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September 2, 2008

Via Hand-Delivery

Chairman Tre Hargett
c/o Ms. Sharla Dillon
Tennessee Regulatory Authority
460 James Robertson Parkway
Nashville, Tennessee 37243

electronically filed 9/2/08

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 Hargett:

Enclosed please find an original and seven (7) copies of filing of Tennessee American Water Company's Post-Hearing Brief in Support of Its Petition to Change and Increase Certain Rates and Charges.

Please return three copies of this document, which I would appreciate you stamping as "filed," and returning to me by way of our courier.

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

Sincerely,

Ross I. Booher

RB/cw
Enclosure

cc: Hon. Mary Freeman (*w/o enclosure*)
Hon. Sara Kyle (*w/o enclosure*)
Hon. Eddie Roberson (*w/o enclosure*)
Richard Collier, Esq. (*w/o enclosure*)
Ms. Shilina Chatterjee (*w/o enclosure*)
Ms. Kelly Grams (*w/o enclosure*)

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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**

TENNESSEE AMERICAN WATER COMPANY'S POST-HEARING BRIEF IN SUPPORT OF ITS PETITION TO CHANGE AND INCREASE CERTAIN RATES AND CHARGES

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TENNESSEE AMERICAN WATER COMPANY'S POST-HEARING BRIEF IN SUPPORT OF ITS PETITION TO CHANGE AND INCREASE CERTAIN RATES AND CHARGES

Tennessee-American Water Company ("TAWC" or the "Company") submits this post-hearing brief as directed by the Tennessee Regulatory Authority ("TRA") Directors at the conclusion of the rate case Hearing. Based on the arguments contained herein, the Company respectfully submits that it has met its burden of proof on all issues raised in this docket. Accordingly, TAWC's *Petition To Change And Increase Certain Rates And Charges So As To Permit It To Earn A Fair And Adequate Rate Of Return* should be granted.

I. Introduction

This rate case is simply about economic reality. There are four aspects that form the core basis for the requested rate increase of $7.645 million. First, expenses are skyrocketing for the goods, services, labor and benefits necessary to operate the water system; this is an economic reality facing TAWC as well as many other companies operating in Chattanooga. Second, major investment is required to upgrade and replace TAWC's aging water system infrastructure and to maintain compliance with ever expanding government quality regulations. Third, TAWC's investors are entitled by law to a fair rate of return on their investment, a return that has fallen to

4.16% in the current year, well below the 10.2% return on equity authorized in the last case and even below the cost of investment grade debt. Finally, TAWC faces a proven downward trend in water consumption and water sales will be below the level seen in 2007, one of the hottest and driest years in over a century, which will result in a reduction in revenues that must be recovered in rates. These are the economic realities that TAWC cannot ignore, and its only way to address these realities is to request a rate increase from the TRA.

Unlike other Chattanooga companies, as a regulated utility, TAWC cannot simply choose to raise its rates or reduce the quality or quantity of service it offers its customers. TAWC operates under its "regulatory compact," which does not allow the Company to select which customers it will serve. Instead, the regulatory compact requires a public utility to provide service to all customers on a non-discriminatory basis in exchange for rates set by the regulators to cover its expenses and provide a reasonable rate of return on its investment. So, TAWC must petition this Authority for increased rates, showing the need for the additional revenue. This is exactly what TAWC has done through its petition, pre-filed testimony, rebuttal, exhibits, numerous discovery responses and the testimony it offered at the hearing.

Expenses are rising dramatically. Testimony offered in this case showed that operational costs have significantly increased since the filing of TAWC's last rate case. Gasoline costs, electric power costs, chemical costs and sewer costs have greatly outpaced inflation and have surpassed what TAWC anticipated in its previous case. In fact, proof offered in rebuttal testimony, discovery responses and live testimony indicates that these costs have continued to soar since the filing of this rate case in March. These increasing expenses affect TAWC directly as the cost of almost every material and service that TAWC must purchase continues to rise.

In addition to these expenses, labor costs have risen for TAWC. Testimony offered in this case shows that pension obligations alone have increased by $1.1 million to TAWC due to a federal mandate. The Company is also in need of three new employees to meet its service obligations, including a position dedicated 100% to the reduction of unaccounted for water. Finally, the regulatory expenses incurred in the 2006 rate case must be considered in looking at TAWC's increase in operational expenses. While the Intervenors complain of rate case expenses that they themselves compounded, the TRA has consistently recognized the propriety of allowing the recovery of expenses associated with necessary rate increases.

With the overall increase of operational expense has come an increase in management fee expenses, due to many of the same cost drivers. TAWCs testimony establishes that the management fees paid for support services from American Water Works Service Company ("AWWSC") are necessary and prudent expenditures. Specifically, TAWC can offer its customers high quality, specialized services as a result of the economies of scale achieved through the use of AWWSC.

The Company's management audit established that the support services provided by AWWSC to TAWC were prudent; that the support services are necessary, not duplicative at the operating company level, are priced reasonably consistent with the costs of the same or similar support services at other regulated utilities, and are allocated reasonably to TAWC. Equally notable, not one Intervenor witness examined the validity or challenged the substance of the management audit's findings.

Unable to criticize the substance, the Intervenors attempted to attack the management audit on technical grounds, claiming that it did not technically comply with the Authority's directive for a Sarbanes-Oxley compliant management audit. However, the Intervenors

arguments are based on a fundamental misunderstanding of the Sarbanes-Oxley Act. The Company was thus required to perform a *management audit* (which it did), not a financial audit (which the Intervenors now claim was required). The testimony in this case demonstrated the difference between these two types of audits. And TAWC's witnesses proved that the Company completed a Sarbanes-Oxley compliant management audit. Thus, the Intervenors' claimed technicalities are without merit. The record establishes that TAWC receives prudent and reasonable support services from AWWSC and that the requested management fees should be fully approved.

TAWC also has made substantial improvements to the water system infrastructure in the City of Chattanooga, and has plans for many future improvements. The evidence shows that TAWC has made, or has plans to make, nearly $21 million in capital improvements to the water system through the attrition year. Under traditional rate-making policy, this investment properly goes into rate base investment on which TAWC is entitled to a reasonable return.

The Company is also entitled to a higher depreciation expense than the Intervenors would allow. The Company submitted a full depreciation study, which resulted in a reduction of depreciation expense by $507,017 to the benefit of the ratepayers. The study applied the method of depreciation that is accepted by nearly every state, including Tennessee, for depreciating utility assets. While the Intervenors present a novel alternative to depreciation in order to reduce depreciation expense even more, the TRA should accept the Company's application of the widely-accepted method of depreciation.

As a result of these increasing cost demands and additional investments, TAWC's return on equity ("ROE") has grossly underachieved the percentage set by this Authority in the 2006 case. The Company's cost of capital witness recommends that the Company be allowed to earn

a rate of return on equity of 11.75% on a capital structure with approximately 45.3% equity. His recommendation takes into consideration, among other factors, the risks associated with investing in a regulated water company. On the other hand, the testimony of the Intervenors' witnesses with regard to ROE demonstrates their lack of understanding of these risk considerations. Frankly, the Intervenors' testimony even reveals a lack of understanding of basic economic principles, such as the difference between realized returns versus expected returns. TAWC respectfully submits that Dr. Vilbert's testimony on ROE is much more authoritative and, accordingly, asks the Authority to adopt his recommendations.

TAWC has also shown that revenues derived from water service to Chattanooga customers have steadily decreased during the last few decades. This decline, which has not been overcome by the growth of new customers, necessarily indicates a decline in annual revenue. As will be discussed herein, none of the Intervenors offered credible, scientific, or statistically valid evidence to rebut the Company's expert's statistical analysis.

In short, TAWC has demonstrated that it requires a $7.645 million rate increase to continue providing its customers the high level of service they have come to expect from the Company while still allowing TAWC to earn the level of return on its investment to comply with the United States Supreme Court decisions in *Hope* and *Bluefield*,[1] and thereby facilitate the Company's ability to borrow money at reasonable rates for the needed capital improvements to Chattanooga's water system.

[1] *See FPC v. Hope Natural Gas Co.*, 320 U.S. 591 (1944) and *Bluefield Water Works & Improvement Co. v. P.S.C.*, 262 U.S. 679 (1923).

II. Travel of the Case

A. Initial Proceedings

On March 14, 2008, the Company filed its *Petition* seeking rate increases to allow it to "meet the present and future needs of its customers in an economically feasible manner."[2] The Company proposes to place into effect customer rates that will produce an overall rate of return of 8.514% on a rate base of $119,881,506.[3] The additional revenue requirement would be approximately $7,644,859.[4] At a regularly scheduled Authority Conference held on April 7, 2008, the panel voted unanimously to convene a contested case proceeding and to appoint General Counsel or his designee as Hearing Officer for the purpose of preparing this matter for hearing, including handling preliminary matters and establishing a procedural schedule to completion. The panel also suspended the proposed tariffs filed with the *Petition* for ninety days, from April 13, 2008 to July 17, 2008. On July 10, 2008, an *Order* was entered further suspending the proposed tariffs until September 15, 2008. Subsequently, TAWC agreed to delay the effective date of the proposed tariffs until October 1, 2008.

During April 2008, the Consumer Advocate and Protection Division of the Office of the Attorney General (the "CAPD"), the Chattanooga Manufacturers Association (the "CMA"), and the City of Chattanooga (the "City") filed *Petitions to Intervene* that were unopposed by the Company. By *Order* dated May 1, 2008, the Hearing Officer granted the intervention petitions of CAPD, the CMA and the City (collectively, the "Intervenors") and established a *Procedural Schedule*. The *Procedural Schedule* called for discovery to commence on May 12, 2008 and concluded with a Pre-Hearing Conference on August 1, 2008.

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[2] Petition at 5, Docket 08-00039 (March 14, 2008).
[3] *Id.*
[4] *Id.*

B. Modifications to the Procedural Schedule

The Intervenors filed a *Joint Motion to Modify Procedural Schedule* on May 6, 2008, to which the Company objected on May 9, 2008. The CAPD again asked the Hearing Officer on June 2, 2008, to reconsider his *Procedural Schedule* by filing a *Motion to Set Aside the Procedural Schedule and Extend the Date of the Final Hearing on the Merits*. These Motions were resolved by the Proposed Order agreed to by the parties on June 9, 2008, which granted the Intervenors extra time to complete their discovery responses and for all parties to file motions to compel.

On June 25, 2008, the Intervenors filed a *Joint Motion to Expand the Time to Submit Their Pre-Filed Direct Testimony to July 21, 2008*, to which the Company filed a *Response in Opposition* on June 27, 2008. On July 3, 2008, the Hearing Officer entered an *Order, Granting, in Part, Joint Motion of Intervenors to Expand the Time to Submit Their Pre-Filed Direct Testimony and Modifying Procedural Schedule*, in which he extended the Intervenors' deadline to submit their pre-filed direct testimony to July 14, 2008, and made other modifications to the remaining deadlines in the *Procedural Schedule*. Under this revised *Procedural Schedule*, the Pre-Hearing Conference was continued until August 15, 2008.

The Intervenors filed motions requesting permission to appeal this July 3 Order, which TAWC opposed. The primary relief requested by the Intervenors was a further extension of the July 14 deadline by which they were to file their pre-filed direct testimony. After conducting a conference with counsel for the parties, the Hearing Officer entered an *Order Further Modifying Procedural Schedule* on July 11, 2008. The July 11 Order made modifications to certain of the remaining case deadlines, to which all of the parties agreed. Among those modifications was the extension of the Intervenors' deadline to file its pre-filed direct testimony (from July 14, 2008 to July 18, 2008) and the delay of the beginning of the second round of discovery (from July 21,

2008 to July 24, 2008). However, the Company's deadline to file its rebuttal testimony (August 13, 2008) and the pre-hearing conference (August 15, 2008) remained unchanged.

C. Protective Orders

On May 6, 2008, the Company filed a *Motion for Entry of Confidential Protective Orders* and the Intervenors filed their *Proposed Protective Order*. The Company filed a *Response in Opposition to Intervenors' Proposed Protective Order* on May 9, 2008. CAPD, in turn, filed a *Response* opposing the Company's *Motion for Entry of Confidential Protective Orders* on May 13, 2008. The Hearing Officer entered a *Protective Order* on May 23, 2008.

On June 13, 2008, the Company and CMA proposed an amendment to the May 23 *Protective Order* that was discussed at length at a June 19, 2008 Status Conference. At the June 20, 2008 Continued Status Conference, the Hearing Officer circulated a proposed Amended Protective Order to the parties. Thereafter, each of the parties filed comments to the proposed Amended Protective Order. After giving consideration to the parties' filed comments, the Hearing Office entered an *Amended Protective Order* on July 10, 2008.

D. Discovery Issues

The parties commenced discovery in accordance with the May 1 *Procedural Schedule*, which limited the CAPD to 80 discovery requests, including subparts, and 40 discovery requests for the CMA and City. Prior to serving its first round of discovery, the Intervenors filed a *Joint Objection to Discovery Question Limits for the Initial Round of Discovery* on May 6, 2008. The Hearing Officer overruled the *Joint Objection* on May 9, 2008, but on May 12, 2008, the CAPD once again filed a *Motion to Ask Additional Discovery Questions*. On May 12, the CAPD proceeded to serve 217 discovery requests on the Company, well in excess of the Hearing Officer's limitation of 80 requests. Likewise, the City and the CMA each served 43 discovery requests upon the Company during the first round of discovery. The Company propounded 13

discovery requests to each of the Intervenors during the first round of discovery. The second round of discovery saw the CAPD propound 27 additional requests, the City 26 requests, and the CMA 11 requests, while the Company propounded 16 requests to the CMA, 25 to the City and 17 to the CAPD.

All parties filed a number of objections to the discovery requests of the other parties. Similarly, numerous motions to compel were filed by the parties regarding alleged deficiencies in discovery responses. In all, 18 motions to compel were filed by the parties. All discovery disputes were eventually resolved by agreement or ruling prior to the hearing.

E. Conflict of Interest Issue

The City and the CAPD retained a consulting firm, Snavely King Mojoros O'Connor & Bedell, Inc. ("Snavely"), one of whose consultants was a former American Water Works Service Company ("AWWSC") employee. The Intervenors were, or should have been, on notice of the conflict of interest the moment the Intervenors learned of Mr. Impagliazzo's prior position with AWWSC or saw Mr. Impagliazzo's resume and consequently, that Mr. Impagliazzo, Snavely, and any counsel receiving information from him were at risk of disqualification. Nonetheless, the CAPD proceeded with Mr. Impagliazzo as one of its consultants, to which TAWC immediately objected given the obvious conflict of interest his retention presented. Ultimately, the parties were able to craft a compromise, embodied in the parties' proposed Agreed Order Regarding Information Related to Frank Impagliazzo, filed June 24, 2008, which was entered by the Hearing Officer on July 11, 2008.

F. Pre-Hearing Motions

Three motions in limine were filed on August 14, 2008, which were considered by the Hearing Officer on August 15, 2008: TAWC's *First Motion in Limine Regarding the Testimony Offered by Michael Majoros*, the City's *Motion to Strike and Exclude the Testimony of Mark*

Manner, and CMA's *Motion to Strike from the Record and/or to Exclude as Evidence the Supplemental Testimony of TAWC Witnesses, Including but Not Limited to, John Watson, Sheila Miller and Mike Miller, Related to Alleged Increased Expenses*. The Hearing Officer denied the motions of TAWC and the City and allowed the testimony to be presented, with the understanding that the panel would be able to give these witnesses' testimony the appropriate weight. With regard to the CMA's Motion, the Hearing Officer denied the Motion without prejudice, allowing the CMA to renew its objection for consideration by the Directors. At the hearing, CMA did renew its objection. The Directors instructed CMA and the Company to include in their post-hearing submissions a discussion regarding the admissibility of the evidence of increased costs submitted by the Company in its rebuttal testimony, its testimony at the hearing, and its responses to TRA data requests. The Company's statement as to the admissibility of this evidence is contained in Section IV herein.

III. Criteria for Establishing Just and Reasonable Rates

Pursuant to Tennessee Code Annotated § 65-5-101, it is the duty of the Tennessee Regulatory Authority to set utility rates that are "just and reasonable." This charge requires the Authority to examine not only what is just and reasonable for the customer, but also what is a just and reasonable rate of return for the utility company.[5] "When these rates are fixed so low that the utility cannot get a fair return this amounts to the taking of property for public use without just compensation and is confiscatory."[6]

The Authority has traditionally considered four criteria when determining the appropriate rate for a utility:[7]

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[5] *Southern Bell Tel. & Telegraph Co. v. Tenn. Public Serv. Comm'n*, 304 S.W.2d 640, 642-43 (Tenn. 1957).
[6] *Id.* at 643.
[7] *See, e.g., 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 Rate of Return on Its Property Used and Useful in Furnishing Water*

1) The investment or rate base upon which the utility should be permitted to earn a fair rate of return;

2) The proper level of revenues for the utility;

3) The proper level of expenses for the utility; and

4) The rate of return the utility should earn on its rate base.

The United States Supreme Court has provided the following guidance on establishing a fair rate of return:[8]

1) The rate of return should maintain the financial integrity of the company;

2) The rate of return should allow the company to attract capital for investment and operations; and

3) The rate of return on equity should be commensurate with returns investors could achieve by investing in other enterprises of corresponding risk.

IV. Test Period and Attrition Period

To determine the proper level of revenues and expenses for the utility, the Authority has traditionally accepted the following methodology: (a) select a historic test year; (b) normalize the test year to reflect normal year revenues, annualize partial year expenses, and eliminate non-recurring expenses; and (c) determine an attrition year, which is adjusted for known and measurable changes that are reasonably expected to occur in the attrition year. In this case, TAWC selected a historical test period of the twelve months ending November 30, 2007. TAWC made normalizing adjustments to the test year as well as adjustments for known and measurable changes to develop a forecast for the attrition period, the twelve months ending August 31, 2009.[9]

Service to its Customers, Docket No. 06-00290 (the "2006 Case"); *In re: Petition of Aqua Utilities Company for Approval of Adjustment of its Rates and Charges and Revised Tariff,* Docket No. 06-00187, 2007 Tenn. PUC LEXIS 405, at *9.

[8] *See FPC v. Hope Natural Gas Co.*, 320 U.S. 591 (1944) and *Bluefield Water Works & Improvement Co. v. P.S.C.*, 262 U.S. 679 (1923).

[9] Sheila A. Miller, Pre-Filed Direct Testimony, at 4:21-26.

Rather than using the Company's historic test period, and contesting any adjustment it believed the Company improperly included or overlooked, the CAPD employed a different historic test period of the twelve months ending March 31, 2008.[10] Of course, the Petition in this case was filed prior to the conclusion of that test period, and so the results for the CAPD's test period were unknown and unknowable to TAWC as of the date of the Petition.[11] Compounding the problem of selecting an inappropriate test period, the CAPD then failed to make appropriate normalizing adjustments to the test year; instead, the CAPD merely made an inflation adjustment.[12] The CAPD proceeded to select the same attrition period as that used by the Company, the twelve months ending August 31, 2009.[13]

When known and measurable costs are available, the TRA should consider those costs in place of a general inflation adjustment.[14] Throughout the course of the rate case, the Company undertook to advise the TRA when it became aware of any additional known and measurable adjustments after the filing of its Petition on March 14, 2008. The Company presented updated known and measurable changes in response to TRA data requests, pre-filed rebuttal testimony and live testimony at the hearing. The Intervenors generally objected to the presentation of such updated information.

