

BEFORE THE TENNESSEE REGULATORY AUTHORITY

DOCKET NO. 08-00039

**REBUTTAL TESTIMONY:
MIKE A. MILLER**

ON BEHALF OF TENNESSEE AMERICAN WATER COMPANY

AUGUST 13, 2008

**TENNESSEE-AMERICAN WATER COMPANY
PSC CASE NO. 08-00039
REBUTTAL TESTIMONY OF MICHAEL A. MILLER**

1. Q. WHAT IS YOUR NAME AND BUSINESS ADDRESS?

A. Michael A. Miller, 1600 Pennsylvania Avenue, Charleston, West Virginia.

2. Q. DID YOU FILE DIRECT TESTIMONY IN THIS CASE?

A. Yes.

3. Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. I will address the obvious attempt of the intervenors to inappropriately and artificially deflate the reasonable cost of service of the Company in this case. I differ with CMA witness Mr. Gorman on many issues, which I will address in several areas of this testimony. However he did stick to reasonable regulatory approaches of looking at the Company's historical test-year information and making adjustments to specific issues related to the Company's cost of service. Some witnesses, however, make unnecessary statements about the Company's filing and motives for filing this rate case, including unsupported, unfair and inappropriate attacks on the Company and its witnesses' credibility and reputation. The Directors should understand that in many cases the intervenors' testimony is short on facts, substance, support and the use of established rate making principles.

The CAPD and City witnesses have attempted to create a "smoke screen" to mask the absence of reasonable conclusions based on the facts in this case. What you won't find in the testimony of the intervenors is a supportable rebuttal point to (i) TAWC's filing in this case, (ii) the historical test-year numbers, (iii) the attrition year adjustments, or (iv) the facts concerning the drivers of this rate increase as outlined on Exhibit MAM-2 of my direct testimony. No party to this case provides any rebuttal to the fact that TAWC will have invested over \$21.0

1 million in capital improvements through the attrition year in this case above the
2 level on which current rates are currently based. In addition, no party has rebutted
3 the facts that (i) gasoline prices have increased over 66%, since the last case, or
4 (ii) that chemical prices have sky-rocketed, or (iii) that the City of Chattanooga
5 Electric Power Board has increased rates five times since the effective date of the
6 Company's last rate case

7 In addition, you will not find any witness that disputes that the historical
8 test-year for this case, the twelve months ended November 2007, was one of the
9 hottest and driest years on record for the Chattanooga area. In the case of the
10 CAPD witnesses, they proceed to create their own revenues and expenses by
11 choosing multiple base periods as far back as 2005 on which to make their
12 calculations, and they simply ignore numerous known and measurable
13 adjustments that are appropriate for inclusion in the attrition year for this case
14 without even a mention for their reasoning or support for their position. I will
15 address the CAPD's approach to rate making and the significant problems this
16 creates in the following sections of this testimony. The general topics of my
17 testimony are as follows:

- 18 1. General Observations and Reasons for Filing This Case at This Time
- 19 2. Appropriate Rate Making Practices and Multiple Test Years
- 20 3. Capital Structure
- 21 4. Cost of Debt
- 22 5. Return on Equity
- 23 6. Rate Base & Working Capital
- 24 7. Revenues at Present Rates
- 25 8. Unaccounted For Water
- 26 9. Management Fees
- 27 10. Deferred Income Taxes

28
29
30 **GENERAL OBSERVATIONS**

1 4. Q. THERE HAS BEEN MUCH SAID IN THE MEDIA AND DURING THIS
2 CASE ABOUT WHY TAWC FILED A RATE CASE AT THIS TIME. PLEASE
3 EXPLAIN WHY TAWC DECIDED TO FILE THIS CASE.
4

5 A. As part of the planning process TAWC assesses its financial results. That process
6 begins with revenues at present rates determined on the expected billing
7 determinates for a normalized year as adjusted for expected normal organic
8 customer growth . TAWC also determines the O&M expenses, capital spending,
9 financing activity, efficiency programs, service improvements, and taxes based on
10 known and measurable items This planning process results in an income
11 statement, capital spending plan and capital structure for the planning period.
12 From that base plan an assessment is made regarding the timing of any rate case
13 that would be required to maintain adequate revenues to support the forecasted
14 cost of service. From this bottom-up process, Mr. Watson and I recommend the
15 Business Plan to TAWC's Board of Directors who, after review and discussion,
16 either approve the Business Plan or ask for modification of that Plan, prior to
17 approval. From this planning process TAWC has a general timeline for when
18 future rate cases will be filed.
19

20 5. Q. WHEN DID THE COMPANY DETERMINE THAT A RATE CASE SHOULD
21 BE SCHEDULED FOR 2008?
22

23 A. From that planning process the Company determined in 2007 that, based on its
24 cost of service forecasts for 2008/2009, there was a need for a rate case to be
25 filed in 2008.
26

27 6. Q. CAN YOU ILLUSTRATE THE FORECASTED FINANCIAL RESULTS FOR
28 2008 AND 2009 FOR TAWC THAT SUPPORTED THE COMPANY'S
29 DECISION TO FILE THIS RATE CASE?
30

1 A. Yes. Attached to this rebuttal testimony is Rebuttal Exhibit MAM-1 which
2 summarizes the Company's historical and forecasted financial results. The blue
3 bars represent the ROE authorized by the TRA and the red bars represent the
4 achieved ROE of the Company. As can be seen from the graph, at no time from
5 2001 through 2007 has the Company exceeded its authorized ROE. Without
6 further rate relief from this proceeding the Company forecasts that earnings for
7 2008 and 2009 will result in achieved ROE's of 4.16% and 3.26%, respectively.
8

9 7. Q. DOES THE COMPANY BELIEVE THE PROJECTED FINANCIAL RESULTS
10 FOR 2008 AND 2009 ARE ADEQUATE OR REASONABLE?
11

12 A. No. The Company does not believe achieved ROE's that are 600 to 800 basis
13 points below the cost of equity capital are adequate or reasonable. Projected
14 ROE's for 2009 are significantly below the current cost of LT Debt and even
15 under the current rates for Treasury Bonds. The Company believes such returns
16 will make it difficult to attract the capital necessary to carry out its public service
17 obligation, and therefore cannot be in the best interests of the Company's
18 customers.
19

20 8. Q. WHAT WOULD THOSE PROJECTIONS FOR THE COMPANY'S
21 EARNINGS LOOK LIKE IF THE CAPD'S REVENUE REQUIREMENT
22 RECOMMENDATION IN THIS CASE WERE ACCEPTED?
23

24 A. The CAPD has taken the absurd position in this case that the Company current
25 rates should be lowered by approximately \$1.6 million. The Company would
26 have little if any earnings in 2009. The Company believes that would be a
27 disastrous result, a result that is not even remotely supported by the facts or the
28 Company's cost of service in this case, and the end result of the CAPD's
29 recommendation could not possibly meet the standards of fair and reasonable
30 regulation established in the landmark U. S. Supreme Court cases of Bluefield and
31 Hope. The CAPD's approaches to the cost of capital, capital structure, and

1 attrition year revenues/expenses are far removed from TRA practices and
2 established rate making principles. The Company believes most of the CAPD's
3 approaches utilized in determining its recommended revenue requirement in this
4 case were soundly rejected by the TRA in the Company's previous rate case.
5 When the CAPD takes such absurd positions it makes it difficult, if not
6 impossible, to reach a fair settlement. This too adds to the cost of processing the
7 case as a fully litigated case.
8

9 9. Q. WOULD YOU SUMMARIZE YOUR UNDERSTANDING OF THE
10 BLUEFIELD AND HOPE CASES?
11

12 A. In my responsibility as Director of Rates for the SE Region, I have reviewed
13 Bluefield and Hope extensively and been responsible for applying the regulatory
14 principles contained therein to assess the impact on numerous rate case requests
15 and results of rate cases. Bluefield establishes three criteria on which to
16 determine whether rates of utilities established by regulatory agencies are just,
17 reasonable and not confiscatory. Those three criteria are:

- 18 1. the comparable earnings test
 - 19 2. the financial integrity test, and
 - 20 3. the capital attraction test
- 21

22 Hope upheld the three basic tests established in Bluefield, except for purposes of
23 applying the comparable earning test, the phrase return to the equity owner on his
24 investment is substituted for the phrase the return to the Company on the fair
25 value of property. The standards established in the Bluefield and Hope cases
26 continue to be the relevant standards for setting utility rates today.
27

28 Those standards are commonly referred to as the Regulatory Compact. The
29 Regulatory Compact can be summarized as follows: a public utility has a service
30 obligation to the general public, and in return for meeting that public service

1 obligation, the utility is entitled to be provided rates that fairly and justly meet the
2 utility's cost of providing that public service.

3
4 The Company takes its public service obligation very seriously. It cannot deny
5 service to customers or discriminate in the provision of that service. It is required
6 to maintain sufficient employees, to maintain and replace its facilities, and to
7 incur other expenses required to provide that service. It is the Company's belief
8 that if that regulatory compact is not met with just and reasonable rates, its ability
9 to meet its public service obligation is impaired, which is not in the best interests
10 of our customers. The intervenors overall recommendations and positions on cost
11 of service elements in this case in no way result in just and reasonable rates for
12 the Company necessary to adequately carry out its public service obligation.

13
14 Dr. Vilbert provides further testimony regarding the recommendations of the
15 CAPD and CMA witnesses and what impact those recommendations if accepted
16 would have on the capital attraction test included in the Bluefield and Hope
17 decisions.

18
19 10. Q. WHAT COST OF SERVICE ELEMENTS PRESENT TODAY AND IN THE
20 ATTRITION YEAR ARE NOT EMBEDDED IN THE CURRENT RATES OF
21 THE COMPANY?

22 A. The following is a list of those major items:

- 23 • Capital investment resulting in increased rate base of \$15.599 million
- 24 • Additional depreciation expense on that investment
- 25 • Additional property taxes associated with that investment, in addition to
26 increased assessment rates applicable to those property taxes
- 27 • Five increases in the electric power rates from the Chattanooga EPB/TVA,
28 which do not include the hike of potentially 10-20% that the EPB has
29 announced will be effective in fourth quarter of 2008

- Skyrocketing increases in chemical prices because many of those chemicals are petroleum based and it takes gasoline and diesel fuel to deliver them
- Pay increases for the Company's employees
- The ERISA required pension payment, the minimum allowed under federal law, of over \$1.1 million
- Increased cost of health care benefits for both our current and retired employees, and
- Significant increases in paving costs also related to the major price increase for petroleum products

11. Q. WOULD YOU SUMMARIZE WHY THE COMPANY FILED THIS RATE CASE?

A. Yes. The reason the Company filed this case is very simple, the revenues at present rates do not meet the Company's current cost of service, or the cost of service demonstrated by the Company for the attrition year in this case. The Company did what every regulated utility in this position does; it filed a rate case, subject to full review by the TRA. Certainly the Chattanooga Sanitary Board, the Chattanooga EPB and the TVA increased their rates over the last seventeen months presumably for the same reasons the Company filed this case. However, those entities did not go through the rigorous process which the Company goes through before the TRA to demonstrate the need for rate relief.

Rate cases are part of being a regulated utility, and the Company is entitled to seek rate relief. Rate cases should be about the level of service provided by the Company and what its cost to provide that service is. A rate case should not be a venue to bring in unrelated agendas, nor a place to unjustly attack the motives and credibility of a Company that has provided dependable, quality service to the residents of Chattanooga for 138 years, with which the Company's customers have consistently indicated high levels of satisfaction.

1
2 12. Q. ARE THERE OTHER GENERAL AREAS THAT YOU WOULD LIKE TO
3 ADDRESS IN YOUR REBUTTAL TESTIMONY?

4 A. Yes. I would like to discuss the nature of this proceeding to date and its
5 impact on the cost of processing this case. I have regularly appeared in rate
6 proceedings and many other types of proceedings for AWW subsidiaries in
7 West Virginia, Kentucky, Virginia, and Maryland, as well as, Tennessee. I
8 have also had the opportunity to review filings, testimony, discovery and
9 Orders of the various regulatory agencies in every jurisdiction where AWW
10 operates regulated subsidiaries. .

11
12 I fully understand from experience that in regulatory proceedings there will be
13 differences of opinion and healthy debate. That is part of the normal
14 regulatory process, and that is as it should be. However, this case and the
15 Company's last case have morphed from a normal regulatory proceeding to
16 something more akin to a major federal trial. In my 30 years of experience
17 with AWW, I have not experienced regulatory proceedings remotely
18 comparable to this proceeding. Much of the massive discovery issued by the
19 CAPD in this case is only required so that the CAPD witnesses can create an
20 entirely different test-year than that used by the Company in full compliance
21 with TRA regulations. In the case of the City, it appears the only way to
22 satisfy their requests is to perform a full forensic audit of every expense
23 TAWC incurs. This does not occur in any other jurisdiction where I have
24 worked.

25
26 I also fully understand that the parent company of TAWC, AWW, has gone
27 through a great deal of change in the last few years, including a change in
28 ownership, reorganization of operations, and even the way we do business
29 with the national shared service and call center operations. AWW and TAWC
30 are not the only utility companies that have gone through those types of

1 changes. many of those changes have resulted in more efficient operations
2 and improved service to our customers, including the customers of TAWC.
3

4 13. Q. WHAT IS THE IMPACT OF THE APPROACHES THAT THE CAPD AND
5 THE CITY HAVE UNDERTAKEN?

6 A. These approaches drive the cost of processing a rate case up significantly.
7 TAWC has no choice but to come before the TRA to seek rate relief, and
8 likewise it has no choice but to comply with these massive information
9 requests. In addition, the Company has no choice but to challenge those
10 discovery requests under the rules when those requests seek irrelevant
11 information, information that is not readily available in the format requested,
12 the requests are unduly burdensome and overly broad, or when the requested
13 information is of such a sensitive nature that it requires a proper protective
14 order. The Company does not believe all of the discovery is needed to
15 determine the prudence of its costs, the reasonableness of its costs and cost of
16 service elements, or to develop a position to challenge the Company's
17 requested increase. It is clearly the intervenors who are driving up the costs of
18 these rate proceedings.
19

20 14. Q. WHAT DO YOU MEAN BY FORENSIC AUDIT?

21 A. In a forensic audit, the auditor requires the subject of the audit to provide
22 every invoice and back-up document underlying the transaction at issue. An
23 example is an IRS audit of a taxpayer whose deductions or write-offs are
24 being questioned. A forensic audit would be undertaken as to specific
25 transactions if the IRS agent believed he had uncovered evidence of fraud as
26 to those specific items. The City's discovery requests and supporting
27 arguments seek to apply this methodology wholesale, for example, to a probe
28 of all the expenses of the management services contract charged to TAWC.
29
30

1 In my years working in many regulatory jurisdictions, I have not seen that
2 type of audit in a regulatory proceeding, nor is that the way in which an
3 independent auditor would perform a financial audit. The intervenors in every
4 other state in which I have worked before regulatory commissions in rate
5 cases, are capable and able to review historical test-year information, review
6 known and measurable adjustments and develop positions in agreement or in
7 opposition to the Company's filing without coming anywhere close to the
8 level of detail demanded by the City. Contrary to the City's position, that
9 level is not required to determine the prudence of a Company's costs, it is not
10 required by audit standards, and performing such an audit is costly and
11 impractical in the extreme.

12
13 In my opinion, the position taken by the City is unreasonable, and if the City
14 requires such an audit to be comfortable in its position, it should bear the cost
15 of that approach, not the Company's shareholders.

16
17 15. Q. WHY IS THIS IMPORTANT TO THE COMPANY?

18 A. The fact is that TAWC will continue to provide quality, reliable service to its
19 customers in Chattanooga that doing so will require TAWC to seek rate cases
20 in the future in order to assure that quality, reliable service is maintained.
21
22

23 **APPROPRIATE TEST-YEARS: PROBLEMS WITH THE CAPD'S APPROACH?**
24

25 16. Q. DOES THE CAPD USE A CONSISTENT HISTORICAL TEST-YEAR IN
26 MAKING ITS RECOMMENDATION IN THIS CASE?

27 A. No they do not and the CAPD approach causes a great deal of confusion,
28 problems, and extra costs in processing the TAWC rate case.
29

30 17. Q. WHAT APPROACH DOES THE CAPD TAKE ON HISTORICAL TEST-
31 YEARS?

1 A. The problem is they do not take a consistent approach to a historical test-year.
2 The CAPD continues to use multiple test-periods to develop their
3 recommendations for various areas of revenues and expenses. For many
4 expenses they insist on using March 2008 data to start the attrition year
5 calculations, in other cases they use a 2005 base period completely ignoring
6 known and measurable increases significantly above the rate of inflation. In
7 the case of going-level revenues they don't use any historical period at all, but
8 instead they simply develop an attrition year number based on extremely
9 faulty trending methods developed from a four year period, that totally ignores
10 the impact of weather. The Company will clearly show the CAPD approach to
11 revenue trending is without merit and badly distorts the information on which
12 the CAPD's bases its conclusions.

13 18. Q. DID THE TRA ADDRESS THIS ISSUE SURROUNDING PROPER TEST-
14 YEARS IN THE COMPANY'S 2006 RATE CASE?

15 A. Yes. The Company believes the TRA addressed this issue in both the motion
16 made by Director Miller on May 14, 2007 and approved by the TRA that
17 same day, as well as, in the final Order of the TRA of June 10, 2008.

18
19 19. Q. WHAT DID THE TRA DETERMINE IN ITS ORDER OF JUNE 10, 2008
20 REGARDING THE APPROPRIATE TEST-YEAR FOR DETERMINING
21 REVENUES AND EXPENSES?

22 A. The June 10, 2008 order at page 21 states, "The panel rejected the multiple
23 test periods utilized by the CAPD to forecast Revenues and Expenses and
24 accepted the Company's uniform test period of the twelve months ended June
25 30, 2006 for Revenues and Expenses, except in the instance of Insurance
26 Other Than Group where abnormal monthly bookings were noted."

27
28 20. Q. HOW DID THE COMPANY INTEPRET THIS SECTION OF THE
29 ORDER?

30 A. To the Company it was clear that the use of a consistent test-year, in the
31 absence of abnormal monthly bookings to a specific type of expenses was

1 appropriate. In the Company's last case, the timing of retro adjustments for
2 insurance led to the TRA's decision.

3
4 21. Q. DID THE COMPANY USE A CONSISTENT HISTORICAL TEST-YEAR
5 IN THIS CASE?

