

BASS, BERRY & SIMS PLC
A PROFESSIONAL LIMITED LIABILITY COMPANY
ATTORNEYS AT LAW

DALE GRIMES
TEL: (615) 742-6244
dgrimes@bassberry.com

315 DEADERICK STREET, SUITE 2700
NASHVILLE, TN 37238-3001
(615) 742-6200

www.bassberry.com

OTHER OFFICES

KNOXVILLE
MEMPHIS

March 23, 2009

Via Hand-Delivery

Hon. Eddie Roberson
c/o Ms. Sharla Dillon
Tennessee Regulatory Authority
460 James Robertson Parkway
Nashville, Tennessee 37243

filed electronically in docket office on 03/23/09

***Re: Petition Of Tennessee American Water Company To Change And
Increase Certain Rates And Charges So As To Permit It To Earn A Fair
And Adequate Rate Of Return On Its Property Used And Useful In
Furnishing Water Service To Its Customers
Docket No. 08-00039***

Dear Chairman Roberson:

Enclosed please find an original and six (6) copies of a Notice of Filing of Tennessee American Water Company's Request for Proposal for a Management Audit.

Please return two (2) copies of this, which I would appreciate your stamping as "filed," and returning to me by way of our courier.

Should you have any questions concerning any of the enclosed, please do not hesitate to contact me.

With kindest regards, I remain

Very truly yours,



R. Dale Grimes

RDG/smb
Enclosures

cc: Hon. Sara Kyle
Hon. Mary W. Freeman
Ms. Darlene Standley, Chief of Utilities Division

Chairman Eddie Roberson

March 23, 2009

Page 2

Kelly Cashman-Grams, Esq.
Rebecca Montgomery, Esq.
Richard Collier, Esq.
Timothy C. Phillips, Esq.
David C. Higney, Esq.
Henry M. Walker, Esq.
Michael A. McMahan, Esq.
Frederick L. Hitchcock, Esq.,
Mr. John Watson
Mr. Michael A. Miller

6839113.1

**BEFORE THE TENNESSEE REGULATORY AUTHORITY
NASHVILLE, TENNESSEE**

IN RE:

**PETITION OF TENNESSEE AMERICAN
WATER COMPANY TO CHANGE AND
INCREASE CERTAIN RATES AND
CHARGES SO AS TO PERMIT IT TO
EARN A FAIR AND ADEQUATE RATE
OF RETURN ON ITS PROPERTY USED
AND USEFUL IN FURNISHING WATER
SERVICE TO ITS CUSTOMERS**

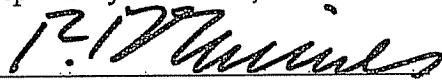
Docket No. 08-00039

**NOTICE OF FILING OF TENNESSEE AMERICAN WATER
COMPANY'S REQUEST FOR PROPOSAL FOR A MANAGEMENT AUDIT**

PLEASE TAKE NOTICE that Petitioner, Tennessee American Water Company ("TAWC") hereby files with the Tennessee Regulatory Authority ("TRA") the Request for Proposal for a Management Audit that the TRA ordered TAWC to develop pursuant to the Order in this Docket entered January 13, 2009. A true and correct copy of the Request for Proposal and its related attachments are included.

Dated: March 23 2009.

Respectfully submitted,


R. Dale Grimes (#6223)
Ross I. Booher (#019304)
BASS, BERRY & SIMS PLC
315 Deaderick Street, Suite 2700
Nashville, TN 37238-3001
(615) 742-6200

*Attorneys for Petitioner
Tennessee American Water Company*

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing has been served via the method(s) indicated, on this the 23 day of March, 2009, upon the following:

<input type="checkbox"/> Hand	Michael A. McMahan
<input checked="" type="checkbox"/> Mail	Special Counsel
<input type="checkbox"/> Facsimile	City of Chattanooga (Hamilton County)
<input type="checkbox"/> Overnight	Office of the City Attorney
<input checked="" type="checkbox"/> Email	Suite 400
	801 Broad Street
	Chattanooga, TN 37402
<input type="checkbox"/> Hand	Timothy C. Phillips, Esq.
<input checked="" type="checkbox"/> Mail	Vance L. Broemel, Esq.
<input type="checkbox"/> Facsimile	Office of the Attorney General
<input type="checkbox"/> Overnight	Consumer Advocate and Protection Division
<input checked="" type="checkbox"/> Email	425 5th Avenue North, 2 nd Floor
	Nashville, TN 37243
<input type="checkbox"/> Hand	Henry M. Walker, Esq.
<input checked="" type="checkbox"/> Mail	Boult, Cummings, Conners & Berry, PLC
<input type="checkbox"/> Facsimile	Suite 700
<input type="checkbox"/> Overnight	1600 Division Street
<input checked="" type="checkbox"/> Email	Nashville, TN 37203
<input type="checkbox"/> Hand	David C. Higney, Esq.
<input checked="" type="checkbox"/> Mail	Grant, Konvalinka & Harrison, P.C.
<input type="checkbox"/> Facsimile	633 Chestnut Street, 9 th Floor
<input type="checkbox"/> Overnight	Chattanooga, TN 37450
<input checked="" type="checkbox"/> Email	
<input type="checkbox"/> Hand	Frederick L. Hitchcock, Esq.
<input checked="" type="checkbox"/> Mail	Chambliss, Bahner & Stophel, P.C.
<input type="checkbox"/> Facsimile	1000 Tallan Building
<input type="checkbox"/> Overnight	Two Union Square
<input checked="" type="checkbox"/> Email	Chattanooga, TN 37402

12.12.2009

REQUEST FOR PROPOSAL

Management Audit of Tennessee American Water

PROPOSAL DUE: __, 2009

BACKGROUND

Tennessee-American Water Company ("TAWC"), a wholly owned subsidiary of American Water Works Company, Inc. ("AWW") requires a comprehensive management audit by an independent, certified public accounting ("CPA") firm of the affiliate relationship between TAWC and American Water Works Service Company ("AWWSC"). The referenced management audit is to be prepared for filing with the Tennessee Regulatory Authority ("Authority" or "TRA"). The management audit shall include, but not be limited to, an investigation of AWWSC's management performance and decisions relating to internal processes and internal controls with an attestation¹ and recommendations of any management process changes needed for those controls and implementation thereof. Further, the management audit shall evaluate and render an opinion with an attestation regarding the charges allocated to TAWC, including the efficiency of processes and/or functions performed on behalf of TAWC, as well as the accuracy and reasonableness of the allocation factors utilized. Attached is: (i) a copy of the relevant portion of the TRA Order from Docket No. 08-00039 that requires TAWC to conduct this management audit and (ii) the two most recent management audits performed for TAWC, the most recent of which is discussed in the TRA Order.

AWW is a publicly traded utility holding Company subject to the guidelines and requirements of the U. S. Securities and Exchange Commission ("SEC") and the New York Stock Exchange ("NYSE"). AWW owns and operates 73 subsidiaries, including regulated water and wastewater utilities in 20 states, and 46 non-regulated subsidiaries including AWWSC. AWWSC through affiliated interest agreements with the regulated subsidiaries that were approved by the state regulatory commissions provides services to the regulated subsidiaries. AWWSC also provides services to the non-regulated subsidiaries. Those services provided to the regulated subsidiaries, including TAWC, are defined in the 1989 Service Company Agreements. AWWSC is comprised of a number of offices and locations to address the services provided to the AWW subsidiaries in the most efficient manner possible. AWWSC corporate functions are located in Voorhees, NJ; the national Shared Services Center is located in Woodcrest, NJ, the national customer call centers are located in Alton, IL. and Pensacola, FL, the national Water Quality Lab is located in Belleville, IL, and other offices are located in Hershey, PA, Charleston, WV, St. Louis, MO, Chula Vista, CA, Phoenix, AZ, and Woodcrest, NJ.

AWW's financial audit is performed by PricewaterhouseCoopers ("PwC"). AWW's Sarbanes-Oxley compliance work is performed by Ernst & Young ("E&Y"). The financial audit includes issuance of certified financial statements for

¹ Hereinafter, the terms "attest" and "attestation" for purposes of this RFP and proposed management audit shall be defined as: an opinion letter in accordance with Generally Accepted Auditing Standards (GAAS) concerning the Management Audit (report, findings and recommendations) signed by the independent licensed CPA in charge of the proposed engagement herein.

AWW on a consolidated basis as required by GAAP. As a publicly traded company, AWW files a quarterly 10-Q report with the SEC and the annual SEC 10-K report, including the annual certified financial reports of AWW on a consolidated basis. Audited annual financial statements are also issued for certain regulated subsidiaries, including TAWC. The financial audit of AWW on a consolidated basis includes the necessary review of all AWW subsidiary information, including AWWSC, required to conform to Generally Accepted Auditing Standards ("GAAS") and the issuance of the auditor's opinion on the consolidated financial information of AWW. The successful bidder ("Independent management auditor" or "Auditor"), will make best efforts not to duplicate the financial auditing functions already performed by AWW's financial auditor. Instead, the Independent management auditor may rely on AWW's audited financials and any financial auditing work already performed by PwC. Likewise, the successful bidder shall not duplicate the functions of AWW's SOX compliance testing. Instead, the Independent Management Auditor may rely on the work already performed by E&Y and PWC. If the Independent Management Auditor is not provided sufficient information from the PwC financial audit and E&Y internal control evaluation, the Auditor may perform such additional work as required to formulate their opinion.

To conduct the required management audit, TAWC and AWWSC will provide the Auditor with total AWWSC costs for 2008 for each functional area, and those AWWSC costs charged to TAWC. In addition to analysis and reports, TAWC and AWWSC will also make employees, officers, or other such personnel available for interview, as deemed necessary by the Auditor to form a comprehensive understanding of the costs incurred by AWWSC, and the basis for assignment and/or allocations of costs to TAWC and the other regulated and non-regulated subsidiaries. The review of the allocations will include limited testing at the level appropriate to test the reliability of the allocation methodology.

For costs charged to TAWC, TAWC/AWWSC will provide TAWC's supporting documents of (i) costs assigned directly to TAWC and (ii) costs allocated to TAWC, with an explanation of the allocation process. For each category of expense, AWWSC/TAWC will provide a discussion of the nature of the service provided, and an explanation of the benefits received by TAWC and its customers for each service. The Auditor will be authorized to communicate with AWWSC, TAWC and their affiliates as deemed necessary by the Auditor, including seeking responses or clarification to a draft of the Management Audit Report and draft of tentative findings, assessments and recommendations developed during the management audit.

Portions of the above referenced information may include business sensitive information and/or non-public information that would require appropriate confidential protection. An appropriate non-disclosure/confidential protection agreement will be made part of the final contract applicable to any successful bidder and, to the extent that the TRA or participants to the proceeding for which the management audit was prepared are provided access to such confidential

information, the protections of the Protective Order entered in TAWC's 2008 rate case docket, or a separate new Protective Order with protections equivalent to the 2008 TAWC rate case Protective Order shall be entered in the docket if a new docket is opened by the TRA relating to the management audit.

If _____ is interested in preparing the management audit, please provide a proposal by _____, 2009.

SECTION A:

ROLE OF THE AUDITOR

Any Auditor who is selected to perform the management audit expressly agrees to perform the management audit as an independent contractor. Any conclusions, results, or recommendations formulated by the Auditor may be examined by any participant to the proceeding for which the management audit report was generated.

THE ROLE OF THE TRA STAFF

The role of the TRA Staff in the management audit process will be to ensure that the general and Company specific requirements are fully addressed in the management audit, in accordance with the directives specified in the TRA Order issued on January 13, 2009. Further, it shall be understood that the TRA and/or its Staff shall not be liable for any acts committed by the Auditor or its agents in the preparation and presentation of the Management Audit Report. TRA Staff personnel will be copied and informed of all requests and replies for information between the Auditor and the Company and shall be given five working days notice of all meetings and interviews between the Company and the Auditor. The TRA Staff may take an active part in the management audit and the Auditor should be prepared to work with the TRA Staff throughout the course of the audit.

SCOPE OF WORK

TAWC is soliciting the services of a qualified independent CPA firm to conduct a management audit as set forth below. Given the nature of this engagement the independent CPA firm may employ consultants with management audit experience to assist in conducting the management audit if that would minimize the cost of the management audit. The proposer shall identify any contemplated consulting arrangement in its response to this RFP. Consultants employed by the independent CPA firm selected, if any, will be disclosed to TAWC and the TRA Staff as soon as that arrangement is known. Any consultants used by the Auditor shall be subject to the same independence provisions included in Section B of this RFP. The management audit is to be performed in accordance with the provisions contained in the Order issued by the

TRA on January 13, 2009 and detailed in this RFP and shall at a minimum be conducted under the supervision of an independent CPA firm who may direct the audit in order to issue a report, opinion and attestation.

The TRA has required TAWC to conduct an independent management audit to determine AWWSC's management performance and decisions relating to internal processes and internal controls, evaluate the charges allocated to TAWC, the efficiency of processes and/or functions performed on behalf of TAWC, and the accuracy and reasonableness of the allocation factors utilized.² The purpose of this management audit is to provide an independent, objective and comprehensive review of TAWC and the management fees paid to AWWSC.