The TRA's statutory authority is undoubtedly broad enough to allow it to consider this information,[15] and the TRA's past practices indicate a preference for admitting and considering

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[10] *See, e.g.,* Terry Buckner, Pre-Filed Direct Testimony, at 17:22 – 18:4.
[11] *See* Terry Buckner, Vol. XVI, Tr. 1667:4-7.
[12] *See, e.g.,* Sheila A. Miller, Pre-Filed Rebuttal Testimony, p. 2:1 – 3:2; Terry Buckner, Vol. XVI, Tr. 1670:1-18.
[13] *See, e.g.,* Terry Buckner, Pre-Filed Direct Testimony, p. 17:22 – 18:4.
[14] *See In re Petition of United Telephone Company to Change and Increase Certain Intrastate 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 Telephone Service to its Customers in Tennessee and to Adopt New and Realistic Depreciation Rates for Central Office Equipment* (Petition filed May 22, 2001), Docket No. 01-00451, 2002 Tenn. PUC LEXIS 139 (April 30, 2002).
[15] *See* Tenn. Code Ann. § 65-5-101.

these newly discovered changes.[16] Despite the Intervenors' objection to the admission of this evidence, CAPD witness Terry Buckner even acknowledged that consideration of such known and measurable expenses was appropriate and beneficial.[17]

V. Contested Issues

A. Revenues

For the attrition year, the Company projects revenues of $37,142,460. This amount was obtained by making the standard, widely-recognized adjustments to the historical test year and then normalizing for a normal year of consumption using the weather normalization adjustment the TRA has used since the mid-1990's.[18] As a result all of these adjustments, the Company's projected revenue is increased in the attrition year in the amount of $33,362 over the revenues for the historical test year.

1. Adjustments Made To Per Book Revenues

As noted, the Company made several adjustments to per book revenue for the historical test year to have the most accurate basis upon which to project the attrition year. The adjustments undertaken by the Company involve the following:

- The Company normalized the test year adjustments, including eliminating the extra month of billing on routes with 13 bills, eliminating revenues for Velsicol Chemical Corporation due to the closing of that plant, annualizing the rate increases for the Catoosa Utility District that went into effect in June 2007 and for Fort Oglethorpe in May 2008, and annualizing the rate increase effective May 22, 2007 for TAWC customers.

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[16] *See, e.g., In re Petition of United Telephone Company to Change and Increase Certain Intrastate 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 Telephone Service to its Customers in Tennessee and to Adopt New and Realistic Depreciation Rates for Central Office Equipment*, Docket No. 01-00451, 2002 Tenn. PUC LEXIS 139 (April 30, 2002) (admitting and considering revised schedules four days prior to hearing); *In re Nashville Gas Company Application for Approval of Negotiated Gas Redelivery Agreement with State Industries*, Docket No. 98-00338, 1999 Tenn. PUC LEXIS 129 (July 6, 1999) (allowing amendment of petition after the conclusion of hearing).

[17] Terry Buckner, Vol. XVI, Tr. 1666:19-23 (August 26, 2008) ("Q: And you think it's important for the TRA to consider the latest known and measurable data when setting rates in this case, correct? A: Yes sir. I think that's to a benefit of their decision, yes.").

[18] *See* Michael Miller, Pre-Filed Rebuttal Testimony, p. 63 (August 13, 2008).

- The Company undertook a weather normalization adjustment for the residential and commercial customer classes.
- The Company eliminated Walden's Ridge revenues from the filing.[19]
- The Company added revenue for the estimated number of new customers to be added during the attrition year, based on historical test year growth.[20]

The Consumer Advocate adopted a different historical test period and utilized different billing determinants for its forecasting methodology.[21] The usage Mr. Buckner included in his total is correct, but the usage by individual customer is incorrect because Mr. Buckner included usage from the bill analysis in Docket 06-00290, wherein the line labeled as Ft. Oglethorpe includes usage for that customer, as well as usage for Catoosa Utility District and the Town of Signal Mountain through September 2005.[22]

TAWC, on the other hand, reconciled those billing determinants.[23] In addition, TAWC accounted for the fact that 2007 was one of the hottest and driest years on record. Consequently, the TRA should adopt the Company's revenue calculation based on the Company's historical test year (as it has done in the past), because that revenue calculation reflects TAWC's financial state most accurately.

2. Decreased Revenues Due To Weather Normalization

The Company also normalized the test year to establish a normal year of consumption for the attrition year.[24] To explain the Company's weather normalization, Dr. Edward Spitznagel

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[19] This action alone lowered the Company's revenue deficiency by 434,810. *See* working paper TN-TRA-01-Q13-Revenues, page 47.

[20] Sheila A. Miller, Pre-Filed Direct Testimony, p. 6:1-15 (March 14, 2008).

[21] *See* Sheila A. Miller, Rebuttal Exhibit SAM-4 (Mr. Buckner's historical test year ending March 2008 includes more usage than the historical test year of November 2007 used by the Company. However, if one looks at the time period of twelve months ending June 30, 2008, the Town of Signal Mountain and Catoosa Utility District have usage less than either of the twelve month periods ending March 2008 or November 2007. SAM-4 reflects these comparisons.).

[22] This was noted on working paper TN-TRA-01-Q013-REVENUES, p. 75 of 133, Docket 06-00290.

[23] Sheila A. Miller, Pre-Filed Rebuttal Exhibit SAM-3 (August 13, 2008).

[24] Notably, the Company did not weather normalize the Sale for Resale class of customers, and thus the Company's filing likely overstates the sales to this class of customers in the attrition year under a weather normalized year. As a

testified on the expected decline in revenues TAWC can expect in the attrition year. Dr. Spitznagel, a mathematician and statistician with over 30 years of experience, has testified in numerous water rate cases before the regulatory authorities of multiple states.[25] His testimony in those cases, as in this case, establishes the importance of creating a "normal" weather year to analyze future water consumption. Weather normalization has been widely accepted as an appropriate and necessary method of establishing future water consumption in rate cases and, specifically, Dr. Spitznagel's weather normalization analysis has been repeatedly adopted by this Authority in prior cases.[26] In fact, the TRA has used a weather normalization adjustment of this type since the mid-1990's.[27]

In this case, Dr. Spitznagel examined approximately 30 years of data regarding the actual water usage of Tennessee-American customers and compared that with various meteorological data for the same time period.[28] After testing several models, Dr. Spitznagel concluded that soil moisture was the most accurate predictor of future water consumption.[29] Dr. Spitznagel used the Palmer Drought Severity Index, a document published by the National Oceanic and Atmospheric Administration ("NOAA"), as a measurement of soil moisture.[30] He provided numerous tables

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result, the TRA should utilize the attrition year revenues for this class of customers as calculated in the Company's revenue requirement. Sheila A. Miller Pre-Filed Rebuttal Testimony, p 9:5-10 (Aug. 13, 2008).

[25] Dr. Edward Spitznagel, Pre-Filed Direct Testimony, at ELS Appendix A (March 14, 2008); Spitznagel, Vol. IV, Tr. 547:14-21.

[26] Dr. Edward Spitznagel, Vol. IV, Tr. 547:7-13.

[27] *See* Michael Miller, Pre-Filed Rebuttal Testimony, p. 63 (August 13, 2008).

[28] Spitznagel, Vol. IV, Tr. 443:5-10.

[29] Dr. Edward Spitznagel, Pre-Filed Direct Testimony, p. 4:1-5:15 (March 14, 2008); Spitznagel, Vol. IV, Tr. 443:17 – 445:6.

[30] Dr. Edward Spitznagel, Pre-Filed Direct Testimony, p. 6:14-20 (March 14, 2008); Spitznagel, Vol. IV, Tr. 445:16-23. The Intervenors' counsel attempted to discount the reliability of the Palmer Drought Severity Index ("PDSI") in their cross-examination of Dr. Spitznagel by introducing certain maps (Exhibits 10 and 11) and articles regarding the PDSI (without laying the proper evidentiary foundation). It is telling, however, that the Intervenors' witnesses offered no such criticism of this government-sponsored publication in their pre-filed testimony. The articles were not offered into evidence but the TRA plans to take "administrative notice" thereof. Consequently, the Company is submitting, for administrative notice, "A Review of the Palmer Drought Severity Index and Where Do We Go From Here?", Thomas R. Heddinghaus and Paul Sabol, Climate Analysis Center, NWS/NOAA and "A Self-Calibrating Palmer Drought Severity Index", Nathan Wells, et al., JOURNAL OF CLIMATE, Vol. 17 at 2335 (2004) in rebuttal of the articles submitted by the Intervenors.

and charts (attached to his pre-filed testimony and rebuttal) that demonstrate the effect of moisture and periods of drought on water usage in Chattanooga. After reviewing the data, Dr. Spitznagel concluded that TAWC could expect water usage to *decrease* in the attrition year to 141.81 gallons per day per residential customer and 1029.41 gallons per day per commercial customer from the levels in the historic test year.[31]

The Intervenors attempted to attack Dr. Spitznagel's scientific statistical analysis by suggesting that it failed the Intervenor's undefined "test of reasonableness"[32] or that it was inconsistent with a usage prediction that was roughly based on three-year, five-year and ten-year averages offered by an Intervenor's witness.[33] Charles King, who has never before testified anywhere on weather normalization in a water rate case, maintains that Dr. Spitznagel's statistical conclusions are somehow unreasonable.[34] Without any scientific or mathematical basis, Mr. King proposes that water consumption in Chattanooga should mirror the bell-curve trend of average temperature in Chattanooga.[35]

Notably, when Mr. King's theory was challenged, he admitted that his only basis for drawing this conclusion was that temperature is the only consumption-driver in natural gas rate cases.[36] He conceded, however, that other factors might affect water consumption – factors that he failed to consider.[37] At the hearing, Mr. King was presented with a variety of graphs comparing actual water usage in 2006 to average temperature for Chattanooga in 2006. Mr. King testified that the graphs comparing actual water usage in 2006 to average temperature is

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[31] Dr. Edward Spitznagel, Pre-Filed Direct Testimony, p. 7:3-7 (March 14, 2008); Spitznagel, Vol. IV, Tr. 446:4-8.
[32] Charles King, Pre-Filed Direct Testimony, p. 16:3-4 (July 18, 2008).
[33] Terry Buckner, Pre-Filed Direct Testimony, p. 21:2-4 (July 18, 2008); Michael Gorman, Pre-Filed Direct Testimony, p. 20 (July 18, 2008).
[34] Charles King, Vol. XV, Tr. 1579:17- 1580:6.
[35] Charles King, Vol. XV, Tr. 1582:2-5; Tr. 1583:12-18.
[36] Charles King, Vol. XV, Tr. 1582:2-5.
[37] Charles King, Vol. XV, Tr. 1590:4-16; Tr. 1592:8 – 1593:15.

like comparing apples to oranges[38] – a statement with which TAWC would agree, given that scientific data indicates that soil moisture, not temperature, drives water usage. Mr. King finally admitted that, if 2006 were a normal weather year, it would prove the complete invalidity of his weather normalization testimony.[39] Dr. Spitznagel explained that 2006 certainly was a normal weather year (in other words a year of average soil moisture) as indicated by the Palmer Drought Severity Index, 1895-2007.[40] Mr. Gorman, another Intervenor witnesses, thereafter confirmed that 2006 was, in fact, a normal weather year.[41] Accordingly, based upon the Intervenors' own testimony, Mr. King's weather normalization analysis is discredited.[42]

CAPD witness Terry Buckner's weather normalization analysis was similarly discredited at the hearing. Mr. Buckner performed no weather normalization of his own, choosing instead to rely upon the flawed opinion of Mr. King.[43] Mr. Buckner also attempted to rebut Dr. Spitznagel's statistical analysis by demonstrating that the trend for the past ***three*** years indicates an increase, not a decrease, in water usage by Chattanoogans. However, the use of a three-year trend for purposes of weather normalization was clearly criticized by Dr. Spitznagel as well as Michael Gorman, a witness sponsored by the City and CMA.

First, Mr. Gorman admitted that "[l]onger data is appropriate to look at trends and consumption."[44] Mr. Gorman then testified at the hearing: "[A] three-year average is certainly a

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[38] Charles King, Vol. XV, Tr. 1598:10 – 1599:15.
[39] Charles King, Vol. XV, Tr. 1604:4-5.
[40] See Dr. Edward Spitznagel, Pre-filed Rebuttal Testimony, ELS Rebuttal, Appendix A (August 13, 2008); Spitznagel, Vol. IV, Tr. 447:12-15 (August 19, 2008).
[41] Michael Gorman, Vol. XXII, Tr. 2178:19-21.
[42] Mr. King was one of the witnesses the Intervenors sought to call from the firm of Snavely, King & Majoros. Three Snavely witnesses actually testified at the hearing — all of them well outside any area of expertise they may have — and the testimony of each does not withstand scrutiny. *See* King, Vol. XV, Tr. 1604:4-5; Stoffel, Vol. XIX, Tr. 1952:11-19 (admitting he was "completely wrong"); Majoros, Vol. XX, Tr. 2010:18-23 and Tr. 2039:24 – 2041:10 (offering testimony as a CPA despite having not held an active license for more than 20 years).
[43] Terry Buckner, Pre-Filed Testimony, p. 22:16-19.
[44] Michael Gorman, Vol. XXII, Tr. 2182:9-10.

period that may produce results that are not a good normalization of consumption."[45] In fact, Mr. Gorman agreed with Dr. Spitznagel (in direct contradiction to Mr. Buckner) that, based upon an analysis of a longer period of time, there is a trend evidencing a reduction in water consumption due to conservation efforts.[46]

Consequently, Dr. Spitznagel presents the only weather normalization analysis that withstands scientific and mathematical scrutiny. TAWC therefore urges the Authority to accept Dr. Spitznagel's analysis, as the TRA has repeatedly done, and accept the attrition year going level revenues in the Company's filing that were calculated consistently with prior TRA rulings.

B. Expenses

For its expenses in the attrition year, the Company anticipates increased Operating and Maintenance Expenses ("O&M Expenses") in the amount of $3.262 million above the level embedded in current rates. The primary drivers of this increase are increased labor and employee benefit costs, and increased operating costs, such as the cost of fuel, power, and waste disposal, all of which are discussed in detail below.[47] Adjustments related to O&M Expenses were included in the Company's calculations to arrive at an accurate attrition year.[48]

1. TAWC Cost-Control Efforts

As an initial matter, it is important to note that TAWC is constantly working to reduce costs, operate more efficiently, and stay within its projected budgets. As a result, TAWC has implemented numerous cost-saving or efficiency measures aimed at achieving that goal. For instance, TAWC President John Watson conducts monthly assessments of the Company's

[45] Michael Gorman, Vol. XXII, Tr. 2190:21-23.
[46] Michael Gorman, Vol. XXII, Tr. 2176:17-22.
[47] John S. Watson, Pre-Filed Direct Testimony, p. 6:18 – 7:5 (March 14, 2008) (noting that these increases constitute 23% of the Company's increased operating expenses).
[48] For instance, the Company made adjustments for property taxes, gross receipts taxes, PSC fees, and franchise taxes. *See* Sheila A. Miller, Pre-Filed Direct Testimony, p. 11:27 – 13:8 for specific treatment for each.

Operating & Maintenance (O&M) budget and technological abilities. The Company's use of tools such as radio telemetry meters and Toughbook laptops enables the Company to reduce costs, increase employee efficiency, and improve customer service.[49] Similarly, new leak detection technology has improved the Company's ability to detect unaccounted for water and reduced the need for manual surveys of the lines.[50]

The success of this equipment is unquestionable, as shown by the Company's customer service levels.[51] Since implementing these new technology systems, the number of customers per employee has increased and the average number of service requests per month has increased. Notwithstanding this significant increase, the Company has achieved an impressive service metric of completing 99.64% of all 2007 service requests on schedule.[52] Equally impressive, the Company has obtained actual, as opposed to estimated, meter readings on 99.2% of the Company's meters.[53]

Mr. Watson also conducts monthly reviews of the expenses charged to TAWC for American Water Works Service Company ("AWWSC") services.[54] TAWC utilizes these services to benefit from the expertise and economies of scale offered by AWWSC at cost.[55] For instance, TAWC has access to AWWSC's Belleville Central Laboratory, which provides highly specialized testing equipment and microbiologists to TAWC at cost. Belleville Central

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[49] *See* John S. Watson, Pre-Filed Direct Testimony, at 4:26-5:16 (March 14, 2008)
[50] John S. Watson, Pre-Filed Direct Testimony, p. 5:6 – 6:16 (March 14, 2008).
[51] *See* Terry Buckner, Cross-Examination, Vol. XVII, Tr.1691:14-15, Vol. XVII, Tr. 1695:14-17; Michael D. Chrysler Pre-Filed Direct Testimony, Docket 06-00290, p. 3-4 (March 5, 2007).
[52] At a rate of 7,417 service calls/month. *See* John S. Watson Pre-Filed Direct Testimony at 9:8-11 (March 14, 2008).
[53] John S. Watson, Pre-Filed Direct Testimony at 7:12-8:2 (Ex. JSW-1) (March 14, 2008).
[54] *See* John S. Watson, Pre-Filed Rebuttal Testimony, at 17:16-22 (August 13, 2008) (attaching John S. Watson's Supplemental Testimony in Docket 06-00290, at 10-12, filed April 26, 2007).
[55] *See* John S. Watson, Pre-Filed Rebuttal Testimony, p. 15:8-17:14 (August 13, 2008); John S. Watson, Vol. I, Tr. 31:11-19.

Laboratory processes over a 100 water tests for TAWC each year to ensure safe drinking water free of contaminants.[56]

Taken together, the Company has struck an impressive balance between dramatically increasing customer service and water quality, while enjoying net savings from its use of AWWSC services. However, increasing regulatory burdens and customer expectations, a growing customer base, and an aging infrastructure dictate that TAWC be authorized to continue utilizing such technology and services.

Although the CAPD would have TAWC cut its costs even further, it acknowledged the Company's outstanding customer service achievements in both this proceeding and in Docket 06-00290.[57] Further, when questioned on how the CAPD suggested that TAWC cut costs, the CAPD could not identify a single aspect of service that the CAPD would be willing to see TAWC streamline or end.[58] The reality is that each of the technologies or services utilized by TAWC offers important savings to the Company and provides for better quality service and water to its customers – two achievements the Company is not willing to forsake.

2. Growth Factor

In response to TRA Data Request 5, Question 1, the Company adopted a 21-month average inflation adjustment based on the Value Line Forecast Consumer Price Index. This results in a 3.94% inflation factor.[59] TAWC applied the inflation factor to expenses for which there were not known and measurable expense adjustments made. In contrast, the Consumer Advocate adopted a slightly higher rate of inflation and applied it across the board despite

[56] *See* John S. Watson, Pre-Filed Rebuttal Testimony, p. 15:24 -17:14 (identifying specific examples of benefits offered by the service company) (August 13,, 2008); Watson, Vol. II, Tr. 234:5-25.
[57] *See* Terry Buckner, Vol. XVII, Tr. 1691:14-15; Michael D. Chrysler, Pre-Filed Direct Testimony, Docket 06-00290, p. 3-4 (March 5, 2007).
[58] Terry Buckner, Vol. XVII, Tr.1690:8-13 (August 26, 2008).
[59] Robert A. Shiltz, Direct Examination, Vol. VII, Tr. 805:6-11, 810:20 – 811:7, TAWC Response to TRA Data Request No. 5, Question 1, Attachment 1 (August 5, 2008).

agreeing that "it's appropriate in accounting to make adjustments for known and measurable changes."[60] Thus, by the CAPD's own admission, the TRA should adopt the Company's expense calculation, which utilizes the 21-month inflation factor only in the absence of known and measurable costs.