6 A. Yes. The Company consistently used the twelve month period ended
7 November 2007 on which to base its attrition year revenues, expenses and rate
8 base in its filing. The Company made various appropriate adjustments to
9 normalize the historical test-year in order to eliminate non-recurring items and
10 reflect annualizing changes to the various cost of service elements only
11 present for a portion of the test-year. The normalization adjustments were
12 fully described in the Company's accounting exhibit and working papers filed
13 in this case. Examples of test-year normalization adjustments would include
14 annualizing power increases, customer growth and the loss of an industrial
15 customer such as Velsicol that occurred during the test-year. The Company
16 then adjusted the normalized test-year for known and measurable adjustments
17 that would impact the attrition year. For expenses that were not adjusted
18 based on known and measurable factors, an inflation factor was used
19 consistent with past treatment of those items in arriving at the attrition year
20 expenses. The Company also weather normalized the historical test-year
21 billing determinates in the residential and commercial customer classifications
22 consistent with the TRA policy established in the late 1980's and consistently
23 utilized in determining going-level revenues for the attrition year in all TAWC
24 rate cases since that time.

25
26 22. Q. IS IT A PROBLEM FOR THE COMPANY TO SUPPLY MORE RECENT
27 ACTUAL RAW DATA TO THE CAPD BEYOND THE HISTORICAL
28 TEST-YEAR INFORMATION USED BY THE COMPANY?

29 A. No, the Company has no problem in supplying more recent raw financial data
30 to the CAPD. It is the use of that data and the format in which the CAPD
31 requests that data that drives the problem. The CAPD is entitled to more

1 recent financial information as it becomes available, and it is absolutely
2 appropriate to use that data to assess and test the Company's normalized test-
3 year information, and known and measurable going-level adjustments. This is
4 the normal process of the intervenors in each regulatory jurisdiction where I
5 have worked.

6
7
8 23. Q. PLEASE DESCRIBE THE PROBLEMS WITH HOW THE CAPD
9 REQUESTS AND UTILIZES MORE RECENT DATA.

10 A.

- 11 1. The CAPD's use of a different historical test-year leads to excessive
12 discovery, which leads to discovery disputes, and ultimately
13 unnecessarily increases the cost to process the case. The CAPD issued
14 nearly 200 requests in its initial discovery request. Approximately 60-
15 70% of those requests related to information needed to generate a
16 different test-year than the one used by the Company.
- 17 2. The use of a test-year different than the Company's leads to confusion.
18 It places the Company in the position of generating the data, in a
19 format not readily available to the Company, so that the CAPD can
20 generate a different test-year. In many cases the CAPD does not
21 appropriately normalize their different test-year, and in many cases
22 ignores the known and measurable adjustments that should be
23 reflected in the attrition year. Instead they just use their different test-
24 year information for many expense types, claiming it is more correct
25 on the unsupported basis that it is more current, and then limit the
26 attrition year adjustments to an inflation factor.
- 27 3. What the CAPD is actually doing is telling the Company that it will
28 not use the Company's test-year, and the Company must do most of the
29 work required to generate a different test-year. This is extremely
30 burdensome and costly to the Company. In no other jurisdiction where
31 I have worked is this approach used or accepted.

- 1 4. The CAPD does not appear to understand that the weather
2 normalization factors, developed by Dr. Spitznagel for this case are
3 only applicable to the Company's historical test-year. To properly
4 normalize the CAPD's different test-year would require the
5 development of a different weather normalization factor. In this case
6 the CAPD just ignores that 2007 was one of the 11 driest and one of
7 the 10 hottest years in the last 114 years in the Chattanooga area.
8 Presumably because they didn't understand, they didn't have the
9 expertise to develop their own factors, or they didn't want to absorb
10 the cost to have an expert do the work. Regardless of the reasons, the
11 CAPD makes no credible argument that the weather normalization
12 adjustment should not be used to develop the attrition year billing
13 determinants, instead relying on an extremely biased trending factor.
- 14 5. If a different test-year were normalized correctly and uniformly, there
15 should be little difference in the attrition year results. While I fully
16 understand the CAPD and the other intervenors can disagree on the
17 adjustments required to normalize the historical test-year and the
18 adjustments appropriate for the attrition year, it is not appropriate to
19 ignore those adjustments and instead use their improperly adjusted
20 test-year to artificially deflate the true cost of service of the Company
21 for the attrition year.

22
23 24. Q. WHAT IS YOUR RECOMMENDATION REGARDING THE APPROPRIATE
24 TEST-YEAR FOR THIS CASE?

25 A. The TRA got it right in its Order in the Company's 2006 rate case. It was clear
26 then and its is even more clear now that the CAPD approach does not properly
27 normalize their test-year. The CAPD attempts to supplant known and measurable
28 adjustments appropriate for the attrition year, apparently on the belief that the
29 attrition year should be limited to the rate of inflation, and they provide little, if
30 any, rebuttal or challenge to the known and measurable adjustments supported by
31 factual information in the Company's testimony, accounting exhibits, working

1 papers, and discovery responses. This is puzzling given the significant known
2 and measurable increases related to chemical price bid increases, electric power
3 increases, gasoline price increases, and paving increases to name a few that have
4 increased well in excess of the rate of inflation, but are absent from the CAPD's
5 attrition year expense level recommendation.

6
7 The TRA made its position very clear in its Order of June 10, 2008. Still, in this
8 case, the CAPD took the same approach it used in the Company's 2006 rate case
9 and arrived at the same unsupported and unreasonable conclusions. The
10 Company believes that the CAPD approach does not comply with TRA policy on
11 the appropriate the test-year, does not comply with well established regulatory
12 principles, particularly the attempt to replace supported and appropriate known
13 and measurable adjustments to the attrition year with an inflation factor.

14
15 In the absence of any credible evidence to support the incorrectly normalized test-
16 year used by the CAPD, the TRA should again accept the properly normalized
17 test-year utilized in the Company's filing. The Company is hopeful that the TRA
18 will agree with the Company's position, will address the problems the CAPD's
19 approach creates, will consider the significant increase in the cost to process rate
20 cases driven by the CAPD approach, and make it clear the CAPD's approach is
21 not in line with established regulatory principles and the TRA's policy.

22
23 **CAPITAL STRUCTURE AND COST OF DEBT**
24

25 25. Q. DO YOU HAVE GENERAL COMMENTS ABOUT THE DIFFERENCE IN
26 THE CAPITAL STRUCTURE PROPOSED BY THE COMPANY, THE CAPD
27 AND THE CMA IN THIS CASE?

28
29 A. Yes. The difference in capital structures and Weighted Cost of Capital, or WCC,
30 is the single largest issue in this case and it has a major impact on the difference
31 in the proposed revenue requirements in this case. The difference in revenue

1 requirement related to capital structure and WCC as filed by the Company and the
2 CAPD in this case is approximately \$3.7 to 3.9 million. Dr. Brown's
3 recommendation of a WCC of 6.65% is a major driver of the reduction of
4 revenues for TAWC proposed by the CAPD in this case. As stated earlier in this
5 testimony and in Dr. Vilbert's rebuttal, Dr. Brown's recommendations, when
6 coupled with the unreasonable adjustments to revenues and expenses proposed by
7 Mr. Buckner, result in the absurd recommendation of CAPD to reduce current
8 rates by \$1.641 million. On the bright side, the CAPD's recommendation to
9 reduce rates in this case is \$400,000 higher than the rate reduction the CAPD
10 proposed in the Company's 2006 rate case. In that case, the TRA approved a
11 WCC over 140 basis points higher than Dr. Brown's recommendation, including
12 an ROE 270 basis points higher than Dr. Brown's recommendation. If the
13 CAPD's position were accepted, it would result in financial ratios at or on the
14 brink of junk bond status. The Company is confident such a recommendation
15 could not meet the financial integrity and capital attraction tests in the landmark
16 Bluefield and Hope U. S. Supreme Court decisions. It is my opinion that the
17 investors in TAWC would view the impact of Dr. Brown's recommendations
18 regarding the WCC, particularly a 7.5% ROE, very negatively and the attraction
19 of capital under those scenarios would be compromised significantly.

20
21 While Mr. Gorman's recommendation of a WCC of 7.33% is more reasonable
22 than the CAPD's recommendation, there are serious flaws in his parent company
23 capital structure application which I will discuss later in this testimony.
24 According to Mr. Gorman's testimony his capital structure and cost of capital
25 recommendations reduced the Company's requested increase by approximately
26 \$3.2 million.

27
28 26. Q. HAVE YOU REVIEWED THE TESTIMONY CONCERNING CAPITAL
29 STRUCTURE FILED BY DR. BROWN AND MR. GORMAN?

30 A. Yes.
31

1 27. Q. WHAT CAPITAL STRUCTURE AND WEIGHTED COST OF CAPITAL DID
2 THE COMPANY USE IN ITS PETITION IN THIS CASE?

3 A. The capital structure utilized by the Company reflects the capital structure that
4 will be in place at TAWC for the attrition year in this case. That capital structure
5 is the actual capital structure of TAWC that will be utilized to support the rate
6 base TAWC utilized to service its customer in the Chattanooga area, and to fund
7 its operations and capital investment programs. The Company determined the
8 capital structure used in its filing from the books and records of the Company,
9 along with known and measurable changes to that Capital Structure that will
10 occur through the Attrition Year in this case, to determine its "stand alone" capital
11 structure. The Company to my knowledge has never filed a rate case that
12 included the imputation of double leverage from its parent. The reason for this is
13 simple; the Company does not believe the use of a double leverage capital
14 structure is appropriate for determining the cost of capital for the Company in a
15 rate setting proceeding. The Company's proposed capital structure in this case
16 was attached to my direct testimony as Exhibit MAM-3.

17
18 28. Q. WHY DOES THE COMPANY OPPOSE THE USE OF DOUBLE LEVERAGE
19 IN ITS CAPITAL STRUCTURE USED TO ESTABLISH FAIR AND JUST
20 RATES IN THIS CASE?

21 A. The application of double leverage in the capital structure of TAWC deprives the
22 Company of the opportunity to recover the true cost of the capital deployed by
23 TAWC and is used to fund the rate base and cost of operations utilized by the
24 Company in providing service to its customers. The theory behind double
25 leverage revolves around the parent/subsidiary relationship common in the
26 publicly traded utility sector. The Company believes one of the major
27 components of regulation is to determine what the cost of capital for a regulated
28 business is. Where the regulated business obtains that capital should have no
29 bearing on the determination of a fair and reasonable cost of capital used to
30 determine just and reasonable rates for that entity. Just because the equity
31 investor happens to be a utility holding company does not and should not have a

1 bearing on determining the true cost of capital for setting just and reasonable
2 rates. The individual investing in a mutual fund or an institutional investor can
3 just as easily use their borrowing power to obtain the funds to invest in equity
4 capital as could a utility holding company, but in the case of rate making they are
5 handled quite differently. The cost of equity is what the market determines it to
6 be and should not be influenced by where the equity investor obtains the funds to
7 purchase that equity interest. The application of double leverage at the subsidiary
8 level results in determining the source of funding the parent company utilizes to
9 invest in the equity of the subsidiary. The Company does not believe it is proper
10 or relevant to the true cost of equity at the subsidiary where the parent obtained its
11 capital. The Company also believes the use of a double leverage in the capital
12 structure of TAWC for establishing rates builds in automatic erosion of the
13 authorized ROE, depriving TAWC of any reasonable opportunity to achieve that
14 rate of return. The Company does not believe that the use of a "double leverage"
15 capital structure in setting rates for TAWC is appropriate.

16
17 Even though the Company does not agree with the so-called "double leverage"
18 capital structure approach, it is my belief that the concept attempts to capture the
19 source of the funds utilized to invest in the equity of a subsidiary. Both Dr.
20 Brown's and Mr. Gorman's parent capital structure include the debt issued at the
21 AWWC subsidiary level (including the debt of TAWC) which would dilute the
22 equity ratio of the parent company on the consolidated basis. If double leverage
23 is applied, only the debt/equity ratios of the parent as a stand-alone entity should
24 be utilized. Certainly the subsidiary debt issued by the subsidiaries, including
25 TAWC, is not a source of funds for AWWC to invest in the equity of those same
26 subsidiaries because they were utilized to fund the subsidiary operations,
27 including funding on-going capital improvements. In addition, if double leverage
28 is applied the retained earnings at the subsidiary level should not be subject to the
29 parent company stand-alone capital structure ratios. The retained earnings at
30 TAWC were generated through TAWC's dividend policy of retaining 25% of
31 earnings for re-investment. The retained earnings are a function of capital that

1 could have been paid to the stockholders as dividends. Retained earnings should
2 not be subject to double leverage, because they are not funded by the parent
3 company capital structure.
4

5 29. Q. CAN YOU PROVIDE A SIMPLE EXAMPLE OF WHY DOUBLE LEVERAGE
6 IS NOT APPROPRIATE?

7 A. I believe I can. My example is based on this assumption: that if anyone of us in
8 this room believed we knew of a stock that's market based return could produce
9 11% and we wanted to purchase that stock, but we didn't have the available cash
10 to purchase that stock this time, but we had a line of credit at the bank which
11 could support that purchase. In this example I will assume that we could borrow
12 that money from the bank at an interest rate of 6%. The theory behind double
13 leverage would indicate that regardless of the fact that the market return is 11%,
14 we would only be allowed to receive a 6% return because we borrowed the money
15 to purchase that stock. Obviously, the source of cash to purchase a stock has no
16 bearing on the market return of that stock, and thus double leverage for TAWC
17 does not reflect the true cost of the capital deployed by TAWC.
18

19 30. Q. WHAT CAPITAL STRUCTURE METHODOLOGY HAS BEEN UTILIZED
20 BY DR. BROWN IN ARRIVING AT HIS RECOMMENDATION FOR THE
21 COST OF CAPITAL?

22 A. Dr. Brown determines his recommended capital structure by starting with the
23 Company's capital structure as filed and adjusting that capital structure for the
24 impact of double leverage. He then goes through an analysis to determine in his
25 terms the level of capital structure that comes from external sources (non parent
26 company related) and the portion of the capital that in his opinion is derived from
27 internal sources (the parent company relationship). He then applies his
28 interpretation of the AWWC capital structure ratios to the portion of TAWC's
29 capital structure that he says are obtained through AWCC or AWWC (internal
30 capital). He then applies his estimated cost rates for Debt and Common Equity to
31 arrive at a Weighted Cost of Capital ("WCC") that he applies to his parent

1 company derived portion of the capital structure. He then applies the actual cost
2 rates for what he considers external debt to arrive at an average cost of capital for
3 that portion of the capital structure. He then sums the total of the external
4 supplied WCC and the parent company supplied WCC to arrive at his overall
5 recommendation for WCC.
6

7 31. Q. WHAT CAPITAL STRUCTURE DID THE TRA ULTIMATELY APPROVE
8 FOR TAWC IN ITS ORDER OF JUNE 10, 2008?

9 A. The TRA on page 47 of its June 10, 2008 Order, used a double leveraged capital
10 structure as proposed by Dr. Brown, but utilized a parent company capital
11 structure consisting of 45% equity, instead of the 30% parent company equity
12 proposed by Dr. Brown. Mr. Gorman, however, has picked up the mantle
13 regarding ridiculously low equity ratios in his recommendation in this case, and I
14 will address the absurdity of that position in my rebuttal of Mr. Gorman's
15 proposed capital structure.
16

17 32. Q. WHAT PARENT COMPANY CAPITAL STRUCTURE DID DR. BROWN
18 UTILIZE IN HIS RECOMMENDED CAPITAL STRUCTURE?

19 A. He states that he utilized the consolidated capital structure of AWW filed with the
20 SEC 10-Q on May 15, 2008 for the period ended March 31, 2008. He also
21 indicates that he reflected what he incorrectly calls off book transactions as
22 adjustments to the actual capital structure.
23

24 33. Q. WOULD YOU EXPLAIN THE ADJUSTMENTS DR. BROWN MADE TO
25 THE ACTUAL AWW CONSOLIDATED CAPITAL STRUCTURE OF
26 MARCH 31, 2008?

27 A. Yes. I have prepared a rebuttal exhibit to illustrate Dr. Brown's proposed capital
28 structure and correction to properly reflect what he calls "off book" transactions.
29 That exhibit is attached to this rebuttal testimony and is identified as Rebuttal
30 Exhibit MAM-2, page 2 of 2. Dr. Brown claims on page 8 of his testimony that
31 he decreased short-term debt by \$200 million and increased long-term debt by the

1 same amount. I attempted to take the actual consolidated capital structure of
2 AWW as of March 31, 2008 and make the adjustments reflected in his testimony
3 but I could not duplicate the parent company debt and equity ratios used in Dr.
4 Brown's proposed capital structure as indicated on page 7 of his testimony. I also
5 scoured the AWW SEC 10-Q in search of his purported \$200 million "off book"
6 transaction, but I could not find reference to any \$200 million transaction, and
7 certainly no reference to it being "off book".
8

9 34. Q. DID YOU FIND ANY REFERENCE IN THE AWW 10(Q) THAT IS LIKELY
10 THE SOURCE OF DR. BROWN'S ADJUSTMENT?

11 A. Yes, I believe I did. At the bottom of page 9 of the 10(Q), there is reference to an
12 equity infusion made by RWE of \$245 million on May 13, 2008, and that the
13 proceeds from that transaction would be used to reduce debt. I believe this
14 disclosure in the 10-Q forms the basis for Dr. Brown's adjustment to the March
15 31, AWW consolidated capital structure.
16

17 35. Q. WHY DID THE EQUITY INFUSION BY RWE OCCUR?

18 A. As RWE was required to do by conditions in some of the state Commission orders
19 approving the Divestiture of AWW, RWE made that equity infusion in order that
20 AWW's consolidated capital structure would include 45% of equity. Once the
21 10-Q was completed indicating the equity ratio had dropped below 45%, RWE
22 provided the paid in capital to AWW required to maintain it 45% equity ratio.
23

24 36. Q. DID DR. BROWN PROPERLY REFLECT THIS ADJUSTMENT IN HIS
25 PROPOSED CAPITAL STRUCTURE?

26 A. No he did not. In the top section of Rebuttal Exhibit MAM-2, page 2 of 2, I
27 reflect the capital structure proposed by Dr. Brown. In the middle section of that
28 exhibit I provide an explanation of the equity infusion that occurred on May 13,
29 2008. In the bottom section of the exhibit, I provide adjustment of Dr. Brown's
30 capital structure to properly reflect the equity infusion.
31

1 37. Q. PLEASE EXPLAIN THE CORRECTIONS YOU HAVE PROPOSED TO DR.
2 BROWN'S CAPITAL STRUCTURE AS SHOWN ON REBUTTAL EXHIBIT
3 MAM-2, PAGE 2 OF 2.

