				
Information Systems						
IT Capital Program Mgmt		///				
IT Help and Training		///				///
IT Project Management		///		///		
IT Infrastructure		///			///	
IT Operations		///				///
Business Solutions	///			///		
Applications		///		///		
Develop IT Infrastructure:	///	///				
		///				

 Indicates underlying activity causation

Exhibit 4-1: Benefits Analysis

Activity	Benefit Attributes					
	Reduce Risk	Increase Employee Productivity	Provide Management Information	Enhance Corporate Performance	Reduce or Avoid Costs	Increase Reliability
Operations						
Business Development						
Best Practices						
Capital Project Management						
Regional Production Management						
Network Policy Setting and Administration						
Regional Maintenance Oversight						
Client Executive						
Regional Business Developer						
Large Project Design						
Rates & Revenue						
Regulatory Management						
Rate Case Support						

 Indicates underlying activity causation

Exhibit 4-1: Benefits Analysis

Activity	Benefit Attributes					
	Reduce Risk	Increase Employee Productivity	Provide Management Information	Enhance Corporate Performance	Reduce or Avoid Costs	Increase Reliability
Risk Management						
Health and Safety	///	///			///	
Physical Security	///					
IT Security	///					///
Business Continuity	///					///
Loss Control	///					
Claims					///	
Water Quality						
Research Group		///		///		///
Environmental Management	///			///		
Water Quality	///		///			
Regional Environmental Management	///	///		///		
Customer Service						
Call Handling		///				
Billing		///	///			
Accounts Receivable					///	
Customer Relations		///				///

 Indicates underlying activity causation

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Exhibit 9-1

Data Sources and Calculations

Data Field	Source	Calculation
Service Company O&M	FERC Form 60 Schedule XV, Line 30	N/A – Raw Data
Service Company Adjusted O&M	FERC Form 60 Schedule XV	Total (Expense) (Line 30) - Adjustments
Adjustments	FERC Form 60 Schedule XV, Lines 403 – 405, 408 – 411.5, 419, 427, 430, 431, 435	Total of all lines
Parent Co. Revenue	SEC Form 10-K annual report, Consolidated Statement of Operations	N/A – Raw Data
Parent Co. O&M	FERC Form 1 pgs. 320 – 323, Lines 100, 126, 134, 141, 148, 168	Total all of the lines for all operating companies for each given holding company
Retail Customers	FERC Form 1 pgs. 300 – 301, Line 12	Aggregate the customers from each Form 1 for all of the operating companies for each holding company
Service Company Employees	FERC Form 60 Account 920, Line 40	N/A – Raw Data
Parent Co Total Employees	SEC Form 10-K annual report, Item 1, Employees	N/A – Raw Data
Parent Co Assets	SEC Form 10-K annual report, Consolidated Balance Sheets	N/A – Raw Data

2006 AWWSC Peer Group

All Service Companies Submitting 2005 FERC Form 60
Allegheny Energy
Alliant
Ameren
AEP
Black Hills
Dominion
Duke
Energy East
Entergy
E.ON
FirstEnergy
Great Plains
KeySpan
NationalGrid
NiSource
Northeast Utilities
PEPCO Holdings
PNM
Progress Energy
SCANA
Southern
Unitil
Xcel

Service Companies with more than 10 Service Offerings

FERC Form 60 Submitters with 15 or more services offered
Allegheny Energy
Alliant
Ameren
AEP
Black Hills
Dominion
Duke
E.On
Entergy
Exelon
First Energy
KeySpan
National Grid
NiSource
Northeast
Pepco
Progress
SCANA
Southern
Xcel