3. Salaries and Wages / Group Insurance Expense

a. *Computation of Expenses*

As the Company has done in prior rate filings, the Company calculated labor expense by individual employee. Each employee's wages during the twelve months ended November 30, 2007, were adjusted to account for the wage level that would be in effect during the attrition year.[61] Intervenors contest only the employee level set by the Company for the attrition year, not the Company's calculation of wage levels for the attrition year. Payroll taxes were similarly determined based on historical and test year salary and wage expenses.

The Company also established that labor-related expenses were adjusted for group insurance expenses. The annualized group insurance cost was calculated by applying the group insurance rates in effect as of November 30, 2007 to the *pro forma* insurance coverage based upon the employee complement and salary and wage information. Employee contributions for healthcare coverage were then subtracted to reach the annualized group insurance cost.[62]

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[60] Terry Buckner, Vol. XVI, Tr. 1669:18-21.

[61] To calculate wage levels, the Company used the hours worked during the historical test year from the Company's actual payroll records for union employees. Adjustments were then made to overtime hours to restate those hours to a level equivalent to the employee's hourly pay rate. Similar adjustments were made for other premium overtime hours. Each employee's equivalent hours were then applied to their average attrition year wage rate to determine going-level wages. The Company based average rate year wage rates for union employees on existing bargaining agreements, which contain negotiated wage rates through the attrition year. The wage rates for each pay class in effect for the attrition year were pro-rated based upon the number of days in the attrition year. For non-union hourly and clerical employees, current wage rates that became effective on April 1, 2007 were adjusted for wage increases of 3.6% on April 1, 2008 and April 1, 2009. The test year wage rate was calculated based upon the number of days each of those wages were in effect, just as the union wage rates were calculated. Salaried employees' rates were adjusted for wage increases as well. Sheila A. Miller, Pre-Filed Direct Testimony, p. 7:1 – 8:18 (March 14, 2008).

[62] Sheila A. Miller, Pre-Filed Direct Testimony, p. 10:22-11:5 (March 14, 2008).

In accordance with accounting principles, and as acknowledged by Mr. Buckner, the Company appropriately eliminated the 20.28% of the labor and group insurance expense that is capitalized from the gross O & M expenses. This elimination included capitalized amounts associated with wage levels, group insurance, and payroll taxes.[63]

b. *Need For Three Additional Employees*

TAWC also seeks to expand its employee level from the 111 employees approved in the 2006 Docket to 114 employees to maintain its quality of service. Specifically, the Company seeks to add the following three new positions:

> Operations Specialist – This position is necessary to provide operational and financial statistical reporting and analysis, serve as a liaison with each local department to coordinate Sarbanes Oxley compliance, conduct monthly operational reports, review and analysis of financial statements, service metric reporting, compilation of reports to TAWC management personnel, preparation of electronic spreadsheets for comparative and detailed analytics of operating and capital expenditure programs, and to assist in the annual budget preparation.
>
> Manager - Engineering Services – This position is necessary for general supervision of the Project Manager and Engineering staff, to direct TAWC's Capital Expenditure Program, oversee compliance with state and federal standards for construction, review, and management of the specifications for construction activities, inspection services, and manage the short-term and long-term capital expenditure planning. The Manager of Engineering will also head the Capital Investment Management Committee ("CIMC"), which will provide governance over the capital spending plan to assure compliance with American Water and TAWC policies.
>
> Non-Revenue Water Supervisor – This position is necessary to oversee TAWC's unaccounted for water efforts, including leak detection and reduction in unaccounted for water levels.[64]

The decision to create new positions or hire additional personnel is driven by consumer and regulatory demands and is only implemented after a careful assessment of current and projected

[63] Sheila A. Miller, Pre-Filed Direct Testimony, p. 5:6-7, 11:8-19 (March 14, 2008).
[64] John S. Watson, Pre-Filed Direct Testimony, pp. 17:11 – 18:23 (March 14, 2008).

demands.[65] Each position has particularized responsibilities and plays an integral role in the Company's provision of service.

Due to the natural occurrence of workforce turnover, however, there are sometimes vacant positions that reduce TAWC's workforce below full-strength. The fact that the Company is not always at full strength due to turnover in no way reflects a lack of desire, effort or need. For instance, in the last three and a half years, the Company has experienced about a 32.4% turnover in the workforce due in large part to the Company's aging employee ranks.[66] Adding to the challenge, many positions that TAWC seeks to fill often require specialized licensing or certification — a point conceded by Mr. Buckner[67] — which dramatically limits the candidate pool from which the Company may recruit.[68] Notwithstanding these challenges, the Company has been working diligently and in good faith to fill vacancies as they occur – an effort not disputed by Mr. Buckner.[69]

In contrast, Mr. Bucker recommends a ***reduction*** in TAWC workforce by ***five*** positions. Mr. Buckner selectively limited the Company to the March 31, 2008 actual employment level, which does not reflect an appropriate employment level, and admitted that his level does not include "any assessment or evaluate the actual needs of the company going forward."[70] Further, Mr. Buckner does not consider workforce turnover and movement[71] – a significant factor affecting employee levels and one that is beyond the Company's control.[72] Nor does Mr. Buckner's analysis appreciate the Company's obligations pursuant to union contracts, which

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[65] John S. Watson, Pre-Filed Rebuttal Testimony, 2:31 – 3:7 (August 13, 2008).
[66] John S. Watson, Pre-Filed Rebuttal Testimony pp. 5:24-6:9 (August 13, 2008).
[67] Terry Buckner, Cross-Examination, Vol. XVII, Tr. 1707:14-18.
[68] John S. Watson, Pre-Filed Rebuttal Testimony, p. 8:17-19 (August 13, 2008).
[69] Terry Buckner Cross-Examination, Vol. XVII, Tr. 1704:15-17, 1706:19-23; John S. Watson Pre-Filed Rebuttal Testimony, p. 5:8-16 (August 13, 2008).
[70] Terry Buckner, Cross-Examination, Vol. XVII, Tr. 1702:21-24.
[71] Terry Buckner, Cross-Examination, Vol. XVII, Tr. 1704:16-20.
[72] *See* John S. Watson, Pre-Filed Rebuttal Testimony, Rebuttal Ex. JSW-1 (August 13, 2008).

require the Company to first hold open any new or vacant position internally for 90 days before the Company can seek candidates outside the Company.[73] Mr. Watson directly rebutted Mr. Buckner's contentions regarding the accounting for particular personnel by providing an extensive outline of employee movement.[74]

Moreover, by ignoring vacant but needed positions, Mr. Buckner's adjustment does not account for the costs TAWC incurs related to that vacancy, such as the cost for overtime, temporary service personnel, meal allowances, use of contracted services, recruiting expenses, physical exams, and fees for background checks that are incurred to fill vacancies within the Company.[75] Mr. Buckner also failed to recognize that it is more cost-effective to hire a full-time employee to meet demands than to pay current employees overtime to perform the same function. Further, the Consumer Advocate does not dispute that regulatory burdens (such as the Safe Drinking Water Act) are increasing and that greater resources are necessary to meet those burdens.[76]

Thus, the Consumer Advocate's arguments entirely ignore the economic reality in which TAWC operates. TAWC requires 114 employees to satisfy the high regulatory burdens in place regarding water quality, to reduce unaccounted for water, to reduce bill estimates, and to maintain the high level of customer service its customers have come to expect – all of which are necessary to fulfill the Consumer Advocate's own espoused water utility service goals.[77]

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[73] John S. Watson, Pre-Filed Rebuttal Testimony, p. 11:9-11 (August 13, 2008); *see also* Terry Buckner Cross-Examination, Vol. XVII, Tr. 1706:24 - 1707:13 (acknowledging the union labor requirements).
[74] John S. Watson, Pre-Filed Rebuttal Testimony, p. 10:16 - 13:27 (August 13, 2008).
[75] John S. Watson, Pre-Filed Rebuttal Testimony, p. 6:15-19 (August 13, 2008).
[76] Terry Buckner Cross-Examination, Vol. XVII, Tr. 1694:9-24.
[77] *See* John S. Watson, Pre-Filed Rebuttal Testimony, p. 4:13-22 (August 13, 2008); Terry Buckner, Vol. XVII, Tr. 1695:23 – 1696:9.

4. Increasing Cost of Gasoline, Electric, Sewer, Chemicals, Waste Disposal, etc.

Additionally, as established by the evidence offered by several witnesses (Mr. Watson, Mrs. Miller, Mr. Shiltz, Mr. Miller, and Mr. Buckner), the Company's is experiencing increased operating expenses in part due to the increases in the cost of gasoline, power, waste disposal, and chemicals.[78] These costs not only increase TAWC's line item costs for those items, but also to some degree increase the costs associated with almost every other service or product that TAWC must purchase. Ironically, electric power and waste disposal are both under the control of Intervenor City of Chattanooga, which has regularly and routinely raised the rates of each service without the need to justify the increases to a regulatory authority like the TRA. Moreover, Intervenors do not contest that these rates are increasing.[79]

a. *Fuel And Power*

The price of gasoline has increased by 66% since January 2007 – far outpacing the rate of inflation.[80] Similarly, TAWC utilizes power from the Electric Power Board of Chattanooga ("EPB"). The Company's Citico Water Treatment and Pumping Station and 28 booster stations — many of which operate continuously — require such power to serve TAWC customers at all elevations across the service area.[81] Since the last rate case, the Company has seen multiple increases to the electricity costs because of repeated fuel cost adjustments and energy demand rate increases.[82] Indeed, shortly before the hearing in this case began, the TVA announced a 15-

[78] *See, e.g.*, Sheila A. Miller, Pre-Filed Rebuttal Testimony, pp. 3:19 – 4:4, 12:13 – 13:11 (August 13, 2008); John S. Watson, Pre-Filed Direct Testimony, p. 24:16 – 25:5 (August 13, 2008); Hearing Ex. 62 at 14-20 (Watson Summary Slides), Hearing Ex. 70, at 4 (M. Miller Summary Slides).
[79] Terry Buckner Cross-Examination, Vol. XVII, Tr. 1677:2-5 (August 26, 2008).
[80] *See* Sheila A. Miller, Pre-Filed Rebuttal Testimony 3:16 – 4:4, Exhibit SAM-1 (U.S. Energy Information Administration Schedule reflecting a 66% increase in the cost of the national average for all grades of gasoline since early 2007).
[81] John S. Watson, Pre-Filed Direct Testimony, p. 19:1-9 (March 14, 2008).
[82] John S. Watson, Pre-Filed Direct Testimony, p. 19:9 – 20:6 (March 14, 2008).

20% rate increase that will take effect October 2008.[83] Such increases are passed directly through the EPB to its customers, including TAWC. Likewise, TAWC has no choice but to seek recovery of such increased costs through higher rates.

b. *Chemicals*

Upon accepting its new chemical contracts on August 1, 2008, the Company's water treatment chemical expenses reported in its Petition increased by $509,950.[84] Specifically, fluoride increased by 65.3% from the 2008 unit price, sodium hydroxide (caustic soda) increased by 179%, and zinc orthophosphate increased by 245%.[85] Again, these costs are impacted by the increasing cost of gasoline and diesel fuel, which is significantly outpacing inflation.

Notably, these figures are ***not*** contained in TAWC's Petition because they were unknown to the Company at that time. These costs, however, are necessarily borne by the Company in the attrition year and were brought to the TRA and Intervenors' attention at the earliest possible time prior to the start of the hearing; the costs were fully explored by the Intervenors through cross-examination at the hearing.[86] The Consumer Advocate acknowledged that "when a known and measurable figure is brought to the company's attention . . . the company should make that change"[87] and that the TRA should take that change into consideration:

> Q: Now, if those chemical expenses were established by contract, you would agree that that is, in fact, a known and measurable expense?
>
> A: Yes, sir, if that's established.
>
> Q: And you agree that when there are known and measurable expenses that they should be taken into account so that the TRA can set the most accurate rates possible?

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[83] Sheila A. Miller, Pre-Filed Rebuttal Testimony, Ex. SAM-8 (August 13, 2008).
[84] *See* TN-TRA-05-Q01 (reflecting adjustments); S. Miller Pre-Filed Rebuttal Testimony, p. 12:16-25 (August 13, 2008); 2008 Chemical Contracts at S. Miller Rebuttal Ex. SAM-7; John S. Watson Pre-Filed Rebuttal Testimony, p. 25:20-23 (August 13, 2008).
[85] John S. Watson, Pre-Filed Rebuttal Testimony, p. 25:20-23 (August 13, 2008).
[86] *See, e.g.*, Sheila Miller, Vol. IV, Tr. 646:8-16, 704:14 – 708:22, 713:21 – 714:12.
[87] Terry Buckner, Vol. XVII, Tr. 1699:6-10.

A: Yes, sir.[88]

Thus, although the Company does not seek to revise its requested overall rate increase, TAWC does request that the TRA consider these increased costs when making its determination of the appropriate rate relief.

c. *Waste Disposal*

The Company's waste disposal rates paid to the City of Chattanooga Sanitary Board to treat the water plant residuals were adjusted for a 3% increase effective October 2007 and another 3% increase effective April 2008.[89] Adding to the costs faced by the Company in the attrition year, but not included in this rate request, the City of Chattanooga Sanitation Board just announced another 6% increase on August 25, 2008.[90] As noted above, TAWC requests that the TRA consider such certain price increases the Company will necessarily incur in the attrition year as it makes its determination of the Company's expenses.

5. Management Fees

TAWC seeks recovery of $4.335 million for management services provided by its affiliated service company, American Water Works Service Company ("AWWSC"). This is an increase of approximately $430,000 over the amount of management fees approved by the TRA in Docket 06-00290. The Intervenors have contested the recovery of management fees paid to AWWSC, on the basis of their allegations that (1) the service company model has not resulted in a cost savings to TAWC and (2) TAWC's management audit does not meet the requirements of Director Miller's May 15, 2007 Motion or the TRA's June 10, 2008 Order in Docket 06-00290. The Company has justified the management fees by proving that the service company model has

[88] Terry Buckner, Vol. XVII, Tr. 1701:7-15.
[89] *See* TN-TRA-01-A013-WASTE DISPOSAL, Page 2 of 14; Sheila A. Miller, Pre-Filed Direct Testimony p. 10:15-20 (March 14, 2008).
[90] *See* Cliff Hightower, *City Proposes Sewer Rate Hike*, CHATTANOOGA TIMES FREE PRESS, at A1 (August 26, 2008).

resulted in better service at lower cost, and by submitting a management audit in compliance with every requirement imposed by this Authority.

a. *Efficiency*

With respect to TAWC's management fees, no party disputes that TAWC receives necessary and valuable services from AWWSC, an affiliated company. Further, no party disputes that AWWSC provides these services to TAWC pursuant to the 1989 Service Agreement approved by the Tennessee Public Service Commission. Through employing the efficient and proven service company model, TAWC is able to provide more prompt and reliable service and achieves significant cost savings.[91]

As proof of the value offered by AWWSC services, the City of Chattanooga itself relies on AWWSC for sewer billing, a testament to the quality, efficiency, and cost advantages offered by AWWSC. AWWSC provides TAWC with a 24/7 customer call center (an important convenience for Chattanooga ratepayers) as well as expert services in accounting, operations, rates & revenues, administration, audit, information systems, communications, human resources, risk management, finance, legal, water quality, and engineering.[92] Moreover, AWWSC provides all of these services to TAWC *at cost*.[93]

If not for its relationship with AWWSC, the Company would still have to provide the required services.[94] Shifting services from AWWSC to the local level would require more full-time employees and would result in much greater fees for outside contractors (who do not bill at cost). As many leading national utilities have done, through the service company model, the Company has taken advantage of the economies of scale afforded by its relationship with its

[91] Michael Miller, Pre-Filed Rebuttal Testimony, Exhibit Rebuttal MAM-10 (August 13, 2008).
[92] Joseph Van den Berg, Pre-Filed Rebuttal Testimony, Figure 1, p. 12 (August 13, 2008).
[93] Michael Miller, Pre-Filed Direct Testimony, p. 13 (March 14, 2008).
[94] BAH Management Audit, p. 19, Joseph Van den Berg, Pre-Filed Direct Testimony (August 13, 2008).

corporate parent AWW and its affiliate, AWWSC.[95] This model allows AWW subsidiaries to utilize highly qualified and specialized employees, while sharing in the cost of employing those personnel, whose services are not needed on a full-time basis at each operating subsidiary. The management audit witness Mr. Van den Berg testified that, in his extensive experience, the service company model is a cost-effective way for operating utilities to obtain many necessary services.[96]

Contrary to the Intervenors' assertions, the Company has proved conclusively that it has saved the customers money, while improving customer service, by adopting the service company model.[97] Mr. Miller testified that the service company model has improved service for TAWC's customers, while helping TAWC meet ever-increasing regulatory burdens.[98] TAWC has carried its burden to justify the full amount of management fees included in its Petition. Even if this Authority decides that the BAH Management Audit does not fully comply with its directive (a conclusion with which the Company disagrees), TAWC is entitled to recover its management fees in rates because TAWC has established that the services provided by AWWSC are essential for TAWC to meet its public service obligation and no Intervenor has provided any substantive evidence to the contrary.[99] Further, no evidence disputes that the management fees approved in Docket No. 06-00290 were not prudent. Indeed, even CAPD witness Mr. Buckner does not dispute that at least $3.453 million of the management fees charged to TAWC by AWWSC are reasonable although he incorrectly limits that amount based on the assertion that there is no

[95] BAH Management Audit, pp. 6, 24, Joseph Van den Berg, Pre-Filed Direct Testimony (August 13, 2008).
[96] BAH Management Audit, p. 5, Joseph Van den Berg, Pre-Filed Direct Testimony (August 13, 2008).
[97] BAH Management Audit, pp. 6, 24, 50, Joseph Van den Berg, Pre-Filed Direct Testimony (August 13, 2008); Michael Miller, Pre-Filed Rebuttal Testimony, Exhibit Rebuttal MAM-10 (August 13, 2008).
[98] In this case, the Authority heard no customer service complaints among the 13 customers who made public comments, despite the fact that three of those commenters were representatives of Intervenors in this docket.
[99] Terry Buckner, Vol. XVII, Tr. 1709:8-13.

offset at TAWC for the increased management fees.[100] Thus, TAWC's relationship with AWWSC is a good deal for the customers of TAWC.