4 A. In the bottom section of the exhibit under the subheading "Parent", I show the
5 actual consolidated capital structure of AWW per the 10-Q filed on May 15,
6 2008. In the next column under the subheading "Parent", I properly reflect the
7 \$245 million as an addition to common stock and a reduction to Short-term debt.
8

9 38. Q. HOW DID THIS IMPACT DR. BROWN'S PROPOSED CAPITAL
10 STRUCTURE?

11 A. The proper recording of the equity infusion increased the Parent equity ratio to
12 45.36% with corresponding reductions to the other classes of capital. It is also
13 noteworthy that Dr. Brown did not reflect any preferred stock at the parent level
14 in his capital structure and use of the actual AWW capital structure as of March
15 31, 2008 corrects that error. The impact of these adjustments, without any
16 adjustments to his capital component cost rates raises his recommended WCC
17 from 6.65% to 6.70%.
18

19 39. Q. HOW DID DR. BROWN DETERMINE THE COST RATE FOR PARENT
20 COMPANY LONG-TERM DEBT USED IN HIS CAPITAL STRUCTURE?

21 A. His calculation of the Long-term cost of debt is shown on page 5 of his testimony.
22 Dr. Brown uses a weighted cost of Long-term debt of 5.8644%. His calculations
23 are unreasonable on their face. It appears he utilizes the information from page
24 10 of the AWW 10-Q filed May 15, 2008. It also appears that he used the \$200
25 million referenced earlier in this testimony to incorrectly adjust the total actual
26 AWW Long-term debt as of March 31, 2008. Page 10 of the 10-Q identifies that
27 debt under broad categories of debt, such as, Debt of AWWC: Private Activity
28 floating rate and fixed rate debt; and Debt of Other Subsidiaries: Private Activity
29 fixed and floating rate bonds, Mortgage fixed rate bonds, etc. The schedule used
30 by Dr. Brown and similar to the 10-Q, page 10 lists a high and low rate for each
31 classification of various maturity dates. Obviously, each of these broad

1 descriptions is made up of numerous bonds with differing coupon rates and in
2 some cases floating rates. To correctly determine the weighted cost of debt for
3 AWW, each of those individual debt instruments should be listed by amount and
4 coupon rates to determine the actual weighted cost of debt. Dr. Brown made no
5 attempt to determine the cost of the various debt issues, nor did the CAPD issue
6 discovery requesting that information. Instead, Dr. Brown just added the high and
7 low rates for the broad descriptions of debt and averaged them. While a simple
8 and easy method, it produces an inaccurate result, which does not reflect the
9 actual cost of debt in the AWW capital structure.

10
11 40. Q. DID YOU PREPARE A SCHEDULE THAT WOULD INDICATE THE COST
12 OF DEBT FOR THE STAND-ALONE PARENT OF TAWC, THAT BEING
13 AWW?

14 A. Yes. That calculation is attached to this testimony and identified as Rebuttal
15 Exhibit MAM-3. That exhibit shows the actual cost of debt of AWW parent only
16 as of December 31, 2007. That calculation shows weighted cost of Long-term
17 debt to be 6.26%. This is the same weighted cost of parent company debt used by
18 Mr. Gorman. My recommendation is if the TRA elects to use the parent capital
19 structure to determine the capital structure in this case a weighted cost of debt of
20 6.26% should be utilized for the parent capital in that calculation.

21
22 41. Q. WHAT IMPACT DOES UTILIZING A WEIGHTED COST OF PARENT
23 COMPANY DEBT HAVE ON DR. BROWN'S RECOMMENDATION FOR
24 WCC?

25 A. That adjustment would further raise Dr. Brown's capital structure to 6.89% from
26 the 6.70% previously shown on Rebuttal Exhibit MAM-2, page 2 of 2.

27
28 42. Q. ARE THERE OTHER ISSUES WITHIN THE COST OF DEBT USED IN DR.
29 BROWN'S PROPOSED CAPITAL STRUCTURE?

30 A. Yes. Dr. Brown incorrectly claims the Short-term interest rates paid by AWW are
31 LIBOR. He utilizes a short-term interest rate of 2.87% which is not

1 representative of current short-term rates or the short-term rates likely to be
2 obtained in the attrition year for this case. AWW and its subsidiaries use AWCC
3 to obtain their short-term debt. Those funds are obtained in the money markets
4 with varying amounts and rates depending on the cash requirements of AWW and
5 its subsidiaries. Those short-term debt instruments are generally bid at LIBOR
6 plus a premium or spread determined by market conditions at the time of
7 issuance.

8
9 43. Q. WHAT SHORT-TERM INTEREST RATE DID TAWC USE IN ITS CAPITAL
10 STRUCTURE?

11 A. TAWC used a short-term interest rate of 4.5%.

12
13 44. Q. HAVE YOU LOOKED AT MORE RECENT INFORMATION ON SHORT-
14 TERM INTEREST RATES ON WHICH YOU COULD MAKE A
15 RECOMMENDATION IN THIS CASE?

16 A. Yes. Attached to this testimony is Rebuttal Exhibit MAM-4 which captures my
17 recommendation for short-term interest rates to be effective in the attrition year in
18 this case.

19
20 45. Q. PLEASE DESCRIBE YOUR RECOMMENDATION.

21 A. I utilized the latest five months actual short-term rates from AWCC and compared
22 them to the FED Funds Rate for each month. I utilized the FED Funds rate to
23 determine the spreads because the Value Line publication does not forecast
24 LIBOR. I then applied the average spread for the latest five months to the Value
25 Line Publication of May 23, 2008 forecast for FED Funds Rate in 2009. This
26 calculation produced an expected short-term interest rate of 3.85%. I believe this
27 to be a reasonable estimate of the short-term interest rates for the attrition year in
28 this case.

29
30 46. Q. WHAT IMPACT WOULD UTILIZING A SHORT-TERM INTEREST RATE
31 OF 3.85% HAVE ON DR. BROWN'S WCC?

1 A. Using a short-term interest rate of 3.85% would further raise the WCC to 6.90%
2 when using Dr. Brown's methodology for capital structure adjusted to reflect the
3 adjustments I have recommended in this testimony.
4

5 47. Q. DO YOU HAVE FURTHER COMMENTS ON DR. BROWN'S CAPITAL
6 STRUCTURE AND WCC?

7 A. I have nothing further to add to my comments on his capital structure, but Dr.
8 Vilbert will address Dr. Brown's recommendation for ROE, and I will also
9 address that issue later in this testimony.
10

11 48. Q. DID MR. GORMAN ADDRESS CAPITAL STRUCTURE AND COST OF
12 CAPITAL IN HIS TESTIMONY?

13 A. Yes.
14

15 49. Q. WHAT CAPITAL STRUCTURE METHODOLOGY HAS BEEN UTILIZED
16 BY MR. GORMAN IN ARRIVING AT HIS RECOMMENDATION FOR THE
17 COST OF CAPITAL?

18 A. Mr. Gorman apparently attended the capital structure school of Dr. Brown since
19 the Company's 2006 rate case. He essentially used the same capital structure
20 methodology used by Dr. Brown in this case by starting with the Company's
21 capital structure as filed and adjusting that capital structure for the impact of
22 double leverage in a similar fashion to Dr. Brown. He then goes through the same
23 analysis as Dr. Brown to determine in his terms the level of capital structure that
24 comes from external sources (non parent company related) and the portion of the
25 capital that in his opinion is derived from internal sources (the parent company
26 relationship). He then applies his interpretation of the AWWC capital structure
27 ratios to the portion of TAWC's capital structure that he says is obtained through
28 AWCC or AWWC (internal capital). At this point, however, he deviated in a
29 major way from Dr. Brown's capital structure determination which I will cover in
30 the following Q and A's regarding rebuttal of Mr. Gorman's capital structure. He
31 then applies his estimated cost rates for Debt and Common Equity to arrive at a

1 Weighted Cost of Capital ("WCC") that he applies to his parent company derived
2 portion of the capital structure, although Mr. Gorman used different cost rates for
3 both Long-term and Short-term Debt. He then applies the actual cost rates for
4 what he considers external debt to arrive at an average cost of capital for that
5 portion of the capital structure. He then sums the total of the external supplied
6 WCC and the parent company supplied WCC to arrive at his overall
7 recommendation for WCC.
8

9 50. Q. WHAT IS THE MAJOR DIFFERENCE BETWEEN MR. GORMAN'S AND
10 DR. BROWN'S CAPITAL STRUCTURES?

11 A. Consistent with Dr. Brown's capital structure approach, Mr. Gorman uses the
12 consolidated capital structure of AWW as of March 31, 2008 as shown in the 10-
13 Q filed on May 15, 2008 with the SEC as the starting point for his parent
14 company capital. Mr. Gorman did not repeat the improper recording of the equity
15 infusion to AWW on May 13, 2008 as described in the previous rebuttal of Dr.
16 Brown. He did, however, take up of the mantle of Dr. Brown in the Company's
17 2006 rate case, by eliminating \$1.7 billion from the equity of the parent in
18 arriving at his astounding recommendation that rates should be set on an equity
19 ratio of 29.07% for the Parent. Dr. Vilbert addresses the impacts such a low
20 equity ratio has on increased financial risk and bond ratings. I will discuss below
21 why his basis for this approach is wrong from both an accounting and theoretical
22 perspective.
23

24 51. Q. WHAT BASIS DID MR. GORMAN GIVE FOR THIS MODIFICATION TO
25 THE PARENT COMPANY CAPITAL STRUCTURE?

26 A. On page 24 of his testimony he indicates that he reduced the actual equity on the
27 books and records of AWW by \$1.7 billion for the goodwill, an asset, on the basis
28 that this represents capital not available to invest in the equity of the AWW
29 subsidiaries.
30

1 52. Q. WHAT ARE THE PROBLEMS WITH MR. GORMAN'S APPROACH FROM
2 AN ACCOUNTING AND RATEMAKING PERSPECTIVE?

3 A. The problem from an accounting perspective is that the goodwill of a company is
4 an intangible asset as described in both FAS 141 and FAS 142, thus goodwill is
5 not a capital item. To the extent the goodwill asset is derived from business
6 combinations the accounting for that asset is covered by FAS 141. As prescribed
7 by FAS 141, intangible assets covered by pronouncement are subject to
8 impairment tests. Those tests determine the current value of that asset. To the
9 extent the current value is at or above the book value no adjustment is necessary.
10 If the value of that asset is determined to be less than the book value a write-down
11 of that asset is required, which results in a charge to expense. The goodwill only
12 impacts the capital once the charge to income flows through as a reduction to
13 retained earnings. Mr. Gorman's determination to charge the entire goodwill
14 asset to capital is not supported by U. S. GAAP as described in FAS 141.

15
16 There is another problem in Mr. Gorman's assumption. He assumes that all of the
17 goodwill on the books of AWW at March 31, 2008 relates to the goodwill asset
18 generated through the sale of the common stock of AWW. This is simply not the
19 case. The balance of the goodwill includes non- FAS 141 intangible assets, as
20 well as, FAS 141 assets generated by business combinations at the subsidiary
21 level. The fact is that since AWW common stock was purchased by RWE
22 approximately \$1.1 billion of the goodwill asset related to that transaction has
23 been written off to income, reducing retained earnings. In addition, there has
24 been approximately \$1.1 billion of additional paid-in capital to AWW from RWE
25 to maintain the AWW equity ratio of 45% as required by several state regulatory
26 commissions in the Divestiture Proceedings. The fact is AWW's capital structure
27 as of March 31, 2008 has already been reduced by the write-off the goodwill asset
28 recorded based on the sale of the AWW stock, and replaced by additional paid-in
29 capital (cash equity infusions) which can easily be determined from the AWW
30 parent company capital structure supplied in the supplemental response to
31 discovery request TRA-01-Q66. Certainly Mr. Gorman cannot support

1 eliminating the major portion of the same asset twice. Mr. Gorman's adjustment
2 is based on faulty assumptions and not supported by accounting principles.

3
4 Even if Mr. Gorman had used the correct goodwill asset to adjust his capital
5 structure, his adjustment to the actual consolidated capital structure of AWW
6 does not pass muster in a theoretical rate making application, either. In the 2006
7 case, Dr. Brown attempted to artificially deflate the parent company capital
8 structure in a similar way. As Dr. Brown admits in his testimony in this case, at
9 page 8, "However, AWW's unaudited SEC Form 10(Q) filed in May of this year
10 shows near \$1.6 billion of good-will on its books." Dr. Brown is also wrong
11 about what this amount represents as discussed above. He goes on to say, "If that
12 amount were excluded from AWW's common equity, its common equity ratio
13 would fall to 30 percent. Given the Authority's most recent decision, I did not
14 pursue a 30 percent equity ratio." The TRA did not credit Dr. Brown's attempt to
15 artificially deflate the equity ratio of the parent company in setting rates for
16 TAWC in case number 06-00290 and the TRA should not credit Mr. Gorman's
17 attempt to do so in this case.

18
19 53. Q. DO YOU HAVE PROBLEMS WITH MR. GORMAN'S APPROACH TO THE
20 CAPITAL STRUCTURE FROM A THEORITICAL PERSPECTIVE?

21
22 A. Yes. On page 24 of his testimony, Mr. Gorman indicates the theoretical basis for
23 applying double leverage is that only AWW's actual capital supporting its
24 investments in numerous subsidiary utility companies should be used to apply
25 double leverage. I agree with him on this point. However, he goes to say that
26 only the common equity available to support AWW's capital to invest in
27 subsidiaries should be examined. Mr. Gorman and I part ways on this point. In
28 fact, this caveat interjected by Mr. Gorman flies in the face of the theory behind
29 double leverage. If you recall my example, it's the use of debt to leverage the
30 investment in the subsidiary that drives the double leverage theory.

1 Assume that Mr. Gorman's \$1.7 billion reduction of the actual parent company
2 consolidated capital structure was appropriate, which I have clearly demonstrated
3 it is not. Now take this one step further under the universally accepted theory
4 behind double leverage, that being we should look to the source of capital at the
5 parent available for investment in the equity at the subsidiary to determine the
6 capital structure for rate making purposes at the subsidiary level.

7
8 I don't agree with double leverage, but I do accept the universally accepted theory
9 just described. But Mr. Gorman only chooses to accept a portion of that theory
10 that benefits his position. Mr. Gorman's theory can only hold true if he looks at
11 all the capital of the parent available for investment in the equity of the
12 subsidiary, he cannot selectively choose which elements of the parent's capital to
13 eliminate for double leverage and he for sure should not be permitted to pick only
14 the equity portion of the parent capital structure to artificially deflate the equity
15 ratio of the parent to apply to his double leverage capital structure. The TRA said
16 no to Dr. Brown in the 2006 case and it should say no to Mr. Gorman approach in
17 this case.

18
19 54. Q. DO YOU HAVE AN EXAMPLE IF MR. GORMAN'S THEORY WERE
20 APPLIED TO ALL ASPECTS OF THE PARENT COMPANY CAPITAL
21 STRUCTURE?

22 A. Yes, attached to this testimony and identified as Rebuttal Exhibit MAM-2, page 1
23 of 2 is a schedule that in the top section shows Mr. Gorman's capital structure
24 recommendation in this case. In the middle of the schedule describes the basis for
25 the adjustments I make to Mr. Gorman's capital structure in the bottom section of
26 the schedule to properly reflect Mr. Gorman's theory of double leverage.

27
28 55. Q. PLEASE DESCRIBE THOSE ADJUSTMENTS.

29 A. As I did on page 2 of 2 of Rebuttal Exhibit MAM-2 in my discussion of Dr.
30 Brown's capital structure, I based the analysis of the parent company capital
31 structure as adjusted by Mr. Gorman for the \$1.7 billion of equity (although I

1 have pointed out previously this is not justified or supported by accounting or
2 previous decisions of the TRA). In the box at the bottom I used the actual May
3 15, 2008 AWW 10-Q capital structure and eliminated the parent company stand-
4 alone capital structure as supplied in the supplemental response to TRA-01-Q66.
5 I then took the difference in those numbers to determine the amount of LT Debt,
6 ST Debt and Preferred Stock of the subsidiaries of AWW that are included in the
7 consolidated parent company capital structure. In the section of the exhibit
8 highlighted in yellow I then eliminated those subsidiary capital components from
9 Mr. Gorman's capital structure as included in his testimony. This results in the
10 equity ratio of the parent company on a stand-alone basis moving from Mr.
11 Gorman's troublesome and inaccurate 29.07% to 63.73%. The impact of this
12 change results in the calculation of the WCC of 8.73% versus the 7.33% proposed
13 by Mr. Gorman.

14 I am not endorsing this adjustment, but rather utilizing it to show Mr. Gorman's
15 theory on double leverage as he applies it is extremely faulty, his recommended
16 capital structure severely and artificially depresses the equity ratio for setting rates
17 for TAWC in this case, and is not in compliance with the methods on which the
18 TRA established the double leverage for setting rates of TAWC in case number
19 06-00290.

20
21 56. Q. DO YOU AGREE WITH COST RATES OF DEBT AT THE PARENT LEVEL
22 USED BY MR. GORMAN?

23 A. No. I would point out that Mr. Gorman used 6.26% as the cost of LT Debt at the
24 parent level which is in agreement with the cost rate I recommended in rebuttal to
25 Dr. Brown's testimony, as provided on Rebuttal Exhibit MAM-3. I do however
26 disagree with his Short-term interest rate of 3.25%. I also addressed this in my
27 rebuttal of Dr. Brown. I recommend that a short-term interest rate of 3.85% be
28 used in this case as indicated on Rebuttal Exhibit MAM-4 attached to this
29 testimony.
30
31

1 **RETURN ON EQUITY AND OTHER ISSUES RAISED BY DR. BROWN**

2
3 57. Q DO YOU HAVE GENERAL COMMENTS ABOUT THE TESTIMONY OF
4 DR. BROWN?

5
6 A. Yes. Dr. Brown in past cases and in this case goes to great lengths to support his
7 inadequate ROE and WCC recommendations, which in this case produces a
8 6.65% WCC. He continues his history of providing unfounded, inaccurate and
9 misleading allegations about AWW and TAWC in this case.