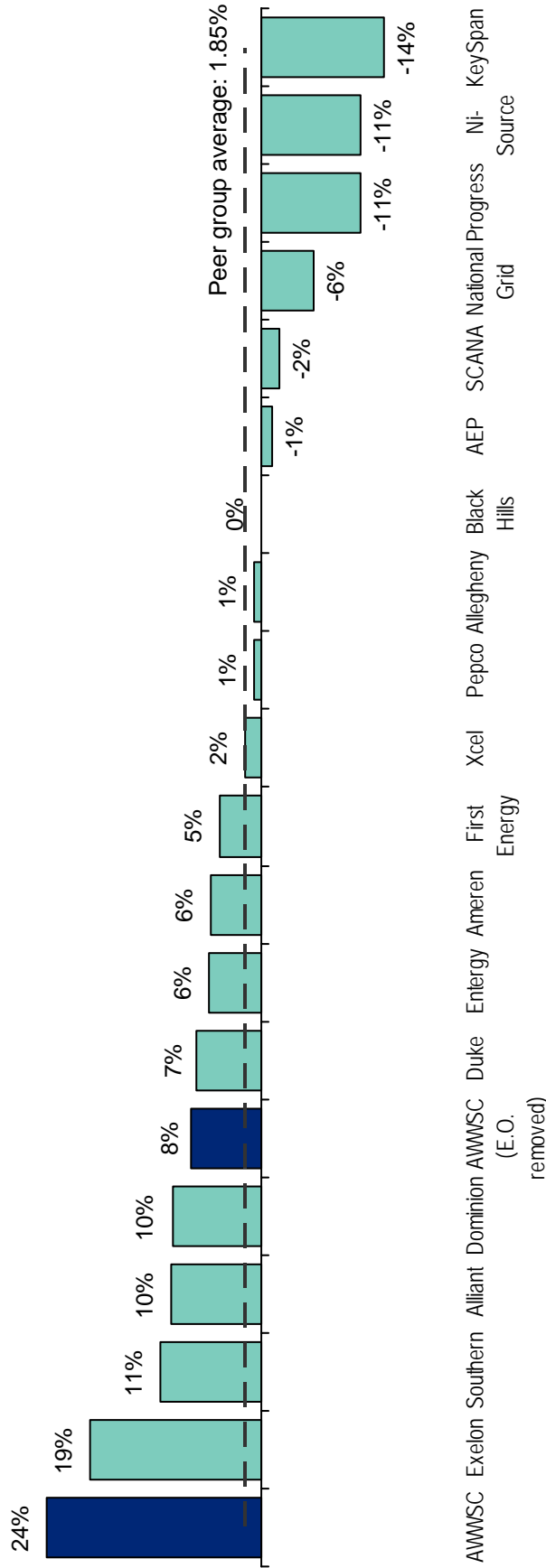
Source: FERC, BAH Analysis.

Summary of Benchmarking Results using the FERC Form 60 Data for 2006

Benchmark	AWWSC Performance vs. Average
Service Co O&M as percentage of total assets	Below average cost
Service Co O&M as percentage of total company O&M	Below average cost
Service Co O&M as percentage of revenue	Average cost
Service Co O&M per customer	Below average cost
Service Co O&M per total company FTE	Below average cost
Service Co O&M per Service Co FTE	Below average cost
Service Co O&M Expense 2005 to 2006 Change	Above average cost change

Service Company O&M Cost Trends

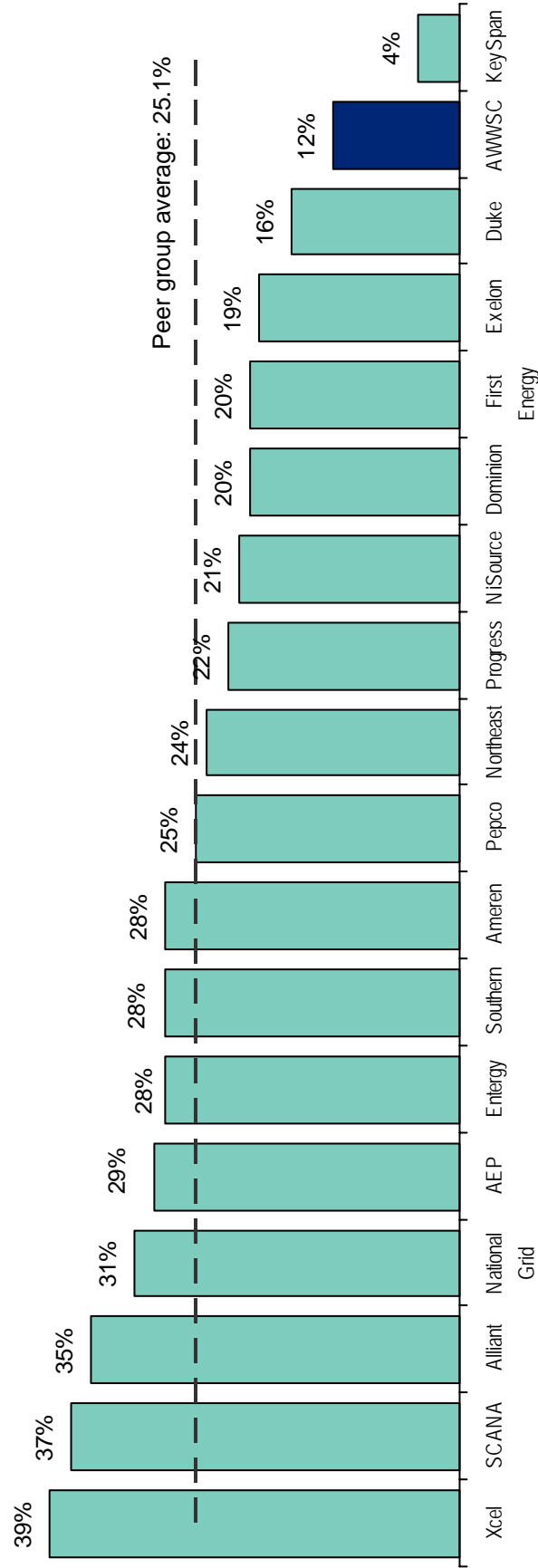
2006 Service Company O&M Expense 2005 to 2006 Change (%)