Because the Intervenors have been unable to find real fault with the type, level, or cost of services provided by AWWSC, they resorted to an argument that the Management Audit of those services performed by Booz Allen Hamilton was technically insufficient. As further detailed below, this argument is without merit.

b. *The Management Audit*

At the conclusion of TAWC's last rate case, Director Miller instructed the Company to perform a management audit in conjunction with its next rate petition:

> I move that the Authority direct TAWC to have a management audit performed in compliance with Sarbanes-Oxley requirements and to submit the audit results concurrent with any future 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.[101]

A management audit is designed, in accordance with the designated scope and purpose, to provide a subjective analysis and evaluation of management's performance.[102] These audits are entirely distinct from financial audits.

In accordance with Director Miller's instruction, the Company submitted a comprehensive management audit prepared by Joseph Van den Berg of Booz Allen Hamilton (now Booz & Company) (the "BAH Management Audit") with its present Petition. Notably, the BAH Management Audit conformed in all respects with Director Miller's Motion, as well as the Authority's June 10, 2008 Order in the same case because:[103] 1) the audit was performed in full

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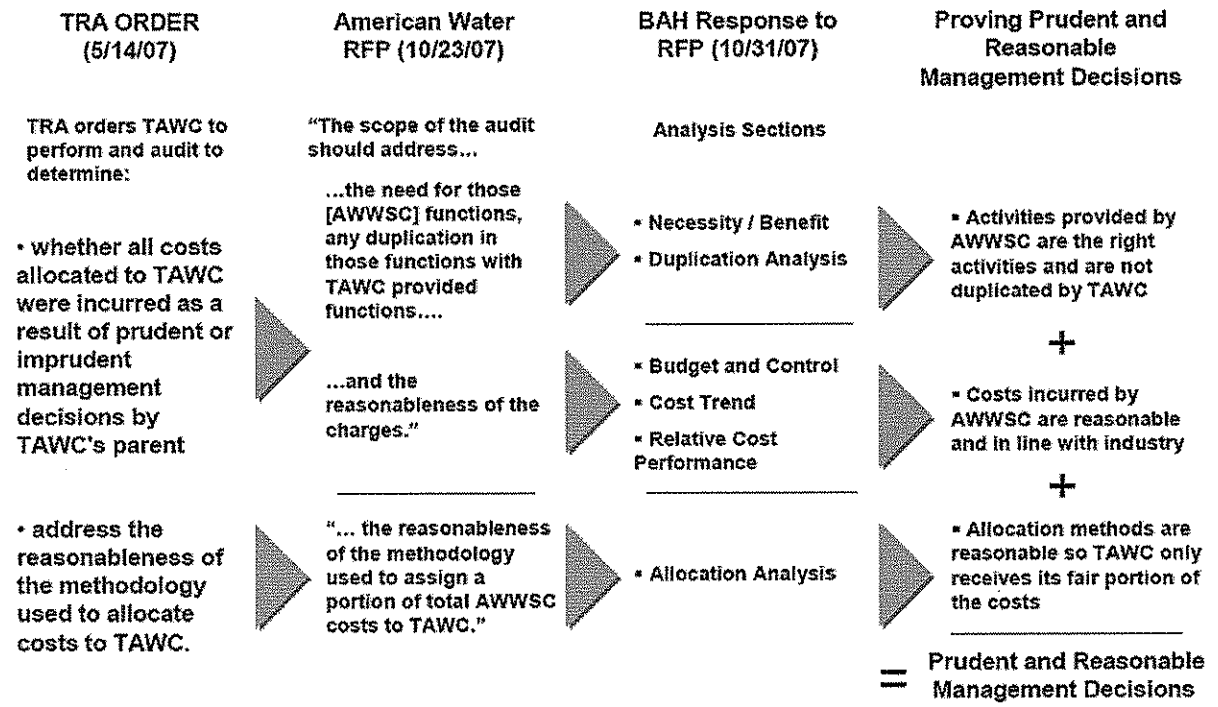
[100] Terry Buckner, Vol. XVII, Tr. 1709:8-13.
[101] *See* Motion of Director Pat Miller, TRA Docket No. 06-00290, May 15, 2007.
[102] *See* Mark Manner, Pre-Filed Rebuttal Testimony, p. 16:18-19 (August 13, 2008); 1992 NARUC Manual, Vol. II.
[103] *See* Joseph Van den Berg, Pre-Filed Direct Testimony, p. 2 (August 13, 2008). Mr. Majoros contends that someone with TAWC or BAH should have contacted the TRA to inquire more specifically regarding the intent of Director Miller's Motion. Michael Majoros, Tr. Vol. XX, at 1995:24-1996:3 TAWC and BAH understood the intent

compliance with applicable provisions of the Sarbanes-Oxley Act; 2) it determined that the management fees incurred by TAWC were a result of prudent decisions by TAWC's parent;[104] and 3) it determined that the cost-allocation method used by AWWSC is reasonable.[105]

To arrive at the conclusions that TAWC's management fee costs are the result of prudent management decisions and that the allocation methodology is reasonable, the BAH team employed a Management Audit methodology that has been used and accepted in multiple other jurisdictions.[106]



of the Motion, and nevertheless could not have engaged in the ex-parte contact suggested by Mr. Majoros because the final order in the case was not issued until June 10, 2008.

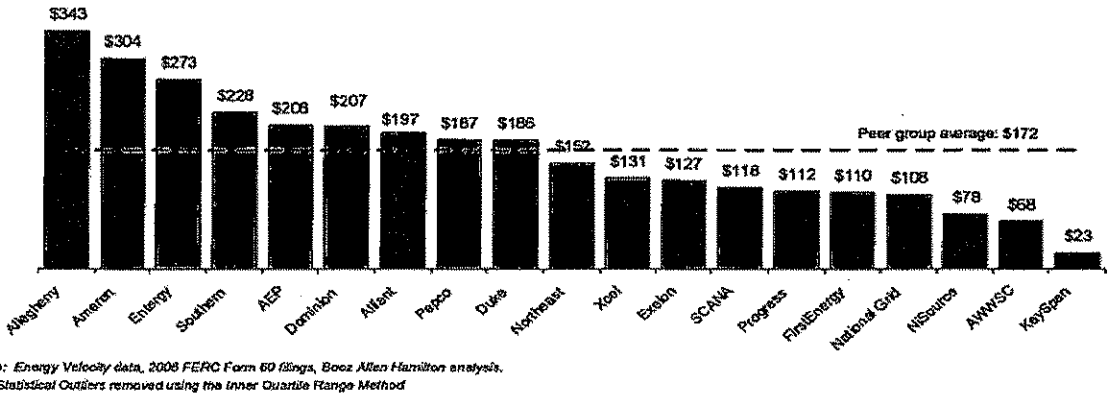
[104] The BAH Management Audit focused on Operations and Maintenance costs charged by AWWSC because TAWC and BAH believed it was clear from the context of Director Miller's Motion that the Authority was concerned with the AWWSC O&M expenses, rather than the Capitalized Costs also billed from AWWSC. In both the Motion and the June 10, 2008 Order, the discussion of a management audit was focused on O&M expenses, and noted nothing about the entirely separate category of capitalized costs, some of which also originate at AWWSC. *See* Michael Miller, Vol.XIV, Tr. 1555:4-1556:4 (August 22, 2008). Even CAPD witness Mr. Buckner testified that he believes the TRA requested the Management Audit to examine O&M expenses. Terry Buckner, Tr. Vol. XVII, at 1719:11-13 (August 26, 2008).

[105] Joseph Van den Berg, Pre-Filed Direct Testimony, p. 2-3, 13 (August 13, 2008).

[106] Joseph Van den Berg, Vol. VII, Tr. 841:8-12; Vol X, Tr. 1074:4-25, 1075:19-25.

Figure 1-1 to BAH Management Audit.[107] The BAH Management Audit methodology examines seven aspects of the relationship between the service company and the operating utility, including: (1) the organizational structure of the service company; (2) the necessity and benefits of service company functions; (3) whether any functions are duplicated between the service company and the operating company; (4) the budget and control systems that regulate service company costs; (5) cost trends; (6) relative cost performance measured against a comparable peer group; and (7) allocation of costs from the service company to the operating company.[108]

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

Based on the above criteria, and as illustrated by this figure provided in the BAH Management Audit, it is clear that the Company not only receives very fair rates from the service company, but also very competitive rates.[109]

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[107] Even City witness Mr. Majoros agreed with the BAH management audit's definition of prudence. Michael Majoros, Vol. XXI, Tr. 2072:19 – 2073:03. *See also* Joseph Van den Berg, Vol. X, Tr. 1074:4-25, 1075:19-25, 1076:1-5 (testifying that the BAH Management Audit's definition of prudence and management audit methodology has been accepted by regulatory authorities in eighteen other jurisdictions).
[108] Joseph Van den Berg, Pre-Filed Direct Testimony, pp. 4-10 (August 13, 2008).
[109] BAH Management Audit, Joseph Van den Berg Pre-Filed Direct Testimony, p. 57 of 59 (March 14, 2008).

c. *The Management Audit Complied with Sarbanes-Oxley and Properly Addresses the Issues in this Authority's Order*

The Management Audit also complied with all applicable provisions of the Sarbanes-Oxley Act.[110] As applied to management audits, Sarbanes-Oxley defines a management audit as a "Non-audit service" and precludes a public company's financial statement auditing firm from doing such "non-audit" work for the public company.[111] The BAH Management Audit was performed by an independent management consulting firm, as required by Sarbanes-Oxley,[112] and the financial information on which the Management Audit was based was prepared by and for American Water Works ("AWK"), a Sarbanes-Oxley compliant company.[113] This financial information was also incorporated in the audited and certified financial statements filed by American Water with the SEC. Accordingly, TAWC strictly observed both of the two Sarbanes-Oxley requirements that apply to the BAH Management Audit: (1) the definition of Non-audit services under Sarbanes-Oxley, and (2) the ban on non-audit work by the company's financial auditors.[114] These two requirements are designed to ensure the company's financial auditors, as well as any firm performing non-audit work, are not operating under any conflicts of interests.[115] TAWC did not send the Request for Proposal for the management audit to PricewaterhouseCoopers (the independent financial auditors for AWK), and Booz & Co. has never conducted the financial audits for AWK.

Further, AWK is in full compliance with Sarbanes-Oxley. Just over four months ago, AWK completed an IPO, selling its stock on global markets and in the process subjecting itself

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[110] Mark Manner, Vol. XI, Tr. 1191:2-6.
[111] Mark Manner, Pre-Filed Rebuttal Testimony, p. 13 (August 13, 2008); Sarbanes Oxley, § 201(g), 2(a)(8).
[112] Mark Manner, Pre-Filed Rebuttal Testimony, p. 13 (August 13, 2008); Sarbanes Oxley, § 201(g), 2(a)(8).
[113] Mark Manner, Pre-Filed Rebuttal Testimony, pp. 13, 15 (August 13, 2008).
[114] Joseph Van den Berg, Vol. XX, Tr. 1111:10 – 1112:10.
[115] Mark Manner, Pre-Filed Rebuttal Testimony, p. 13 (August 13, 2008).

to underwriter and SEC scrutiny.[116] Since that time, AWK has been regularly filing for public review the comprehensive financial statement and control certifications under sections 302 and 906 of Sarbanes-Oxley.[117] These AWK officer certifications, which carry significant civil and criminal liability, lend further support to the accuracy and reliability of the Company's financial statements and operations.[118] In fact, the Company's decision not to accelerate its Sarbanes-Oxley Section 404 certification is both responsible and prudent given its newly-public status — a fact reflected by the other 80% of 2007 IPO's of companies listed on the New York Stock Exchange that chose not to accelerate Section 404 certification.

AWK has engaged Ernst & Young to assist with its continued Sarbanes-Oxley compliance.[119] Mark Manner, an expert securities attorney with over 25 years of experience counseling public companies on complying with federal securities laws, testified that AWK is in full compliance with Sarbanes-Oxley.[120] Indeed, no witness in this docket testified that Sarbanes-Oxley requires AWK to engage in any further compliance efforts at this time. Nor could any Intervenor witness offer any first-hand experience in conducting or viewing a "Sarbanes-Oxley compliant" management audit.[121]

Nevertheless, City witness Michael Majoros (who is neither a practicing CPA nor an attorney[122]) offered his opinion that the BAH Management Audit was not Sarbanes-Oxley compliant, based solely on his inexperienced and untrained reading of the statute and a few superficial observations concerning the management audit, including that it: (i) did not

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[116] Mark Manner, Pre-Filed Rebuttal Testimony, pp. 15, 27 (August 13, 2008).
[117] Mark Manner, Pre-Filed Rebuttal Testimony, pp. 22-23, 27 (August 13, 2008).
[118] *See* 302 and 906 Officer Certifications filed with AWK 10-Q Reports to the U.S. Securities and Exchange Commission.
[119] Mark Manner, Pre-Filed Rebuttal Testimony, p. 25 (August 13, 2008).
[120] Mark Manner, Pre-Filed Rebuttal Testimony, p. 24-25 (August 13, 2008).
[121] Docket 08-00039, City of Chattanooga's Response to TAWC's Second Set of Discovery Requests, Question 21 (August 5, 2008).
[122] *See* Michael Majoros, Vol. XXI, Tr. 2037:8 – 2038:4, 2046:23 – 2047:3; Md. Bus. Occupations & Professions Code Ann. § 2-603; Tenn. Code Ann. § 62-1-113(c).

specifically mention Sarbanes-Oxley; (ii) was not performed by a public accounting firm[123]; (iii) was not a financial "audit" as defined by Sarbanes-Oxley; (iv) did not address and describe American Water Works' internal financial controls.[124] Mr. Majoros has never interpreted or applied the Sarbanes-Oxley Act, never received any kind of training regarding Sarbanes-Oxley, never before testified on Sarbanes-Oxley, and acknowledged that never before had he seen a "Sarbanes-Oxley compliant" management audit.[125] Ironically, Mr. Majoros contends that a person who is not a practicing CPA is unqualified to testify regarding Sarbanes-Oxley, even though as a matter of both Tennessee and Maryland law, it is clear that Mr. Majoros cannot testify as a CPA.[126]

Mr. Majoros' interpretation of Sarbanes-Oxley, as applied to management audits, is entirely different than the interpretation adopted and explained by Mr. Manner (an experienced securities lawyer).[127] Mr. Majoros would have AWK duplicate a Sarbanes-Oxley compliance and financial audit process that cost millions upon millions of dollars to satisfy his amateur view of what this Authority's order meant. Mr. Majoros' interpretation could result in highly damaging marketplace turbulence for AWK, because the hiring of a second independent public

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[123] Mr. Majoros' confusion of the applicable Sarbanes-Oxley standards is especially evident on this point. On the one hand, Mr. Majoros testified that his firm could have completed a Sarbanes-Oxley compliant management audit of AWWSC if Snavely hired a CPA, but on the other hand testified that Snavely is not a public accounting firm and not registered with the PCAOB – two requirements Mr. Majoros claims must be met to conduct *this* management audit. *See* Michael Majoros, Vol. XX, Tr. 2013:11-15; PCAOB Registered Firms, *at* http://www.pcaobus.org/Registration/Registered_Firms.pdf (last visited September 1, 2008). In fact, PCAOB registration is only required for firms conducting financial audits under Sarbanes-Oxley.

[124] Michael Majoros, Pre-Filed Direct Testimony, pp. 6-9 (July 18, 2008).

[125] Michael Majoros, Vol. XXI, Tr. 2047:7-25.

[126] *Cf.* Hearing Ex. 57 (Majoros Summary Slides); Michael Majoros, Vol. XX, Tr. 2041-2044. Mr. Majoros maintained at the hearing that he meets the eligibility requirements for his membership in an association of CPAs, the AICPA, despite his apparent failure to meet the express requirements of such membership. *Cf.* Hearing Ex. 59, 60; Michael Majoros, Vol. XX, Tr. 2028, 2037-2038. Regardless, it appears that Mr. Majoros cannot hold himself out as a CPA in Maryland or Tennessee because he allowed his CPA license to become inactive over 20 years ago. Any testimony given by Mr. Majoros based on any claim that he is a CPA would therefore need to be disregarded in this case. *See* Michael Majoros, Vol. XX, Tr. 2010-2011, 2037, 2039; Md. Bus. Occupations & Professions Code Ann. § 2-603; Tenn. Code Ann. § 62-1-113(c).

[127] Michael Majoros, Pre-Filed Direct Testimony, pp. 6-9 (July 18, 2008); Mark Manner, Pre-Filed Rebuttal Testimony, p. 2 (August 13, 2008).

accounting firm might be interpreted as a sign of possible financial difficulties at American Water.[128] It is unreasonable to believe that this Authority intended the consequences that would result from Mr. Majoros' erroneous interpretation of Sarbanes-Oxley in the context of Director Miller's Motion and the June 10, 2008 Order.

Mr. Majoros also contended that the BAH Management Audit is not a management audit at all because the BAH Management Audit "does not resemble" the other management audits he claims to have reviewed in preparation for his testimony.[129] To take the position that the BAH Management Audit is not actually a management audit simply because it "does not resemble" the few examples Mr. Majoros has reviewed is an absurd position — and is further testament to Mr. Majoros' lack of firsthand experience regarding management audits.

Mr. Majoros further testified that the BAH Management Audit does not meet a definition of management audit supplied by a 20 year-old NARUC manual, which acknowledged itself as merely guidance.[130] Aside from the age of the NARUC manual and Mr. Majoros' demonstrated lack of knowledge concerning its foundation, source, and purpose, the NARUC manual itself makes it clear that the term "management audit" is not subject to a clear, unchanging definition.[131] Rather, the term "management audit" is a general term for an evaluation of a company's management decisions, the full scope and structure of which is defined by the requesting party.[132] A much more recent NARUC publication, the Rate Case and Audit Manual, prepared by the NARUC Subcommittee on Accounting and Finance in 2003, puts it this way:

> We (NARUC) do not mean it (Management Audit or Regulatory Audit) in the purist sense of the word, where one might assume a verification of booked

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[128] Mark Manner, Vol. XI, Tr. 1124:10-1125:9.
[129] Michael Majoros Pre-Filed Direct Testimony, p. 11 (July 18, 2008).
[130] Michael Majoros, Vol. XX, Tr. 2001:11-2003:23.
[131] NARUC "Management Audit Manual Volume I of Fundamentals of Management Audits", Hearing Exhibit 58; Michael Majoros, Vol. XXI, Tr. 2085:7-2087:16.
[132] Mark Manner Pre-Filed Rebuttal Testimony, p. 12 (August 13, 2008).

> numbers to source documents and a strict sampling of accounts. Instead, we use it to mean a regulatory review, a field investigation, or a means of determining the appropriateness of a financial presentation for regulatory purposes. **Clearly, the reader should distinguish a regulatory audit from financial audits performed by independent certified public accountants.**[133]

It is clear that the term "Management Audit" used by Director Miller's Motion and the subsequent June 10, 2008 Order is a broad and general term for an evaluation of the management decisions of a business entity — exactly the type of management audit conducted by BAH.

Some concern was expressed that the BAH Management Audit did not include a separate section of recommendations for changes within AWWSC. Again, the intended scope of management audits is determined by reference to the initiating request. In this case, Director Miller's Motion did not request recommendations for improvement, but rather sought an evaluative study of the prudence or imprudence of management decisions by TAWC's parent, and of the reasonableness of the allocation methodology set forth in the 1989 Service Company Agreement.[134] It was undisputed that expanding the scope of the BAH Management Audit would have significantly increased its cost.