10 In case number 04-00103 his theory was that RWE had coerced TAWC, me and
11 Dr. Vanderweide to manufacture a WCC to meet RWE's desires and to
12 inappropriately recover the premium RWE paid for American Water Works
13 Company ("AWWC"). Upon challenge of his position the Company was able to
14 demonstrate his interpretation of the comments by the CEO of RWE were taken
15 out of context, and that he had no understanding of the term ROCI or its meaning
16 and application under International Accounting Standards.

17
18 In case number 06-00290 he attempted to claim the only reason for TAWC's rate
19 increase filing was to impact the price RWE receives for the AWWC stock in the
20 IPO. It did not appear to matter to him that TAWC achieved an ROE of 5.1% in
21 2006, had invested \$26.0 million in capital improvements since the last rate case,
22 or that the expected ROE for 2007 was 2% without rate relief. Again the
23 Company provided rebuttal and facts about his claims, including discussion about
24 the commitments made by RWE in several regulatory jurisdictions to infuse
25 equity as required to maintain a common equity ratio for AWW at 45%. The
26 TRA rejected Dr. Brown's approach and unfounded theories.

27
28 In this proceeding he has developed a different theory, though similarly
29 misguided. He paints a picture that the "sky is falling" concerning AWW's
30 Sarbanes Oxley status. Dr. Brown's obvious attempts to discredit TAWC and
31 AWW are not based on the facts pertaining to AWW's Sarbanes Oxley status. He

1 selectively chooses snippets of information on which to base his allegations,
2 including comments taken out of context to manufacture his position.

3
4 58. Q. WHAT DOES DR. BROWN SAY ABOUT SARBANES OXLEY AT AWW?

5 A. To summarize about 20 pages of testimony by Dr. Brown, he claims that AWW is
6 not in compliance with Sarbanes Oxley, that AWW in his words "opted out" of
7 early Sarbanes Oxley compliance, and implies that the financial statements of
8 AWW, and presumably TAWC, can not be relied on. The Company in its
9 rebuttal to Dr. Brown on this topic will show none of those claims are accurate.
10 Dr. Brown even goes so far as to suggest that TAWC should have elected to
11 voluntarily forgo the filing of a rate case until AWW completes section 404
12 certification under Sarbanes Oxley, which is not required by SEC regulation to
13 occur until the financial audit of AWW's 2009 financial statements.

14
15 . In the 2006 case , Dr. Brown indicated TAWC should be denied rate relief until
16 the IPO was complete. In this case, he suggests that TAWC should not even seek
17 rate relief until section 404 certification is complete, even though the laws of the
18 land and SEC regulations do not require that for another year. It appears not to
19 matter to Dr. Brown that the Company has provided compelling evidence that it
20 has and will continue to need capital investment to update and replace aged
21 infrastructure, or that electric costs, chemical costs, gasoline costs or paving costs
22 have increased significantly over the last seventeen months. He just doesn't
23 appear to believe there should be a rate increase or that the Company should ever
24 seek rate relief. In order to meet this end he then produces ROE and WCC
25 recommendations that are on their face unreasonable and out of touch with every
26 regulatory jurisdiction in the country. He then develops unfounded theories and
27 allegations to mask the unreasonableness of his recommendations. It appears to
28 me that Dr. Brown does not fully understand Sarbanes Oxley requirements or
29 what they are intended to accomplish.

30 59. Q. ARE THERE OTHER COMMENTS THAT DR. BROWN MAKES THAT YOU
31 DISAGREE WITH?

1 A. Yes, the comments on page 66 of his testimony demonstrate the lengths that Dr.
2 Brown goes to manufacture support for his unreasonable recommendations. He
3 says, "The statement about 6% being a likely return is accurate." Above that
4 statement he provides a snippet of the transcript of the interview that Mr. Watson
5 and I had with the Chattanooga Times editorial board about the filing of this rate
6 case. As Dr. Brown indicates the interview lasted over 1 hour. The quote he
7 selectively chooses was made by me in response to questions about the reasons
8 for the case and comments I made earlier in the interview regarding the need to
9 continue making capital investments. I also had stated that in order to attract the
10 capital to make those capital improvements, adequate rates should be in place for
11 TAWC to be able to attract that capital. I attempted to use a simple, hypothetical
12 example regarding where (an investor) had the option to invest (in a CD) and one
13 bank was paying 6% and another bank was paying 6.25%, the investor would
14 obviously choose the higher rate. I was trying to educate the editorial board about
15 why rate cases are necessary and part of being a public utility, and in a simple
16 way relay to them the essence of the standards of setting rates contained in the
17 Bluefield and Hope cases. Somehow, Dr. Brown lifts these remarks out of
18 context and implies that I endorse a 6% return in this case, and that I mislead the
19 editorial board by not bringing Sarbanes Oxley into this discussion. My
20 comments are taken completely out of context, and I certainly did not endorse a
21 6% return in this case in that interview.

22
23 60. Q. ON PAGE 68 AND 69 OF DR. BROWN'S TESTIMONY HE PROVIDES TWO
24 DISCOVERY REQUESTS ANSWERED BY THE COMPANY IN THIS CASE.
25 DO THOSE RESPONSES REPRESENT THE COMPLETE ANSWERS
26 PROVIDED?

27 A. No. The Company supplemented both responses pasted into Dr. Brown's
28 testimony. To both requests, without waiving the original objections, the
29 Company further responded that neither AWW nor TAWC were in possession or
30 control of any information responsive to this request, and that AWW has in fact
31 not performed any such studies.

1 61. Q. ON PAGE 69-70 DR. BROWN PROVIDES COMMENTS ABOUT TAWC'S
2 FUTURE RATE CASE PLANS. WOULD YOU COMMENT ON THAT?

3 A. Yes. On page 69 Dr. Brown says, "the current rate case is not the end of TAW's
4 rate-case cycle in Chattanooga." If Dr. Brown had stopped here, I would agree
5 with him. When future costs of providing the public service increase and TAWC
6 can not offset those increases with revenue growth and efficiency measures,
7 TAWC will file rate cases. However, Dr. Brown did not stop; he went on to say,
8 "To the extent that AWW succeeds in acquiring extreme regulatory returns
9 without SOX certification, another rate case is invited in 2009." As will be
10 thoroughly explained in the testimony of Mark Manner and later in this testimony
11 Dr. Brown is just wrong about Sarbanes and AWW, and he is wrong to indicate a
12 reasonable return (ROE) in this case invites a 2009 rate case.

13 I can not today tell you whether gasoline costs may increase significantly above
14 what they are today, or that a large industrial customer may close due to the
15 current market and status of the economy, or that inflation may reach double digits.
16 I worked for AWW in the late 1970's and I remember those days, and I can not
17 say that TAWC would not pursue rate relief if those types of changes to the cost
18 of service approved in this occurred. However, that does not justify Dr. Brown's
19 unsupported assertion that a 2009 request will be invited from approval of
20 reasonable and just rates to be determined in this case.

21
22
23 62. Q. IS AWW IN COMPLIANCE WITH SARBANES OXLEY RULES AT THIS
24 TIME?

25 A. Yes. AWW became a publicly traded company on April 28, 2008. The SEC 10-
26 Q filing by AWW on May 15, 2008 complies with all SEC and Sarbanes Oxley
27 requirements. The AWW 10-Q provides a complete disclosure of the internal
28 controls of AWW by its CEO and CFO, including a discussion about material
29 weaknesses and remediation efforts. I would note that AWW management
30 represented, notwithstanding these material weaknesses, that the financial
31 statements included in the 10(-Q for the period ended March 31, 2008 fairly

1 represent in all material respects their financial position, results of operations and
2 cash flows for the periods presented in conformity with GAAP. AWW
3 management also indicates that they expect to complete remediation of these
4 material weaknesses during 2008. AWW also included a full discussion of what
5 has transpired at AWW regarding implementing the Sarbanes Oxley process and
6 procedures and the remediation efforts. This rigorous process will continue for
7 each 10-Q until the section 404 certification is required.

8
9 Contrary to Dr. Brown's claims, AWW has complied with all SEC regulations
10 and Sarbanes Oxley requirements.

11
12 63. Q. WHAT OTHER EFFORTS HAS AWW UNDERTAKEN REGARDING
13 SARBANES OXLEY IMPLEMENTATION?

14 A. The following is a list that describes the major efforts undertaken by AWW
15 regarding the Sarbanes Oxley implementation process and other facts Dr. Brown
16 does not mention:

- 17 • TAWC's financial statements for 2006 and 2007 were audited and
18 certified independently by PriceWaterhouseCoopers.
- 19 • The books and records of TAWC form the basis for the Company's per
20 books historical test-year in this case.
- 21 • The books and records of TAWC were provided in this filing, along with
22 the accounting exhibits, workpapers, testimony, and responses to a
23 massive amount of discovery requests. That neither the CAPD, nor any
24 other party to the case, has indicated even one material misstatement in
25 those records.
- 26 • AWW senior management initiated the Sarbanes Oxley implementation
27 process in late 2006 and that the audit committee of AWW has reviewed,
28 directed and supported that process at each meeting. Substantial
29 information was provided about the Sarbanes Oxley implementation
30 process in response to discovery request CAPD-01-part III-Q3.

- AWW retained a nationally recognized accounting and auditing firm to assist management in developing policies and procedures surrounding internal controls over financial reporting, to evaluate and test these internal controls and to assist in the remediation of internal control deficiencies.
- AWW hired a director of internal control and director of taxes.
- AWW conducted extensive training on existing and newly developed processes and month end close processes.
- AWW has been enhancing the internal audit staff .

64. Q. DR. BROWN ON PAGE 59 REFERS TO SOME STATISTICS FROM THE AUDIT ANALYTICS 2007 REPORT, WOULD YOU COMMENT ON THAT?

A. Sarbanes Oxley requires Company management to establish and review appropriate internal controls, and more importantly to provide a management disclosure about those internal controls, including a discussion about any material weaknesses that may exist. The Company must also disclose its efforts to remediate any material internal control weaknesses as part of issuing its financial statements to the public, investors, potential investors and regulatory agencies such as the SEC. The Company's external auditors then assess and test management's representation on internal controls, and issue an opinion concurring or disagreeing with management's representations. I could not, nor could anyone else, tell the TRA that they assure no material misstatement of its financial statements will ever occur. That is not what Sarbanes Oxley is intended to do-- it is intended to put in place a system of controls that will detect material problems, or disclose that such a process is not in place to do that. I believe that the process which AWW and TAWC have and continue to undertake regarding Sarbanes Oxley should be pointed out to illustrate the potential differences between AWW and information referenced by Dr. Brown.

- AWW consists of regulated subsidiaries that regularly appear before regulatory commissions in 19 states. That includes rate case filings,

1 prudency reviews, and management audits which look at the books and
2 records, and operation of the operating subsidiary and AWWSC in depth.

- 3 • AWW and its subsidiaries have gone to great lengths to make sure it gets
4 the Sarbanes Oxley implementation right. The significant amount
5 expended for this effort is outlined on page 30 of the May 15, 2008 10-Q.I
6 would also note that AWW and RWE committed to numerous state
7 regulatory commissions that they would not seek rate recovery for those
8 implementation costs. As I outline in my direct testimony TAWC
9 eliminated those costs from its historical and attrition year management
10 fee expenses in this case.
- 11 • AWW and RWE recently completed an IPO, which included the filing of
12 multiple S-1's before the SEC of the United States, and full review of the
13 financial data and representations made by AWW.
- 14 • I seriously doubt that many, if any, of the companies included in the report
15 referenced by Dr. Brown have been through such a vigorous review of its
16 financial data.

17
18 65. Q. PLEASE DESCRIBE YOUR PERSONAL INVOLVEMENT IN THE
19 SARBANES OXLEY IMPLEMENTATION AT AWWSC AND TAWC.

20 A. In my position as Director of Rates for the Southeast Region of AWWSC and as
21 Treasurer/Comptroller of TAWC, I have been involved with the process since its
22 inception in early 2007. I attended a major kick-off meeting where I was exposed
23 to the requirements of Sarbanes Oxley and the implementation plan for AWW.
24 During the first and second quarters of 2007, I was on a team that identified all
25 the key internal controls related to the rates and regulation function. Starting with
26 the second quarter 2007 accounting close process, I have had to review each of
27 those internal controls applicable to TAWC, WVAWC and KAWC and provide
28 documentation and certification they were or were not being followed.

29
30 I will describe three of the internal control processes for which I am responsible.
31

1 Each month I certify that that all rate changes for both AWW subsidiaries and any
2 third party sewer billing contracts, such as the Chattanooga Sanitary Board, have
3 been processed in compliance with internal controls. I am required to certify by
4 my signature that each rate change was authorized by approved tariff or city
5 ordinance, were fully tested to prove the billing software was properly
6 determining the correct rates, and that the internal control for each rate change
7 was properly completed.

8
9 Each month I am required to provide regulatory asset authorization forms for any
10 new regulatory assets that occur, including an assessment that determines that it is
11 probable the regulatory asset will be approved for rate recovery. If I can provide
12 that opinion the cost is charged to expense. I also review each existing regulatory
13 asset to assure that all amortizations or additional expenses have been properly
14 recorded. I must attest in writing that all regulatory assets have been reviewed
15 and adjusted as necessary.

16
17 Each quarter I must attest in a section 302 certification that I have reviewed all
18 internal controls for which I am the responsible manager and those internal
19 controls were working as required, or if they are not, indicate so with my
20 recommendation for remediation. There are over 1000 management level
21 employees at AWW going through these same processes each month for internal
22 controls applicable to their area of responsibility.

23
24 66. Q. IN YOUR OPINION IS DR. BROWN'S ASSESSMENT OF AWW'S
25 SARBANES OXLEY STATUTE ACCURATE?

26 A. No. I also don't believe that there is any material issue with the historical test-
27 year financial data on which TAWC relied in preparing this case or updated actual
28 data which has been supplied in this case.

29
30 67. Q. HAVE YOU REVIEWED THE TESTIMONY OF DR. BROWN REGARDING
31 RETURN ON EQUITY?

1 A. Yes.

2
3 68. Q. DO YOU HAVE ANY GENERAL COMMENTS ABOUT THAT
4 TESTIMONY?

5 A. Yes. As I read Dr. Brown's testimony, it is his opinion and belief that his analysis
6 fully captures investor expectations and produces an ROE of 7.50%. He relies
7 primarily on his DCF calculation. His DCF actually produces 7.53%. He
8 performs a CAPM analysis, but he mercifully did not rely on his calculation under
9 that method which produced 6.17%. The 6.17% ROE result in Dr. Brown's
10 CAPM is approximately the same as the current 30-year, A-rated bond rates that I
11 show at the bottom of the exhibit identified as Rebuttal Exhibit MAM-5, page 4
12 of 4 attached to this testimony. This is an astounding and puzzling result to Dr.
13 Brown's CAPM analysis. I interpret that to indicate Dr Brown is attempting to tell
14 this Authority that there is no additional risk associated with the investment in
15 equity of a company versus investment in the Long-term bond of the Company.
16 His recommendation for ROE of 7.5% is only 130 basis points above the average
17 30-year, A-rated utility bond for the quarter ended June 30, 2008, as determined
18 from the Value Line Publication and shown on page 4 of 4 of Rebuttal Exhibit
19 MAM-5. The Company does not believe the risk premiums just described are in
20 line with the risk premium between 30-year A-rated utility bonds and the ROE's
21 granted other water companies of similar risk in regulatory jurisdictions where
22 American Water subsidiaries have received orders. The 7.5% ROE is manifestly
23 inadequate. The end result of Dr. Brown's calculations produce a result that is
24 significantly below ROE's in all other U.S. regulatory jurisdictions included in
25 my analysis for water companies of similar risk. I will address the ROE's
26 awarded in other states and Dr. Vilbert will address the shortcomings of the
27 determination of a 7.5% ROE using the DCF and CAPM calculations.

28
29 69. Q. HAS DR. BROWN MISSED AN IMPORTANT CONSIDERATION IN HIS
30 RECOMMENDATION OF A 7.5% ROE?

1 A. I believe he has. An ROE authorized by a regulatory commission must pass the
2 constitutional tests established in the landmark cases Bluefield Waterworks and
3 Hope Gas. Those cases as decided by the U. S. Supreme Court provide the basic
4 tests for regulatory commissions in establishing a fair and reasonable return on
5 equity. I covered my understanding of the tests from the Bluefield and Hope
6 decisions earlier in this rebuttal testimony at page 5, question 9. The Company
7 believes Dr. Brown's recommendation if approved by the TRA would fail these
8 basic tests. My rebuttal testimony will focus on the comparable earnings test by
9 comparing the authorized equity returns of TAWC's sister companies and two
10 Aqua American companies as approved in other regulatory jurisdictions.
11

12 70. Q. WHY SHOULD THE TRA CONSIDER THE A-RATED UTILITY BONDS TO
13 BENCHMARK THE BASIS POINTS SPREAD (RISK PREMIUM) FOR THE
14 COMPANY'S ROE IN THIS CASE?

15 A. The utility business is a long-term business. Utility plant investments are
16 recovered over many years, with useful depreciation lives for water mains, for
17 instance, of upwards of 70 years. Many water lines and treatment plants remain
18 in service for over 100 years. It is also a ratemaking and financial community
19 axiom that there is greater risk associated with the ownership of the equity in a
20 company than with the ownership of the debt of a company, based on the simple
21 fact that the shareholders stand "last in line" in the event of dissolution.
22 Consequently, a comparison of current rates for long-term bonds in relation to
23 authorized ROEs provides a viable and meaningful benchmark of the extent of
24 that additional risk as authorized by regulatory commissions for companies with
25 the most similar risk to that of the Company. A-rated utility bonds provide a
26 uniform platform on which to assess the risk associated with equity because the
27 interest rates on those bonds are easily obtained from publication such as Value
28 Line.
29

30 71. Q. YOU INDICATED EARLIER THAT YOU DISAGREE WITH THE ROE
31 RECOMMENDATIONS OF DR. BROWN. WHY?

1 A. The recently authorized ROEs for other American Water operating subsidiaries
2 and the Aqua American subsidiaries for which I could obtain information, when
3 compared to the Value Line interest rate for A-rated utility bonds at the time of
4 the Order, demonstrate just how unreasonable Dr. Brown's ROE recommendation
5 is. This comparison is a simple method the Commission can use to benchmark
6 the risk between A-rated utility bonds and equity recognized by Commissions in
7 other jurisdictions in determining a fair and reasonable rate of return on equity,
8 and to benchmark the fairness and reasonableness of the recommended ranges of
9 ROE in this case.
10
11

12 72. Q. WHAT ARE THE ROE's CALCULATED USING THIS APPROACH?