In addition to the scope of the work above, the Independent Management Auditor may be required to participate, as an independent party (not on behalf of any individual party) in a proceeding before the TRA concerning the management audit. Appearance for such proceeding before the TRA would include responding to data requests relating to the management audit, preparing pre-filed direct and rebuttal testimony, and testifying before the TRA if required. The cost estimate for completion of the requirements set forth in Section B below should be segregated to clearly identify the cost of the management audit from the subsequent costs that would be required for participation in a proceeding before the TRA. The hourly rates submitted under Section B shall be the basis for billing services performed beyond the filing of the management audit.

The Auditor shall be expected to enter into a contract with TAWC for performing the services outlined herein in order to deliver a complete and comprehensive Management Audit Report. Proposer shall cause to be delivered to the TRA a sealed bid to be inspected mutually and concurrently by the TRA Staff and TAWC. TAWC shall have no contact with the bidders regarding price.

The Auditor shall develop findings and make appropriate conclusions and recommendations for specific areas with potential for improvement.

CONTACT INFORMATION

The Auditor's principal contacts with TAWC will be Michael A. Miller and John Watson, or a designated representative, who will coordinate any assistance to be provided by TAWC/AWWSC. Michael A. Miller will have the primary responsibility for briefing any necessary parties and TRA Staff during the management audit process.

² By Order dated January 13, 2009 in Docket No. 08-00039, the TRA ordered the Company to develop a Request for Proposal ("RFP") for a comprehensive management audit by an independent certified public accountant. Pursuant to the Order, the issuance of the RFP shall occur subsequent to an approval of the RFP by the Authority.

TAWC's Project Leader is:

Michael A. Miller
P.O Box 1906
Charleston, WV, 25327
E-mail: mike.miller@amwater.com

The Project Leader will serve as the Auditor's main point of contact within TAWC, its parent and affiliates and will be responsible for providing all background materials, policies and procedures, reports and information that will be necessary for the completion of project work.

The Auditor will be responsible for maintaining contact with the Project Leader and taking the lead from him/her and TRA Staff, as necessary. The Project Leader will work with necessary TRA Staff in order to complete work under the project and the Project Leader will work with the TRA Staff to further define any change in project scope as may be required by the TRA Staff. Weekly communication (written and via on-site meetings or telephone) shall be required at the request of the TRA Staff. More or less frequent communication may be required or permitted by the TRA Staff.

SPECIFIC REQUIREMENTS OF THE MANAGEMENT AUDIT

The management audit should include along with the Management Audit Report and working papers, the independent CPA's opinion and attestation to the following areas:

1. Assess the status and sufficiency of AWWSC's management performance and decisions relating to internal processes and internal controls
2. Assess the efficiency of operating procedures and communication between TAWC and AWWSC.
3. Assess the AWWSC performance with industry standards and best management practices.
4. Assess the appropriateness of organizational structure of AWWSC/TAWC and reporting alignment.
5. Assess the development of AWWSC's long-range and short-range operational plans to assure the effective and efficient performance of the functions.
6. Assess the appropriateness of AWWSC's staffing and skill sets.
7. Assess TAWC's controls and systems to analyze and control costs from AWWSC.
8. Evaluate the accuracy and reasonableness of total AWWSC charges (including expenses) allocated to TAWC.
9. Evaluate the necessity, reasonableness/prudence, and efficiency of processes and/or functions performed by AWWSC on behalf of TAWC.
10. Evaluate the accuracy and reasonableness of the allocation factors utilized to allocate AWWSC charges to regulated and non-regulated

subsidiaries, and allocated regulated AWWSC charges to TAWC, including review of work previously performed regarding allocation methods which will be supplied by AWW.

The management audit will also address the following processes:

1. Perform the necessary audit steps, including random, statistically valid sampling, to determine whether the time and expenses charged or allocated to TAWC are accurate, reasonable and necessary and are accurately allocated to TAWC through the AWWSC accounting system.
2. Make specific recommendations and the estimated remediation costs regarding the findings of the management audit, if any.
3. Consider the work and avoid duplicating the work, analysis, findings, and/or certifications of PWC and E&Y to the extent deemed possible to keep the cost of the management audit and the cost to TAWC customers as low as possible while formulating an opinion in conformance with the management audit requirements.
4. Provide both a draft Management Audit Report for review by TAWC and the TRA Staff, prior to providing the final Management Audit Report. The Report should describe the methods and/or sources used and work undertaken to develop the information upon which the findings, conclusions and recommendations described above are based. The Report must include affirmation by the Independent Management Auditor that its management audit complies with: (i) generally accepted auditing standards (GAAS) related to issues of management economy, efficiency, and effectiveness as applicable to public utilities; and/or, (ii) as set forth in GAAP. The successful bidder shall be "independent" as set forth by GAAS and a "certified public accounting firm" as defined by GAAP.
5. Upon completion of the management audit, the Auditor shall deliver to TAWC and the TRA Staff one set of working papers, indexed, bound and in orderly form, supporting the development of all calculations and recommendations by the Auditor and summarizing the procedures used in analyzing and evaluating all data, including proper treatment of any confidential information so designated during the development of the Management Audit Report. These working papers must be delivered to TAWC and the TRA staff member assigned to oversee the management audit. The working papers shall be delivered concurrently with the delivery of the final Management Audit Report. For purposes of this project, audit interview notes shall be deemed part of the auditor's work papers.
6. Upon request of the Auditor, the Company shall furnish any and all documentation or information requested which is related to TAWC and AWWSC and is relevant to the scope of the management audit. The Company may conspicuously mark such documentation or information as being confidential if this data is closely held.

7. Nothing in the final written Contract will preclude the Auditor from performing tests, checks or other audit procedures if the Auditor does not deem the work of the predecessor audits mentioned above adequate.

PROPOSAL INFORMATION, CONDITIONS, INSTRUCTIONS & FORMAT

Proposers shall promptly notify TAWC of any ambiguity, inconsistency, conflict or error which they may discover upon examination of this RFP document. Verbal inquiries regarding this RFP are not permitted. All inquiries must be made in writing and received by the TAWC/AWWSC Project Leader who will provide copies of all such inquiries to the TRA Staff designee.

After the TRA Staff review, TAWC will respond to all or part of the written inquiries received by issuing a written Addendum to the RFP, if in the opinion of TAWC and TRA Staff an Addendum to this RFP is deemed necessary for Proposers to submit proposals or if the lack of such addendum would be prejudicial to prospective Proposers. Any Proposer who attempts to make inquiries outside the process described in the previous paragraph may be disqualified.

PROPOSAL SUBMISSION DEADLINE

Sealed proposals must be received by TRA no later than 3 pm, CST on _____, 2009 at:

Tennessee Regulatory Authority
460 James Robertson Parkway
Nashville, TN 37243-0505

Proposers are to submit an original and five (5) copies of each proposal.

Proposals received after the time and date set forth above shall be rejected. All proposals submitted in response to this RFP must be signed by an individual with the legal authority to submit the offer on behalf of the Proposer.

SECTION B:

RESPONSE TO THE RFP

The response to the RFP should include the following:

1. Total estimated cost "not to exceed" for work defined in Section A of this Request for Proposal. The cost estimate for this project should be broken down into as much detail as possible, including segregation of billable

- hours, hourly rates, travel costs, lodging and meals, printing, other incidentals, etc.
2. Hourly rates for any and all employees and consultants who would provide service to the Company during the course of the preparation of the management audit.
 3. An outline and narrative discussion of the scope of the services that will be provided in order to satisfy the project's requirements. The proposal should set forth a work plan to perform the services required of this RFP. In developing the work plan, reference should be made to such sources of information as enabling legislation, bylaws, interviews, prior management audits, organizational charts, manuals and programs, financial and other management information systems, and other related materials. The work plan should also identify any proposed segmentation or phasing of the project and the level of staff and number of hours to be assigned to each proposed segment of the engagement
 4. Identification in specific detail of the methodologies that the Proposer will use (including the manner in which the Proposer will incorporate, utilize and rely on the sources described in Section A, SPECIFIC REQUIREMENTS, Paragraph 13 above to avoid duplication of effort). The Auditor will perform all requisite procedures to attest and render an opinion.
 5. A definition section specifically defining all key terms used in the response to this RFP.
 6. A discussion of additional steps and costs associated with Section A, SPECIFIC REQUIREMENT, Paragraph 17; if required.
 7. A list of industry consultants who will work on the project in order to reduce cost, along with their qualifications.
 8. A description of the resources that Proposer will utilize or make available for the project.
 9. A description of the prior experience of the firm and individuals in preparing management audits that are related to or similar to this requested management audit, specifically addressing experience with regulated utility management audits during the last five years. Specifically, identify all management audit experience involving utility holding companies with service organizations that provide services to both regulated and non-regulated subsidiaries, service company organizations that direct charge or allocate costs among regulated and non-regulated companies, and publicly traded companies. Please indicate whether the Proposer has offered or given testimony before regulatory commissions and include reference to regulatory commission case numbers, orders, etc.
 10. Identification of the principal in charge of the management audit (who must be a licensed certified public accountant), who shall attest to the management audit as set forth above and provide testimony to support the accuracy and validity of the analyses undertaken and conclusions and recommendations reached during the management audit, if required.

COST OF THE RFP

Each Proposer shall be solely responsible for all costs and expenses associated with the preparation and/or submission of its proposal, and TAWC shall have no responsibility or liability whatsoever for any such costs and expenses in the preparation of same. Neither the TRA, TAWC, its directors, officers, employees nor authorized agents shall be liable for any claims or damages resulting from the solicitation or collection of proposals. By submitting a proposal, a Proposer expressly waives (i) any claim(s) for such costs and expenses, and (ii) any other related claims or damages.

Pursuant to the language in the Order issued by the TRA on January 13, 2009 in docket number 08-00039, the TRA panel may determine during the bidding process that the RFP results in a bid that might not yield a benefit to TAWC customers, and the Authority can order that a management audit not be performed. In such case, the TRA shall not be liable for any costs of preparation of responses by Proposers.

PURCHASE OBLIGATION

TAWC and responding firms expressly acknowledge and agree that TAWC has made no expressed or implied promises to expend any dollar amounts with respect to the services addressed by this RFP. Submitting a proposal in response to this RFP, and/or any communication by TAWC, which must be approved in advance by the TRA Staff in the selection process, shall not vest any right, privilege, or right of action in any Proposer.

QUALIFICATION OF PROPOSERS

Proposers will be evaluated by TAWC and also reviewed by the TRA Staff based on their experience in performing the services requested, financial stability, appropriate personnel, responsiveness, technical knowledge and general organization, prior to being approved.

Proposers may be disqualified and their Proposals rejected for any reason deemed mutually appropriate by TAWC and the TRA Staff including, but not limited to, the following:

1. Evidence of collusion between a Proposer and any other Proposer
2. An unsatisfactory performance record on prior projects for TAWC, or any other organization for good cause shown by TAWC to the TRA.
3. The appearance of financial instability and or evidence that the Proposer may not be financially able to complete the work required by the Scope of Work in a satisfactory manner.

4. Evidence of the Proposer having failed to complete one or more public contracts in the past.
5. The Proposer, or its agents or employees, have been convicted of a crime arising from illegal accounting practices associated with previous public contracts.

INDEPENDENCE

The firm, including any consultant used on this project, must provide an affirmative statement that it is independent of TAWC, AWWSC, AWW, the TRA, the Attorney General of Tennessee, the City of Chattanooga, and the Chattanooga Manufacturers Association as defined by Generally Accepted Auditing Standards (GAAS) and that firm will warrant in the engagement contract that they will not undertake an engagement that will impair their affirmation of independence during the term of the audit. The TRA in its reasonable discretion shall determine a firm's independence.

SECTION C:

SELECTION PROCESS & EVALUATION CRITERIA

The selection of the Independent Management Auditor will be based on the following criteria: widely recognized expertise in the utility management auditing field, the proposed scope, cost, adequacy and availability of resources to complete the project on schedule and the Auditor's experience and qualifications in conducting similar management audits with particular weight given to the experience related to regulated utilities and experience in regulated utility work involving utility holding company service organizations and publicly traded companies. The selection will be made by TAWC with the approval of the TRA.

The following evaluation criteria category weights will be used for all proposals submitted:

Qualifications and Experience:	35%
Proposed Approach and Work Plan	25%
Proposed Key Personnel	15%
Pricing	25%

The selected Proposer will be required to meet all time requirements and deadlines for completion of the management audit as described above.

TAWC, with the approval of the TRA reserves the right to select the top ranked firm based solely on the scoring of the written proposals. At the discretion of the TRA panel, two or more of the highest ranked firms may be invited to make an oral presentation of their respective Proposal concurrently to TAWC and the TRA. The selected firms will have an opportunity to summarize the information provided in their written proposals, expand on their capabilities, experience, proposed approach, work plan and answer questions from the TRA. If firms invited to appear before the Authority do not appear, their bid may be set aside and not considered. TAWC may enter directly into a contract with said firm subsequent to TRA approval

During the evaluation process, TAWC reserves the right subsequent to TRA approval, where it may serve TAWC's best interest, to request additional information or clarifications in written communications approved by the TRA Staff from Proposers, or to allow corrections of errors or omissions.