Source: 2006 FERC Form 60 filings, Booz Allen Hamilton analysis.
 Note: Statistical Outliers removed using the Inner Quartile Range Method

Service Company Benchmarking – Total Company

2006 Service Company O&M Expense as a Percentage of Total O&M¹



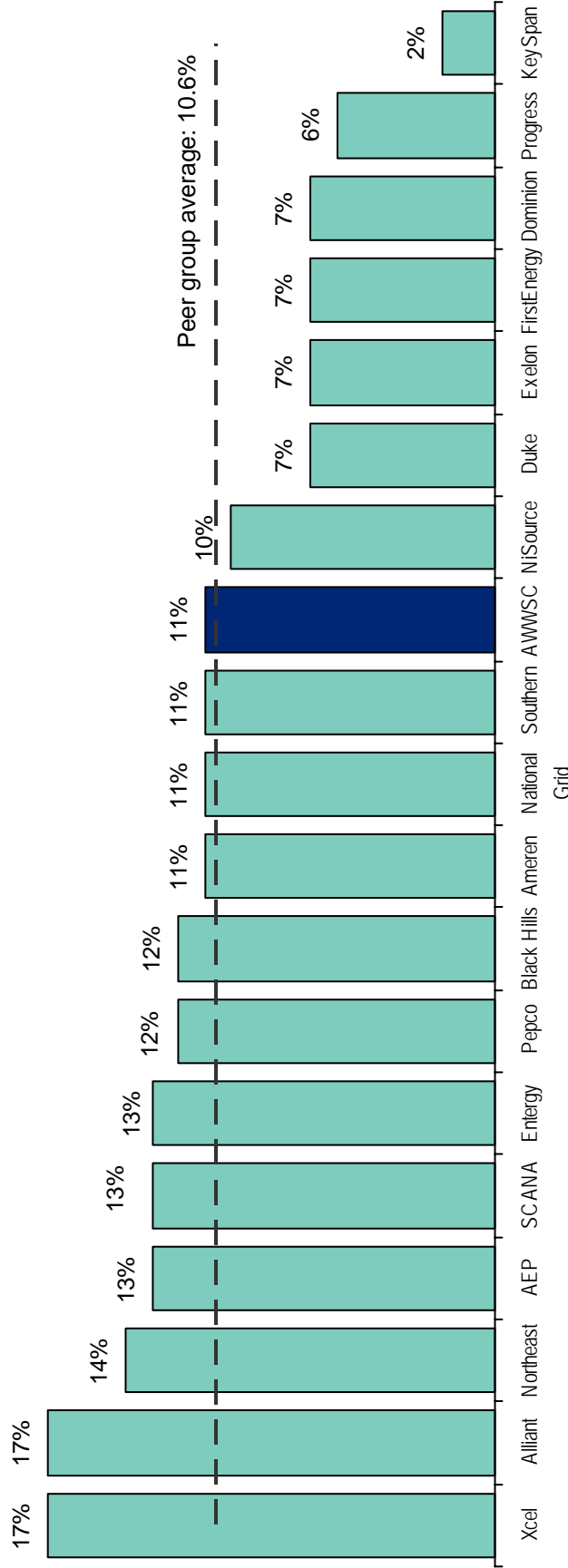
Source: Energy Velocity data, 2006 FERC Form 60 filings, Booz Allen Hamilton analysis.