13 A. On Rebuttal Exhibit MAM-5, page 1 of 4, I applied the current 30-year A-rated
14 utility bond rates of 6.16% (latest 4 qtr. Spread), 6.14% (latest 2 qtr. Spread), and
15 6.19% (latest 1 qtr. Spread), and then added the average spread (risk premium) of
16 the American Water subsidiaries and Aqua American subsidiaries authorized
17 return on equity to produce ROE's of 10.34%, 10.32%, and 10.37% respectively.
18

19 73. Q. WHY SHOULD THE TRA REVIEW THE LEVEL OF ROE AUTHORIZED BY
20 OTHER REGULATORY JURISDICTIONS?

21 A. The Company does not obtain its equity capital in the open market, but obtains
22 that equity from AWW. Each of the rate of return witnesses recognizes this fact
23 and utilizes a proxy group of publicly-traded water companies to determine a
24 market expectation of ROE. There is an incredibly wide range of
25 recommendations from the cost of capital witnesses for the Company, the CMA
26 and the CAPD in this case. If the Company (or any company) is to be able to
27 attract capital when needed to maintain facilities and improve service it must have
28 the opportunity to achieve an ROE that is comparable to companies with similar
29 risk. I believe it is appropriate, if not essential, that the TRA review all available
30 data on ROE, including the level of ROE that other regulatory commissions are
31 recognizing as fair and reasonable based on the most current data. All of the

1 AWWC subsidiaries obtain their equity capital from the same parent, as do the
2 Aqua American subsidiaries. The AWWC subsidiaries obtain their debt from
3 AWCC, all have similar capital structures, and all face similar financial and
4 business risks. These returns can, at the very least, provide a frame of reference
5 and comparison for the TRA to benchmark its determination of a fair and
6 reasonable return on equity in this case.
7

8 74. Q. YOU INCLUDED THE RECOMMENDED ROE OF DR. BROWN IN THIS
9 CASE ON THIS SCHEDULE. HOW DO HIS RECOMMENDATIONS
10 COMPARE?

11 A. I included his recommended ROE to show how low and unreasonable it is. The
12 recommended 7.5% ROE of Dr. Brown compared to the average 2008 A-rated
13 utility bonds on Rebuttal Exhibit MAM-5, page 1 of 4 produces a spread of only
14 134, 136, and 131 basis points respectively, far below that recognized in any other
15 jurisdiction in which American Water operates. It is worthy of note that the
16 average ROE authorized between 2004 and 2008 is **10.25%**. Dr. Brown's
17 recommendation is 303 basis points below the average spread produced from the
18 latest authorized ROE for all American Water Subsidiaries and the two Aqua
19 American subsidiaries receiving Commission orders since 2004. The Company
20 believes an ROE spread to current A-rated utility bond projections this far below
21 other regulatory jurisdictions is unreasonable and out of touch with market
22 expectations.
23

24 75. Q. IS THE COMPANY ASKING THE TRA TO USE THE METHOD JUST
25 DESCRIBED TO DETERMINE THE ROE?

26 A. No. The Company is only asking that the TRA consider the information as a
27 benchmark in determining the reasonableness of the ROE it establishes in this
28 case and to point out the unreasonableness of Dr. Brown's recommended ROE.
29 The Company believes that a comparison of other Commission established risk
30 premiums between ROE and the A-rated utility bonds at the time the ROE was
31 established, when compared to the current bond market conditions, provides a

1 valuable point of reference for the TRA. This is particularly true when the
2 comparative companies compete for the same equity capital, obtain their capital
3 from the same source, and have very similar business and financial risk.

4
5 76. Q. HOW DOES DR. BROWN'S RECOMMENDATION ON ROE IN THIS CASE
6 COMPARE TO THE ROE APPROVED BY THE TRA IN THE COMPANY'S
7 LAST RATE CASE, CASE NO. 06-00290?

8 A. The Company was authorized an ROE of 10.20% in its last rate case which was
9 the ROE approved by the TRA in its order dated June 10, 2008. I have looked at
10 the bond market conditions at the time the TRA issued its motion setting the
11 current rates of TAWC (May 2007) and can find no reasonable justification that
12 would support a 270 basis point drop in the ROE in this case. In fact the numbers
13 support an increase in authorized ROE.

14
15
16 77. Q. WOULD YOU DEMONSTRATE THE FACTORS THAT CONTRIBUTE TO
17 YOUR BELIEF THAT AN INCREASE IN ROE IS WARRANTED WHEN THE
18 CURRENT BOND MARKETS ARE COMPARED TO THOSE AT THE TIME
19 OF THE ORDER IN THE PRIOR RATE CASE?

20 A. Yes. I have prepared a schedule to demonstrate this fact and attached that
21 schedule to this testimony titled Rebuttal Exhibit MAM-5, page 2 of 4.

22
23 78. Q. PLEASE EXPLAIN REBUTTAL EXHIBIT MAM-5, page 2 of 2.

24 A. The first section compares the interest rates as published on May 11, 2007 by
25 Value Line for 30-year A-rate utility bonds, 30-year BBB-rated utility bonds, 10-
26 year A-rated corporate bonds, 30-year T-bonds and 10-year T-bonds at the time
27 the TRA deliberated and approved the current rates of TAWC. In the second
28 section I then applied those equity to bond spreads from the previous rate case to
29 the most current Value Line (August 8, 2009April 6, 2007) rates for those same
30 bonds. The results produced ROE's ranging from 10.97% to 9.60% and an
31 average of the four ROE results of 10.38%. I also calculated the result using only

the long-term corporate bond rates. The reason I made this separate calculation using only the long-term bond rates is the spreads between Long-term corporate bonds rates over T-bonds has risen significantly since the Company's last case and the results of using the spread of ROE to T-bonds from the last case is not reflective of current market conditions. The result using only the Long-term corporate bond rates produces an average ROE of 10.76%.

79. Q. YOU HAVE PROVIDED SEVERAL CALCULATIONS THAT IN THE COMPANY'S OPINION SHOULD BE USED TO BENCHMARK THE ROE THE TRA ULTIMATELY DECIDES IN THIS CASE. WOULD YOU RECAP THOSE CALCULATIONS?

A. Yes. The following schedule will recap the ROE results from Rebuttal Exhibits MAM-5, pages 1 and 2 of 4.

Table MAM-1

Rebuttal Exhibit MAM-5, page 1 of 2:

Average of AWWC& Aqua subs. Auth. ROE	10.25%
ROE using current bond information and AW avg. spread-	
Latest one quarter average	10.37%
Latest two quarter average	10.32%
Latest four quarter average	10.34%

Rebuttal Exhibit MAM-5, page 2 of 4:

Avg. ROE based on all current bond market rates	10.38%
Avg. ROE based on only Long-term Corporate bond rates	<u>10.76%</u>

Average of six calculations **10.38%**

80. Q. WHAT DO YOU BELIEVE THE TABLE ABOVE INDICATES?

A. I believe the above table if viewed by any prudent investor would indicate that the cost of equity based on a reasonable risk premium applied to the current bond

1 market conditions would indicate an ROE of at least 10.38% as reasonable. I
2 believe this table also indicates that when current bond market conditions are
3 compared to those present at the time of the Company's previous case, an increase
4 in the currently authorized ROE of 10.209% is warranted. I believe that this table
5 also indicates that Dr. Brown's recommendation of a 7.5% ROE is utterly
6 unreasonable and could not pass any of the basic tests for a fair and reasonable
7 ROE established in the Bluefield and Hope cases, particularly the test of
8 comparable earnings to companies of similar risk.

9
10 81. Q. WOULD YOU SUMMARIZE YOUR RECOMMENDATIONS REGARDING
11 CAPITAL STRUCTURE, COST OF DEBT AND EQUITY AS COVERED IN
12 THIS TESTIMONY?

13 A. Yes. I do not support the use of a double leveraged capital structure for the
14 reasons I have stated in this testimony. If the TRA elects to use a double
15 leveraged capital structure to set the rates of TAWC, I believe that should be done
16 consistently with the TRA's order of June 10, 2008, in case number 06-00290. I
17 have attached to this testimony Rebuttal Exhibit MAM-6 which I believe to be
18 consistent with that Order. The capital structure is consistent in part with the
19 approach used by both Mr. Gorman and Dr. Brown in that it determines capital of
20 TAWC obtained internally from AWW or AWCC, and capital obtained externally
21 by TAWC. I have used the latest consolidated capital structure of AWW as of
22 June 30, 2008, which I believe is consistent with the approach approved by the
23 TRA in case number 06-00290. I have used the parent company long-term debt
24 rate of 6.26%, which was used by both Mr. Gorman and recommended by me
25 based on the calculations performed on Rebuttal Exhibit MAM-3, versus the
26 inaccurate average calculations used by Dr. Brown. I have used a short-term
27 interest rate of 3.85%, because I believe that more accurately reflects the cost of
28 short-term debt that TAWC will experience in the attrition year and is based on
29 the actual experience of TAWC from February through June of 2008. This
30 calculation is shown on Rebuttal Exhibit MAM-4. I explained the problems with
31 Dr. Brown's short-term debt in my rebuttal. When I insert the average ROE of

10.4% determined on MAM Table 1 of this testimony the capital structure produces an overall weighted cost of capital of 8.08%.

RATE BASE & DEPRECIATION EXPENSE

82. Q. HOW DID TAWC ARRIVE AT ITS RATE BASE REQUESTED IN THIS CASE?

A. TAWC started with the rate base (Utility Plant Balances, CWIP, Capital Leases, Accum. Depr., Accum. Def. Income Taxes, ITC and CIAC's) as of the historical test-year November 30, 2007, and adjusted for known and measurable changes that will occur through the attrition year for such items as: additional plant in service, additional depreciation, additional deferred income taxes, and amortization of ITC. The Company then calculated its attrition year rate base for the 13-month average of the attrition year balances. This method is consistent with the approach approved by the TRA in its order of June 10, 2008 in case number 06-00290.

83. Q. HOW DID THE CAPD ARRIVE AT RATE BASE?

A. The CAPD arrived at its rate base using essentially the same methodology as the Company, but started their calculations using a test-year of March 31, 2008.

84. Q. DID DR. BROWN MENTION RATE BASE IN HIS TESTIMONY?

A. Yes. On pages 74 – 76 Dr. Brown uses comments by me regarding a rate case for West Virginia American in 2004 to imply that TAWC may have included discretionary rate base in this case. Let me make it clear: the circumstances in WV at the time of that testimony were quite different than at TAWC in 2004 and today, and TAWC believes the capital improvements included in its rate base in this case are not discretionary.

In 2003, WVAVC filed a rate case in which an ROE of 7% was authorized. This Order was appealed to the WV Supreme Court of Appeals. In 2004, WVAVC

1 filed a rate case and explained to the Commission that such low ROE's caused the
2 same type of problems TAWC has identified in this docket if Dr. Brown's 7.5%
3 ROE is approved. My testimony in the West Virginia case indicated that
4 WVAWC had invested nearly \$400 million in improvements over the previous 10
5 years. Those improvements included significant investment in regional
6 public/private growth projects that eliminated over 30 substandard small publicly
7 owned systems and extended service to over 100,000 residents of WV who
8 previously had substandard service or no public water system at all. My
9 testimony, taken in context, indicated that the Company was concerned that it
10 could not attract discretionary capital if the 7% ROE was not rectified in the 2004
11 case, and may not be able to continue those growth projects which the
12 Commission had encouraged the Company to undertake and wanted the Company
13 to continue to undertake for the public good.

14
15 WVAWC never indicated it would not make needed capital investments required
16 to maintain service, and Mr. Watson's comments quoted on page 76 of Dr.
17 Brown's testimony confirms TAWC has likewise made no such indication.

18
19 85. Q. DURING THE PROCESSING OF THIS CASE DID THE COMPANY AMEND
20 ITS RATE BASE REQUEST?

21 A. Yes. The Company learned it had not calculated its attrition year CWIP using the
22 13-month average. The Company also amended certain elements of its working
23 capital. The Company provided an amended Accounting Exhibit including these
24 corrections in response to data request TRA-05-Q1.

25
26 86. Q. DID THE COMPANY FIND ANY PROBLEMS IN THE CAPD'S RATE BASE
27 CALCULATIONS?

28 A. Yes. There are several areas of the CAPD's rate base calculations with which the
29 Company disagrees. The following areas are covered in the rebuttal testimony of
30 Mrs. Miller:

- CWIP – the CAPD limited CWIP to only the CITICO Treatment Plant Project without explanation or justification for the elimination of CWIP on other construction projects.
- RWIP – the CAPD eliminated RWIP, inconsistent with the way rate base has been determined in prior rates as approved by the TRA.
- Accumulated Amortization of Capital Lease – the CAPD utilized an incorrect starting balance.
- Accumulated Deferred Income Taxes – the CAPD duplicated the rate base reduction for NNS which was already reclassified in their beginning Accumulated Depreciation balance.

The CAPD's mistaken Working Capital rate base calculations will be covered by my rebuttal

87. Q. DID BOTH THE CMA AND CAPD WITNESSES ADDRESS WORKING CAPITAL?

A. Yes.

88. Q. HOW DID THE COMPANY CALCULATE WORKING CAPITAL?

A. In exactly the same manner as it has in previous rate cases. The Company included average attrition year balances for cash, prepaid insurance, prepaid taxes, materials and supplies, deferred regulatory expense, unamortized debt, and other deferred debits. For all other revenue and expense items, the Company used the lead/lag method to determine the working cash requirement.

89. Q. HOW HAS THE TRA DETERMINED WORKING CASH IN PRIOR TAWC CASES?

A. In case number 06-00290, the TRA indicated that the CAPD accepted the Company's attrition period forecast for Working Capital of \$962,583.¹ In case

¹. TRA Order in case 06-00290, at V(e)5 page 41.

1 number 04-00288 the CAPD accepted the Company's attrition period forecast of
2 Working Capital of \$1,385,205 as indicated on the settlement agreement at
3 exhibit CAPD-RTB, schedule 2. The settlement agreement was approved by the
4 TRA.²

5
6 90. Q. PLEASE ADDRESS YOUR PROBLEMS WITH MR. GORMAN'S
7 ADJUSTMENTS TO WORKING CAPITAL AND, TO THE EXTENT MR
8 BUCKNER'S ADJUSTMENTS TO LIKE TYPES OF WORKING CAPITAL
9 COINCIDE WITH MR GORMAN'S, PLEASE ADDRESS THOSE.

10 A. Mr. Gorman adjusts the Company's working capital calculation to:

- 11 • Eliminate average cash
- 12 • Eliminate group insurance and insurance other from the lead/ lag study
- 13 • Eliminate unamortized debt expense (also Buckner)

14 The Company agrees with Mr. Gorman that average cash should be eliminated
15 from the working capital calculation. The Company agrees that unamortized debt
16 expense should be eliminated from working capital if the Company's capital
17 structure is approved. However, if the Double Leverage capital structure
18 approach is taken, all of the debt issued by TAWC to AWCC (shown on TAWC's
19 capital structure net of unamortized debt expense) is eliminated and replaced by
20 the parent company capital structure, which does not permit TAWC to properly
21 recover in rates its full unamortized debt expense. TAWC does not agree with
22 Mr. Gorman's elimination of group insurance and insurance other from the
23 lead/lag calculations, but does agree that it should not have reflected prepaid
24 insurance in its working capital.

25 TAWC has made these adjustments in its Amended Accounting Exhibits filed in
26 response to discovery request TRA-05-Q1.

27
28 91. Q. DO YOU AGREE WITH THE OTHER ADJUSTMENTS TO THE
29 COMPANY'S WORKING CASH CALCULATIONS BY MR. GORMAN AND
30 MR. BUCKNER?

². TRA Order in case 04-00288 at page 7.

1 A. No. The following list of changes made to the Company's Working Capital
2 calculations will be addressed in this rebuttal.

- 3 • Rate case expense (Gorman and Buckner)
- 4 • Other deferred debits (Gorman and Buckner)
- 5 • Lead/lag items related to:
 - 6 A. Revenue days (Gorman only)
 - 7 B. Lag days for management fees (Gorman only)
 - 8 C. Lag days for insurance other and group insurance (Gorman
9 only)
 - 10 D. Lag days for uncollectible expense (Gorman only)
 - 11 E. Lag days for depreciation expense (Gorman only)
 - 12 F. Lag days for deferred income tax expense (Gorman only)
 - 13 G. Lag days for net earnings (Gorman only)
 - 14 H. Lag days on SIT (Buckner only)
 - 15 I. Lag days on the contract sewer billing collections (Buckner
16 only)

17
18 92. Q. WHY DO YOU DISAGREE WITH MR. GORMAN'S ELIMINATION OF
19 DEFERRED RATE CASE EXPENSE FROM THE WORKING CAPITAL
20 CALCULATION AND MR. BUCKNER'S DIFFERENT APPROACH?

21 A. Mr. Gorman claims that he has included a three year amortization and therefore
22 the unamortized balance should not be included in the working capital
23 calculations. Mr. Gorman's position is incorrect for several reasons. The rate
24 case expense also includes cost of service and depreciation study expenses which
25 are amortized over a longer period of time. The unamortized rate case expense is
26 updated to the average unamortized balance for the attrition year in each case.
27 The amortization-only approach of Mr. Gorman does not take into account the
28 cost of the full outlay of cash made by the Company due to the time value of
29 money. Finally and most importantly, the Company has consistently in past rate
30 cases included unamortized rate case expense its working capital calculation. The
31 CAPD has consistently agreed with that approach, and the TRA has consistently

1 included unamortized rate case expense in TAWC's working cash. Please
2 reference the answer to question 89 of this testimony.

3
4 Mr. Buckner takes a different approach to deferred rate case expense. He doesn't
5 argue that deferred rate case expense should not be an element of working capital;
6 he believes the level is too high. He bases this on the assumption that TAWC
7 should be limited to rate recovery of the estimated rate case expense of \$400,000
8 from the 2006 case. The Company believes that the CAPD and the City drove the
9 cost of the 2006 rate case, and will provide rebuttal about rate case expense later
10 in this testimony. Once the TRA takes into consideration what really drove the
11 cost of the last rate case (and, similarly, this rate case), the Company believes its
12 position will be upheld.

13
14 The Company's unamortized rate case expense as included in this filing should be
15 used to determine working capital. Mr. Gorman's position is contrary to
16 established TRA practices, and Mr. Buckner's position will be shown to be
17 incorrect.