Prior to approval of a bid, the TRA panel may determine during the bidding process that the RFP results in a bid that does not yield a benefit to TAWC customers and the Authority may order that a management audit not be performed.³

CONTRACT CLAUSES AND PROVISIONS

Upon acceptance of the winning bid, the Proposer will be required to enter into a written contract with TAWC. The contract will be provided in its entirety to the winning Proposer including but not limited to, clauses pertaining to:

1. the scope of work, cost
2. billing
3. insurance requirements
4. hold harmless
5. cancelation/termination
6. assignment
7. payment of taxes
8. application of laws and regulations
9. jurisdiction and choice of law
10. subletting
11. confidentiality
12. enforceability/severability
13. proof of licensure (i.e., valid CPA license, etc.)

³ Order, *In Re: Petition of Tennessee American Water Company to Change and Increase Certain Rates and Charges So As to Permit It to Earn a Fair and Adequate Rate of Return on Its Property Used and Useful in Furnishing Water Service to its Customers*, Docket No. 08-00039, p. 22 (January 13, 2009).

After the written contract and terms are developed by TAWC and the Proposer, the Contract will be submitted to the TRA for ratification prior to the contract being signed by the parties and considered enforceable.

INDEPENDENT CONTRACTOR

The Auditor's and any consultant's relationship to TAWC in performing the contract is that of an independent contractor and nothing herein shall be construed as creating an employer/employee relationship, partnership, joint venture or other business group or concerted action. The personnel performing services under this contract shall at all times be under the Auditor's exclusive direction and control and shall be employees or consultants of the Auditor and not TAWC.

Sincerely,

Michael A. Miller
Director, Rates and Regulations

7657745.1

BEFORE THE TENNESSEE REGULATORY AUTHORITY

NASHVILLE, TENNESSEE

January 13, 2009

IN RE:

PETITION OF TENNESSEE AMERICAN WATER
COMPANY TO CHANGE AND INCREASE CERTAIN
RATES AND CHARGES SO AS TO PERMIT IT TO
EARN A FAIR AND ADEQUATE RATE OF RETURN
ON ITS PROPERTY USED AND USEFUL IN
FURNISHING WATER SERVICE TO ITS CUSTOMERS

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) DOCKET NO.
) 08-00039
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ORDER

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The panel voted to adopt the Company's attrition period forecast of \$179,088 because this amount reflected the actual increases in rates from the City of Chattanooga Sanitary Board.

V(b)6. MANAGEMENT FEES⁵¹

The Company projected attrition period Management Fees of \$4,335,190. This amount is based on the historical test period expenses of \$4,789,601 and the elimination of non-recurring expenses of \$729,713.⁵² In addition, the Company eliminated salary and salary-related overheads for the Non-Revenue Water ("NRW") Manager.⁵³ To the normalized historical test period amount, the Company applied an inflation factor of 3.5% per year to reflect the expected salary and salary-related overhead increases for the attrition period.⁵⁴ An additional adjustment was made to the attrition period forecast to reflect the difference between the FAS 87 pension expense billed to TAWC by AWWSC during the test period and the pension expense under ERISA.⁵⁵

The Company also stated that it had retained the services of the firm of Booz Allen Hamilton ("Booz Allen") to perform the management audit of the charges allocated by the service company to TAWC, as directed by the Authority in Docket No. 06-00290. The Company asserted that the audit report (the "Booz Allen Report") attests that the allocated costs were prudent, that they were allocated to TAWC by a reasonable methodology, and that they

⁵¹ Management fees are the charges from American Water Works Service Company ("AWWSC") for services provided under the 1989 Service Company contract. Those services consist of services related to accounting, administration, communication, corporate secretarial, engineering, finance, human resources, information systems, operations, rates and revenue, risk management, water quality and other services as agreed to by the Company. These services are billed at cost to TAWC. See Michael A. Miller, Pre-filed Direct Testimony, p. 13 (March 14, 2008).

⁵² Non-recurring expenses include the STEP project, the STAR project, the Business Change project, the Divestiture, and implementation costs related to Sarbanes-Oxley compliance.

⁵³ The Non-Revenue Manager has been transferred to Tennessee American and therefore his cost has been added to the direct employee cost at Tennessee American.

⁵⁴ Michael A. Miller, Pre-filed Direct Testimony, p. 11 (March 14, 2008).

⁵⁵ ERISA utilizes a cash basis for recording pension expense and is the method historically used by the TRA in the regulation of TAWC. The pension amount is based on the minimum contribution amount per the 2008 American Water Actuarial Study performed by the firm Towers/Perrin for the pension year ended June 30, 2008. Michael A. Miller, Pre-filed Direct Testimony, p. 12 (March 14, 2008).

were very reasonable when compared to other utilities.⁵⁶ The Booz Allen Report was filed in this docket along with the Company's *Petition*.

The Consumer Advocate forecasted Management Fees of \$3,453,223 for the attrition period. The Consumer Advocate used the 2005 forecasted Management Fees of \$3,062,940 from TRA Docket No. 04-00288 as its base. This amount was then grown at an annual inflation/growth rate of 3.87% in 2006, 3.23% in 2007, and 3.05% for 2008 and 2009, to arrive at its forecasted amount for the attrition period.⁵⁷ The Consumer Advocate argued that the growth in TAWC's management fees has far out-stripped inflation and has not produced the synergy in savings that the Company claimed would result by using the service company.⁵⁸

The City retained the services of a consultant to review the Booz Allen Report filed in this case. The objective of this review was to form an opinion whether the management audit met the Sarbanes-Oxley ("SOX") requirements of the audit ordered by the Authority in Docket No. 06-00290. Based on its evaluation, the City recommended disallowance of all costs related to the Booz Allen Report and all AWWSC management fees and allocated costs until the Company obtains an audit that conforms to the specifications of the TRA and the new audit report is examined in a later proceeding.⁵⁹ The City claimed, in part, that Booz Allen is not an independent public accounting firm; Booz Allen did not conduct an "audit" as required by the TRA or SOX; and Booz Allen did not conduct an audit in conformance with the rules of the Public Accounting Oversight Board.⁶⁰ The CMA did not offer testimony on this issue, but stated that it supported the positions of the Consumer Advocate and the City relative to management fees.⁶¹

⁵⁶ Michael A. Miller, Pre-filed Direct Testimony, pp. 11-14 (March 14, 2008).

⁵⁷ Terry Buckner, Pre-filed Direct Testimony, CAPD work papers, p. 189 (July 18, 2008).

⁵⁸ Transcript of Proceedings, v. XVI, p. 1649 (August 26, 2008).

⁵⁹ Michael J. Majoros, Pre-filed Direct Testimony, p. 3 (July 18, 2008).

⁶⁰ Michael J. Majoros, Pre-filed Direct Testimony, pp. 8-9 (July 18, 2008).

⁶¹ *Chattanooga Manufacturers Association's Post Hearing Memorandum of Law*, p. 1 (September 2, 2008).

Because of unresolved questions regarding management fees assessed by the service company and requested by TAWC in Docket No. 06-00290, the TRA ordered TAWC to perform a management audit to determine whether all costs allocated to TAWC were incurred as a result of prudent or imprudent management decisions by TAWC's parent and to address the reasonableness of the methodology used to allocate costs to TAWC.⁶² During the Hearing in this docket, the Company's witness testified, "The purpose here was very specific to provide an independent assessment of the costs incurred by TAWC of the service company costs that have been allocated and directly charged to Tennessee American from the service company."⁶³ In order to compare the costs incurred by AWWC and charged to TAWC, the Company stated that a set of peer companies was established for comparison. The Company asserted that, because there were no strictly water companies that could be used for comparison, the Company looked beyond and formulated a set of companies as peers for comparison. The study looked at the services performed by the parent to ensure there was no duplication or overlap of the services provided by TAWC. Further, the study reviewed the allocation factors, to determine whether the functions performed were necessary, budget and control mechanisms were in place and costs were benchmarked. The Company argued that the management audit was in compliance with SOX and similar to accepted audits performed in other states.⁶⁴

A majority of the panel found that the management audit performed did not adequately address the issue of prudence of the management fees, and that the audit was not an independent audit as ordered in Docket No. 06-00290. The Booz Allen witness, Joe Van den Berg, who

⁶² The Authority's June 10, 2008 Order in Docket No. 06-00290 stated at pages 26-27:

Additionally, the panel concluded that TAWC should have a management audit performed in compliance with Sarbanes-Oxley requirements and submit the results to the Authority in one year or, if the audit is not complete in one year, submit a status report on the audit in one year. 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.

⁶³ Transcript of Public Hearing, v. 7, p. 840 (August 20, 2008).

⁶⁴ Transcript of Public Hearing, v. 7, pp. 841-856 (August 20, 2008).

performed the management audit required by the TRA also provided testimony on behalf of TAWC in other dockets, both before the TRA and other utility commissions. For this reason, the panel determined that the independence of the selected audit firm was impaired.⁶⁵ Further, the audit did not address the primary concerns of the Authority that the costs were the result of prudent management decisions. By admission of the Company's witness, the audit report was an "assessment" or review of the costs incurred by the American Water Works Service Company subject to potential allocation to TAWC.⁶⁶ The panel did not find a sufficient basis in the Company's testimony to support the Company's request that management fees should be increased by \$355,365.

The record shows that from 2004 to the Company's forecasted attrition period in this docket, management fees have increased seventy-three percent during the five and one-half year time period. There was a fifty-nine percent increase between the 2004 fees and the fees approved in Docket No. 06-00290. Therefore, a majority of the panel⁶⁷ voted to set the Management Fee attrition year expense amount at \$3,529,933. This amount was based on the Company's forecasted 2005 Management Fee amount from Docket No. 04-00288 as used by the Consumer Advocate in this docket. The majority of the panel voted to change the growth factor to include all customer growth instead of one-half of customer growth, as used by the Consumer Advocate.

Because the panel determined that the Company had not complied with the Authority's directive in Docket No. 06-00290, the panel ordered the Company to develop a Request For Proposal ("RFP") for a comprehensive management audit by an independent certified public

⁶⁵ The Booz Allen witness testified for the Company in the last rate case.

⁶⁶ Joe Van den Berg, Pre-filed Direct Testimony, pp. 2-3 (March 14, 2008).

⁶⁷ Director Freeman did not vote with the majority. Instead, she found that management fees should be held to the same amount as that adopted in Docket No. 06-00290, \$3,979,825. In support of her position, Director Freeman stated that the Company's audit of management fees that was ordered by the Authority in Docket No. 06-00290 did not provide evidence to support an increase in management fees. She further noted that numerous calculations in determining the Company's revenue deficiency would be impacted by her adoption of this figure.

accountant. The RFP for the audit shall include, but not be limited to, an investigation of AWWSC's management performance and decisions relating to internal processes and internal controls with an attestation and recommendation of any needed management changes and implementation thereof. Further, the audit shall evaluate and attest to the charges allocated to TAWC, including the efficiency of processes and/or functions performed on behalf of TAWC, as well as the accuracy and reasonableness of the allocation factors utilized.⁶⁸ This RFP should be filed in this docket no later than six months from September 22, 2008, for approval by the Authority. The issuance of the RFP shall occur subsequent to an approval of the RFP by the Authority.

Further, the panel determined that if, during the bidding process, the RFP results in a bid which might not yield a benefit to TAWC customers, the Authority could order that the management audit not be performed. In this regard, the panel discussed other alternatives available to the Authority, including the participation in a multi-state audit which may be authorized by regulatory agencies in those states served by companies owned by American Water Works Company.

V(b)7. GROUP INSURANCE

The Company projected Group Insurance Expense of \$1,714,550.⁶⁹ This amount was calculated by applying the November 30, 2007 insurance rates to the employee coverage, based upon salary and wage information, and subtracting the employee contribution toward employee healthcare coverage. Consistent with a percentage of labor not charged to expense (20.28%, see

⁶⁸ The panel determined that the Company should contact Authority staff in the event the Company has any questions regarding the scope of the audit.

⁶⁹ Sheila A. Miller, TN-TRA-02-Q001-Group Insurance-Summary (May 28, 2008).

Exhibit Witness: PLB-1

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

12-Months Ended June 30, 2006

Baryenbruch & Company, LLC



**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.

Baryenbruch & Company, LLC 

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	

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			\$	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
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
	Accounting			\$ 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

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
Belleville Lab	Water Quality				1,639
Call Center	Human Resources		228		
Corporate	Accounting			24	
	Administration		1,207		
	Audit			345	
	Communications		140		
	Finance			578	
	Human Resources		569		
	Legal	198			
	Operations				795
	Rates & Revenue			179	
	Risk Management		285		
	Water Quality				411
Central Region	Administration		-		
	Communications				
	Engineering				2
	Finance			6	
	Human Resources		26		
	Legal				
	Operations				
	Risk Management				
	Water Quality				
Northeast Region	Administration		2		
	Communications				
	Engineering				
	Finance			1	
	Human Resources		0		
	Legal	2			
	Operations				7
	Risk Management				
	Water Quality				
Southeast Region	Administration		621		
	Communications		414		
	Engineering				763
	Finance			2,692	
	Human Resources		912		
	Legal	1,195			
	Operations				4,355
	Risk Management		557		
	Water Quality				1,364
Western Region	Administration		-		
	Communications				
	Engineering				(1)
	Finance				
	Human Resources				
	Legal	1			
	Operations				
	Risk Management				
	Water Quality				
IT	Information Systems			4,583	
Supply Chain	Accounting			1,480	
Shared Services	Accounting			4,810	
	Administration		204		
	Finance			997	
	Rates & Revenue			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				
	Contract Services	Travel Expenses	Computer HW/SW	Severance Payments	Total
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				
	Contract Services	Travel Expenses	Computer HW/SW	Severance Payments	Total
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.