Glynn Stoffel, another City of Chattanooga witness, offered pre-filed testimony in this docket criticizing the BAH Management Audit's use of a peer group comprised of electric utilities.[135] Mr. Stoffel based his criticism of the BAH methodology on his years of providing training "stressing" benchmarking.[136] All of this training, it turns out, was encapsulated within two simple PowerPoint slides, neither of which addressed benchmarking for management audit purposes.[137] Mr. Stoffel suggested three alternative benchmarking studies (the AWWA Study,

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[133] Hearing Ex. 58, NARUC Rate Case and Audit Manual, p. 4 (2003) (emphasis added).
[134] Director Pat Miller's Motion, Docket No. 06-00290 (May 14, 2007).
[135] Glynn Stoffel, Pre-Filed Direct Testimony, p. 5 (July 18, 2008).
[136] Glynn Stoffel, Pre-Filed Direct Testimony, p. 2 (July 18, 2008).
[137] A number of the slides developed by Mr. Stoffel in his years of training speak for themselves. Mr. Stoffel is not qualified to opine of the propriety of Mr. Van den Berg's Management Audit benchmarking process. Hearing Ex. 56.

Wisconsin PSC Study, and the EPA Study), which he said BAH should have considered instead of the peer electric utilities.[138]

Mr. Van den Berg's decision to benchmark AWWSC's costs against a comparable peer group of electric utilities was reasonable and appropriate.[139] There are very few (approximately 2) water companies that employ a service company model comparable to the relationship between AWWSC and TAWC. Alternatively, the electric companies chosen for benchmarking in the BAH Management Audit all employ a similar service company structure, and thorough information regarding the service charges incurred by those companies is available on the reliable, federally-mandated FERC Form 60. For purposes of cost comparison, there is no significant functional difference between the types of service company services provided for electric and water operating companies.[140] For example, both water and electric utilities require accounting, finance, engineering, payroll, administration, human resources services, and even water quality functions.[141]

Under cross examination, Mr. Stoffel admitted that each of the three alternative sources of benchmarking data he suggested in his pre-filed testimony was fundamentally flawed.[142]

The AWWA "Benchmarking Performance Indicators for Water and Wastewater Utilities" contains cost data on water-industry customer service costs, but Mr. Stoffel admitted that this cost category is simply not comparable to the more comprehensive "service cost per customer" metric for the FERC-60 group.[143] The Wisconsin Public Service Commission data suggested by Mr. Stoffel is not transparent, and it is not clear exactly what cost elements are

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[138] Glynn Stoffel, Pre-Filed Direct Testimony, pp. 5-6 (July 18, 2008).
[139] Joseph Van den Berg, Pre-Filed Direct Testimony, p. 9 (March 14, 2008).
[140] Joseph Van den Berg, Pre-Filed Rebuttal Testimony, p. 9-10 (March 14, 2008).
[141] Joseph Van den Berg, Vol. XX, Tr. 1079:1 – 1083:6.
[142] Glynn Stoffel, Vol. XIX Tr., 1952: 11-19; 1962:13-15; 1968:7-21.
[143] Glynn Stoffel, Vol. XIX Tr., at 1952:11-19.

contained within each reported cost in that study.[144] Finally, the EPA study group report Mr. Stoffel originally proposed as an appropriate alternative to the FERC-60 group is not even a benchmarking data set at all.[145]

Mr. Stoffel's admission that his proposed alternative benchmarking data would not be sufficient or appropriate for analysis of AWWSC's costs underscores the reasonableness of Mr. Van den Berg's choice of the FERC-60 electric peer group for the BAH Management Audit.

d. *Questions about specific charges*

In his pre-filed testimony, and again in his summary of that testimony at the hearing, CAPD witness Terry Buckner mentioned several AWWSC expense charges allocated to TAWC, which he questions based solely on the names of the vendors.[146] Some of the vendors chosen for their potentially inflammatory names included Swanky Bubbles, Champagne Limousine, and Leggs Limousine.[147] What Mr. Buckner failed to mention in his testimony is that AWWSC's payments to almost all of these vendors were for legitimate business purposes.[148] For instance, Swanky Bubbles provides lunch catering for the AWWSC office in Voorhees, New Jersey. Champagne Limousine provides a cost-effective shuttle service for groups of AWWSC employees traveling from the Alton, Illinois call center to the St. Louis airport.[149] Similarly, Leggs Limousine provides shuttle service to the Newark airport for employees in AWWSC's Voorhees office.[150]

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[144] Glynn Stoffel, Vol. XIX Tr., at 1962:13-15.
[145] Glynn Stoffel, Vol. XIX Tr., at 1968:10-21.
[146] Terry Buckner Pre-Filed Direct Testimony, p. 48-49 (July 18, 2008).
[147] Michael Miller Pre-Filed Rebuttal Testimony, p. 82, (August 13, 2008).
[148] Michael Miller Pre-Filed Rebuttal Testimony, p. 82 (August 13, 2008).
[149] Michael Miller Pre-Filed Rebuttal Testimony, p. 82 (August 13, 2008).
[150] Michael Miller, Vol. XII, Tr. 1260:1-1261:25.

There is no reason to conclude that expense charges are improper based solely on the names of the vendors.[151] Nonetheless, TAWC conducted a broad search of AWWSC's expense charges allocated to TAWC for any vendor whose name includes the words "Limo", "Limousine", "Resort", "Casino", "Liquor" and similarly "provocative" terms, and determined that the Company paid a total $3,568.23 to such vendors.[152] This amount represents less than 1/1000th of the total management fees requested in this docket.[153]

Further, Mr. Buckner incorrectly testified that Mr. Miller had conceded that the $3,568.23 in charges included in Mr. Miller's search were illegitimate.[154] This is demonstrably inaccurate, as the record clearly shows that Mr. Miller made no such concession.[155] As demonstrated above, there is no evidence that the vast majority of these charges were not for a legitimate business purpose.[156]

The Company has fully justified its management fee expenses for the attrition year by demonstrating that TAWC ratepayers save money and get better service as a result of the service company relationship, and by submitting a Sarbanes-Oxley compliant management audit that fully meets the requirements set forth by this Authority. The vast majority of the CAPD's allegations that specific charges are not appropriate for recovery are specious and based on a superficial examination of limited data. The service company is a good deal for Chattanooga ratepayers and TAWC is entitled to recovery in rates of the charges paid to AWWSC.

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[151] Michael Miller Pre-Filed Rebuttal Testimony, pp. 81-83 (August 13, 2008).
[152] Michael Miller Pre-Filed Rebuttal Testimony, pp. 81-83 (August 13, 2008).
[153] Michael Miller Pre-Filed Rebuttal Testimony, pp. 81-83 (August 13, 2008).
[154] Terry Buckner, Vol. XVII, Tr. 1737:24 – 1738:5.
[155] *See e.g.*, Michael Miller, Pre-Filed Direct Testimony; Michael Miller, Pre-Filed Rebuttal Testimony; Michael Miller, Vol. XII-XIV.
[156] Mike Miller testified that he does not consider a small amount of the AWWSC expense charges legitimate for business purposes, and that TAWC is not seeking recovery of the $40.89 paid to those vendors. Michael Miller Pre-Filed Rebuttal Testimony, p. 82 (August 13, 2008).

6. Regulatory Expenses

For a variety of reasons, this rate case has cost everyone involved more than expected, and more than it should have. The Intervenors have asserted that the TRA should limit TAWC's recovery of regulatory expenses in rates. To limit TAWC' rate case cost recovery would be contrary to TRA precedent and unjust, in light of the fact that most of the increased cost of this docket and docket 06-00290 is attributable directly to litigation tactics employed by the Intervenors, to which the Company has no choice but to respond.

TAWC has been forced to bear the cost of (1) responding to dramatically more discovery requests than in even the unprecedented number of requests faced in the last docket,[157] (2) responding to numerous Intervenors' motions that could not have been anticipated, (3) addressing the CAPD and City's decision to retain a former AWK executive as an expert witness, (4) litigating the entry of a protective order and (4) having a thorough and comprehensive management audit performed by a professional consulting firm. Interestingly, the Intervenors protest that the Company is seeking to recover rate case expenses that the Intervenors deem too high, while it has been the Intervenors' actions that have dictated the cost and contentiousness of this docket.

In this rate case, the Company has faced no fewer than 454 discovery requests, 8 motions to compel, 2 motions to strike testimony, 4 hearings and status conferences, a dispute over the Company's proposal to use the same Protective Order entered in Docket No. 06-00290,[158] and the entirely unnecessary decision by the CAPD and the City to create a conflict of interest by

[157] Hearing Ex. 51 (Docket 08-00039 Summary); Hearing Ex. 50 (Docket 06-00290 Summary).
[158] It should be noted that, after arguing against its entry, the City of Chattanooga actually invoked the protections of the Amended Protective Order to protect training materials produced by Mr. Stoffel.

retaining a former AWWSC employee as a consultant.[159] The CAPD's own witness, Mr. Buckner, testified that rate case expenses necessarily increase when there are more complex contested issues.[160]

This onslaught of needlessly contentious litigation and flood of paper requires the Company to respond to protect its rights.[161] Litigation at this level requires resources, for which the Company has to pay. To be clear, TAWC has no desire to be confronted with this level of expense and difficulty. However, under the regulatory compact, the Company has no choice but to petition this Authority for a rate increase when its revenues do not provide an adequate return on its shareholders' investment in serving the community.

The Intervenors, having engaged in litigation and discovery excesses in this case, come before the Authority with unclean hands to argue against the level of regulatory expenses the Company seeks to recover. They should not be heard to complain that the Company's rate case expenses have exceeded expectations. TRA practice and precedent allow regulated utilities to recover regulatory expenses in rates.[162] There is no reason to depart from that established practice in this case.

For future rate cases in all utility industries, the Authority can take certain statutorily-authorized steps to limit the cost and inefficiency of proceedings. The Uniform Administrative Procedures Act gives this Authority the discretion to limit the involvement of Intervenors to ensure that the Intervenors' presence does not impair the "orderly and prompt conduct of the proceedings."[163] In this docket, as in 06-00290, the Intervenors were unable or unwilling to

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[159] Docket 08-00039, Hearing Ex. 51; Michael Miller Pre-Filed Rebuttal Testimony, pp. 84-85 (August 13, 2008). *See* Agreed Order Regarding Information Related to Frank Impagliazzo (July 11, 2008).
[160] Terry Buckner, Vol. XVII, Tr. 1728:5-7.
[161] Michael Miller, Pre-Filed Rebuttal Testimony, p. 85 (August 13, 2008).
[162] *See, e.g.*, June 10, 2008 Order, TRA Docket 06-00290.
[163] Tenn. Code Ann. § 4-5-310(a)(3).

participate without significantly impairing the orderly and prompt resolution of the case, at least without a massive increase in the expected cost of the proceeding.

While it is the Authority's prerogative to permit rate cases to evolve into highly contested proceedings akin to federal court complex litigation, trying such cases is necessarily far more costly than presenting evidence with the lesser degree of detail and adversarial participation more typical of administrative proceedings. TAWC has justified recovery of the full amount of requested rate case expense, and is entitled to just and reasonable rates to compensate for this necessary expense.

7. Unaccounted for Water

Both the CAPD and the CMA have proposed limitations on TAWC's recovery for treatment and delivery costs related to Unaccounted-for Water (UfW).[164] Imposing an unfair and arbitrary UfW requirement on TAWC would be unprecedented in Tennessee, and not in keeping with the Authority's charge to set just and reasonable rates.

The Intervenors proposed limitations should be rejected. First, it should be noted that UfW is a reality for all water systems, even more so for those located in mountainous terrain and having a generally older infrastructure, like TAWC.[165] Second, both the CAPD and the CMA relied on an invalid and unsupported formula to determine the UfW amounts on which they base their recommendations. Finally, the CAPD and CMA base their arbitrary proposed UfW cap on an AWWA report that specifically notes that it is providing a "target" or a "goal" for UfW, not a hard and fast limit.

[164] Terry Buckner, Pre-Filed Direct Testimony, p. 52 (July 18, 2008); Michael Gorman, Pre-Filed Direct Testimony, pp. 14-18 (July 18, 2008).
[165] Michael Miller, Pre-Filed Rebuttal Testimony, p. 71 (August 13, 2008); John Watson, Pre-Filed Rebuttal Testimony, pp. 21-22 (August 13, 2008).

TAWC's UfW rate was 19.97% for the test year, as calculated under the generally accepted formula (the formula used by the AWWA's Benchmarking Study, cited in Mr. Stoffel's pre-filed testimony in this docket).[166] That formula is set forth below:

$$\text{UfW} = \frac{\text{System Delivery} - (\text{Water Sales} + \text{Unbilled but Unmetered})}{\text{System Delivery}}$$

The CAPD and CMA both ignored this AWWA formula when calculating their UfW percentages to present testimony in this docket. Instead, the CAPD and CMA initially adopted Mr. Gorman's calculation of TAWC's UfW as 27.5%, using the following formula:

$$\text{UfW} = \frac{([\text{AWWA-defined UfW}] + \text{Unbilled but Unmetered})}{\text{Water Sales}}$$

The problem with Mr. Gorman's original calculation is that it results in an inflated UfW figure, because it uses a much higher numerator and a much lower denominator than the appropriate measures used by the AWWA.[167] The Gorman calculation also incorrectly included known and intended unmetered water use in TAWC's UfW.[168] Unbilled but Unmetered water (i.e. water used for fire fighting, street cleaning, customer leak adjustments, and infrastructure maintenance) is not "lost" or "unaccounted for"—the Company knows who uses it and where it goes, but does not charge for it.[169] Accordingly, it is inappropriate to disallow recovery of the necessary expense of treating and delivering that water. Mr. Gorman later corrected his calculation in response to Michael Miller's Pre-Filed Rebuttal Testimony, bringing his UfW percentage to 21.5%.[170] Mr. Gorman further admitted under cross examination that even his revised calculation is incorrect, because authorized unmetered usage should not be included in

[166] Michael Miller, Pre-Filed Rebuttal Testimony, p. 70 (August 13, 2008).
[167] Michael Miller, Pre-Filed Rebuttal Testimony, p. 70; Exhibit Rebuttal MAM-10 (August 13, 2008).
[168] Michael Miller, Pre-Filed Rebuttal Testimony, p.70 (August 13, 2008).
[169] John S. Watson, Pre-Filed Rebuttal Testimony, p. 18 (August 13, 2008).
[170] Michael Gorman, Vol. XXII, Tr. 2201:12-17.

UfW.[171] Accordingly, Mr. Gorman was forced to admit that Mr. Miller's calculation is correct.[172]

The CAPD and CMA base their suggested 15% limitation of recovery for TAWC's UfW on another AWWA study, the "Survey of State Agency Water Loss Reporting Practices."[173] This AWWA report itself notes, however, that its 15% number is a "target" and a "goal", not an inflexible requirement or benchmark.[174] In fact, the AWWA 15% standard has not been imposed by any regulatory agency in the United States, according to CMA witness Mr. Gorman.[175]

The Company has engaged in concerted, ongoing efforts to reduce the level of UfW. Among other efforts, TAWC has: (i) established a Non-Revenue Water Program, (ii) established a Non-Revenue Water Committee, including 11 employees across the business, (iii) dedicated 2 full-time crew members to leak detection, (iv) invested $400,000 in leak detection equipment, (v) created a full-time position dedicated to reducing UfW, and (vi) conducted a water audit.[176] These steps are paying dividends, as TAWC's UfW has already dropped to 18.06% for the most recent 12 months, ended July 2008.[177] The Company has a strong pecuniary incentive to continue these efforts and reducing the amount of water it treats but does not bill.

The Intervenors have inappropriately calculated TAWC's UfW percentage and have asked this Authority to adopt a hard and fast rule limiting recovery for UfW over an arbitrary percentage, despite the fact that no other jurisdiction has adopted a similar standard and that it ignores the very real differences in reasonable expectations for different water systems. Accordingly, there is absolutely no reason for this Authority to adopt the CAPD's and CMA's

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[171] Michael Gorman, Vol. XXII, Tr. 2203:15-24.
[172] Michael Gorman, Vol. XXII, Tr. 2203:1 – 2204:20.
[173] Michael Gorman, Pre-Filed Direct Testimony, pp. 14-15 (July 18, 2008).
[174] Michael Miller, Pre-Filed Rebuttal Testimony, p. 72 (August 13, 2008).
[175] Michael Gorman, Vol. XXII, Tr. 2207:2-18.
[176] John Watson, Pre-Filed Rebuttal Testimony, pp. 18-22 (August 13, 2008).
[177] John Watson, Pre-Filed Rebuttal Testimony, p. 17 (August 13, 2008).

recommendation to limit the Company's recovery for treatment and delivery expenses for UfW above 15%. TAWC is entitled to just and reasonable rates, recovering treatment and delivery expense for all water distributed through its system.

8. Customer Accounting

Customer Accounting, a factor of the expense calculation, includes costs associated with the customer billing and collecting function. It includes costs for office supplies, report forms, computer supplies, postage, collection agency fees, lock box expenses, janitorial service, telephone expense, and other miscellaneous customer accounting expense.

Customer accounting expense for the historical test year was $704,362. The Company applied the inflation factor of 3.94% to these expenses, excluding uncollectibles and postage to arrive at an increase of $15,381. The postage increase of $21,131 is largely due to an increase in postage costs as of May 2007 and a second increase in May 2008 – known and measurable expenses that Mr. Buckner failed to specifically apply.[178] One additional adjustment was made to annualize the Wireless Service First billing. This resulted in a decrease of $2,029 for the year. As a result, the net effect of the customer accounting expense for the attrition year is an increase of $34,482.[179]

9. Uncollectible Expense

Similarly, the Company must account for uncollectible expenses in its expense calculation. The Company's uncollectible percentage of 1.489% was derived by taking a three year average of the net charge offs, less recoveries as a percentage of total revenues. That

[178] Terry Buckner, Vol. XVII, Tr. 1684:20-24.
[179] Robert A. Shiltz, Pre-Filed Direct Testimony at 3:18-4:2 (March 14, 2008).

percentage was applied to the proposed revenue increase of $7,644,859 to arrive at the attrition year adjustment to uncollectible expense of $113,834.[180]

10. Rent

The Company's rent expense includes the costs associated with the renting of postage equipment, copiers, and land. The total rent expense for the historical test year was $30,037. To calculate the attrition year, the Company proposes four adjustments to this category:

- Eliminate the extra quarterly payment for the easement of the Brainard Road Tank $75;
- Eliminate expenses for a pager, postage equipment, and truck radios in the amount of $23,767 - these leases were not renewed;
- Eliminate miscellaneous office equipment that was moved to general office expense in the amount of $439 and a correction of three quarterly payments for copier rental that was charged to maintenance expense in the amount of $5,405. The net effect is an increase of $4,967; and
- Adjust and annualize a new lease agreement for postage equipment.

The result is an attrition year expense of $11,336.[181] None of these eliminations were contested by the CAPD.