18
19 93. Q. WHY DO YOU DISAGREE WITH MR. GORMAN'S ELIMINATION OF
20 OTHER DEFERRED DEBITS FROM THE WORKING CAPITAL
21 CALCULATION, AND IN PART, MR. BUCKNER'S ADJUSTMENT TO
22 OTHER DEFERRED DEBITS?

23 A. Mr. Gorman incorrectly claims that the unamortized costs of the transition cost to
24 the national shared services center, the transition costs to the national call center,
25 and the cost of the management audit were not funded by TAWC capital. TAWC
26 wrote checks for these costs. It is true that the call center and shared service
27 center operations provide services for all AWW regulated subsidiaries; it is also
28 true that AWWSC spearheaded the transition process; and it is true that
29 employees of all AWW regulated subsidiaries were integrally involved with those
30 implementations, including employees of TAWC. TAWC provided the capital

1 for its fair share of those costs. Similarly, TAWC paid for the management audit
2 performed by BAH as directed by the TRA in case number 06-00290.

3
4 _____ The transition costs to the national shared service and call centers were included
5 in case number 03-00118. The Company proposed a 10-year amortization of
6 those transition costs in its request. Neither the CAPD nor any other party took
7 exception with the Company's position in that case. It is my belief that the parties
8 to the settlement of that case included both the amortization of the transition costs,
9 the savings demonstrated from those transitions, and the unamortized cost in the
10 expenses and rate base in the settlement approved by the TRA. In addition, the
11 TRA specifically approved the unamortized transition costs in both the 2004 rate
12 case and the 2006 rate case, and I can find no reference in those TRA orders
13 excluding the amortization of those costs. See the TRA's decisions cited in the
14 response to question 89 of this testimony.

15
16 Mr. Gorman's proposed elimination of the deferred debits related to the transition
17 costs to the national shared services and call centers is contrary to prior TRA
18 orders and should not be upheld in this case.

19
20 His only justification for elimination of the Management Audit performed by
21 BAH is that it was not funded by TAWC. This is not correct, The TRA should
22 permit the amortization, and the inclusion of this cost in working capital as the
23 Company has proposed in this case which is consistent with prior TRA positions.

24
25 Mr. Buckner does not make adjustments regarding the Company's working capital
26 calculations regarding the deferred debits for the call center and shared service
27 center transition costs. He does, however, eliminate the management audit costs.

28
29 I will preface my rebuttal of Mr. Buckner's justification for his position by
30 quoting the TRA order of June 10, 2006 as a point of reference. The order says,
31 "the panel concluded that TAWC should have a management audit performed in

1 compliance with Sarbanes-Oxley requirements and submit the results to the
2 Authority in one year or, or if the audit is not complete in one year, submit a
3 status report on the audit in one year. This audit should determine whether all
4 costs allocated to TAWC were incurred as a result of prudent or imprudent
5 management decisions by TAWC's parent, and should address the reasonableness
6 of the methodology used to allocate costs to TAWC.”³

7
8 The Company's position is that the Management Audit is in compliance with the
9 directive of the TRA in every respect.
10

- 11 • Mr. Buckner claims the BAH is not a management audit. The Company
12 believes the BAH report is a management audit directed by the TRA for
13 the specific purpose of assessing the prudence of management decisions
14 and costs, and the reasonableness of the allocation of the costs of
15 AWWSC to TAWC. The Company believes Mr. Van den Berg's
16 testimony and exhibits in this case do exactly that.
- 17 • Mr. Buckner claims management audits are typically contracted
18 independently by a regulatory agency. The TRA order directs TAWC to
19 have the audit prepared. Nowhere in the order does it direct TAWC to
20 clear that with the Authority. TAWC prepared and sent an RFP to a
21 number of Management Consulting Firms to find a firm qualified to meet
22 the TRA directive. PwC was excluded from the list due to the Company's
23 understanding that PwC's status as the independent financial auditor
24 precluded them from participating in the Management Audit under
25 Sarbanes Oxley rules. Nowhere in the Order does it indicate that the TRA
26 wished to participate in the process of selecting the management
27 consultant.
- 28 • Mr. Buckner claims the peer group of electric companies for comparison
29 of service company costs is without merit. Mr. Buckner provides no basis

³ TRA Order in case number 06-00290, at paragraph V(b)7, pages 26-27.

1 for this statement. Mr. Van den Berg will demonstrate that Mr. Bucker is
2 incorrect.

- 3 • Mr. Buckner claims there is no verification that the costs are necessary to
4 provide water to the customers. The Company believes this is an absurd
5 and unsupported claim. Mr. Van den Berg's testimony and report clearly
6 show that the services provided by AWWSC are necessary and are not
7 duplicative of service provide by TAWC employees. It is
8 incomprehensible that Mr. Buckner could claim that costs associated with
9 functions such as: accounting (taxes, procurement, payroll, accounts
10 payable, and general accounting functions), engineering, water quality
11 testing, treasury and cash management functions, financial & capital
12 improvement planning, rate case and regulatory filing functions, legal,
13 human resources, auditing, information systems, operational management,
14 risk and material management, customer call handling, billing, and
15 collections are not necessary to provide service to the customers of
16 TAWC. While Mr. Buckner's claim in this regard is baseless on its face,
17 he does not mention that TAWC does not provide these services with its
18 own employees, and would either have to hire employees to perform those
19 services at TAWC or contract with third party providers, which TAWC
20 has demonstrated in this case and in prior rate cases would cost more than
21 the rates at which TAWC obtains those services from AWWSC.

22
23 TAWC believes the positions of both Mr. Gorman and Mr. Buckner are without
24 merit and provide no reasonable basis on which to deny the cost of the
25 management audit of AWWSC performed by BAH as directed by the TRA.

26
27 94. Q. DO YOU HAVE ISSUES WITH MR. GORMAN'S AND MR. BUCKNER'S
28 PROPOSED ADJUSTMENTS TO THE LEAD/LAG PORTION OF THE
29 COMPANY'S WORKING CAPITAL CALCUALTION?

30 A. Yes.
31

1 95. Q. WHEN DID TAWC PERFORM A FULL LEAD/LAG STUDY?

2 A. The Company provided its lead/lag study in case 03-00118. This study updated
3 the lead/lag study performed in 1996. The Company's lead/lag study produced a
4 revenue lag of 41.73 days. There have not been any changes in the Company's
5 meter reading, billing timing or collections processes that would require this
6 number to change.

7
8 96. Q. PLEASE DESCRIBE YOUR ISSUES WITH MR. GORMAN'S ADJUSTMENT
9 TO THE COMPANY'S LEAD/LAG CALCULATIONS.

10 A. The following are areas on which the Company disagrees with Mr. Gorman:

- 11
- 12 • Mr. Gorman uses a revenue lag of 37.11 days which is 4.62 days lower
13 than the Company. Mr. Gorman bases his change on the description
14 provided in Exhibit 1, Schedule 3, page 4 of 6 of the Company's
15 Accounting Exhibit. Upon reading Mr. Gorman's testimony, the
16 Company realized its mistake. The Company corrected its accounting
17 exhibit and filed an amended exhibit which was provided to all parties to
18 this case on August 1, 2008. I have attached a copy of the amended
19 exhibit to this testimony identified as Rebuttal Exhibit MAM-7. On the
20 original accounting exhibit the company incorrectly used "mailed" in the
21 description of billing lag days and corrected that as highlighted on
22 Rebuttal Exhibit 7 to "issued". On the original accounting exhibit the
23 Company incorrectly used "reading date" in the description of collection
24 lag days and corrected that as highlighted on Rebuttal Exhibit 7 to "billed
25 date." The Company apologizes for its error. However, the revenue lag
26 days in the lead/lag calculation should be based on 41.73 days as it has in
27 each TAWC case since case number 03-00118. The CAPD did not adjust
28 the Company's revenue lag days.
 - 29 • Mr. Gorman assigns a post/payment day equal to the revenue lag day
30 effectively eliminating payment for management fee expense from the
31 working capital calculation. Mr. Gorman's adjustment is wrong for

1 several reasons. The services from AWWSC include payroll and payroll
2 benefits of AWWSC employees, and it is reasonable for TAWC to pay for
3 those services in line with the payroll dates on which those costs are
4 incurred by AWWSC. Many other expenses are paid during the month,
5 such as office rental, equipment rental, phone bills, and maintenance of
6 computer equipment, to name just a few. If TAWC did not pay for the
7 AWWSC services in the current manner, AWWSC would have to pay the
8 working capital costs to meet its payroll and other expense as incurred, but
9 not receive full payment for those services until well past when the
10 expenses were incurred. This would lead to additional working cash
11 requirements at AWWSC, which they would pass along to TAWC and the
12 other AWW subsidiaries. Mr. Gorman's adjustment only considers one
13 side of the equation, a reduction in TAWC's working capital, but not the
14 offsetting cost in the fees charged by AWWSC. Mr. Gorman's
15 adjustment also is not in compliance with TRA practice (in case numbers
16 04-00288 and 06-00290) of establishing Working Capital, as referenced in
17 the answer to question 89 in this testimony. Mr. Gorman provides no
18 justifiable reason for changing the expense lag days for this category of
19 expense. The CAPD did not make an adjustment to this category of
20 expense from the Company's working capital calculation.

- 21 • Mr. Gorman also adjusted the post payment days for group insurance and
22 insurance other, effectively eliminating any working cash requirements
23 related to these two expenses. Mr. Gorman's adjustment to these two
24 categories of the lead/lag calculation is wrong for several reasons. First
25 he appears to assume that group insurance is included in the prepaid
26 insurance category. Group Insurance is not the same as Insurance Other
27 and is never reflected as prepaid insurance on the Company's books. Mr.
28 Gorman pointed out that he believed there was a duplication between
29 prepaid insurance and insurance other in the lead/lag calculation. The
30 Company agreed with Mr. Gorman on this point. The Company amended
31 its working capital calculation and provided an amended accounting

1 exhibit in response to TRA-05-Q1 which eliminated prepaid insurance
2 from its working capital calculation. It is the Company's belief that the
3 lead/lag calculation should include the post payment lag days as included
4 in the Company's lead/lag calculation, now that it has amended its
5 working capital calculation in this case to eliminate prepaid insurance.
6 Mr. Gorman provides no justifiable reason for changing the expense lag
7 days for this category of expense now that the Company has amended it
8 working cash to correctly eliminate prepaid insurance. Mr. Gorman's
9 adjustment also is not in compliance with TRA practice (in case numbers
10 04-00288 and 06-00290) of establishing Working Capital as referenced in
11 the answer to question 89 in this testimony. The CAPD did not make an
12 adjustment to this category of expense from the Company's working
13 capital calculation.

- 14 • Mr. Gorman claims that uncollectible expense is a non cash expense and
15 therefore the post-payment lags days should be set to equal the revenue lag
16 effectively eliminating any working cash requirements related to this
17 expense. Mr. Gorman is incorrect in saying uncollectible expense is non-
18 cash. The revenue of the Company is recorded on gross billing.
19 Uncollectible expense is the amount of cash that the company never
20 collects from the billed revenues recorded on the books. Quite obviously
21 uncollectible expense is a cash item. . Mr. Gorman provides no justifiable
22 reason for changing the expense lag days for this category of expense.
23 Mr. Gorman's adjustment also is not in compliance with TRA practice (in
24 case numbers 04-00288 and 06-00290) of establishing Working Capital as
25 referenced in the answer to question 89 in this testimony. The CAPD did
26 not make an adjustment to this category of expense from the Company's
27 working capital calculation.
- 28 • Mr. Gorman also adjusted the post payment days for depreciation and
29 deferred tax expense, effectively eliminating any working cash
30 requirements related to these two expenses. Mr. Gorman claims that
31 because these two expenses are non-cash items, no working capital

1 requirement should be permitted. Mr. Gorman is incorrect in that there is
2 no working cash associated with depreciation and deferred income tax
3 expense. Depreciation expense does not require a cash payment, although
4 the cash was expended at the time the property was installed. The
5 depreciation is the return of the Company's original investment. The
6 depreciation expense is recorded to return the investment in property each
7 month, but the Company does not receive the cash for that return of capital
8 (depreciation expense) until the revenue from the month that expense is
9 recorded is collected. Therefore, there is a working capital requirement
10 associated with depreciation expense equal to the revenue lag days. The
11 same principles apply to deferred income taxes. Mr. Gorman's adjustment
12 also is not in compliance with TRA practice (in case numbers 04-00288
13 and 06-00290) of establishing Working Capital as referenced in the
14 answer to question 89 in this testimony. Mr. Gorman provides no
15 justifiable reason for changing the post payment days for depreciation and
16 deferred income tax expense. The CAPD did not make an adjustment to
17 this category of expense from the Company's working capital calculation.
18 A similar adjustment was suggested by the Kentucky Attorney General in
19 the 2004 rate case of Kentucky American Water Co and the Kentucky
20 Public Service Commission upheld the Company position in its order in
21 that case.⁴

- 22 • Mr. Buckner claims that the Company's deduction to working capital for
23 incidental collections should be increased by \$891,892. He claims the
24 Company should be limited to a lag days from bill mail date to collection
25 date of 20.39 days, as was used for this category of working capital in the
26 Company's July 2002 lead/lag study. The Company utilized 27.58 days as
27 the days from bill mailing date to payment date. In this case, both the
28 Company and Mr. Buckner are wrong. TAWC does the billing for both
29 the City of Chattanooga Sanitary Board and the Hamilton County Water
30 and Wastewater Treatment Authority. The Company includes the sewer

⁴. Order in Kentucky American Water Co. case number 2004-00103 at page 17-18.

1 bills on the same bills provided to its customers for water service. The
2 collections lag for sewer billing should be the same as used by the
3 Company in determining its revenue lag days. As shown on Rebuttal
4 Exhibit MAM-7 that lag is 24.43 days. The Company apologizes for its
5 error. But as Mr. Buckner points out it is important to be correct and
6 consistent, therefore the Company would recommend that the collections
7 lag days for incidental collections should be 24.43 days. This adjustment
8 will reduce the Company's requested working capital requested as
9 amended in the Accounting Exhibits supplied in response to TRA-05-Q1,
10 from \$1,396,084 to \$1,139,171. The correction to the CAPD's
11 recommended working capital would increase their proposed working
12 cash by \$335,038.

13
14 97. Q. WHAT IS YOUR RECOMMENDATION FOR WORKING CAPITAL IN THIS
15 CASE?

16 A. My recommendation is that working capital for this case should be \$1,139,171,
17 which represents the Company's working cash as provided in its Amended
18 Accounting Exhibit provided in response to TRA-05-Q1, further reduced for the
19 change reflected in the discussion concerning incidental collections discussed in
20 the answer to question 96. I believe this represents a working capital prepared in
21 accordance with the methods by which the TRA has determined working capital
22 in past TAWC rate cases, as referenced in the answer to question 89 of this
23 testimony.

24
25 **REVENUES**

26
27 98. Q. PLEASE DESCRIBE THE METHOD THAT THE COMPANY UTILIZED IN
28 DEVELOPING THE ATTRITION YEAR BILLING DETERMINATES AND
29 GOING LEVEL REVENUES IN THIS CASE?

30 A. The Company requested that a bill analysis report be generated that breaks the
31 various billing determinates down by customer class, meter size, and customer

1 usage for each tariff block. The Company then analyzed this data to determine
2 the required normalization adjustments. The historical test-year data is
3 normalized for such items as:

- 4 • Normalizing billing routes that were billed more or less than 12 times in
5 the year to properly reflect the billing determinates for a 365 day period.
- 6 • Customer growth was determined by month and annualized so that all
7 customers at the end of the historical test-year reflect a full year's billing.
- 8 • Large industrial customer usage was reviewed to determine any abnormal
9 billing during the year, and adjusted if necessary, and any addition or loss
10 of a large customer during the year was normalized.

11 The Company asked Dr. Spitznagel to determine the weather normalization
12 factors specific to the historical test-year and apply those factors to arrive at the
13 weather normalized historical test-year billing determinates. At this point the
14 Company added organic customer growth based on historical average growth
15 rates to arrive at the normalized billing determinates appropriate for the selected
16 attrition year. Finally, the Company applied the currently authorized tariffs to the
17 attrition year billing determinates to calculate going-level revenue for the attrition
18 year.

19
20 99. Q. THAT SOUNDS LIKE A VERY EXHAUSTIVE AND TIME CONSUMING
21 PROCESS, IS THAT CORRECT?

22 A. Yes it is. Because of the magnitude of data required, the Company only requests
23 an annual bill analysis specifically for preparation of rate cases. It usually takes
24 two to three weeks to reconcile that data to the per books revenue, a process that
25 assures the billing determinates for the historical test-year are correct. It is also
26 very time intensive to then review the raw data to determine the known and
27 measurable normalization adjustments. We have to then contract with Dr.
28 Spitznagel to determine the weather normalization factors. It also takes a good
29 deal of work to develop the customer growth and known and measurable
30 adjustments to arrive at the attrition year billing determinates. It takes
31 approximately 45 days from start to finish to complete this area of the case. More

1 time and effort is expended on determining going level revenues than any other
2 area of the case preparation.
3

4 100. Q. WERE THERE SIGNIFICANT DIFFERENCES OF OPINION BETWEEN THE
5 COMPANY AND THE CAPD ABOUT GOING LEVEL REVENUES IN THE
6 COMPANY'S 2006 RATE CASE?

7 A. Yes.
8

9 101. Q. PLEASE DESCRIBE THOSE DIFFERENCES OF OPINION.

10 A. The differences began during the discovery process. The CAPD insists on using a
11 different historical test-year, and then they serve numerous discovery requests on
12 the Company that are only required to provide information to develop a different
13 test-year. They do not request raw data; they request that the Company provide a
14 full bill analysis for each month from the end of the Company's historical test-
15 year through their different test-year. As described above this a very time
16 intensive and costly process. Once the CAPD has this data for a different test-
17 year, the new test-year requires analysis to determine different normalization
18 adjustments. The CAPD does not have those normalization adjustments and in
19 some cases uses normalization adjustments that are not correct, or makes no
20 normalization adjustments at all. The Company has repeatedly explained to the
21 CAPD that different weather normalization factors would have to be generated for
22 the CAPD's different test-year billing determinates, and that hiring Dr. Spitznagel
23 to perform that study is very costly.
24

25 102. Q. WHY IS THE CAPD APPROACH SO TROUBLESOME TO THE COMPANY?