Tennessee American Water Company
Estimated Billing Rates Of Tennessee Attorneys

Billing rates as of December 31, 2005 (Note A)							Cost of
Firm	Michigan Location	Number Of Michigan Lawyers	Billing Rate Range			Adjustment (C)	Adjusted Rate
			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.

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/cpiat.txt>)

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)				
Type of Firm	Average Hourly Billing Rate (Note A)			
	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				
Average Hourly Billing Rate (From Above)	Staff Accountant	Senior Accountant	Manager	Partner
	\$ 72	\$ 77	\$ 120	\$ 160
Typical Percent of Time Spent on an Accounting Assignment	30%	30%	20%	20%
	\$ 22	\$ 23	\$ 24	\$ 32
Escalation to Test Year Mid-Point December 31, 2005 (Note B)				
CPI at December 31, 2003				184.3
CPI at December 31, 2005				196.8
Inflation/Escalation				12.5%
Estimated Average Hourly Billing Rate For New Jersey 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/cpiat.txt>)

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	\$141	
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

	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 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.

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.

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	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 IT Service Centers a. Support expenses for the customer information system (ORCOM) <u>New Jersey American</u> a. Payment processing	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
Aquilla	\$ 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

	Appalachian Power	Virginia Electric Power	Kentucky Power	Kentucky Utilities	Louisville Gas & Electric	Union Light, Heat & Power
(A)	\$ 28,324,797	\$ 27,055,213	\$ 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	\$ 27,055,213	\$ 5,685,064	\$ 10,963,363	\$ 4,556,063	\$ 2,883,712
	\$ 1,155,330	\$ 6,548,241	\$ 180,973	\$ 2,120,162	\$ 337,225	\$ 294,880
	\$ 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	\$ 35,638,665	\$ 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

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 156)
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

	Georgia	Georgia Power	Savannah Electric	Energy Mississippi	Mississippi Power	Carolina Power & Light	Duke Power
(A) Add: Employee Benefits & Employer FICA (not included in above amounts)							
Account 926 - Employee Pension & Benefits	\$ 9,654,370	\$ 6,350,790	\$ 1,295,013	\$ 1,316,361	\$ 844,455	\$ 5,640,268	\$ 5,296,520
Account 408 - Taxes Other Than Income (Employer's Portion of FICA)	\$ 4,923,716	\$ 3,126,656	\$ 312,656	\$ 285,927	\$ 468,229	\$ 1,272,861	\$ 2,239,312
Total Cost Pool	\$ 91,130,205	\$ 7,964,134	\$ 7,964,134	\$ 23,206,603	\$ 11,073,307	\$ 37,038,167	\$ 54,532,846
Total Customers (page 304, line 43)	2,097,807	145,544	145,544	354,230	187,909	1,367,435	2,239,513
Customer Accounts Expense per Customer	\$ 43.44	\$ 54.72	\$ 54.72	\$ 65.51	\$ 58.93	\$ 27.09	\$ 24.35
Note A: Calculation of Pension & Benefits Pertaining to Customer Acct Mgmt							
Account 926 - Employee Pension & Benefits (page 323, line 166)	\$ 96,796,552	\$ 12,889,431	\$ 22,987,263	\$ 15,497,826	\$ 142,055,003	\$ 149,922,345	\$ 828,569,320
Total Payroll (page 355, line 96)	\$ 645,308,750	\$ 40,678,526	\$ 65,288,940	\$ 112,328,854	\$ 419,060,053	\$ 419,060,053	\$ 29,272,048
Total Benefits as Percent of Payroll	15.0%	31.7%	35.2%	13.8%	33.9%	33.9%	18.1%
Payroll Charged to Customer Accts Expenses (page 354, line 6)	\$ 84,362,306	\$ 4,087,010	\$ 3,737,614	\$ 6,120,641	\$ 16,638,704	\$ 16,638,704	\$ 5,296,520
Note B: Calculation of Employer's FICA Pertaining to Customer Acct Mgmt							
Payroll Charged to Customer Accts Expenses (page 354, line 6)	\$ 9,654,370	\$ 1,295,013	\$ 1,316,361	\$ 844,455	\$ 6,120,641	\$ 16,638,704	\$ 29,272,048
Employer's Portion of FICA	7.65%	7.65%	7.65%	7.65%	7.65%	7.65%	7.65%
Estimated Employer's Portion of FICA	\$ 4,923,716	\$ 312,656	\$ 285,927	\$ 468,229	\$ 1,272,861	\$ 1,272,861	\$ 2,239,312

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 166)

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

FERC Account Balances:

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

Customer Accounts Expense per Customer

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

Total Benefits as Percent of Payroll

Pension & Benefits Pertaining to Customer Accts Expenses

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

Estimated Employer's Portion of FICA

	Tennessee		Missouri		Alabama		Arkansas		Group Average
	Kingsport Power	Aquila	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	\$ 27,804,537	\$	389,099,885		
\$ \$	19,249	\$ 1,241,896	\$ 3,189,312	\$ 5,848,557	\$ 6,224,256	\$	51,207,068		
\$ \$	22,989	\$ 483,132	\$ 1,012,104	\$ 3,467,698	\$ 611,803	\$	19,165,626		
\$ \$	1,478,923	\$ 10,444,242	\$ 26,401,390	\$ 67,526,920	\$ 34,440,596	\$	459,472,579		
\$ \$	45,980	\$ 457,368	\$ 1,179,621	\$ 1,392,352	\$ 566,699	\$	14,480,283		
\$ \$	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	\$ 374,086,694	\$ 88,720,642	\$	4,075,920,696		
\$ \$	6.4%	19.7%	24.1%	12.9%	7.2%	\$	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		

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.

Tennessee American Water Company
Designation Of Responsibility For Water Utility Functions

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

Tennessee American Water Company
Designation Of Responsibility For Water Utility Functions

Primarily Responsible / Provides Support	Performed By:					
	Tennessee American	Customer Call Centers	Regional Office	Shared Services	Corporate Office	IT Service Centers
Water Company Function						
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	P	
Internal Auditing					P	
Budgeting and Variance Reporting						
Corporate Guidelines & Instructions					P	
Regional Guidelines & Instructions			P			
Budget Preparation	S		P			
Revenue	P		S			
O&M			S			
Depreciation and Interest Expense	S		S			
Budget Preparation—Service Company Charges		S	P	P	S	S
Capital Budget Preparation—Projects	P		S			
Capital Budget Preparation—Non-Project Work	P					
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

Primarily Responsible - P Provides Support - S		Performed By:					
		American Water Service Company					
Tennessee American		Customer Call Centers	Regional Office	Shared Services	Corporate Office	IT Service Centers	Belleville Lab
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				
Legal					S		
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		
Labor Negotiations—Wages		P	S				
Labor Negotiations—Benefits		P	S				
Labor Negotiations—Work Rules		P	S		P		
Training Program Development		S	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			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.

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.

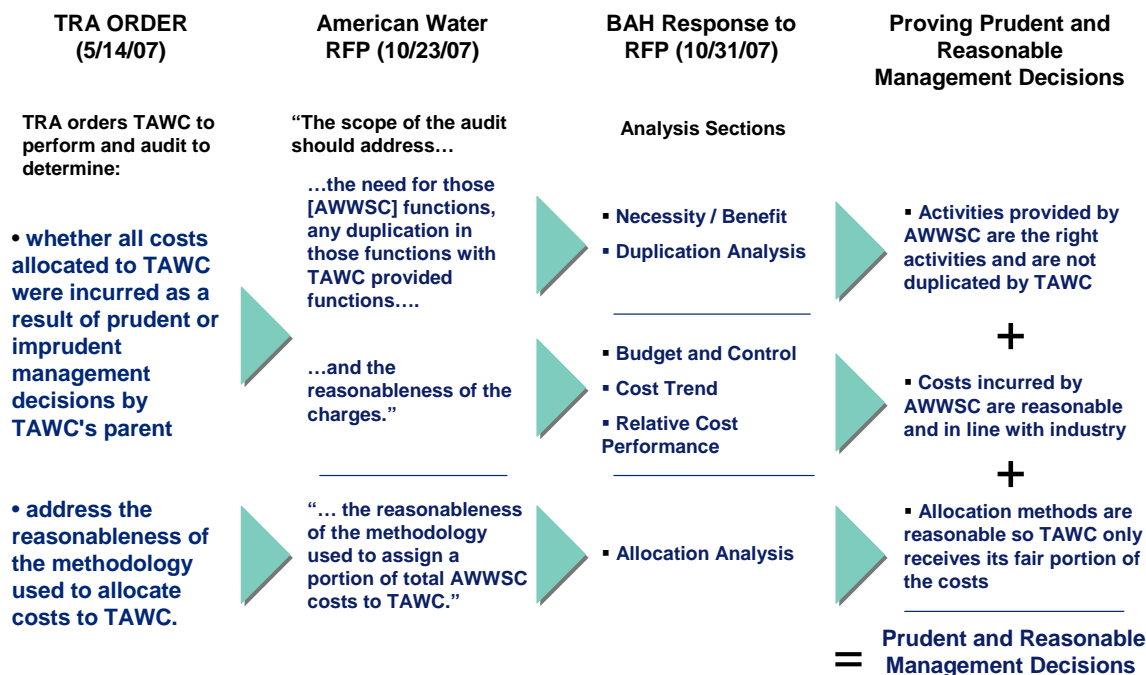
The above criteria were also supplemented in each analysis section of our report with more explicit criteria for that area of analysis.

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

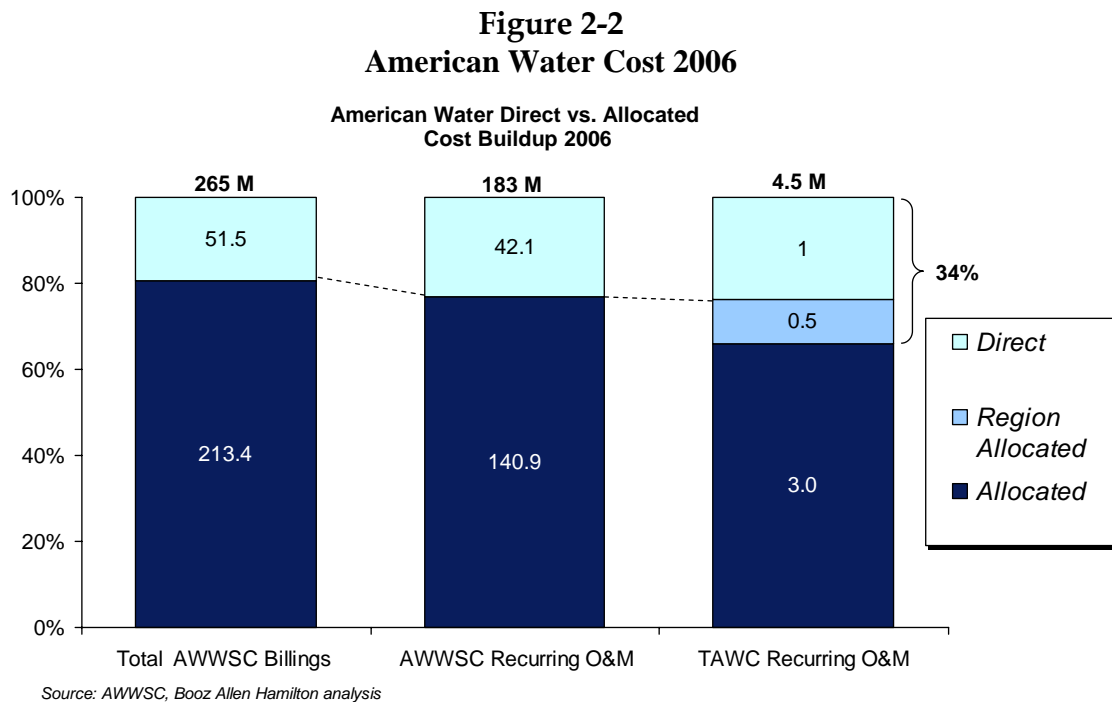
are effective in ensuring that AWWSC charges are appropriately and efficiently incurred.

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.