¹⁾ Total O&M Excludes Fuel and Purchasing Power for electric and gas utilities.

Note: Statistical Outliers removed using the Inner Quartile Range Method

Service Company Benchmarking – Revenue

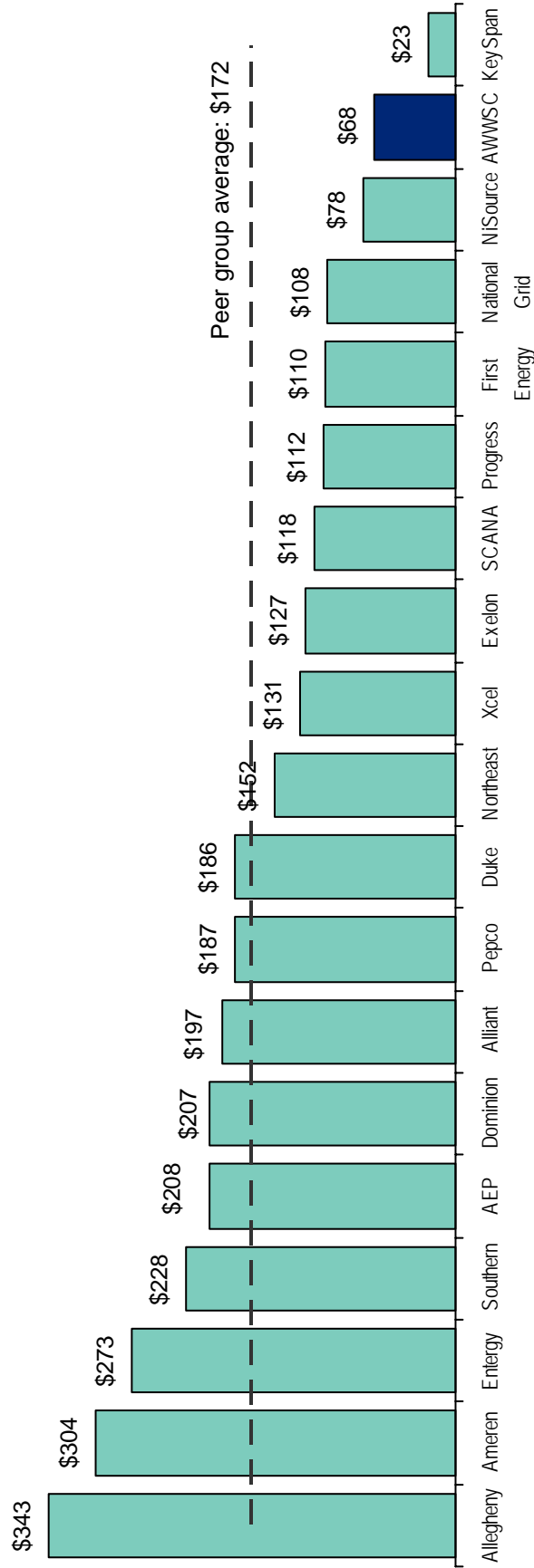
2006 Service Company O&M Expense as a Percentage of Revenue⁽¹⁾



Source: Energy Velocity data, 2006 FERC Form 60 filings, 2006 company SEC 10K filings, Booz Allen Hamilton analysis.
 Note: Statistical Outliers removed using the Inner Quartile Range Method