11. General Office Expense

The Company's General Office Expense includes costs associated with the general expenses for the office such as report forms, office supplies, computer supplies, overnight mail expenses, janitorial services, telephone expense, electrical expense, employee expenses, credit line fees, bank service charges, and other miscellaneous general office expenses. For the attrition year, the Company's general office expense amounted to $244,966. The Company made adjustments to eliminate the business change cost in the amount of $11,124, normalize postage expense in the amount of $402, and the remaining adjustment totaling $2,494 was made

[180] Robert A. Shiltz, Pre-Filed Direct Testimony at 4:4-9 (March 14, 2008).
[181] Robert A. Shiltz, Pre-Filed Direct Testimony at 4:11-32 (March 14, 2008).

to correct charges applied to rents and miscellaneous expense in error. The inflation factor of 3.94% was applied to the remaining expenses (excluding postage) to arrive at an attrition year expense of $245,926.[182]

12. Miscellaneous Expenses

The Company's miscellaneous expense for the historical test year totaled $1,931,046. The Company proposes seven adjustments to this category:

- Adjust for the 3.94% inflation factor, which results in an increase of $68,277 (the Company did not apply the inflation factor to the 401K expense, Defined Contribution expense, or the Retiree Medical Reimbursement Plan);
- Adjust the 401K expense, Defined Contribution, and Retiree Medical Reimbursement, resulting in an increase of $52,949;
- Eliminate the penalties in the amount of $124,992 and lobbying expense of $15,601;
- Include a five-year amortization of the management audit in the amount of $57,000 annually;
- Annualize the maintenance fee to the Tennessee Department of Environment and Conservation in the amount of $22,645;
- Recalculate the 2007 fuel cost at current fuel prices for an increase of $27,000; and
- Reflect a security charge transferred from general office in the amount of $504.

The proposed miscellaneous expense for the attrition year is $2,018,623, which includes net adjustments totaling $87,577.[183]

In calculating the attrition year, both the Company and the Consumer Advocate eliminated lobbying and penalty expenses. However, the Company took into account known and measurable increases in expenses that should be reflected in the attrition year. These include the

[182] Robert A. Shiltz, Pre-Filed Direct Testimony at 4:34-5:6 (March 14, 2008).
[183] Robert A. Shiltz, Pre-Filed Direct Testimony at 5:8-38 (March 14, 2008).

66% increase in the cost of gasoline,[184] fees paid to the Tennessee Department of Environment and Conservation as required by TCA Chapter 68, Rule 1200-5-1-.32, and the 5-year amortized cost of the management audit requested by the TRA.[185] As conceded by the Consumer Advocate, such expenses should be included in the expense calculation by the TRA.[186]

13. Maintenance Expenses

TAWC's maintenance expenses are related to the maintenance of its treatment plant, booster pumping facilities, and distribution system assets that it maintains throughout the service area to assure reliable water service. When preparing its Petition, a review of these assets revealed that the Company needs to increase the expense for programmed preventative maintenance on these pumps and motors by $50,000 to maintain them properly.[187] Additionally, adjustments were made to eliminate the net negative salvage expense of $367,615 and $5,404 which was copier rental transferred to rents. Although Mr. Buckner also eliminated the net negative salvage expense, he failed to include the additional expenses added to the maintenance line, such as the 18% increase in the price of asphalt, which the Company must use in projects that require repaving.[188] Finally, the Company applied a 3.94% inflation factor to the remaining balance to arrive at an adjustment of $35,493 resulting in an attrition year balance of $936,345.[189] As noted, the accounting for known and measurable expenses where available,

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[184] *See* Sheila A. Miller, Pre-Filed Rebuttal Testimony 3:16-4:4, Exhibit SAM-1 (U.S. Energy Information Administration Schedule reflecting a 66% increase in the cost of the national average for all grades of gasoline since early 2007).
[185] Sheila A. Miller, Pre-Filed Rebuttal Testimony 4:6-25 (August 13, 2008).
[186] Terry Buckner, Vol. XVI, Tr. 1666:19-23 (August 26, 2008) ("Q: And you think it's important for the TRA to consider the latest known and measurable data when setting rates in this case, correct? A: Yes sir. I think that's to a benefit of their decision, yes.").
[187] John S. Watson, Pre-Filed Direct Testimony at 22:16-23:4 (March 14, 2008); Sheila A. Miller Rebuttal Testimony at 5:14-25.
[188] John S. Watson, Pre-Filed Rebuttal Testimony at 25:18 (August 13, 2008); Sheila A. Miller Rebuttal at 5:2-12(August 13, 2008).
[189] Robert A. Shiltz, Pre-Filed Direct Testimony at 5:40-6:15 (March 14, 2008).

together with the 3.94% inflation factor when exact expenses are not available, is the most accurate approach for assessing such expenses.

14. Depreciation Expense

Mr. Spanos testified that he was retained to conduct a depreciation analysis on the historic year.[190] The report that was generated as a result of Mr. Spanos' study was attached as an exhibit to his pre-filed testimony.[191] Mr. Spanos' depreciation study indicated that TAWC had depreciation totaling $4.4 million during the test year.[192] As Sheila Miller testified, TAWC took Mr. Spanos' recommended depreciation ratios and applied them to all accounts to generate a depreciation forecast for the attrition year.[193]

The Intervenors' witnesses quibble very little with Mr. Spanos' depreciation recommendations. In fact, Charles King admitted that he agreed with *every aspect* of Mr. Spanos' depreciation analysis, *except* his net salvage calculations for five accounts.[194] Though he did not explain why he adopted Mr. Spanos' net salvage calculations for the vast majority of accounts yet objected to the application of the same procedure to five accounts, Mr. King testified that Mr. Spanos' method of calculating net salvage ratios on these five accounts was invalid because it compared cost of removal expressed in current dollars to original cost of the asset expressed in historic dollars.[195]

Mr. Spanos testified that almost all regulatory bodies in the United States, including the TRA, develop depreciation rates by using the analysis that Mr. Spanos employed in this case.[196] Mr. King admitted that most utility depreciation analysts have rejected King's theory of

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[190] John Spanos, Pre-Filed Direct Testimony, p. 6:16-22.
[191] *Id.* at Exhibit 1.
[192] John Spanos, Vol. VI, Tr. 740:6-8.
[193] Sheila A. Miller, Pre-Filed Direct Testimony, p. 15:16 – 16:8, Ex. 1, Schedule 2 (March 14, 2008).
[194] Charles King, Vol. XV, Tr. 1606:7-10.
[195] *Id.*, Tr. 1606:14 – 1607:1.
[196] John Spanos, Pre-Filed Rebuttal Testimony, p. 4:13-16.

depreciation in favor of the more traditional depreciation method sponsored by Mr. Spanos.[197] However, Mr. King stated that he and his partner, Mr. Michael Majoros, were on a "crusade" to convince states to adopt their novel theory of depreciation.[198] TAWC respectfully submits that this Authority has in the past correctly applied the traditional method of depreciation supported by Mr. Spanos and that it should continue to do so.

The Intervenors' other depreciation witness, Mr. Buckner, admits that he did no depreciation analysis of his own; rather, he relies upon Mr. King's findings.[199] Mr. Buckner's sole issue with the depreciation analysis conducted in this case is his claim that the Company applied a depreciation ratio to certain asset accounts with a zero remaining balance.[200] Mr. Spanos testified that he did not depreciate accounts that had been fully depreciated.[201] It appears from TAWC's depreciation calculation for the attrition year that depreciation percentages were applied to asset accounts with zero balances for the forecast.

As explained by Sheila Miller in her testimony at the hearing, the application of depreciation to these accounts has little or no effect on the total depreciation amount. When Mr. Spanos conducted his depreciation analysis for the test year, he combined certain accounts (such as certain computer accounts) into a single account so that he could compare them to the historic data used to determine life estimates, which were maintained only on the combined basis.[202] When Ms. Miller applied Mr. Spanos' calculations to the current books, those accounts were again separated into sub-accounts.[203] The result is that a depreciation percentage that was derived by looking at a combination of accounts with some positive and some zero balances (but

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[197] Charles King, Vol. XV, Tr. 1609:18-24; 1618:23 1619:10.
[198] *Id.*, Tr. 1573:1-5.
[199] Terry Buckner, Pre-Filed Direct Testimony, p. 54:2-4.
[200] *Id.* at p. 53:15-18.
[201] John Spanos, Pre-Filed Rebuttal Testimony, p. 9:5-7.
[202] Sheila A. Miller, Vol. V, Tr. 592:1-5.
[203] *Id.*

an overall positive balance), was applied to some accounts that were substantially higher and some accounts that were zero. Ms. Miller testified that the depreciation ratios applied by the Company took into consideration the negative balance of certain accounts.[204] Because Ms. Miller applied the much lower rate to the larger-than-expected positive accounts and the zero balance accounts, the cumulative effect is the same as Mr. Spanos' recommendation.

Thus, the depreciation analysis used by TAWC in this case — and supported by expert witness John Spanos — is appropriate and should be adopted by this Authority.

C. Taxes and Fees

1. Gross Receipts Tax

The difference in the calculation of the gross receipts tax between the Company and the CAPD is the excise (state) tax deduction. The Company used the actual current state tax calculated for the historical test period ending November 31, 2007 of $189,372 based on its estimate at the time of filing this case.[205] The deduction that will be taken on the Gross Receipts tax return for 2008 will be $215,767.

In contrast, Mr. Buckner used the total state income tax amount from the December 2007 analysis of income, which is incorrect. This amount of $361,898 includes the current state tax liability, prior year adjustments, deferred state tax for the amortization of the regulatory assets and liabilities, and a prior year adjustment for regulatory liabilities.

The TRA should utilize the Company's actual figure, which is $110,131 less than the deduction taken by Mr. Buckner, and actually slightly higher than the deduction taken by the

[204] *Id.*, at 597:5-10.
[205] Sheila A. Miller, Rebuttal Ex. SAM-5 (detailing the actual 2008 TAWC Excise Tax calculation).

Company. This results in an increase of $146,131 in Mr. Buckner's recommendation, or a decrease in TAWC's recommendation of $26,395.[206]

2. Property Taxes

The Company utilized an effective property tax rate applied to the 13-month average rate base. This method has been accepted by the TRA in prior rate cases since Docket No. 2003-00118.

3. Income Tax Calculation

Both the CAPD and the Company agree the statutory FIT rate is 35% and the SIT rate is 6.5%. The CAPD, however, limits the deferred income tax expense to the statutory rates applied to current book/tax timing differences.

The Company calculated both its deferred income tax rate expense and accumulated deferred income tax rate base reduction using the U.S. GAAP FAS 109 approach.[207] The FAS 109 approach records accumulated deferred income tax liability gross of any regulatory assets that will be recovered in future years as outlined by the IRS normalization rules.[208] The CAPD's approach ignores the amortization (turn-around) of FAS 109 regulatory assets, understating deferred income tax expense.

The CAPD, however, utilized the Company's FAS 109 approach in determining accumulated deferred income tax.[209] The accumulated deferred income taxes under the FAS 109 approach is significantly higher than the non-FAS 109 approach used by the CAPD. The CAPD does no comply with the matching principal it flows through to the customers the benefits of

[206] Sheila A. Miller, Pre-Filed Rebuttal Testimony, p. 10:25-26:8 (August 13, 2008).
[207] Michael Miller, Pre-Filed Rebuttal Testimony, p. 86-87.
[208] Michael Miller, Pre-Filed Rebuttal Testimony, p. 87.
[209] Michael Miller, Pre-Filed Rebuttal Testimony, p. 88.

accelerated depreciation, (i) through lower non-FAS 109 deferred income tax expense and (ii) through higher FAS 109 accumulated deferred income taxes rate base reduction.[210]

If the CAPD's mix and match approach were accepted, the Company would be required to write-off $9,160,322 of accumulated deferred income tax regulatory assets[211] a very negative impact to the Company and its customers. The Company has properly matched the deferred income tax expense and accumulated deferred income taxes in its filing. The CAPD's approach does not, and would result in the Company filing future rate cases under the non-FAS 109 approach with higher rate base, and higher costs to the rate payers.[212]

4. Allowance For Funds Used During Construction (AFUDC)

The Company's proposed amount for AFUDC is $463,690 and is based upon the 2007/2008 budget. This adjustment was made to reflect the AFUDC as an above the line item for ratemaking purposes as an offset to the full amount of CWIP requested for the attrition year rate base.[213] The CAPD limited attrition year CWIP to that related to the Citico plant but did not properly match the attrition year by lowering the amount of AFUDC included in above the line expenses.

D. Rate Base

1. Capital Investments

Indisputably, the Company is obligated to undertake capital investments as necessary to ensure that its infrastructure remains sound and efficient. Such investment is especially critical because, unlike many water utilities throughout Tennessee, TAWC's distribution system operating conditions involve very high operating pressures to service areas such as Lookout

[210] Michael Miller, Pre-Filed Rebuttal Testimony, p. 88 (August 13, 2008).
[211] Michael Miller, Pre-Filed Rebuttal Testimony, p. 88 (August 13, 2008).
[212] Michael Miller, Pre-Filed Rebuttal Testimony, p. 88 (August 13, 2008).
[213] Robert A. Shiltz, Pre-Filed Direct Testimony, p. 6:18-21 (March 14, 2008).

Mountain and Signal Mountain. In addition, Chattanooga's water system is 135 years old. Thus, since the last rate case, the Company has undertaken the following projects:

- Fire protection upgrades
- Normal recurring maintenance on existing infrastructure
- Constructed 5,714 ft. of pipeline in Brainerd Road
- Replaced over 4500 feet of water main in East Ridge
- Installed over 3500 feet of water main on Tyner Road

Other capital expenditures the Company has taken through this year include:

- Replaced over 5,000 water meters at a cost of $1.8 million
- Upgraded over 9,000 water meters at a cost of $114,000
- Replaced over 27,000 feet of water main at a cost of $2.5 million
- Replaced computers and peripheral equipment
- Replaced service vehicles that were beyond their useful lives at a cost of approximately $500,000
- Capitalized Steel Water Tank Rehabilitation and Repainting Project at White Oak Tank in Red Bank and Citico Plant at a cost of approximately $841,000[214]

The Company's routine maintenance totals approximately $6.5 million each year. Additionally, the Company has several major investment projects planned for the upcoming year, including:

- Replace the Lookout Mountain Supply Mains at a cost of $900,000
- Continue the steel water tank rehabilitation and repainting program at a cost of approximately $1.08 million
- Install 6,000 feet of new water main at a cost of $1.3 million
- Citico Water Treatment Improvements totaling approximately $8.8 million for Phases I and II[215]

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[214] *See* John S. Watson, Pre-Filed Direct Testimony, p. 11:23-13:19 (March 14, 2008).

[215] *See* John S. Watson, Pre-Filed Direct Testimony p. 13:20-14:26 (March 14, 2008). The Company provided a complete list of all projects by location and description in Watson Rebuttal Exhibit JSW-2. The prudence and reasonableness of each is self-evident.

Further, the Company faces additional capital investment expenses from projects involving storm water and sewer enhancement/replacement, street rehabilitation including widening sidewalks, curbs and gutters, and paving. Often, such projects are a function of cooperating with the Tennessee Department of Transportation ("TDOT") or municipalities that TAWC serves.[216] Notably, the Company is often not reimbursed for these projects mandated by TDOT action.[217]

2. Walden's Ridge

As TAWC has done in prior rate cases without any dispute by the Intervenors, the Company determined to exclude all costs and revenues associated with Walden's Ridge in the cost of service due to its rates being contractually limited and the large amount of Utility Plant that Walden's Ridge had in service ($4+ million).[218] Notwithstanding, Intervenors now argue that Walden's Ridge should be included in the rate base despite having not disputed its exclusion in the 2006 rate case.[219] Given its unique circumstances, however, it remains appropriate to exclude the rate base and other cost of service elements related this Sale for Resale customer from the Company's cost of service in the current proceeding.

3. Accumulated Depreciation

The Company's accumulated depreciation balance begins with the historical test year balance as of November 30, 2007. Accumulated depreciation was calculated through the end of the attrition period utilizing current depreciation rates through August 31, 2008 and the new depreciation rates as calculated by the Company's depreciation witness, Mr. John Spanos, through August 31, 2009. A 13-month average was then calculated using the month end

[216] John S. Watson, Pre-Filed Direct Testimony, p. 8:3-11:21 (March 14, 2008).
[217] John S. Watson, Pre-Filed Direct Testimony p. 10:25-27 (March 14, 2008).
[218] *See* TAWC Response to TRA Data Request 5, Question 3; Sheila A. Miller, Vol. IV, Tr. 582:24 – 583:7.
[219] Terry Buckner Cross-Examination, Vol. XVII, Tr. 1684:8-11 ("Q: In the last docket the Consumer Advocate didn't challenge the exclusion of Walden's Ridge, did they? A: No, sir.").

accumulated depreciation balances from August 1, 2008 to August 31, 2009 to arrive at the accumulated depreciation at the end of the attrition period.[220]

4. Working Capital

This category includes Prepaid Taxes, Materials and Supplies, and Deferred Regulatory Expense, which consists of an average of the unamortized balances at the end of the attrition year. Additionally, this category includes other deferred debits, such as the unamortized costs of Customer Call Center, Shared Services Center, and management audit, and the Lead-Lag Study, all of which were calculated consistently with TRA rulings since the Company's 1995 rate case.[221]

5. Rate Case Expense

Both the CMA and CAPD witnesses made adjustments to the working capital allowance for rate recovery. The CAPD does not take exception with the historical TRA treatment of inclusion of unamortized rate case expense, only the amount should be eliminated to the estimate of the 2006 rate case costs. Mr. Gorman however, proposes to eliminate the unamortized cost contrary to TRA Orders regarding TAWC since at least 1995.[222]

6. Other Deferred Debits

Mr. Gorman proposes to eliminate entirely the unauthorized transition costs to the national shared service and call center operations, and, the management audit. He bases this recommendation on the incorrect assertion that TAWC did not pay or fund these costs. TAWC certainly did fund either its pro-rate share of the SSC and CCC transition costs, and the entire cost of the management audit.[223] Further, Mr. Gorman's recommendation regarding the SSC and

[220] Sheila A. Miller, Pre-Filed Direct Testimony, Ex. 1, Schedule 2 (March 14, 2008).
[221] Sheila A. Miller, Pre-Filed Direct Testimony, at 14:23-15:23 (March 14, 2008).
[222] Michael Miller, Pre-Filid Rebuttal Testimony, p. 50-51 (August 13, 2008).
[223] Michael Miller, Pre-Filed Rebuttal Testimony, p. 51 (August 13, 2008).

CCC transition costs are contrary to the TRA's orders in every TAWC rate case since case Docket No. 03-00118.[224]

Mr. Buckner does not take exception with the Company's proposed working capital allowance for deferred SSC and CCC costs. He does eliminate the management audit cost on the unsupported basis that the "Management Audit" conducted by BAH is not a management audit, and that the AWWSC costs to TAWC are not verified to be necessary.[225] Ultimately, the evidence in this case supports neither the CMA's nor CAPD's position in the area.