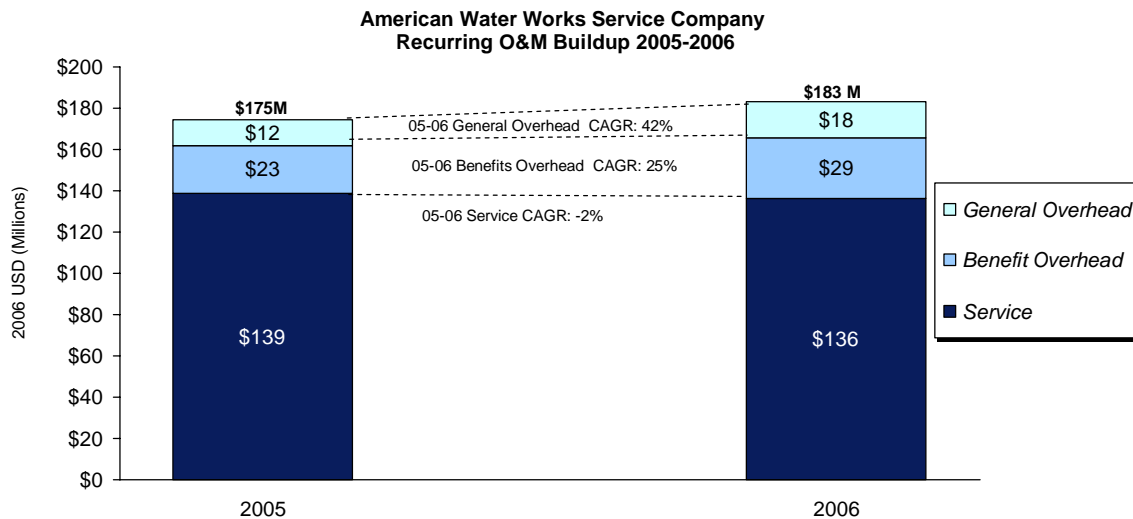


In 2005, AWWSC incurred \$240 million (\$2006), compared to \$265 million in 2006. Services provided are categorized into 14 functions, that will be discussed in Section 3 of this report. The growth in 2006 AWWSC total billings from 2005 represent a real increase of \$25 million in 2006 dollars (\$2006), 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.

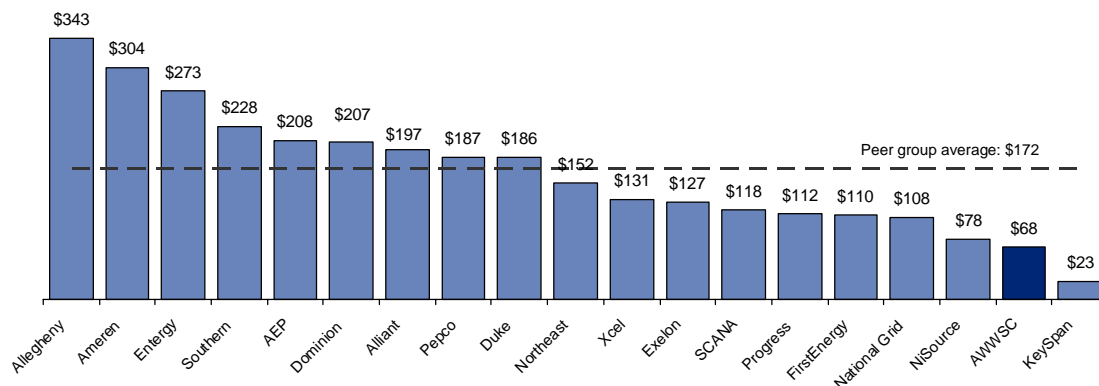
The results of these analyses show that AWWSC compares favorably to the peer utility service companies. Performance is generally average or below average (*i.e.*, lower cost). The results of the AWWSC comparison are set forth in **Figure 2-4**. This figure shows that AWWSC performed at or better than 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	Pepco	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.

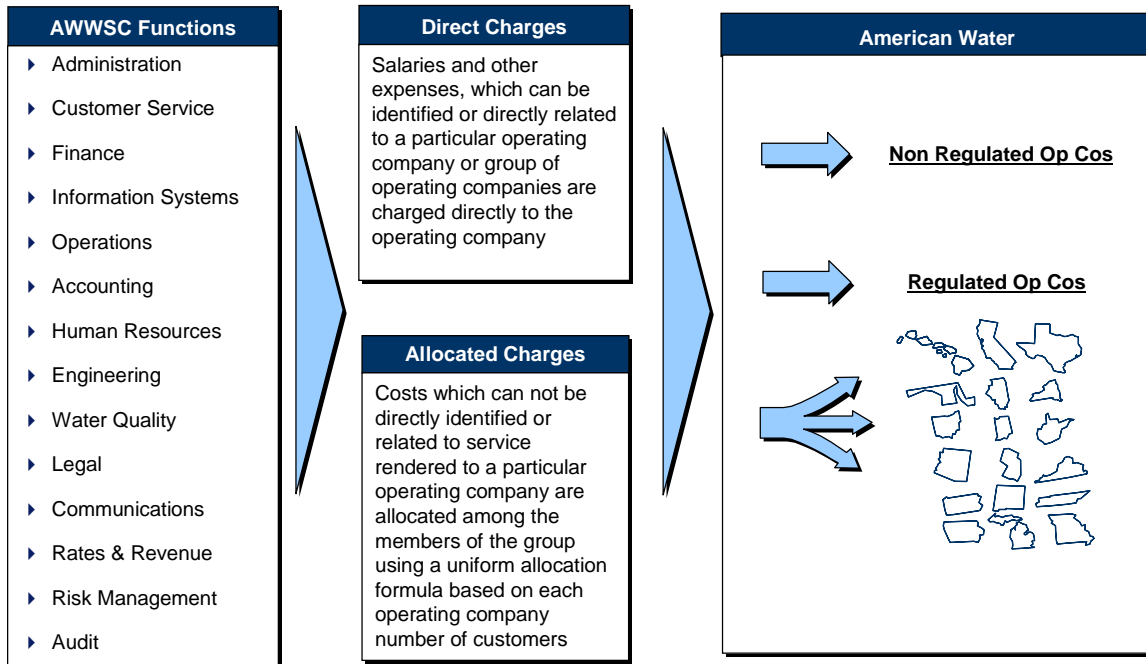
In addition, each regulated operating company pays its proportional share of all common costs that remain after all direct charges have been made. The common costs are allocated on the basis of number of customers served by the operating company relative to the total number of customers served by all 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.

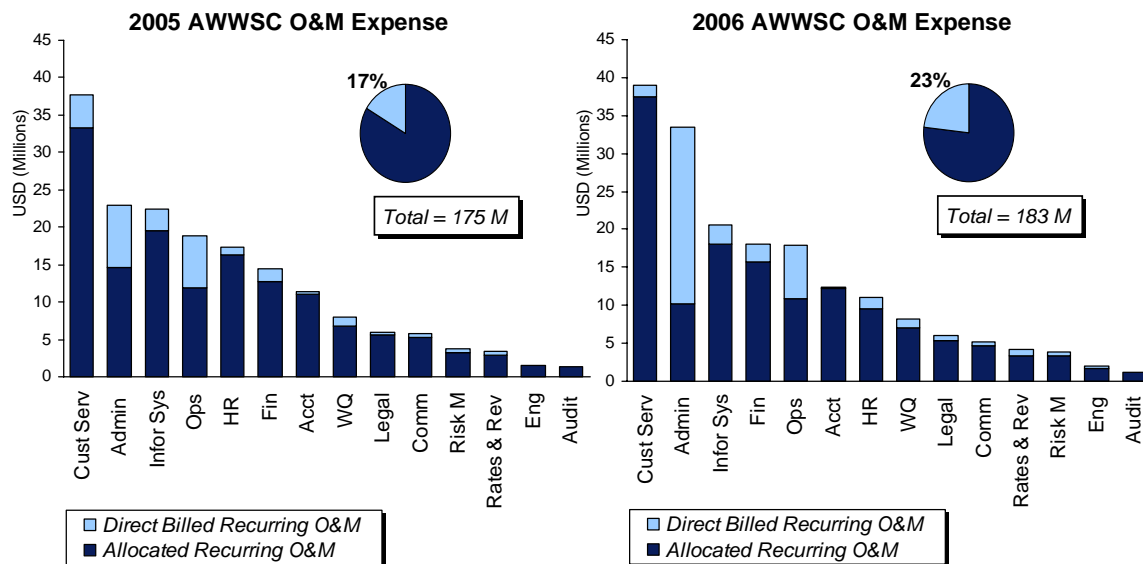
Figure 6-1
AWWSC Service and Overhead Charges Allocation Process



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

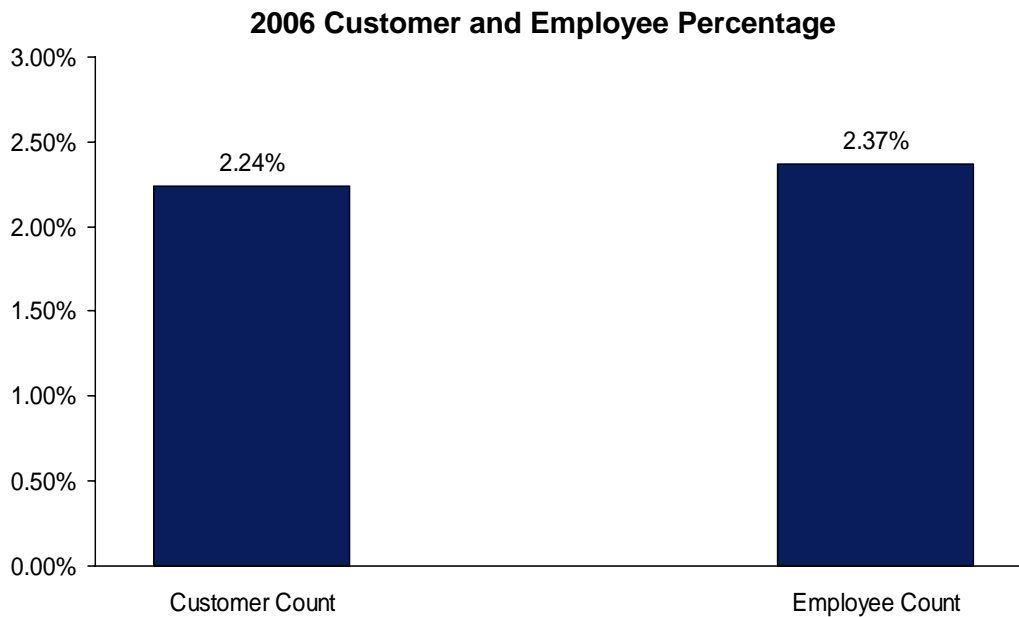


Source: AWWSC, Booz Allen Hamilton analysis

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

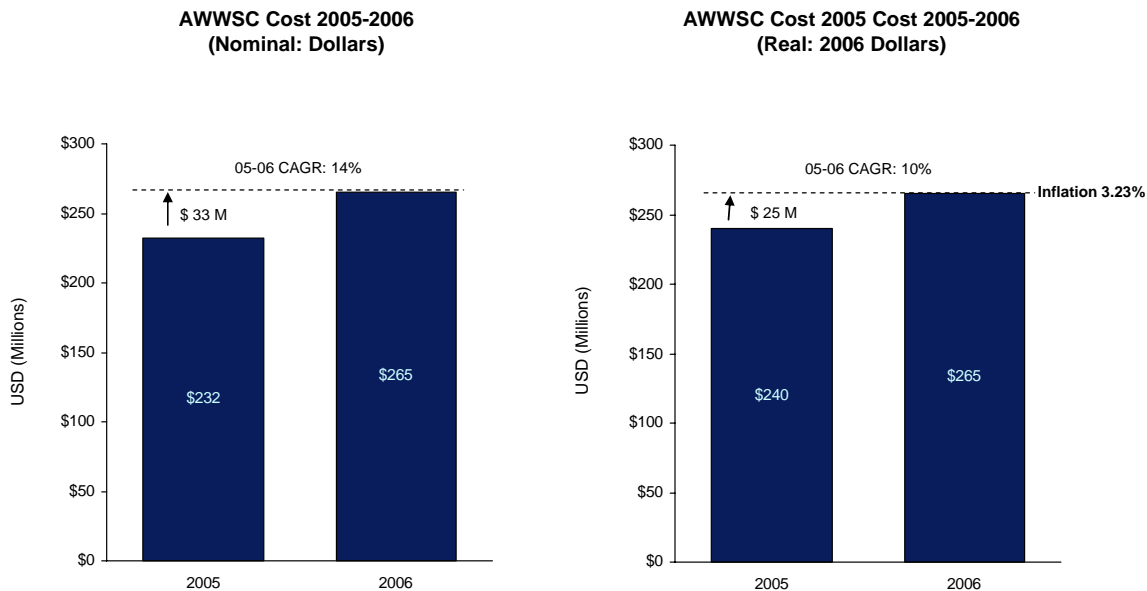
are consistent with the budget and variances are discussed and challenged as appropriate. For these reasons, the budget and control processes were effective in ensuring that AWWSC charges were appropriately and efficiently incurred.

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.