Service Company Benchmarking – Customers

2006 Service Company O&M Expense Per Customer

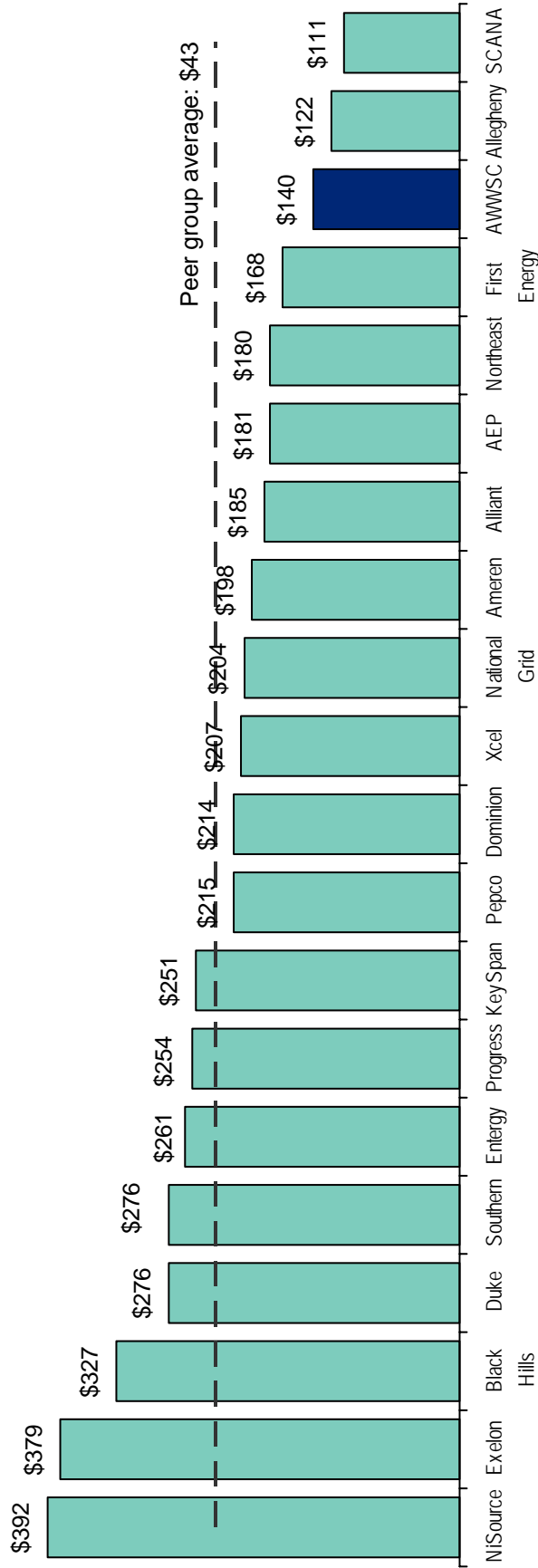


Source: Energy Velocity data, 2006 FERC Form 60 filings, Booz Allen Hamilton analysis.