26 A. As described above and earlier in this testimony, it takes the Company 90-120
27 days to properly prepare and file a rate case based on a uniform historical test-
28 year, which is appropriately normalized and adjusted for known and measurable
29 adjustments through the attrition year. Once that case is filed, the CAPD
30 essentially asks the Company to recreate that process so they can use a different
31 test-year. This is particularly troublesome for the going level revenue process

1 because of the exhaustive effort to arrive at going level revenues described in the
2 answer to question 99 above.

3
4 The Company believes the CAPD should review more current data during the
5 processing of the case, and the Company believes the CAPD should take any
6 position they like about the Company's historical test-year normalization
7 adjustments, weather normalization adjustments and attrition year adjustments.
8 This is the process in every other jurisdiction where I have worked. The
9 Company does not believe, however, it should have to bear the burden and cost of
10 recreating its rate filing process just to satisfy the CAPD's approach of creating
11 different test-years. This is particularly true, when the CAPD's different test-year
12 approach leads to them not properly normalizing that different test-year, leads to
13 excessive discovery on the Company, is not in compliance with the TRA practice,
14 and is not in compliance with established regulatory principles, such as; matching
15 revenues and expenses, and recognizing known and measurable adjustments. The
16 CAPD's approach is extremely burdensome on the Company and leads to
17 unnecessary and significant cost increases in processing a rate case.

18
19 103. Q. DID THE COMMISSION ADDRESS THE ISSUE OF PROPER TEST-YEARS
20 IN THE COMPANY'S 2006?

21 A. Yes.

22
23 104. Q. HOW DID THE TRA RULE?

24 A. The TRA made it very clear that the CAPD approach was rejected. The TRA
25 said, "The panel rejected the multiple test periods utilized by the CAPD to
26 forecast Revenues and Expenses and accepted the Company's uniform test-period
27 of the twelve months ended June 30, 2006 for Revenues and Expenses, except in
28 the instance of Insurance Other Than Group where abnormal monthly bookings
29 were noted."⁵ The TRA also addressed the test-year issue regarding going-level
30 revenues. The TRA said, "The panel accepted the Company's attrition period

⁵ TRA Order of June 10, 2008 in case number 06-00290, at page 21.

1 Revenue forecast at current rates of \$33,432,287 as it determined that the
2 Company had properly taken into account normalizing adjustments for
3 nonrecurring usage and properly matched the test period utilized by the
4 Company.”⁶
5

6 105. Q. DID THE COMPANY COMPLY WITH THE TRA’S ORDER IN THE 2006
7 RATE CASE IN DETERMING ATTRITION YEAR GOING LEVEL
8 REVENUES?

9 A. Yes, in every way. The Company in this case developed attrition year going level
10 revenues precisely in the same manner it did in the 2006 rate case in compliance
11 with the ruling by the TRA. In addition, the Company’s method is consistent with
12 each of the Company’s rate cases since at least the late 1980’s. In the late 1980’s,
13 Mr. Hal Novak, then a staff member of the Tennessee Public Service
14 Commission, developed a model for weather normalization which was used for a
15 number of years. The software on which Mr. Novak developed his model became
16 obsolete. Many of the same concepts and principles used in Mr. Novak’s models
17 are the same used in Dr. Spitznagel’s weather normalization models.
18

19 106. Q. DO THE CAPD’S GOING LEVEL REVENUE CALCULATIONS IN THIS
20 CASE COMPLY WITH THE TRA’S ORDER IN THE 2006 RATE CASE?

21 A. The Company does not believe they do. The following list comprises the
22 Company’s disagreements with the CAPD’s going level calculations.

- 23 • The CAPD utilized a different test-year than the Company, the 12-months
24 ending March 2008.
- 25 • The CAPD did not properly normalize the test-year for the actual
26 customers at the end of their different test-year, changes in customer
27 usage patterns, or routes billed more or less than 12 times in the test-year,
28 to name a few.
- 29 • The CAPD did not normalize their different test-year for weather at all.

⁶ TRA Order of June 10, 2008 in case number 06-0290, at subsection V(a). Revenues, at page 22.

- The CAPD used a trending factor developed for the period August 2003 through March 2008. This trending factor was not determined on weather normalized usage and produces extremely faulty, unreliable, and misleading results.
- The CAPD included the revenues of Walden's Ridge.

107. Q. YOU HAVE COVERED THE PROBLEMS CONCERNING THE TEST YEAR PREVIOUSLY IN THIS TESTIMONY. PLEASE ADDRESS THE WEATHER NORMALIZATION ISSUES.

A. The CAPD bases its recommendation on the testimony of Mr. King. Dr. Spitznagel will address the issues raised by Mr. King. I will address Mr. King's recommendation from a rate making perspective. It appears from my perspective that Mr. King provides no justification at all for his position that weather normalization should not be utilized in developing attrition year going level revenues. The primary reason given by Mr. King for dismissing Dr. Spitznagel's study is that the results for each month don't strictly match Mr. King's bell curve of the average temperatures of the Chattanooga area. This is illogical at best. The usage in any particular month is not strictly driven by weather or temperature. For instance January has 31 days and February has 28 days. It is unreasonable to suppose that the days in a month or differences in the number of billed days between meter readings from month to month don't impact usage for a particular month. It should also be noted that the Company's historical test-year has been identified as one of the top 11 driest and one of the top ten hottest years on record for Chattanooga. Obviously, the number of people in the home at different times of the year can be impacted by holidays, and whether school is in session or not will impact usage levels from month to month, to name a few.

Mr. King provides no justifiable evidence that the long-established TRA practice of weather normalizing attrition year revenues should be ignored in this case. If Mr. King had issues with the way Dr. Spitznagel performed his study or the conclusions he reached he should have provided some basis for adjusting those

1 numbers. But Mr. King's testimony does not justify his opinion that weather
2 normalization should not be utilized at all.

3
4 108. Q. DO YOU HAVE ANYTHING TO ADD TO THE WEATHER
5 NORMALIZATION COMMENTS BY THE CAPD?

6 A. Yes, Mr. Buckner implies that TAWC overcharged its customers in 2007 because
7 its water sales were higher than the level on which current rates were established.
8 Mr. Buckner even claims the hot, dry weather impact on 2007 water sales is proof
9 weather normalization is not supportable. The point of weather normalization of
10 customer usage is to establish rates for a normal weather year. Mr. Buckner
11 appears to only consider one side of the equation. The fact is TAWC, even with
12 the hot, dry conditions present in 2007, did not exceed its authorized ROE. Mr.
13 Buckner's comments can at best be described as single issue ratemaking, a
14 concept that is not within established rate making principles.

15
16 109. Q. DO YOU HAVE COMMENTS ON THE USAGE TREND OR GROWTH
17 FACTORS USED BY THE CAPD IN ARRIVING AT ATTRITION YEAR
18 GOING LEVEL REVENUES?

19 A. Yes. The CAPD attempted to substitute trending factors to replace the long-
20 standing practice approved by the TRA of developing revenues, as described in
21 the answer to question 98 above. In fact, the CAPD inserted this position in
22 supplemental testimony of Mr. Chrysler filed well past the procedural schedule
23 for intervenor testimony in the 2006 case. This became a highly contested issue
24 in that case. The Company argued that this approach ignored test-year
25 normalization, and known and measurable changes to the test-year and attrition
26 year. Specifically, the CAPD did not recognize known and measurable changes
27 in the usage of one of TAWC's large industrial customers, Southern Cellulose.
28 During the cross examination of Mr. Chrysler there was a heated discussion with
29 a Director about the CAPD's approach, and about when the CAPD had the data
30 needed to assess that situation.

1 110. Q. DID THE TRA ADDRESS THE TRENDING OR GROWTH FACTORS
2 UTILIZED BY THE CAPD IN ITS ORDER IN THE 2006 TAWC RATE
3 CASE?

4 A. Yes. The TRA said, "In its pre-filed testimony, the CAPD accepted the
5 Company's attrition period revenue forecast at current rates of \$33,432,287. In its
6 supplemental Revised Direct Testimony, the CAPD increased its projection of
7 attrition period Revenues at current rates to \$33,711,956. The CAPD calculated a
8 growth factor for each class of customer and applied this to the test period to
9 arrive at its attrition period Revenues."⁷ As previously referenced in the answer
10 to question 103, footnote 6, the TRA did not accept the CAPD position.
11

12 111. Q. NOW THAT WE HAVE ESTABLISHED THAT THE TRA DID NOT ACCEPT
13 THE CAPD'S TRENDING/GROWTH FACTORS IN THE 2006 TAWC RATE
14 CASE, WHAT PROBLEMS DO YOU SEE WITH THEIR USE OF THAT
15 APPROACH IN THIS CASE?

16 A. As described earlier, Mr. Buckner determined his revenue trending/growth factor
17 for revenues from data between August 2003 and March 2008. I have attached to
18 this testimony Rebuttal Exhibit MAM-8, page 1 of 3 which graphically depicts
19 residential usage trends for the period chosen by Mr. Buckner, and indicated on
20 that schedule the data is not weather normalized. As shown on that schedule, this
21 information would indicate a trend of increasing usage for residential customers.
22

23 112. Q. WHY IS THE INFORMATION REFERENCED IN THE PREVIOUS
24 QUESTION NOT APPROPRIATE FOR USE IN ESTABLISHING THE
25 ATTRITION YEAR GOING LEVEL REVENUES IN THIS CASE?

26 A. I can best illustrate why this information is inappropriate for determining attrition
27 year going level revenues in this case by reviewing the information contained on
28 Rebuttal Exhibit MAM-8, page 2 of 3 and page 3 of 3. Page 2 of 3 is a table
29 developed from the National Oceanic and Atmospheric Administration ("NOAA"),
30 which ranks temperature and precipitation for the years 1998-2007 in relation to

⁷ TRA Order of June 10, 2008 in case number 06-00290, at V(a) Revenues, page 22.

1 the NOAA information obtained over the last 114 years. This schedule indicates
2 that 2007 was one of the 11 driest periods on record and one of the top 10 hottest
3 years on record; that 2006 was one of the 38 driest years on record and one of the
4 38 hottest years on record; that 2005 was one of the 11 wettest years on record
5 and one of the 38 hottest year on record; and that 2004 was one of the one of the
6 38 wettest years on record and one of the 10 coolest years on record.

7
8 I believe page 2 of 3 of Rebuttal Exhibit MAM-8 clearly shows Mr. Bucker's
9 trend and the graph on page 1 of 3 starts with a very wet, cool year and ends with
10 a very hot, dry year. There is no doubt that the trending/growth factor used by
11 CAPD witness Mr. Buckner is primarily driven by a relatively short sample of
12 weather.

13
14 113. Q. HAVE YOU ALSO LOOKED AT THE RESIDENTIAL CUSTOMER USAGE
15 PATTERNS OVER A LONG PERIOD?

16 A. Yes. That information is shown on Rebuttal Exhibit MAM-8, page 3 of 3. This
17 graph shows the residential usage pattern of TAWC from 1998-2007. The trend
18 developed from that information clearly shows the trend for residential usage (not
19 adjusted for weather) is down, not up as Mr. Buckner claims. It is of note that the
20 residential usage for 2007, a very hot and dry year, still did not reach the levels
21 experienced in any year prior to 2003. In my opinion, the trend line is being
22 driven by decreased usage patterns other than weather, such as efficient plumbing
23 devices and smaller family size. This information confirms what the water
24 industry has been experiencing nationally.

25
26 114. Q. DID MR. GORMAN ALSO ADDRESS ATTRITION YEAR GOING LEVEL
27 REVENUES?

28 A. Yes. Mr. Gorman based his recommendation for residential and commercial
29 attrition year customer usage on a simple average of the years 2005-2007 adjusted
30 for what he refers to as a "conservation adjustment." Mr. Gorman's simple
31 average does not account for the impact of weather at all prior to calculating the

1 averages. Therefore, his averages are influenced by the same weather factors
2 shown on Rebuttal Exhibit MAM-8, page 2 or 3, and they produce the same
3 illogical result as Mr. Buckner's trending/growth factor results. Again the
4 testimony of Mr. Gorman provides no evidence that would support the TRA
5 deviating from its long standing practice of establishing attrition year revenues as
6 reaffirmed in their Order in case number 06-00290.

7
8 115. Q. WHAT IS YOUR RECOMMENDATION FOR THE APPROPRIATE
9 ATTRITION YEAR GOING LEVEL REVENUES IN THIS CASE?

10
11 A. As outlined in this testimony and the testimony of Dr. Spitznagel, there is no
12 evidence presented by the intervenors in this case that would justify or support the
13 TRA to move from its long standing practice as reaffirmed in its June 10, 2008
14 Order in case number 06-00290 of recognizing a consistent normalized test-year,
15 including weather normalization, adjusted for known and measurable changes in
16 arriving at attrition year revenues should be modified in this proceeding. The
17 evidence, or lack thereof, by the intervenors in this case on weather normalization
18 and trending/growth factors does not lead to logical results. The only way the
19 Company could even remotely have an opportunity to achieve the going level
20 revenues proposed by the CAPD in this case would be that 2009 was an even
21 hotter, drier year than 2007, one of 3 or 4 highest drought index years per the
22 testimony of Dr. Spitznagel. The Company has calculated going level attrition
23 year revenues consistent with TRA practice as reaffirmed in its Order in case
24 number 06-00290, and there is no factual or logical testimony in this case that
25 would support deviation from the methods confirmed in that order. The
26 Company's going level revenues should be used for establishing fair and just rates
27 in this proceeding.

28
29
30 **UNACCOUNTED FOR WATER**
31

1 116. Q. DID THE CAPD AND MR. GORMAN MAKE ADJUSTMENTS TO
2 PRODUCTION COSTS BASED ON ADJUSTMENTS TO SYSTEM
3 DELIVERY FOR UNACCOUNTED WATER?
4 A. Yes. Both the CAPD and CMA proposed to reduce the system delivery on which
5 the Company based its production costs for the attrition year by capping
6 unaccounted for water at 15%.
7
8 117. Q. WHAT JUSTIFICATION DID THE MR. BUCKNER GIVE FOR CAPPING
9 UNACCOUNTED FOR WATER AT 15%?
10 A. He provided no justification other than to mention information from Mr. Watson's
11 appearance in the Company's 2006 rate case. The following rebuttal of Mr.
12 Gorman's testimony will show that the CAPD's adjustment is unsupported by
13 factual evidence.
14
15 118. Q. WHAT REASONS DID MR. GORMAN GIVE FOR CAPPING
16 UNACCOUNTED FOR WATER AT 15%.
17 A. On page 14 of his testimony, Mr. Gorman says TAWC's recorded 27.5% of lost
18 and unaccounted for water for the 12 months ending November 30, 2007. He then
19 indicates that factor is excessive, and recommends lost and unaccounted for water
20 factor be limited to 15% for the purpose of calculating chemical and fuel and
21 power expense. He references a document published by the American Water
22 Works Association, "Survey of State Agency Water Loss Reporting Practices"
23 ("AWWA Report") as support for his cap of 15%. On page 15, Mr. Gorman
24 provides reference to a document titled "Benchmarking Performance Indicators,
25 Distribution System Water Loss" ("Benchmarking Report") and then goes on to
26 say TAWC's use of a lost water factor of 27.5% would make it far and away one
27 of the worst operating systems in either survey.
28
29 119. Q. DO YOU HAVE COMMENTS ON THIS ASSERTION MADE BY MR.
30 GORMAN?

1 A. Yes. It is my belief that Mr. Gorman went to great lengths to make a point based
2 on a mathematical mistake.
3

4 120. Q. PLEASE EXPLAIN WHAT YOU MEAN.

5 A. I am providing Rebuttal Exhibit MAM-9 with this testimony which demonstrates
6 TAWC's actual unaccounted for water percentage per the definition provided in
7 the very Benchmarking Report he referenced as support for his position.
8

9 In Note 1 on Rebuttal Exhibit 9, I provide the definition on page 136 of the
10 AWWA Benchmarking Study. That definition states distribution loss
11 (unaccounted for water) % = system delivery – (water sales + volume unbilled but
12 unmetered [non-revenue]) / system delivery.
13

14 I have calculated the unaccounted for water % (as shown on line below the green
15 shading), per the AWW Benchmarking Definition. For the attrition year that
16 calculation produces a result of 19.97% for unaccounted for water, by dividing
17 unaccounted for water per AWWA definition of 3,657,447 by system delivery of
18 18,315,328. The unaccounted for water % for TAWC in the attrition year is
19 19.97%, not 27.5% as calculated by Mr. Gorman.
20

21 121. Q. HOW DID MR. GORMAN ARRIVE AT HIS 27.5% NUMBER?

22 A. Mr. Gorman used the total of unaccounted for water plus non-revenue water (the
23 AWWA definition specifically does not count non-revenue as unaccounted for
24 water) of 3,950,616 (shown in yellow highlight on Rebuttal Exhibit MAM-9) and
25 divided by water sales of 14,364,712 in arriving at his incorrect 27.5%. Mr.
26 Gorman's calculation is performed incorrectly according to the AWWA definition
27 because: (i) his percentage is stated as a percentage of water sales, not system
28 delivery, and (ii) he included in non-revenue in the unaccounted for water total.
29

1 122. Q. DO YOU HAVE ANY COMMENTS ABOUT THE MANNER IN WHICH MR.
2 GORMAN PORTRAYS THE UNACCOUNTED FOR "AWWA STUDY" AND
3 THE STANDARDS OF VARIOUS STATES?

4 A. Reading Mr. Gorman's testimony could mislead one into believing that any
5 unaccounted for water above the standards established by other regulatory
6 commissions should result in an immediate rate implication as recommended by
7 Mr. Gorman and Mr. Buckner.

8
9 One has only to read the AWWA Study to determine that is not the case. The
10 following are some of the comments in the AWWA study.

- 11 • Water accountability, however, is not a well defined discipline and the
12 methodologies used to quantify losses are varied and inconsistent. Lack of
13 standard terminology and measures are the center of the water loss
14 penumbra.⁸
- 15 • The measurement of unaccounted for water can be a source of confusion.
16 The confusion about the terms exacerbates the confusion about
17 standards.⁹
- 18 • Many system characteristics, such as size, age, service population density,
19 physical terrain, soil characteristics, and pipe materials will effect leakage
20 rates.¹⁰
- 21 • Whether a state or agency has a water loss policy is defined very liberally.
22 A water loss policy can thus range from one that simply encourages
23 utilities to reduce water losses to one that specifically defines water loss,
24 set standards, requires reporting, and enforces compliance.¹¹
- 25 • WV, OH, MA only require remediation plans.¹²

⁸ AWWA – Survey of State Agency Water Loss Reporting Practices, at page 3.