7. Lead/Lag Study

The Intervenors' approach to the lead/lag study diverged from that of the Company in a manner the Company believes should not be adopted by the TRA. For instance, Mr. Gorman lowers the Revenue lag days by 4.62 days. Mr. Gorman did this based on a description error in TAWC's filing that was subsequently corrected by TAWC.[226] His only justification was that TAWC's Revenue lag days were different than Missouri American's.[227]

Similarly, with regard to Expense Lag Days for Management Fees, Mr. Gorman incorrectly eliminated any working capitol allowance for management fees. This is contrary to historical TRA treatment. His recommendation is incorrect because it does not consider the AWWSC costs are heavily influenced by payroll cycles, and that absent the bi-monthly payments to AWWSC, AWWSC would have to add that working capitol component to the management fee.[228]

Mr. Gorman also incorrectly eliminated any working capitol allowance for group insurance and insurance other in the lead/lag calculation because he incorrectly assumed group

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[224] Michael Miller, Pre-Filing Rebuttal Testimony, p. 52.
[225] Michael Miller, Pre-Filed Rebuttal Testimony, p. 52-54.
[226] Michael Miller, Pre-Filed Rebuttal Testimony, p. 55 (August 13, 2008).
[227] Michael Gorman, Vol. XXII, Tr. 2119:12-21.
[228] Michael Miller, Pre-Filed Rebuttal Testimony, p. 56 (August 13, 2008).

insurance is included in prepaid insurance. The Company corrected its filing to eliminate prepaid insurance, however. Consequently, Mr. Gorman's adjustment to the lead/lag calculation is not supported by the evidence and is contrary to TRA orders in all TAWC rate cases since at least 1995.[229] Likewise, Mr. Gorman eliminated a working capital allowance for uncollectible expense, incorrectly claiming uncollectible expense is a non-cash item. This recommendation is not supported by the record and is contrary to TRA orders regarding TAWC since at least 1995.[230]

Finally, Mr. Gorman eliminated a working capitol allowance for depreciation expense and deferred income tax expense. Mr. Gorman's recommendation does not consider that both depreciation and deferred income tax expenses are a cash return on the original rate base investment and there is a lag between the recording of the expenses and receipt of the revenue. Mr. Gorman's recommendation is not supported by the evidence in this case and is contrary to TRA orders regarding TAWC since at least case Docket No. 03-00118.[231]

CAPD Witness Terry Buckner also incorrectly claims the working capitol allowance for incidental collections should be reduced by $891,892. He bases this claim on a revenue lag day of 20.39 taken from the working capitol calculation in Docket No. 03-00118. Mr. Buckner does not acknowledge that the Company has performed a distinct calculation regarding sewer billing and collections in each rate case. Regardless, the Company has acknowledged that both the Company and CAPD revenue lag days are incorrect and should be the same 24.43 lag days used for water billing (because water and sewer billing are on the same cycle and same bill).[232]

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[229] Michael Miller, Pre-Filed Rebuttal Testimony, p. 56-57 (August 13, 2008).
[230] Michael Miller, Pre-Filed Rebuttal Testimony, p. 57 (August 13, 2008).
[231] Michael Miller, Pre-Filed Rebuttal Testimony, p. 57-58 (August 13, 2008).
[232] Michael Miller, Pre-Filed Rebuttal Testimony, p. 58-59 (August 13, 2008).

8. Utility Plant In Service

As described in Ms. Miller's pre-filed testimony, Utility Plant includes the original cost of all land, land rights, easements, structures and improvements, together with equipment in service as of November 30, 2007.[233] The Company has confirmed that all items contained in Utility Plant for which the Company is requesting rate base treatment will be used and useful.[234] The Company determined the attrition year Utility Plant balance by adding net additions and retirements through the end of the attrition period, and calculating the 13-month average of the Utility Plant balances from August 1, 2008 through August 31, 2009.[235] Thus, the Company's Utility Plant balance is appropriately accounted for and should be utilized by the TRA.

9. Construction Work in Progress (CWIP)

The Company originally included in rate base a CWIP balance in the amount of $9,083,000 which was the balance at the end of the attrition period. In response to CAPD Data Request 1, Part IV Question 73, the Company calculated the thirteen-month average CWIP balance of $7,996,461. This results in a decrease of $1,086,539 to the rate base.[236] In response to the TRA Data Request, Question 7, dated August 14, 2008, the TRA requested that the Company recalculate the CWIP balance utilizing the actual balance as of March 31, 2008. The Company carried the actual CWIP balance through July 31, 2008, adjusted for a lag in capital spending, and arrived at an amended CWIP balance of $6,968,779.

In contrast, the Consumer Advocate only included CWIP for the CITICO project. Although the CITICO project is the largest project included in the forecasted attrition year, there

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[233] Sheila A. Miller, Pre-Filed Direct Testimony, at 13:26-14:6 (March 14, 2008).
[234] John S. Watson, Pre-Filed Direct Testimony, at 3:24 (March 14, 2008).
[235] *See* Pet. Ex. 1, Schedule 2, p. 3 of 3. (As noted above, however, the Utility Plant associated with Walden's Ridge was excluded.).
[236] *See* TRA Data Request No. 5, Question 1; Sheila A. Miller, Pre-Filed Rebuttal Testimony at 7:7-15 (August 13, 2008).

are other projects and expenditures that will not be in service at the end of the attrition period and thus should be included in CWIP consistent with the methods used to establish rate base. Accordingly, the Company included an additional $945,500 in CWIP above the CAPD level.[237]

If the TRA elected to adopt the Consumer Advocate's CWIP, then a corresponding decrease in the AFUDC would need to be reflected in the Company's filing for his adjustment to properly reflect his CWIP adjustment. It is otherwise entirely inappropriate under the matching principle to eliminate the CWIP but not adjust the AFUDC offset driven by the eliminated CWIP.[238]

10. RWIP

TAWC included Retirement Work In Progress (RWIP) in its rate base calculation. This is consistent with the Tennessee Regulatory Authority's routine practice of including RWIP as an element of rate base in previous rate filings. RWIP should be included in the rate base because it represents cost of removal, which will be cleared by debiting account 108, accumulated deprecation, which increases rate base.[239]

11. Accumulated Amortization of Capital Lease

The Company's calculation of the accumulated amortization of capital lease is uncontested.[240] Under the correctly utilized 13-month average, there is an amount of $86,418 added to the rate base.[241]

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[237] *See* TAWC Response to TN-TRA-01-Q013 (TAWC Working Papers & Schedule on CD, File labeled as TN-TRA-01-Q013-RATE BASE BACK-UP.pdf , at 37-38).
[238] Sheila A. Miller, Pre-Filed Rebuttal Testimony, at 7:19-8:12 (August 13, 2008).
[239] *See* Docket 03-00118, Final Order at 16 (TRA approving a rate base including RWIP as an element); Docket 04-00288, Final Order Approving Settlement at 7 (TRA determined the rate base to include RWIP as an element of that calculation) (Agreed upon by TAWC and the Consumer Advocate Division, detailed on Exhibit CAPD-RTB Schedule 2); Sheila A. Miller Pre-Filed Rebuttal Testimony, at 6:15-7:5 (August 13, 2008).
[240] Originally, the Company and the CAPD's calculation varied in two major respects. First, Mr. Buckner used a 12-month average rather than a 13-month average. Second, Mr. Buckner used an incorrect beginning balance as of August 2008.[240] Mr. Buckner ultimately corrected his recommendation for this item in response to discovery request by the TRA on August 15, 2008.

12. Accumulated Deferred Income Tax Issues

In accordance with the Company's accounting treatment of Negative Net Salvage (NNS), the Company eliminated NNS from its accumulated deferred income taxes. By correction dated August 15, 2008, the Consumer Advocate's calculations were brought in line with the Company's.[242]

E. Revenue Conversion Factor

1. Gross Receipts Percentage

The Company included its gross receipts percentage as a factor in the revenue conversion factor to properly match expenses and revenues. The gross receipts tax that will be paid in August of 2009 will be based on the revenues collected during the twelve months ending December 31, 2008. If the tax is not collected at the time the revenues from this case are effective, the Company will have an accrual of expense during the attrition year which will not be recovered in rates for the attrition year.[243] Accordingly, the Company's gross receipts percentage should be included as a factor in the revenue conversion factor.

2. Exclusion of Forfeited Discounts

The Company did not include a factor for forfeited discounts (referred to as delayed payment penalty in the Company's filing) in the calculation of the revenue conversion factor. Rather, the Company deducted the additional late payment penalties from the overall revenue requirement in the case.[244] This effectively reduced the overall revenue requirement applicable to the tariff water customers by .84%, which is comparable to the .86% factor used by Mr.

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[241] Sheila A. Miller, Pre-Filed Rebuttal Testimony at 5:27-6:2, Rebuttal Exhibit SAM-2 (August 13, 2008).
[242] Originally, Mr. Buckner of the Consumer Advocate failed to eliminate the NNS from the deferred income tax balance as of March 31, 2008, which effectively reduced his rate base twice for the same NNS liability. Since the accumulated depreciation balance included the reclassification of the negative net salvage, however, Buckner should have made the offsetting adjustment to the Accumulated Deferred Income Tax balance. Mr. Buckner corrected this recommendation for this item in response to a discovery request by the TRA on August 15, 2008.
[243] Sheila A. Miller, Pre-Filed Rebuttal Testimony, at 12:1-11 (August 13, 2008).
[244] Sheila A. Miller, Pre-Filed Rebuttal Testimony Exhibit SAM-6 (August 13, 2008).

Buckner in his calculation.[245] Mr. Buckner's proposed adjustment to the revenue conversion factor, however, is the same as the Company's deduction for the delayed payment penalty. Accordingly, the TRA should adopt the Company's method or increase Mr. Buckner's revenue requirement result for the like amount.[246]

F. Rate of Return

To establish the fair rate of return, the Authority should determine the cost of capital and an appropriate capital structure. TAWC proposes an overall rate of return of 8.514 percent, which is based upon the "stand alone" capital structure of the Company, and an 11.75 percent return on equity. The Company's proposed capital structure includes: 50.66% long-term debt; 5.20% short-term debt; 1.16% preferred equity; 24.71% common equity comprised of common stock; and 18.27% common equity in the form of retained earnings.[247] The rate of return adds $1.953 million to the Company's revenue deficiency in this case.

The Intervenors take two different approaches to this issue. The CAPD, through its witness Dr. Brown, argues for an ROE of 7.5% on a capital structure that includes 40.5% equity on a double leverage basis. Dr. Brown also uses a unique methodology to derive inaccurate numbers for the AWK's cost of long-term debt. The CMA's witness, Mr. Gorman[248] claims the ROE should be 9.9%, but on a capital structure that includes only 28.4% equity on a double leverage basis. Both are wrong. Even applying double leverage in accordance with TRA tradition, both Dr. Brown and Mr. Gorman ignore the current yields in corporate bonds and the need for the ROE to reflect the degree of risk undertaken by equity holders and the need for there

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[245] *See* TAWC's Response to CAPD Data Request 1, Part IV, Q52.
[246] Sheila A. Miller, Pre-Filed Rebuttal Testimony, p. 11:12-27 (August 13, 2008).
[247] Sheila Miller, Pre-filed Direct Testimony, Exhibit No. 3, Schedule 1 (March 14, 2008).
[248] Mr. Gorman originally was a witness only for the CMA and the City disclosed no cost of capital witness. Somewhere along the way, the City hitched a ride with the CMA and Mr. Gorman wound up testifying on behalf of both.

to be a sufficient spread between ROE and the cost of debt. The Intervenors' witnesses' proposals should be rejected.

1. Return on Equity

There are three guiding principles for setting the allowed return on equity. First, equity is riskier than debt, so the cost of equity must be proportionately higher than the cost of debt.[249] Second, when comparing the allowed returns on equity that other regulatory boards have set, the amount of equity in the company's capital structure must be taken into account.[250] Third, the return on equity should allow the regulated utility to maintain an investment grade credit rating.[251] Dr. Michael J. Vilbert, testifying on behalf of TAWC, recommends that the Company be allowed to earn a rate of return on equity of 11.75% on a capital structure with approximately 45.3%equity. This recommended return on equity is a point estimate in a range of estimates from 11.25% to 12.25%.[252]

a. *Estimation Models*

Dr. Vilbert's recommendation is based on two estimation models: the discounted cash flow (DCF) and the risk positioning method (i.e. capital asset pricing model (CAPM) and Empirical CAPM). In order to calculate the estimates, he used two samples: a sample of water utilities and a sample of natural gas local distribution companies (gas LDCs). Mr. Michael Gorman (CMA) also used the water sample and gas LDC sample, but Dr. Stephen Brown (CAPD) argues that the gas industry is too dissimilar for any comparison to the water industry.[253] Dr. Brown ignores the fact that both industries are regulated in a very similar way and both

[249] Michael Vilbert, Pre-filed Rebuttal Testimony, p. 7 (August 13, 2008).
[250] Michael Vilbert, Pre-filed Direct Testimony, p. 11 (March 14, 2008).
[251] Michael Vilbert, Pre-filed Rebuttal Testimony, p. 40 (August 13, 2008).
[252] Michael Vilbert, Pre-filed Direct Testimony, p. 4 (March 14, 2008).
[253] Dr. Stephen Brown, Pre-filed Direct Testimony, p. 83 (July 18, 2008).

deliver a commodity through a system of pipes to residential, commercial and industrial customers.

Dr. Vilbert adjusted the estimates on the cost of equity from the models to account for differences in financial risk between the sample companies and TAWC.[254] Dr. Gorman and Dr. Brown also used the DCF and risk positioning models, although they implemented them somewhat differently.[255] Dr. Vilbert, however, is the only witness who considered differences in financial risk by using the after-tax-weighted-average cost of capital (ATWACC) approach, as explained below.

b. *Financial Risk*

Financial risk is the additional risk borne by equity investors resulting from a company's use of debt and other fixed payment liabilities.[256] It is undisputed that equity holders receive their return last, after debt holders have been paid, and therefore, they accept more risk than the debt holders take.[257] Considering differences in financial risk is important for appropriately setting the cost of capital.[258] As the percentage of equity in a company's capital structure changes, so does the required return on equity. For example, if TAWC's capital structure were 55% equity then the return on equity would fall to 10.25% because the relatively higher equity component reduces risks.[259] Likewise, a very low equity rate would increase risk and the necessary ROE would also increase. The ATWACC stays constant and allows for comparison of companies with different capital structures.[260]

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[254] M. Vilbert, Vol. II, Tr. 269:20-25, 270:1.
[255] M. Vilbert, Vol. II, Tr. 270:2-4.
[256] Michael Vilbert, Pre-filed Rebuttal Testimony, p. 14 (August 13, 2008).
[257] Michael Vilbert, Pre-filed Rebuttal Testimony, p. 14 (August 13, 2008); Dr. Stephen Brown, Vol. XVIII, Tr. 1850:13-19; Michael Gorman, Vol. XXII, Tr. 2138:18-25, 2139:1-3.
[258] Michael Vilbert, Pre-filed Rebuttal Testimony, pp. 16-17 (August 13, 2008).
[259] Michael Vilbert, Pre-filed Rebuttal Testimony, pp. 17-18 (August 13, 2008).
[260] The ATWACC is a standard technique presented in graduate level corporate finance textbooks. The developers of the theory won two Nobel prizes in economics. Although the ATWACC has not been explicitly adopted by state

Financial risk is measured on a market-value basis.[261] The market value capital structure is needed to calculate the overall cost of capital, not the return on equity.[262] Therefore, any assumption that the ATWACC is merely a market-to-book adjustment in order to inflate the return on equity is erroneous.

Mr. Gorman and Dr. Vilbert have similar approaches to estimating the return on equity, but they diverge on the financial risk issue.[263] The companies in Mr. Gorman's sample have more than 53% equity on a book-value basis.[264] However, Mr. Gorman applies a 9.9% return on equity to a capital structure with 28.4% equity.[265] This is an extraordinarily different level of financial risk, yet Mr. Gorman makes no adjustment for that fact.[266]

c. *Flaws in the Estimation Models*

According to Dr. Vilbert, the DCF model, which Dr. Brown relies upon, is flawed because it assumes a constant growth rate of dividends, earnings, book value and market price.[267] Therefore, contrary to Dr. Brown's contention, the DCF model assumes capital gains.[268] The model may not be reliable when applied to an industry that is not stable.[269] The water industry is not stable at the present time.[270] Dr. Vilbert and Mr. Gorman agree that the water industry is

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regulatory boards in the United States, it also has not been specifically rejected, and the U.S. Surface Transportation Board uses a very similar method. *See* Michael Vilbert, Pre-filed Rebuttal Testimony, p. 23 (August 12, 2008); Micahel Vilbert, Vol. II, Tr. 271:10-16; 22-25; 272:3-6.

[261] Michael Vilbert, Pre-filed Rebuttal Testimony, p. 15 (August 13, 2008)

[262] Michael Vilbert, Pre-filed Rebuttal Testimony, p. 17 (August 13, 2008); M. Vilbert, Vol. II, Tr. 291:13-18.

[263] Michael Vilbert, Pre-filed Rebuttal Testimony, p. 14 (August 13, 2008); M. Vilbert, Vol. II, Tr. 284:1-21.

[264] M. Vilbert, Vol. II, Tr. 284:1-21.

[265] M. Vilbert, Vol. II, Tr. 284:1-21.

[266] M. Vilbert, Vol. II, Tr. 284:1-21.

[267] Michael Vilbert, Pre-filed Rebuttal Testimony, p. 35-36 (August 13, 2008)

[268] Michael Vilbert, Pre-filed Rebuttal Testimony, p. 35 (August 13, 2008)

[269] Michael Vilbert, Pre-filed Rebuttal Testimony, p. 36 (August 13, 2008)

[270] Michael Vilbert, Pre-filed Rebuttal Testimony, p. 36 (August 13, 2008)

undergoing a high level of capital improvement projects and is faced with enhanced environmental regulations.[271]

An alternative to the DCF model is the CAPM. The CAPM provides a market risk premium ("MRP") to investors for investing in assets that are more risky than a risk-free asset, such as a government bond.[272] The measure of that risk relative to the market is beta.[273] Contrary to Dr. Brown's assertion, the CAPM does not assume capital gains because the model does not specify the form of returns.[274] They could be income, capital gains or a combination of both.[275] The CAPM simply assumes that investors, on average, expect a risk premium relative to government bonds.[276] One issue with the CAPM is that it tends to underestimate returns for low beta stocks and overestimate returns for high beta stocks.[277] To address this issue, Dr. Vilbert uses the Empirical CAPM.[278]

One of the ways that Dr. Brown incorrectly implements the CAPM is his reliance on negative betas for some of the companies in his water sample.[279] Based on the definition of beta, a negative beta indicates an asset is less risky than a risk-free asset. Dr. Brown's assertion that such an occurrence is possible defies logic. Yet at the hearing, Dr. Brown found nothing wrong with such an impossible result.[280] While Dr. Vilbert and Mr. Gorman both use Value Line betas, Dr. Brown uses NASDAQ betas and contends that NASDAQ is the more reliable source.[281] Dr.