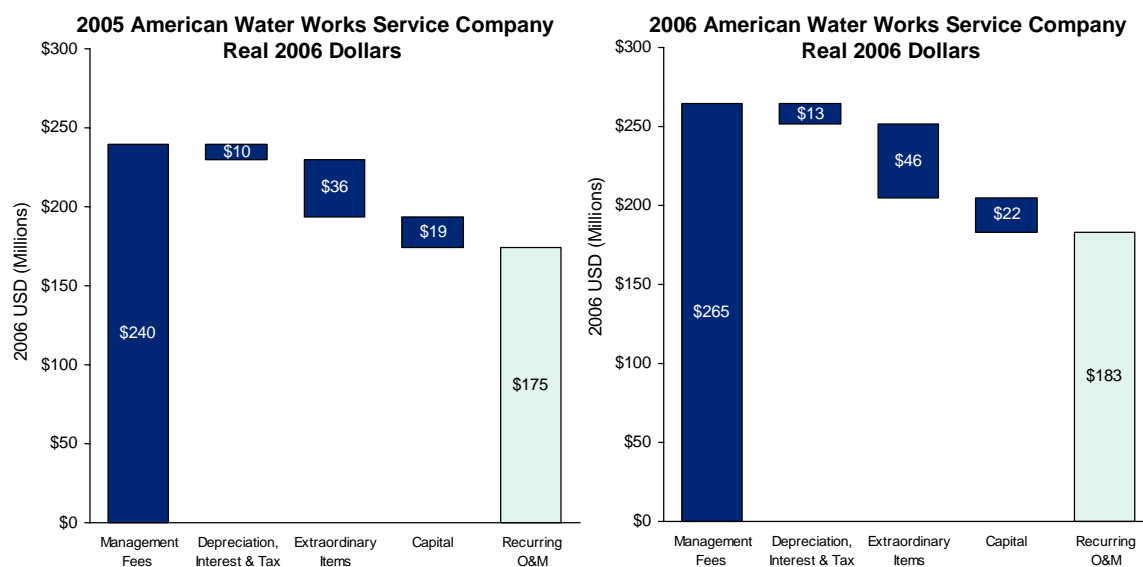
AWWSC billed \$265 million in 2006 and \$232 million in 2005 for services provided to operating companies. These services are categorized into 14 functions, including Administration, Customer Service, Finance, Information Systems, Operations, Accounting, Human Resources, Engineering, Water Quality, Legal, 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

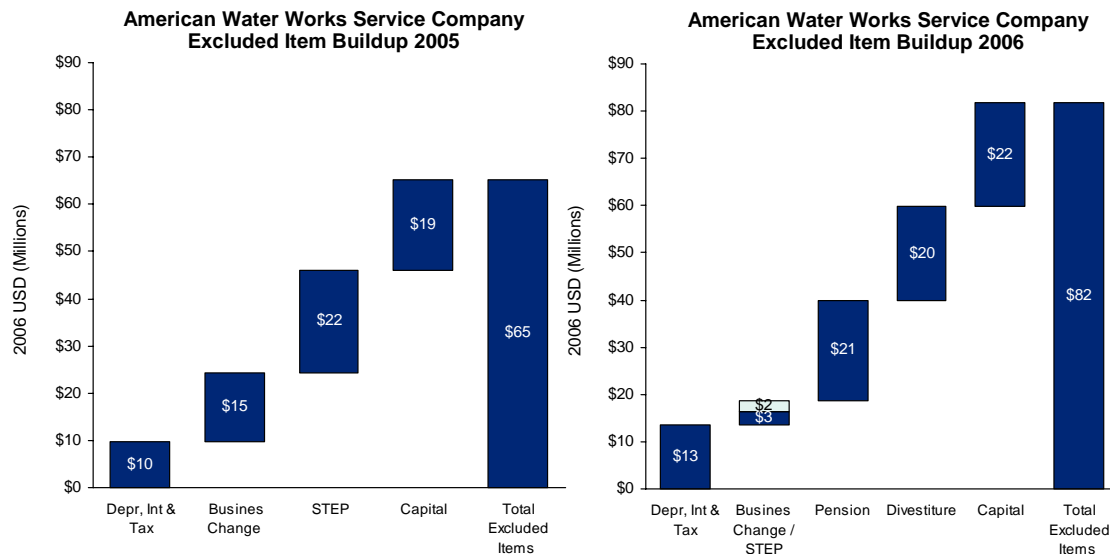
The recurring O&M costs above are subject to further analysis throughout the remainder of this report; however, a brief description of the excluded extraordinary items is warranted:

- **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

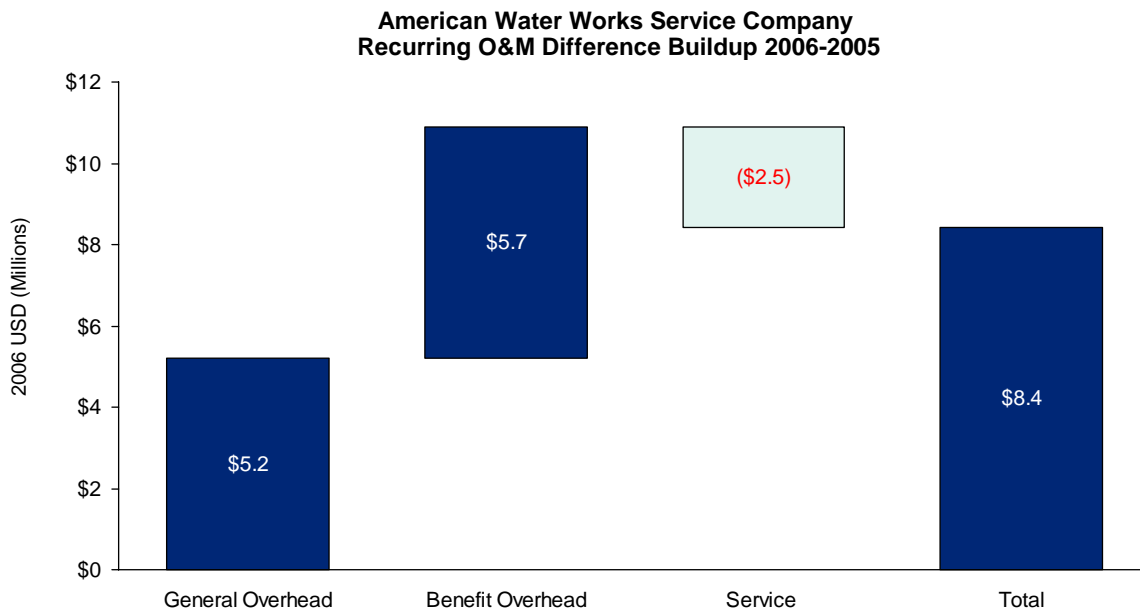


Note: Capital excludes capital cost associated with STEP, Business Change, Depreciation, Interest and Tax.

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

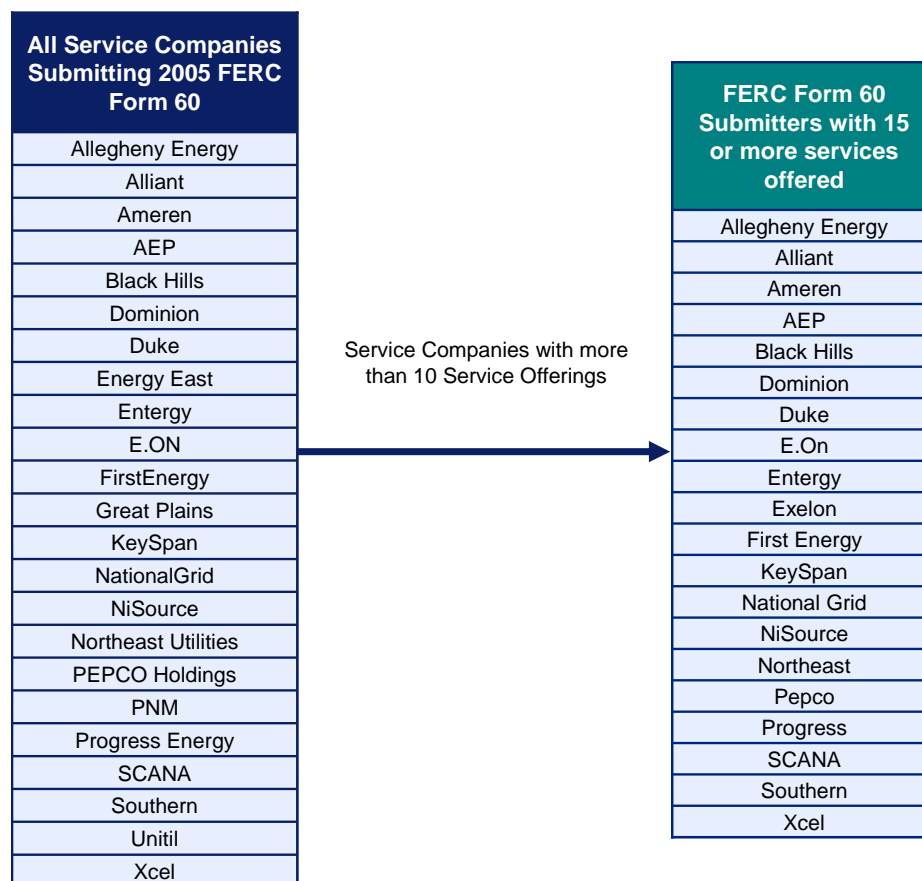
Our analysis consists of analyzing the AWWSC cost levels against utility service companies that file the FERC Form 60. Based on the limited public water utility service company peer data (2), we structured the peer group analysis to include electric utilities. Electric utilities are appropriate peers 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

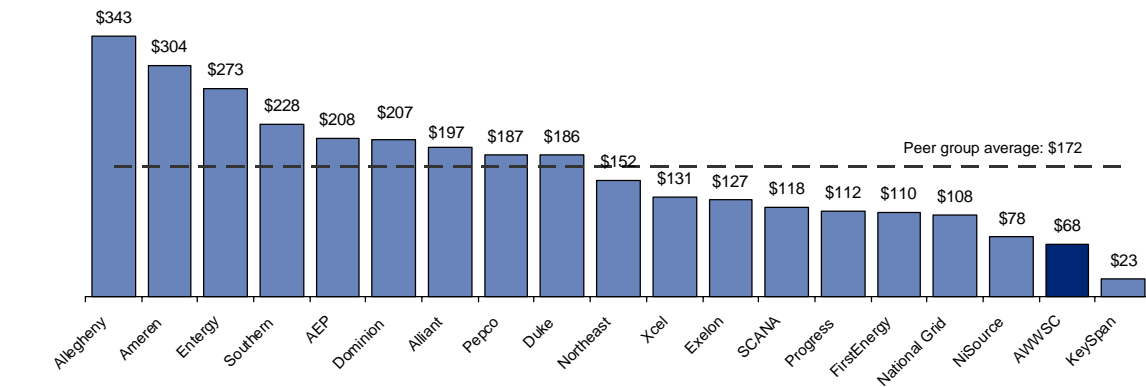
Figure 9-2 summarizes the results of the AWWSC cost comparison. **Figure 9-2** shows that for the majority of the metrics evaluated (6 of 7 metrics measured), AWWSC performed at or better than average compared to the service company peers.

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.

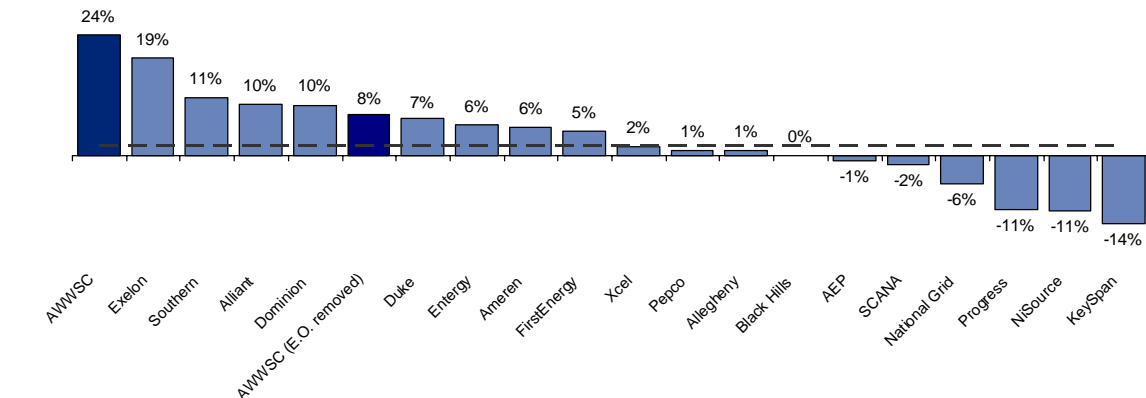
Figure 9-3
2006 Service Company O&M Expense per Customer



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.