Note: Statistical Outliers removed using the Inner Quartile Range Method

Service Company Benchmarking – ServCo FTEs

2006 Service Company O&M Expense Per Service Company FTE (\$000s)

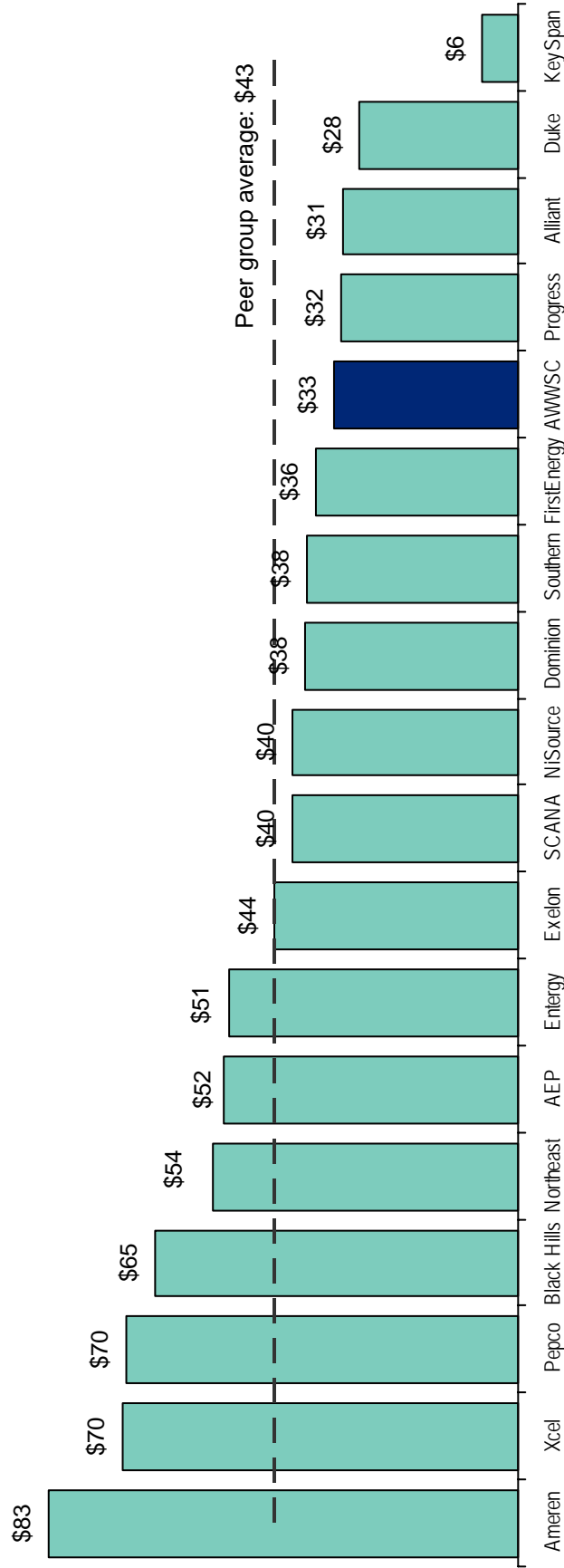


Source: Energy Velocity data, 2006 FERC Form 60 filings, Booz Allen Hamilton analysis.

Note: Statistical Outliers removed using the Inner Quartile Range Method

Service Company Benchmarking – Total FTEs

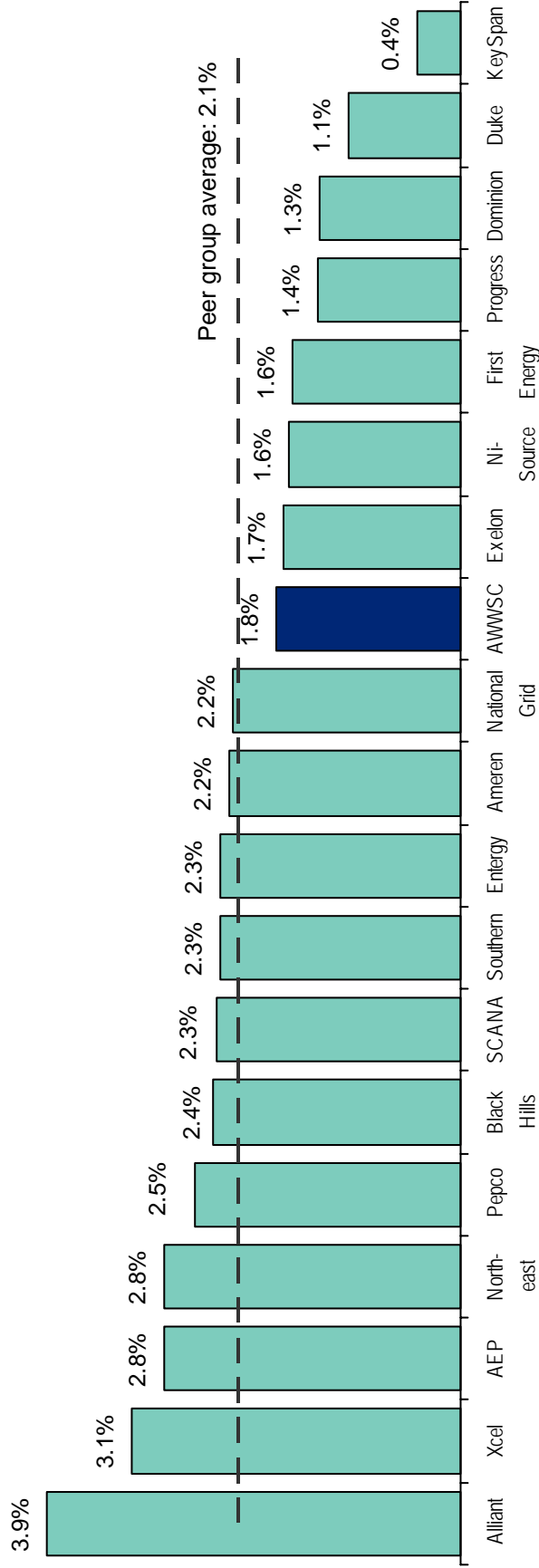
2006 Service Company O&M Expense Per Total Company FTE (\$000s)



Source: Energy Velocity data, 2006 FERC Form 60 filings, 2006 company SEC 10K filings, Booz Allen Hamilton analysis.
 Note: Statistical Outliers removed using the Inner Quartile Range Method

Service Company Benchmarking – Assets

2006 Service Company O&M Expense as a Percentage of Total Assets



Source: Energy Velocity data, 2006 FERC Form 60 filings, 2006 company SEC 10K filings, Booz Allen Hamilton analysis.
 Note: Statistical Outliers removed using the Inner Quartile Range Method