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[271] Michael Vilbert, Pre-filed Direct Testimony, p. 26 (March 14, 2008); Michael Gorman, Pre-filed Direct Testimony, p. 35 (July 18, 2008); M. Gorman, Vol. XXII, Tr. 2148:19-25, 2149:1-13 (August 27, 2008).
[272] Michael Vilbert, Pre-filed Direct Testimony, p. 21 (March 14, 2008).
[273] Michael Vilbert, Pre-filed Direct Testimony, p. 21 (March 14, 2008).
[274] Michael Vilbert, Pre-filed Rebuttal Testimony, p. 30 (August 13, 2008).
[275] Michael Vilbert, Pre-filed Rebuttal Testimony, p. 30 (August 13, 2008).
[276] Michael Vilbert, Pre-filed Direct Testimony, p. 21 (March 14, 2008).
[277] M. Vilbert, Vol. II, Tr. 276:17-23.
[278] Michael Vilbert, Pre-filed Rebuttal Testimony, p. 30 (August 13, 2008).
[279] Dr. Stephen Brown, Pre-filed Direct Testimony, p. 48 (July 18, 2008); S. Brown, Vol. XIX, Tr. 1905:17-22.
[280] S. Brown, Vol. XIX, Tr. 1905:17-22.
[281] Stephen Brown Pre-filed Direct Testimony, p. 47-48 (July 18, 2008).

Brown also uses an MRP of 0.66 percent.[282] Such a low MRP would only be justified or consistent with current bond yields if one believes that the debt of an investment grade utility is riskier than the stock market.[283] Rising betas indicate that the risk of the water industry is increasing.[284] The more risk an investor takes, as measured by beta, the higher the expected return.[285] Therefore, Dr. Brown's analysis under the CAPM is thoroughly unreliable.

d. *Realized Returns vs. Expected Returns*

Dr. Brown's testimony shows a marked confusion between "realized returns" and "expected returns". In fact, he insists that ratepayers are currently paying TAWC the authorized equity return of 10.2 percent in spite of evidence that TAWC's achieved return is approximately 4 percent.[286] He repeatedly points out that investors have been losing money in the stock market or getting returns that are lower than projected. Returns, however, should not be set to mirror the current market.[287] Estimating the return on equity is a forward-looking analysis.[288] Therefore, Dr. Brown uses a very non-standard approach by relying on historical data in his DCF model.[289] Investors understand the risk of investing. They know that there is a chance that they will lose money, but no reasonable person would invest in the stock market if he expected to lose money. Dr. Brown himself agrees with this point.[290] Investors expect a potential return that rewards them for the risk they take.[291] Dr. Brown appears to totally disregard the risk-reward concept.

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[282] Dr. Stephen Brown, Pre-filed Direct Testimony, p. 48 (July 18, 2008).
[283] Hearing Ex. 63 at 9 (M. Vilbert Summary Slides).
[284] Dr. Brown, Vol. XIX, Tr. 1900:12-14; M. Gorman, Vol. XXII, Tr. 2139:22-25, 2140:1-25, 2141:1-11.
[285] M. Vilbert, Vol. II, Tr. 276:1-4.
[286] Dr. Brown, Vol. XVIII, Tr. 1819-1820.
[287] M. Vilbert, Vol. II, Tr. 309:3-6.
[288] M. Vilbert, Vol. III, Tr. 409:17-24.
[289] Michael Vilbert Pre-filed Rebuttal Testimony, p. 36 (August 13, 2008).
[290] Dr. Brown, Vol. XVIII, Tr. 1848:18-24.
[291] Michael Vilbert Pre-filed Direct Testimony, pp. 5-8 (March 14, 2008).

Dr. Brown's recommendation is consistent with his history of recommending a reduced return on equity.[292]

e. *Problems with the Positions of the Intervenors*

Dr. Brown also asserts that the 11.75% return recommended by Dr. Vilbert is comprised of 7.5% which represents dividend payments to stockholders and 4.25% which represents an assumed per share price increase in the value of AWK's stock.[293] He goes on to state that "because the stockholders do not get paid by the company for per share price changes, the assumed 4.25% per share price increase gives the company a cash flow which is put to the company's use not the stockholders."[294] Shareholders are the owners of all the assets of the company including cash in the company's bank accounts, and so it is simply incorrect to say that cash that is not paid out in dividends is not put the stockholders' use.[295]

Mr. Gorman recommends a return on equity of 9.9% on a double leverage capital structure with only 28.4% equity. Dr. Brown recommends a return on equity of 7.5% on a double leverage capital structure with about 40.5% equity. Neither of these recommendations would be sufficient to support an investment grade bond rating if TAWC were a stand-alone company.[296] Additionally, Mr. Gorman's and Mr. Brown's recommendations would fail to meet the standards established by the Supreme Court in *Hope* and *Bluefield* which provide that returns should be (1) commensurate with those of comparable risk investments, (2) sufficient to insure that the company can attract capital and (3) sufficient to maintain the financial integrity of the company.[297]

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[292] *See, e.g.*, Docket Nos. 07-00105, 06-00290, 06-00175, 04-00034 and 04-00288; Dr. Brown, Vol. XVIII, Tr. 1800-1807.
[293] Dr. Stephen Brown, Pre-filed Direct Testimony, p. 17 (July 18, 2008).
[294] Dr. Stephen Brown, Pre-filed Direct Testimony, p. 17 (July 18, 2008).
[295] Michael Vilbert, Pre-filed Rebuttal Testimony, p. 30 (August 13, 2008).
[296] Michael Vilbert, Pre-filed Rebuttal Testimony, pp. 4, 7 (August 13, 2008).
[297] Michael Vilbert, Pre-filed Rebuttal Testimony, p. 2 (August 13, 2008).

Dr. Brown believes that the return on equity should be limited to the company's dividend obligations to its shareholders.[298] Limiting returns to the dividend yield incorrectly estimates the cost of capital.[299] The rate of return should be set at the cost of capital so that the company has no incentive to invest too much or too little.[300] Furthermore, Dr. Brown's recommendation is well below authorized returns from other jurisdictions, which range from 9.5% to 12%, with an average of 10.25%.[301] The Company requests that the TRA consider these authorized returns from other jurisdictions as a benchmark in determining the reasonableness of the ROE it sets in this case and as evidence of the unreasonableness of Dr. Brown's recommended ROE.[302]

f. *Risks Confronting Regulated Utilities*

Regulated water companies face risk factors that are distinct from other companies in the market place. A regulated company is less risky than the stock market on average, but assets are financed with a lot more debt than the average American company, which uses approximately 15% debt.[303] Utilities, on the other hand, use around 45 to 55% debt in their capital structures, which increases the financial risk.[304] Other risks for a regulated company arise out of the difference between forecasted costs and actual costs. [305] If the forecast is off-target, the difference comes out of equity, unless and until the company files for rate relief to recover the costs. [306] To the extent that a regulated company's rate of return is determined by volumes sold or revenues, then an overestimate of revenues creates risks. [307] Costs associated with financing

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[298] Michael Vilbert, Vol. II, Tr. 311:9-13; Dr. Brown, Vol. XVIII, Tr. 1776:24-25, 1777:1-5.
[299] Michael Vilbert, Vol. II, Tr. 311:25, 312:1-2.
[300] Michael Vilbert, Vol. II, Tr. 288:25, 289:1-4.
[301] *See* Michael Miller, Pre-filed Rebuttal Testimony, Rebuttal Exhibit MAM-5 p. 1 (August 13, 2008).
[302] Michael Miller, Pre-filed Rebuttal Testimony, p. 42 (August 13, 2008).
[303] Michael Vilbert, Vol. III, Tr. 393:9-17.
[304] Michael Vilbert, Vol. III, Tr. 393:17-19.
[305] Michael Vilbert, Vol. III, Tr. 393:21-25.
[306] Michael Vilbert, Vol. III, Tr. 393:21-25, 394:1-3.
[307] Michael Vilbert, Vol. III, Tr. 394:4-7.

capital improvements and also costs that are disallowed from the rate base or revenue requirement for whatever reasons also drive risks.[308]

2. Cost of Capital and Capital Structure

The Company is requesting an overall weighted cost of capital of 8.514%. The weighted cost of Long-term debt is 6.26%.[309] The Company used a short-term interest rate of 4.5%, but analysis of more recent data produced a short-term interest rate of 3.85%.[310] The Company used a forecasted capital structure for the midpoint of the Attrition Year, March 2009. The capital structure includes the permanent financing that will be consummated in early 2009 and the level of short-term debt that will be in place after the permanent debt financing is completed.[311] The Company determined the "stand alone" capital structure used in its filing based on the books and records of the Company, accounting for changes that will occur in the Attrition Year.

The Company does not believe that the use of double leverage capital structure is appropriate for determining the cost of capital for the Company in a rate setting proceeding.[312] The application of double leverage in the capital structure of TAWC deprives the Company of the opportunity to recover the true cost of the capital that is used by TAWC to fund the rate base and cost of operations. The cost of capital is determined by the market and the Company does not believe that the source of funding at the parent level has any effect on the true cost of equity at the subsidiary level.[313]

Dr. Brown and Mr. Gorman both incorrectly apply double leverage to the capital structure. They both include the debt issued at the AWWC subsidiary level in the parent capital structure. If double leverage is applied, the parent capital structure should only include the

[308] Michael Vilbert, Vol. III, Tr. 394:8-25.
[309] Michael Miller, Pre-filed Direct Testimony, p. 8 (March 14, 2008).
[310] Michael Miller, Pre-filed Rebuttal Testimony, p. 24 (August 13, 2008).
[311] Michael Miller, Pre-filed Direct Testimony, p. 4 (March 14, 2008).
[312] Michael Miller, Pre-filed Rebuttal Testimony, p. 17 (August 13, 2008).
[313] Michael Miller, Pre-filed Rebuttal Testimony, p. 17 (August 13, 2008).

debt/equity ratios of the parent as a stand-alone entity because the subsidiary debt is not available to re-invest in the subsidiaries.[314] Additionally, if double leverage is applied, the retained earnings at the subsidiary level should not be subject to the parent company stand-alone capital structure ratios because they are not funded by the parent company capital structure.[315]

Dr. Brown proposes a weighted cost of capital of 6.65%. Dr. Brown improperly records an equity infusion that was reported in the AWK SEC 10-Q for the period ending March 31, 2008, which he refers to as an off-book transaction in the amount of $200 million.[316] The proper recording of the equity infusion increased the parent equity ratio to 45.63% with corresponding reductions to the other classes of capital. Dr. Brown also failed to reflect any preferred stock at the parent level in his capital structure. The impact of these adjustments, without any adjustments to his capital component cost rates raises his recommended weighted cost of capital to 6.70%.[317]

Dr. Brown's proposed long-term cost of debt of 5.8644% is incorrect because he fails to appropriately weight the debt instruments or determine the actual cost of the various debt issues. Dr. Brown described his unconventional approach for calculating the weighted average cost of debt and stated that he is the only one who takes this approach.[318] An adjustment to correctly weight the long-term cost of debt further raises Dr. Brown's weighted cost of capital from 6.70% to 6.89%. A correction of Dr. Brown's miscalculation of the short-term debt further increases the weighted cost of capital to 6.90% based on Dr. Brown's capital structure.[319]

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[314] Michael Miller, Pre-filed Rebuttal Testimony, p. 18 (August 13, 2008).
[315] Michael Miller, Pre-filed Rebuttal Testimony, p. 18 (August 13, 2008).
[316] Dr. Stephen Brown, Pre-filed Direct Testimony, p. 8 (July 18, 2008).
[317] Michael Miller, Pre-filed Rebuttal Testimony, p. 22 (August 13, 2008).
[318] Dr. Stephen Brown, Vol. XVIII, Tr. 1862:10-13.
[319] Michael Miller, Pre-filed Rebuttal Testimony, p. 23-24 (August 13, 2008); Rebuttal Exhibit MAM-2, p. 2.

Mr. Gorman arrived at a weighted cost of capital of 7.33% by removing $1.7 billion of what he asserts is a goodwill asset.[320] The result of this adjustment is a reduction in the common equity of the parent company from $3.8 billion to $2.1 billion. This adjustment is improper from an accounting perspective because goodwill only impacts the capital once the charge to income flows through as a reduction to retained earnings.[321] Thus, Mr. Gorman's determination to charge the entire goodwill asset to capital is not supported by the U.S. GAAP as described in FAS 141.[322] Furthermore, Mr. Gorman assumes that all of the goodwill on the books of AWK at March 31, 2008, relates to the goodwill asset generated through the sale of the common stock of AWK, which is not the case.[323] AWK's capital structure as of March 31, 2008 has already been reduced by the write-off the goodwill asset recorded based on the sale of the AWK stock, and replaced by additional paid-in capital.[324] There is no justification for eliminating the major portion of the same asset twice.[325]

Additionally, Mr. Gorman's adjustment is theoretically invalid. Assuming that Mr. Gorman's $1.7 billion reduction of the actual parent company consolidated capital structure was appropriate, the next step under double leverage is to look to the source of capital at the parent available for investment in the equity at the subsidiary to determine the capital structure for rate making purposes at the subsidiary level.[326] Removing only the common equity associated with the goodwill asset is a one-sided approach.[327] Mr. Gorman agreed that the debt of the subsidiaries that is rolled into the AWK capital structure is also not available for investment in

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[320] Michael Gorman, Pre-filed Direct Testimony, pp. 23-24 (July 18, 2008).
[321] Michael Miller, Pre-filed Rebuttal Testimony, p. 27 (August 13, 2008).
[322] Michael Miller, Pre-filed Rebuttal Testimony, p. 27 (August 13, 2008).
[323] Michael Miller, Pre-filed Rebuttal Testimony, p. 27 (August 13, 2008).
[324] Michael Miller, Pre-filed Rebuttal Testimony, p. 27 (August 13, 2008).
[325] Michael Miller, Pre-filed Rebuttal Testimony, p. 27-28 (August 13, 2008).
[326] Michael Miller, Pre-filed Rebuttal Testimony, p. 29 (August 13, 2008).
[327] Michael Miller, Pre-filed Rebuttal Testimony, p. 29 (August 13, 2008).

the equity of the subsidiaries.[328] Once the goodwill asset is properly treated in accordance with the theory of double leverage, the equity ratio of the parent company on a stand-alone basis increases from a very thin 29.07% to 63.73% and the weighted cost of capital becomes 8.73 percent instead of 7.33%.[329]

Contrary to the Intervenors' contentions, the ATWACC approach is not a way of offsetting the impact of a double leverage capital structure.[330] The ATWACC methodology allows for the determination of the rate of return on equity that is consistent with the capital structure in use, and consistent with the evidence from the samples. The samples provide the overall cost of capital based upon the business and financial risk of the sample companies. When applying the overall cost of capital to a company with a different capital structure, a different return on equity is required. The relationship between debt and equity is the theory underlying the ATWACC approach.[331] If double leverage capital structure is adopted, then the TRA should recognize that the return on equity needs to be adjusted to account for the increased financial risk. If the double leverage capital structure proposed by Mr. Gorman is adopted, with 28.4% equity, then the return on equity should increase to 16.75%.[332]

The recommendations of the Intervenors, if adopted, would not result in a rate of return that is just and reasonable. As discussed above, the Intervenors' witnesses have made various errors and faulty assumptions in their methodologies and analyses with regard to the return on equity, cost of capital, and capital structure. Therefore, the TRA should adopt the Company's proposed overall cost of capital of 8.514 percent and return on equity of 11.75 on a stand-alone capital structure with 45.3 percent equity.

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[328] M. Gorman, Vol. XXII, Tr. 2159:5-9.
[329] Michael A. Miller, Pre-filed Rebuttal Testimony, p. 30; Rebuttal Exhibit MAM-2, p. 1.
[330] Michael Vilbert, Vol. III, Tr. 338:6-10.
[331] Michael Vilbert, Vol. III, Tr. 338:15-24.
[332] Michael Vilbert, Vol. III, Tr. 341:4-8.

G. Proposed Rate Structure

Based on the Cost of Service Allocation Study and the guidance of management, the Company established a rate design with the goal to increase service charges and volumetric rates so that each class received approximately the same percentage increase. Additionally, the Company seeks to merge the Lookout Mountain and Lakeview Tariffs into one "Mountain Tariff." The Mountain Tariff is based on the additional costs necessary to provide service to higher elevations, thereby relieving lower-lying Chattanooga resident from subsidizing those costs. Over time, the Company hopes to merge Lone Oak and Suck Creek into the Mountain Tariff as well.

Ultimately, the Company seeks to have only two tariffs – a Mountain Tariff and a Chattanooga Tariff. The merging to more consolidated tariffs for systems that share common characteristics will improve efficiencies and reduce the administrative burden of operating under multiple tariffs.[333] Accordingly, the Company believes this rate design is preferred to an across-the-board rate increase as the Consumer Advocate and the CMA propose (but which the CMA opposed in the last rate case).[334]

Even under the new proposed rates for each of the service classes, TAWC is certainly well within the norm of water utility rates paid by Tennesseans. As evidenced by the 2008 Allen & Hoshall Study,[335] even with the requested increase, TAWC's rates would still be lower than half of the Tennessee market.[336] This is especially impressive given the heightened power costs faced by TAWC for supplying water to elevations higher than in any other major city in the state.

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[333] Paul A. Herbert, Pre-Filed Direct Testimony, p. 10:15 - 11:14 (March 14, 2008); *see also* Schedules B-D to P. Herbert Pre-Filed Direct Testimony.
[334] Paul A. Herbert, Pre-Filed Rebuttal Testimony, p. 2:1-18 (August 13, 2008).
[335] *See* Terry Buckner, Pre-Filed Direct Testimony, p. 74:9-16 (July 18, 2008).
[336] *See* John S. Watson, Pre-Filed Rebuttal Testimony, p. 27:12-18 (August 12, 2008).

Mr. Buckner's five-city comparison is misleading by unnecessarily limiting the sample group. Mr. Buckner's comparison does not account for Chattanooga's unique topography, the water source (e.g., river vs. natural aquifer), the absence of certain fees and charges, the cost of capital, if depreciation is recognized, or the taxes TAWC must pay.[337] Ultimately, absent data on what customers must actually pay directly or indirectly to a municipal utility provider, the overall true cost of service will not be apparent.[338] Thus, comparing TAWC to the entire sample group of 243 water utilities — as Mr. Watson did — is most appropriate if a statewide comparison is to be conducted.

VI. Conclusion

Despite the Intervenors' best efforts to make this a case about something else, this is just a rate case. As such, the Authority's directive by state statute is simply to establish just and reasonable rates for Tennessee-American Water Company and its customers.

Currently, the average TAWC residential customer under Chattanooga tariffs pays $16.54 per month for 4305 gallons of water service (equivalent to $19.39 per month for 5,000 gallons of water service).[339] The impact of the requested increase will be an average of $3.65 per month for the average TAWC residential customer.[340]

The Company has demonstrated through its witnesses and evidence that its requested rate increase is reasonable and is necessary to continue providing quality water service to its ratepayers, to continue updating an aging infrastructure, and to continue being able to attract capital at attractive rates sufficient for operations and future investments. The claims made by the Intervenors to the contrary do not withstand scrutiny and are inadequate to overcome the

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[337] John S. Watson, Pre-Filed Rebuttal Testimony, p. 28:5-27 (August 13, 2008); Paul A. Herbert, Pre-Filed Rebuttal Testimony, at 3:20-4:10 (August 13, 2008).
[338] John S. Watson, Pre-Filed Rebuttal Testimony, p. 27:28-29 (August 13, 2008).
[339] John S. Watson, Pre-Filed Direct Testimony, p. 23:9-11 (March 14, 2008).
[340] *See* Hearing Exhibit 2.

Company's showing. Accordingly, the Company respectfully submits that its $7.645 million rate increase should be approved in full by the Authority.

Respectfully Submitted,

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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 2nd day of September, 2008, upon the following:

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