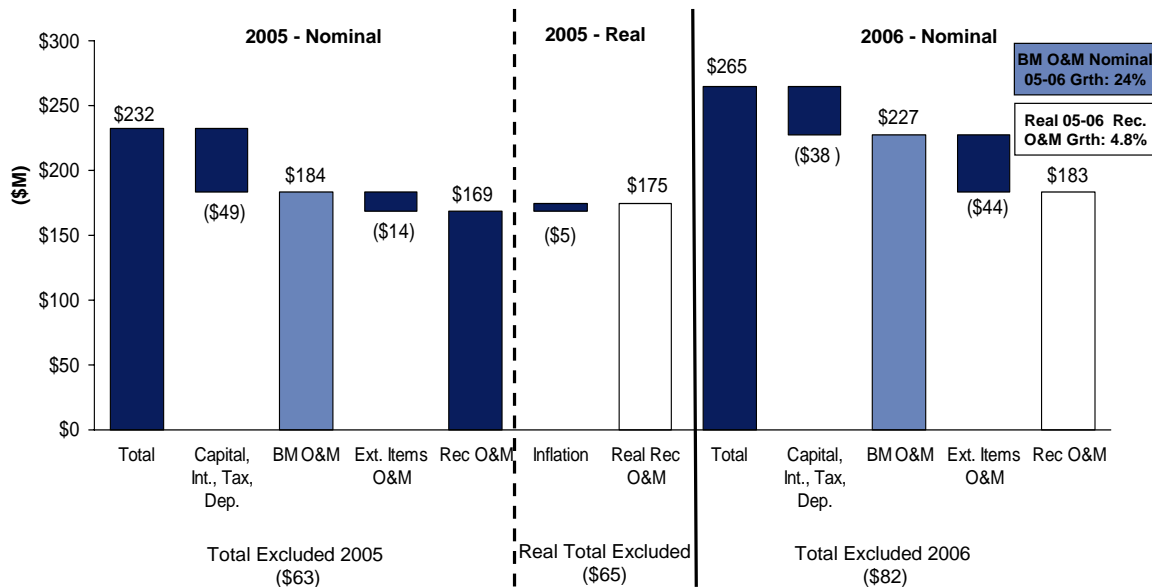
Figure 9-4
Service Company O&M Expense 2005 to 2006 Change



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	<i>See activities below</i>
Executive Oversight	Provides overall executive oversight and leadership to all of American Water; provides strategic direction for the entire company
Business Liaisons	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
Project Management	Manages continuous improvement project initiatives and ensures successful project implementation
Regional Business Administration	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
Audit	<i>See activities below</i>
Financial Audit	Certifies financial statements of the operating companies; ensures compliance with GAAP, IRS and other requirements; performs SOX testing
Operational Audit	Audits entire business model; audits functional operations; tests different aspects of the business to ensure proper functionality

Activities by Function

Communications	<i>See activities below</i>
Government Affairs	Maintains communication with government entities on a national level; sets policy and provides governance for all other government communication at the operating company level
Advertising	Markets the American Water Brand for all of American Water
External Communications	Sets policy, strategy & governance for media relations, customer awareness and communications; handles national level external communications
Internal Communications	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
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	<i>See activities below</i>
Legal Support, Governance, and General Counsel	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
Legal	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

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)	<i>See activities below</i>
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	<i>See 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	<i>See activities below</i>
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	<i>See activities below</i>
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

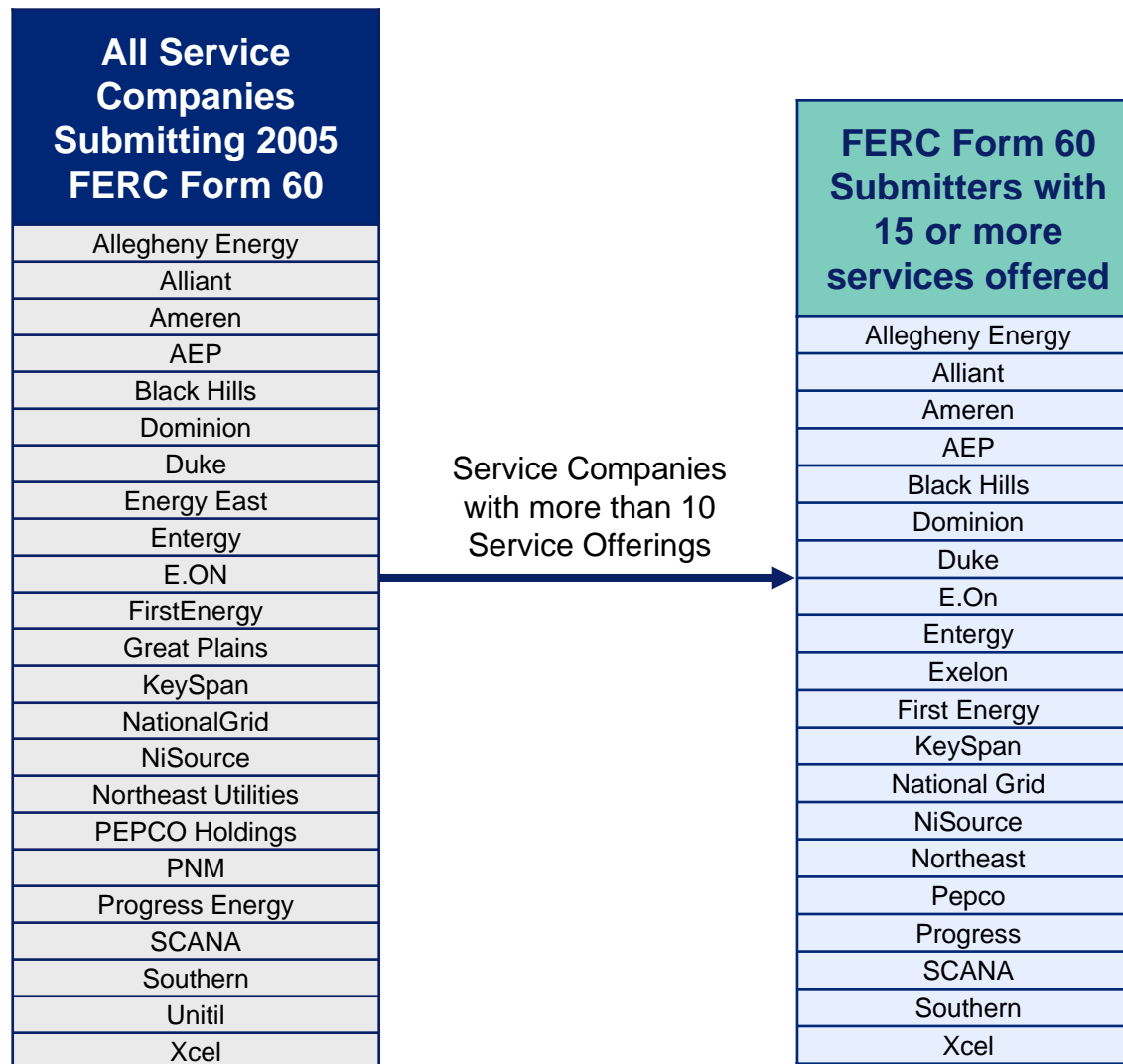


Exhibit 9-1

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



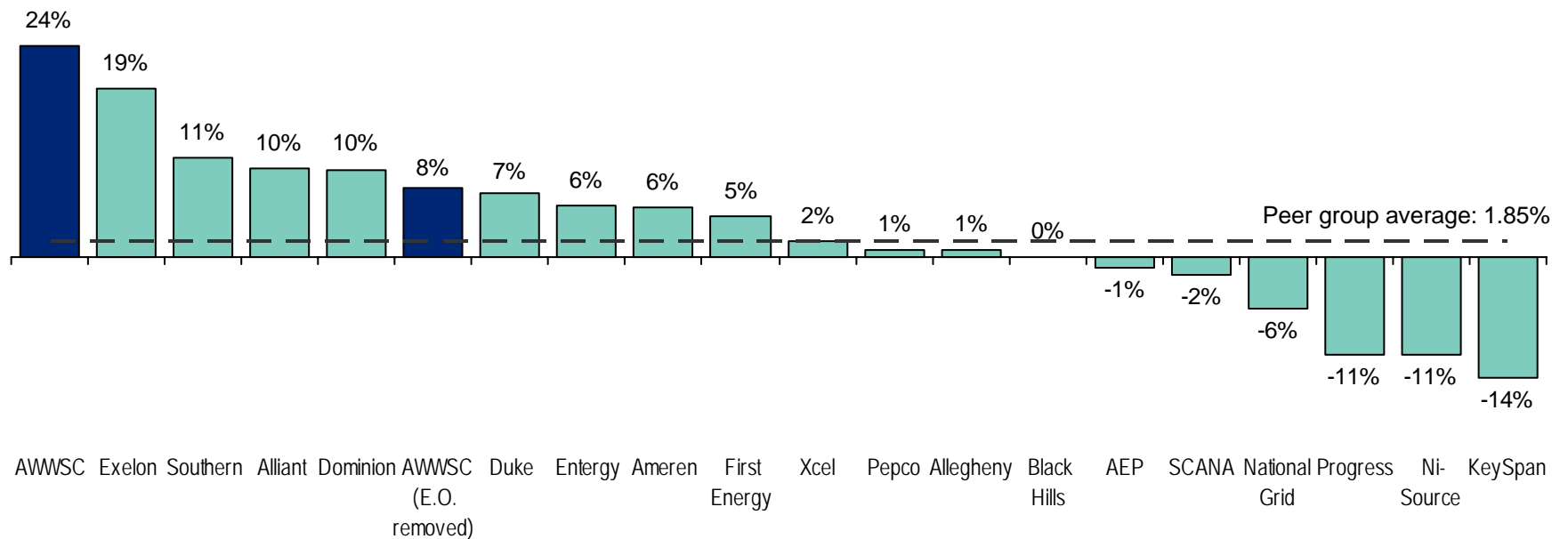
Source: FERC, BAH Analysis.

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 (%)

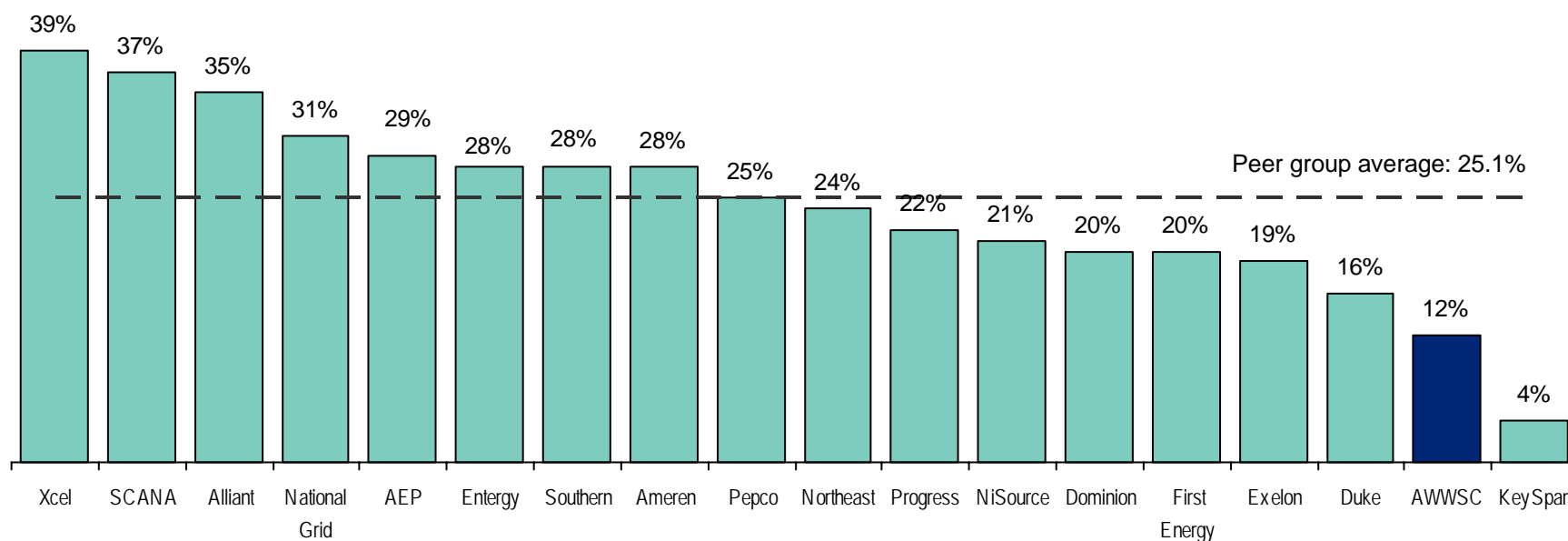


Source: 2006 FERC Form 60 filings, Booz Allen Hamilton analysis.

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



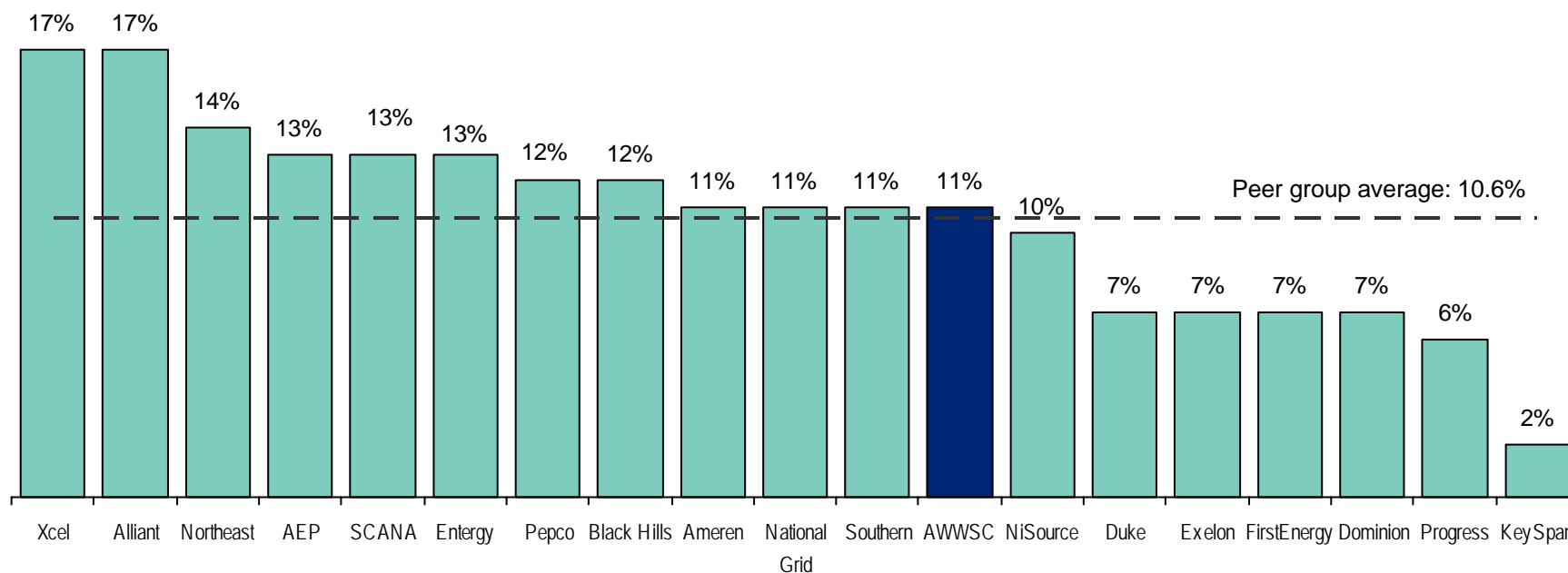
Source: Energy Velocity data, 2006 FERC Form 60 filings, Booz Allen Hamilton analysis.

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⁾

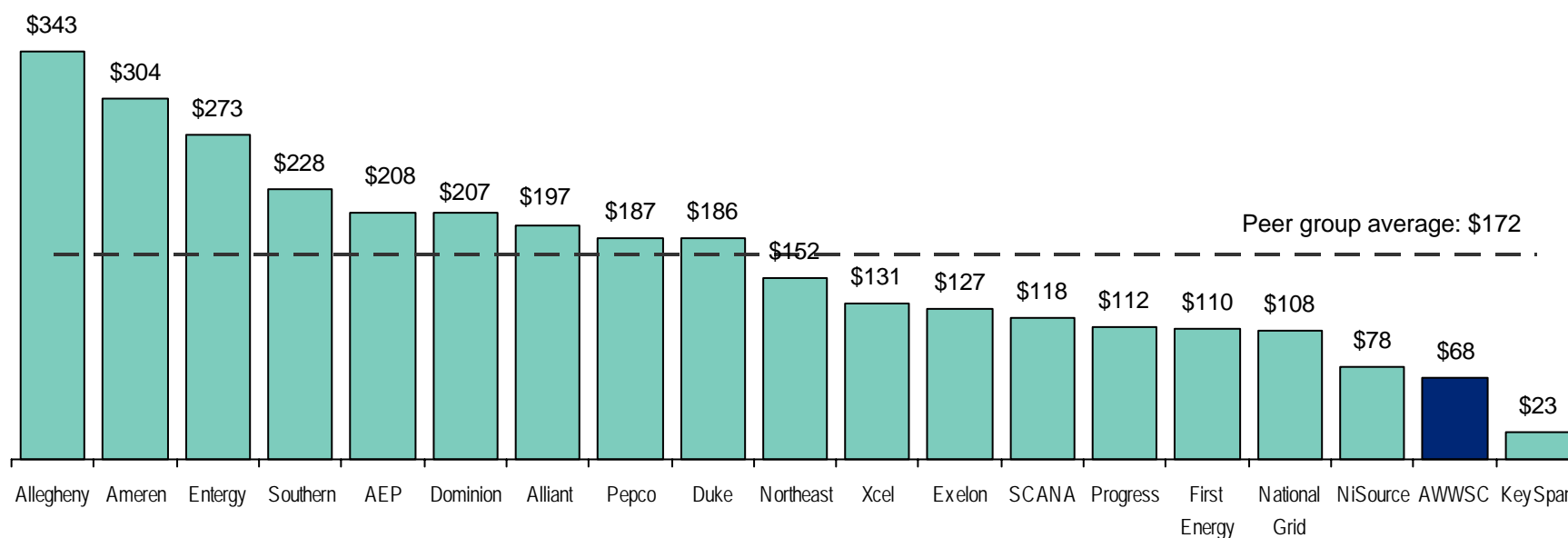


Source: Energy Velocity data, 2006 FERC Form 60 filings, 2006 company SEC 10K filings, Booz Allen Hamilton analysis.

Note: Statistical Outliers removed using the Inner Quartile Range Method

Service Company Benchmarking – Customers

2006 Service Company O&M Expense Per Customer

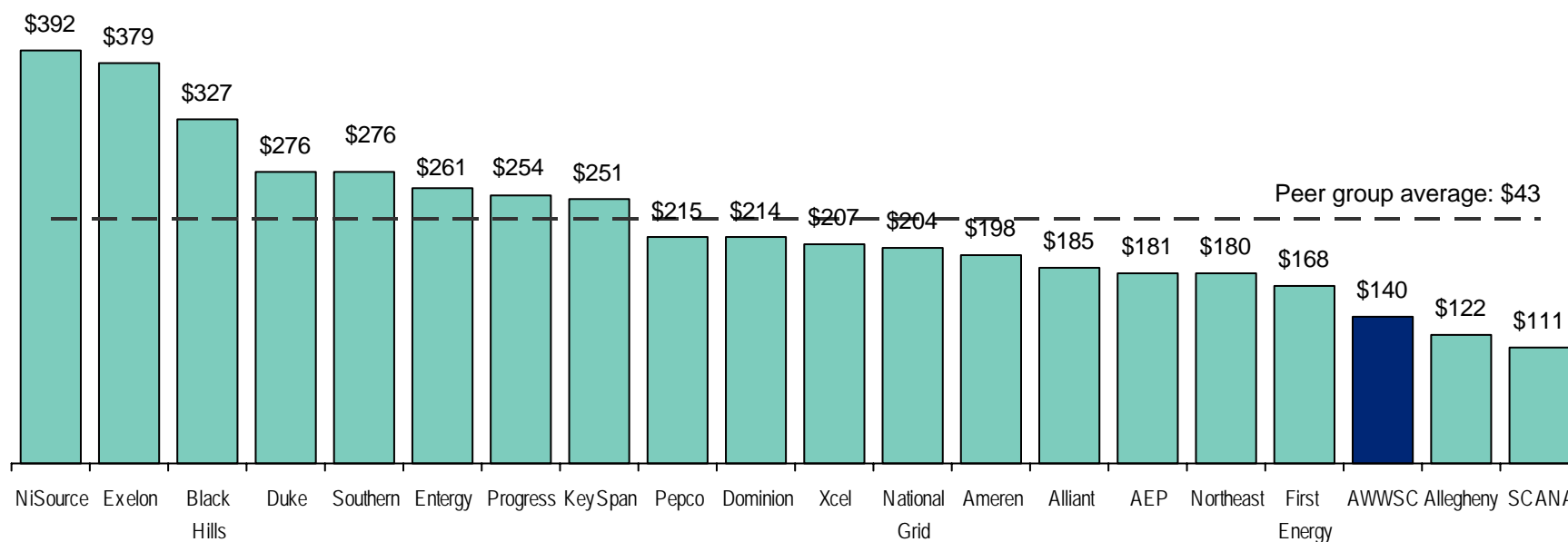


Source: Energy Velocity data, 2006 FERC Form 60 filings, Booz Allen Hamilton analysis.

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)

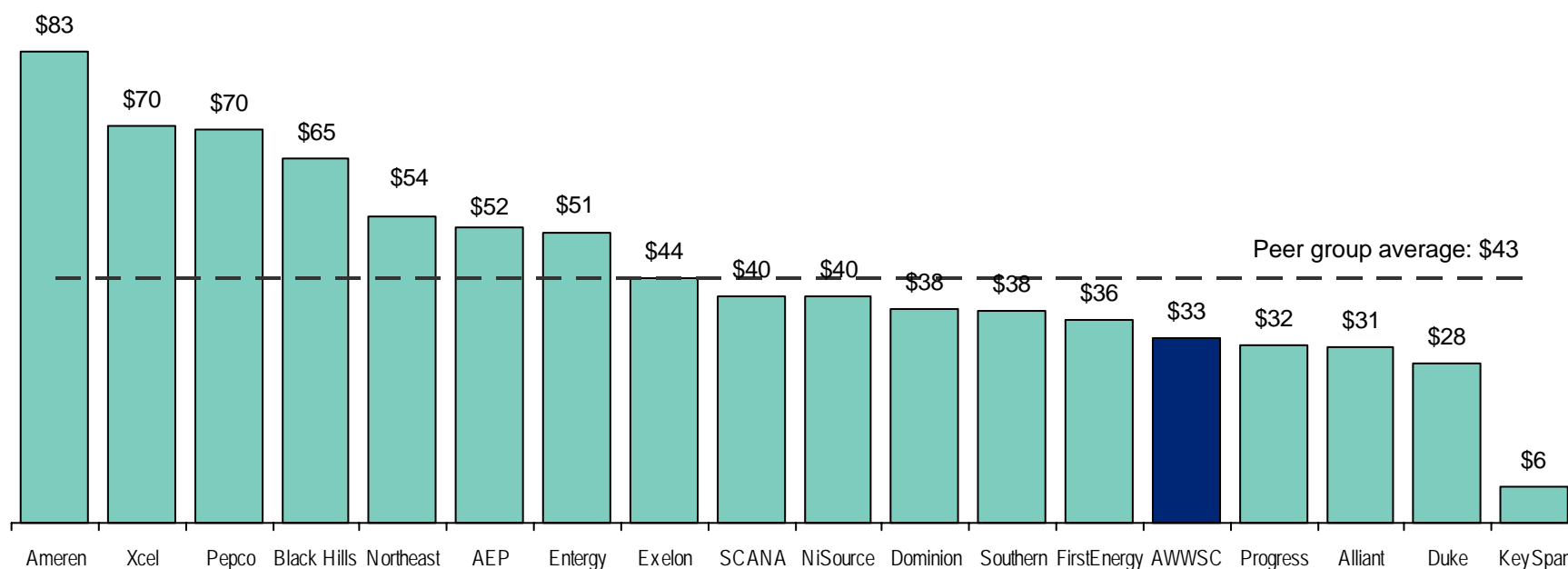


Source: Energy Velocity data, 2006 FERC Form 60 filings, Booz Allen Hamilton analysis.

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)

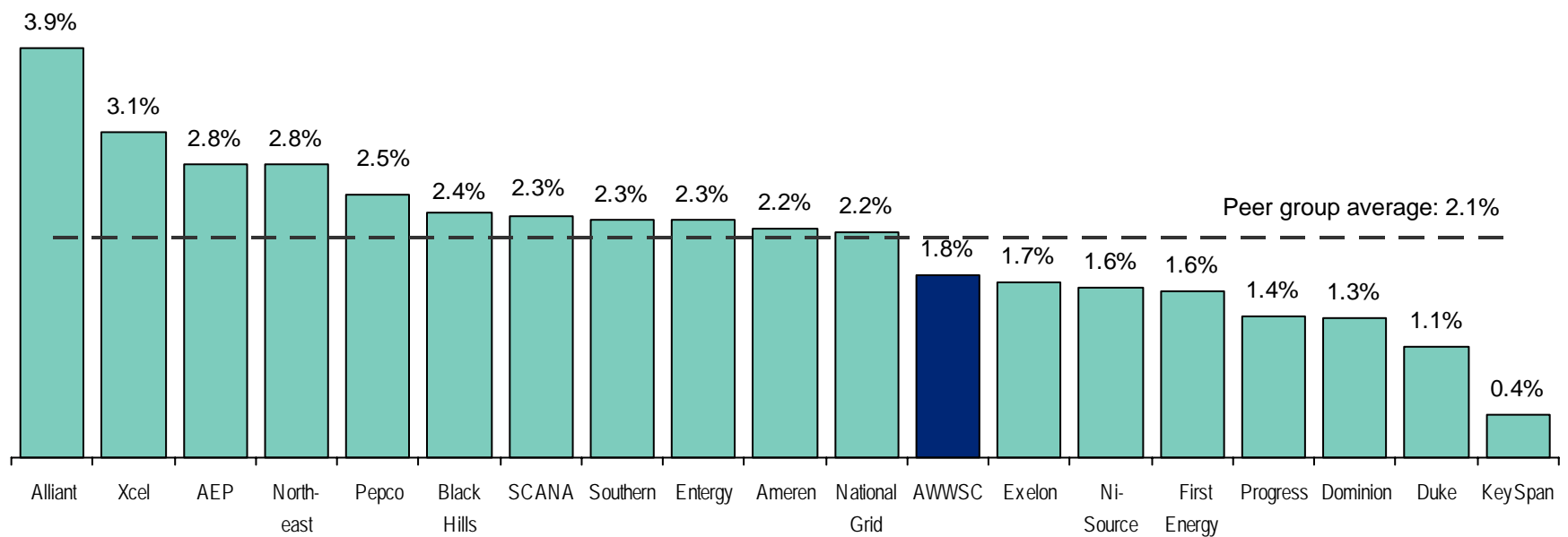


Source: Energy Velocity data, 2006 FERC Form 60 filings, 2006 company SEC 10K filings, Booz Allen Hamilton analysis.

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