⁹ AWWA – Survey of State Agency Water Loss Reporting Practices, at page 4.

¹⁰ AWWA – Survey of State Agency Water Loss Reporting Practices, at page 4.

¹¹ AWWA – Survey of State Agency Water Loss Reporting Practices, at page 9.

¹² AWWA – Survey of State Agency Water Loss Reporting Practices, at pages 11 & 12.

- The table on page 13 references selected state standards, but on page 14 it describes them as target and goals.¹³
- On page 15 are the Texas Natural Resources Conservation Commissions requirements in their water loss plans.¹⁴ The Texas definition mirrors the efforts of TAWC in leak detection and water loss efforts, described by Mr. Watson in his testimony.

123. Q. WHAT DOES THE AWWA STUDY CONCLUDE?

A. The study concludes:

“The results of the Survey and analysis, summarized in Table 3, suggest that a fair amount of state and regional policy activity regarding the issue of water losses. However, the prevailing policies are not entirely clear, consistent, or operational. Most of the identified policies are raising much-needed awareness of the loss issue and promoting better accounting and reporting, but most do not necessarily impose consequences through incentive or enforcement mechanisms.

The findings confirm the need to refine the definitions, measures, and standards for evaluating water losses. A uniform approach, advanced and adopted by authoritative organizations in the water industry, could play a vital role in policy development. It is not uncommon for public policies to refer to authoritative sources with regard to technical standards, such as those that might be developed for water losses.

A precursor to further policy development is the establishment of a uniform system of water accounting and the collection of valid and reliable data on water losses. Better accounting will promote a common understanding of the water-loss issue, as well as appropriate benchmarks and standards. Eventually, best practices for water accounting and loss management may emerge and find reflection in water-loss policies, as future surveys might reveal.”¹⁵

¹³ AWWA – Survey of State Agency Water Loss Reporting Practices, at pages 13 & 14.

¹⁴ AWWA – Survey of State Agency Water Loss Reporting Practices, at page 15.

¹⁵ AWWA – Survey of State Agency Water Loss Reporting Practices, at page 27.

1 124. Q. WHAT IS YOUR RECOMMENDATION REGARDING UNACCOUNTED
2 FOR WATER IN THE ESTABLISHMENT OF CHEMICAL, FUEL, AND
3 POWER COSTS IN THE ATTRITION YEAR FOR THIS CASE?

4 A. Neither Mr. Gorman nor Mr. Buckner provided any evidence to support an
5 assertion that TAWC's unaccounted for water was excessive. In fact Mr.
6 Gorman's premise relied on a mathematical error. The AWWA Study does not
7 support (nor does it indicate any other state regulatory commission imposes)
8 adherence to an unaccounted for water standard to reduce recovery of expenses as
9 Mr. Buckner and Mr. Gorman attempt to impose in this case.

10
11 TAWC's unaccounted for water is not excessive, has been improving in the last
12 few years, and is lower in the attrition year than the historical test-year in this case
13 as shown on Rebuttal Exhibit MAM-9. Absent any credible evidence to the
14 contrary, I recommend that the TRA use TAWC's attrition year system delivery
15 to calculate chemical and fuel & power expense in this case.

16
17 **MANAGEMENT AUDIT AND MANAGEMENT FEES**

18
19 125. Q. DID THE COMPANY HAVE AN INDEPENDENT MANAGEMENT AUDIT
20 OF THE AMERICAN WATER WORKS SERVICE COMPANY PERFORMED
21 AS DIRECTED BY THE TRA IN CASE NUMBER 06-00290?

22 A. Yes. The management audit was performed by Booz Allen Hamilton and is
23 attached to the testimony of Joseph Van den Berg.

24
25 126. Q. DOES THE MANAGEMENT AUDIT MEET THE REQUIREMENTS OF THE
26 TRA ORDER?

27 A. Yes. In my opinion the management audit addresses the prudence of the costs
28 and the management decisions, and the reasonableness of the allocation of
29 AWWSC costs to TAWC. It is also my opinion that the management audit was
30 conducted in compliance with Sarbanes Oxley requirements.

1 127. Q. WHAT ROLE DID YOU PLAY IN SELECTING THE FIRM TO PERFORM
2 THE MANAGEMENT AUDIT?

3 A. After the 2006 case was over, I reviewed the motion of Director Miller with Mr.
4 Watson and several key employees at AWWSC. I drafted the RFP for the
5 management audit and explored what firms would be capable of performing such
6 a management audit. After consultation with Mr. Watson and a number of key
7 employees at AWWSC, I issued the RFP to a number of firms. After receiving
8 the response to the RFP, I talked with the respondents, along with several key
9 employees of AWWSC, to determine their availability, capabilities, credentials,
10 and understanding of the engagement. Then I, along with several key employees
11 of AWWSC, made the decision to engage BAH and Mr. Van den Berg to perform
12 the management audit of AWWSC on behalf of TAWC. I executed the
13 engagement letter and have approved the invoices from BAH.
14

15 128. Q. WHAT ROLE HAVE YOU HAD IN THE MANAGEMENT AUDIT
16 PREPARATION?

17 A. I worked with the BAH in developing the list of data that they asked to review for
18 the management audit and a potential list of key employees at both TAWC and
19 AWWSC they would interview regarding AWWSC. I coordinated those data
20 requests with a number of key AWWSC employees and assisted in establishing
21 the interviews. I also was interviewed by the BAH team concerning the structure
22 and workings of AWWSC. I reviewed all AWWSC data supplied to BAH, and
23 have had numerous conferences with the BAH team regarding the data they
24 received.
25

26 129. Q. WHAT UNDERSTANDING DID YOU HAVE ABOUT THE MANAGEMENT
27 AUDIT BEING COMPLIANT WITH SARBANES OXLEY REQUIREMENTS?

28 A. I knew from my Sarbanes Oxley training that to be compliant with the conflict of
29 interest provisions of Sarbanes Oxley, the Company's external, independent
30 financial auditors, PwC, could not perform the management audit. Accordingly, I
31 did not send the RFP to PwC. I also knew that the financial information for

1 AWWSC was an integral part of the consolidated financial statements of AWW,
2 which were the basis for the financial information provided to the SEC in AWW's
3 S-1 filing, and had been certified separately by PwC for the that purpose. The S-
4 1 provided management discussion of internal controls as required by Sarbanes
5 Oxley. The final S-1 filing also included the publicly issued financial statements
6 of AWW for the periods, 2005-2007 along with a discussion of internal controls,
7 and the representation of AWW's CEO and CFO that those financial statements in
8 all material ways represent the financial position of AWW. It is my
9 understanding and belief that the financial information supplied to BAH did and
10 continues to meet all requirements of Sarbanes Oxley applicable to AWW and
11 AWWSC, which is an integral part of the consolidated financial statement of
12 AWW. Mark Manner also addresses the Sarbanes Oxley requirements in his
13 rebuttal testimony.

14
15 130. Q. DID MR. BUCKNER ADDRESS THE MANAGEMENT AUDIT IN HIS
16 TESTIMONY?

17 A. Yes, but only as it applies to the recovery of the cost of the management audit as a
18 deferred regulatory asset, including the amortizations. I fully addressed the
19 claims made by Mr. Buckner earlier in this testimony regarding Working Capital
20 in response to question 93. I will not repeat my rebuttal of Mr. Buckner's
21 position here.

22
23 131. Q. DO YOU HAVE COMMENTS ABOUT MR. MAJOROS' TESTIMONY
24 CONCERNING THE MANAGEMENT AUDIT?

25 A. Yes. Mr. Majoros claims the management audit is not a management audit and
26 not Sarbanes Oxley compliant. Mr. Manner and Mr. Van den Berg will address
27 these claims in their rebuttal. I believe the management audit is in compliance
28 with Sarbanes Oxley as stated in the answer to question 127. I would like to
29 address Mr. Majoros' recommendation that all management fees should be
30 disallowed for rate recovery. This is an absurd position. The services provided
31 by AWWSC are integral to providing service to the customers of TAWC. TAWC

1 does not have qualified employees to perform the functions currently provided by
2 AWWSC. Who would answer the customer's calls, who would issue and collect
3 the bills, who would do the accounting, who would do the water quality testing,
4 who would obtain the debt financings, who would do the engineering, and who
5 would file the petitions to seek rate relief when required? If TAWC does not
6 recover the cost of providing those services how can TAWC pay for those
7 services critical to providing water service to the customers? TAWC would have
8 not choice but to attempt to hire the employees locally or from a third party
9 provider. TAWC and the other AWW regulated subsidiaries have consistently
10 been able to demonstrate to the regulatory commissions in every state where
11 AWW operates that receiving those services from AWWSC is the least cost
12 option. The management audit concludes those costs are incurred based upon
13 prudent management decisions, allocated to TAWC in a reasonable manner, and
14 are priced extremely competitively when compared to other utilities who provide
15 similar services through a service or management company agreement.

16
17 132. Q. DOES MR. BUCKNER ADDRESS THE LEVEL OF MANAGEMENT FEE
18 EXPENSES?

19 A. Yes. He addresses management fees beginning on page 46 of his testimony.
20

21 133. Q. HOW DID MR. BUCKNER ARRIVE AT HIS RECOMMENDATION FOR
22 MANAGEMENT FEE EXPENSE FOR THE ATTRITION YEAR IN THIS
23 CASE?

24 A. He determined management fee expense for the attrition year in the same manner
25 he calculated management fee expense in case number 06-00290. He started with
26 a base management fee expense approved in case number 04-00288 and simple
27 used an inflation factor to trend the 2005 level to the attrition year in this case.
28 Amazingly, Mr. Buckner's recommendation for management fees in this case is
29 \$3,453,223, which is \$526,602 less than the \$3,979,825 the TRA approved in case
30 number 06-00290.
31

1 134. Q. DID THE TRA ACCEPT MR. BUCKNER'S METHODS FOR DETERMINING
2 MANAGEMENT FEES IN CASE NUMBER 06-00290?

3 A. No. The TRA said, "After review of the record, the panel concluded that the
4 Management Fee booked for the twelve months ended June 30, 2006, as adjusted
5 for: (1) non-recurring items, and (2) the annual growth factor proposed by the
6 CAPD of 3.745% compounded for 20 months."¹⁶

7
8 135. Q. HOW DID THE COMPANY CALCULATE ITS MANAGEMENT FEES FOR
9 THE ATTRITION YEAR IN THIS CASE?

10 A. Consistent with the method approved by the TRA in its Order in case number 06-
11 00290, the Company started with actual management fees for its historical test-
12 year ended November 2007, normalized that year by eliminating all non-recurring
13 items, to reflect ERISA pension expense per the latest Actuarial Report of
14 Towers Perrin per the directive of the TRA in case number 06-00290,¹⁷ and
15 eliminated one non revenue water supervisor who was transferred to the payroll of
16 TAWC. The company then applied a compounded inflation factor of 3.5%
17 through the attrition year.

18
19 136. Q. WHAT ARE THE PROBLEMS WITH MR. BUCKNER'S APPROACH?

20 A. The Company can find no plausible or justifiable reason that Mr. Buckner could
21 continue to claim the Company should be limited to the management fee level
22 from case number 04-00288. Among other faults, it is unreasonable that he does
23 not at least use the latest management fees number of \$3,979,825 approved by the
24 TRA in case number 06-00290 on which to start his inflation adjustment.
25 Certainly Mr. Buckner recognizes that the TRA has the ultimate authority to
26 determine appropriate expense levels in setting just and reasonable rates for
27 TAWC. But the TRA did not say future expenses would be set at the level
28 approved in TAWC's last case plus inflation. It said a uniform, normalized test-
29 year should be the basis for applying the inflation factor in arriving at the attrition

¹⁶ TRA Order in case number 06-00290, at paragraph V(b)7, page 26.

¹⁷ TRA Order in case number 06-00290, at paragraph V(b)9, page 28.

1 year expense levels, which is exactly what the Company did. Mr. Buckner
2 continues to cling to the belief that the only acceptable answer is to limit
3 management fees to a base period expense (established nearly five years ago) plus
4 inflation, even in the presence of clear language from the TRA that his method is
5 not appropriate.
6

7 137. Q. ARE THERE OTHER PROBLEMS WITH MR. BUCKNER'S APPROACH?

8 A. Yes. Mr. Buckner's approach does not properly match revenue and expenses, and
9 it ignores known and measurable changes. Mr. Buckner doesn't give any mention
10 or justification for ignoring known and measurable changes impacting
11 management fees, such as:

- 12 • That ERISA pension cost, OPEB's, and medical insurance cost have
13 significantly exceeded the rate of inflation.
- 14 • That reorganization shifted function and costs to AWWSC, but were offset
15 by reductions in TAWC labor and benefits costs.

16 The Company believes these cost increases are known and measurable; in fact
17 they have been embedded in test-year expenses since case number 04-00288 and
18 recognized for rate recovery by the TRA.
19

20 138. Q. ON PAGE 48 OF HIS TESTIMONY MR. BUCKNER INDICATES THERE
21 HAVE BEEN NO OFFSETS TO THE INCREASE IN MANAGEMENT FEES
22 IN THE OTHER COSTS AT TAWC. WOULD YOU COMMENT ON THIS?

23 A. Mr. Buckner is just wrong about this. The Company demonstrated those offsets
24 in case number 06-00290. Those offsets still exist today and the attrition year
25 expenses requested by the Company in this case reflect them.
26
27

28 139. Q. WHAT HAS DRIVEN THOSE OFFSETS TO INCREASED MANAGEMENT
29 FEES?

30 A. As I demonstrated in case number 06-00290, TAWC had undergone a
31 reorganization whereby FTE's were shifted to the Regional Service Company.

1 The Company was able to demonstrate that these reorganization efforts resulted in
2 improved service by TAWC and cost savings.

3
4 140. Q. ARE THOSE SAME OFFSETS PRESENT IN THE COMPANY'S FILING IN
5 THIS CASE?

6 A. Yes. I have attached to this testimony schedules that I believe clearly demonstrate
7 the shift between fully loaded TAWC labor and management fees, and
8 demonstrate how unreasonable the recommendation of the CAPD is in this case.
9 The schedules are identified as Rebuttal Exhibit MAM-10.

10
11 In order to properly determine a shift in FTE's between TAWC and AWWSC, the
12 analysis must compare fully loaded costs at TAWC to management fees because,
13 as prescribed in the "1989 Service Company Agreement" between TAWC and
14 AWWSC, management fees include labor and all overheads. I have captured this
15 comparison on Rebuttal Exhibit MAM-10. I started my analysis with the level of
16 fully loaded labor costs included in TAWC case 03-00118, because that period
17 reflects the costs TAWC experienced prior to the reorganization that transpired
18 from 2003 to 2006. The costs for TAWC's fully loaded labor plus management
19 fees from case number 03-00118 are shown on page one of Rebuttal Exhibit
20 MAM-10, Page 1 of 2 under the column identified as (1). To determine a
21 reasonable expectation of what the total of fully loaded TAWC labor costs plus
22 management fees would be in 2009 (the attrition year in this case), if no
23 reorganization had occurred, I determined actual cost increase ratios for TAWC in
24 each of the categories of expense. The calculations of these cost increase ratios
25 are provided on page 2 of 2 of the Exhibit.

26
27 The next step in my analysis was to inflate (or deflate as the case may be) the
28 costs shown on page 1 of 2, column (1) (the costs included case number 03-
29 00118) for those cost increase ratios shown at the bottom of page 2 of 2 of the
30 Exhibit. The result of this analysis produces \$12,295,737 for the combination of

1 TAWC fully loaded labor cost plus management fees, as shown in column (7) on
2 page 1 of 2 of the Exhibit.

3
4 In column (8) I show the various categories of expenses that TAWC included in
5 the attrition year of this filing. Those expenses total \$12,269,835 and are within
6 \$25,902 of the total in column (7), a variance of less than 0.2%. Column (9) of
7 page 1 of 2 on the Exhibit demonstrates the shift (or offset) to management fees
8 as a result of the reorganizations. The 2009 TAWC fully loaded labor costs as
9 determined using the costs included in TAWC case 03-00118 (the period prior to
10 reorganization) is \$1,265,645 less than the fully loaded costs included for those
11 expense categories included in the attrition year of TAWC's filing in this case,
12 which offsets the increase in management fees of \$1,239,713.

13
14 141. Q. DOES THIS INFORMATION CONTRADICT THE CLAIM OF MR.
15 BUCKNER THAT NO OFFSET EXISTS TO THE INCREASE IN
16 MANAGEMENT FEES?

17 A. Yes. It clearly demonstrates that Mr. Buckner's claim on page 48 of his
18 testimony that "there is no offset anywhere in TAWC's forecast to account for the
19 dramatic rise in management fees," is without merit. This schedule also discredits
20 that Mr. Buckner's claim that, "Contrary to TAWC's position, their forecasted
21 management fees did not provide a more cost effective operation." On page 49 he
22 claims, "TAWC's level of management fees is simply not just and reasonable for
23 the rate payers."

24
25 142. Q. DO YOU HAVE OTHER COMMENTS ABOUT MR. BUCKNER'S
26 REMARKS CONCERNING MANAGEMENT FEES?

27 A. Yes. Mr. Buckner indicates his examination of employee expenses within
28 management fees include contributions, professional sporting events, alcoholic
29 beverages and the frequent use of limousines. He bases this comment on data
30 supplied in the Company's response to CAPD-01-Part IV, #43. That response
31 included "p-card" expense charges for AWWSC employees whose expenses had

1 been allocated to TAWC by vendor, amount allocated to TAWC and employee
2 name. Mr. Buckner made the statement without any reference to the level of
3 expense he placed in each of those categories. I would also point out that the
4 information requested by the CAPD and supplied by the Company covered the
5 period from January 2006 to March 2008. Mr. Buckner supplied a list of those
6 expenses in response to the TRA discovery request to the CAPD, Q5, but it was
7 for the entire period covered by the Company's response--much of which was
8 outside the test-year for this case.

9
10 It is of note that Mr. Buckner based his claims only on the name of the vendor,
11 making the assumption, without any knowledge of the business purpose, that
12 these charges were inappropriate. Mr. Buckner does not take into account the
13 comparatively miniscule total amount of the charges he deems suspect.

14
15 It is also interesting to me that Mr. Buckner made no effort to determine though
16 the second round of discovery if any of those expenses had a legitimate business
17 purpose, or to recommend the elimination of some dollar amount associated with
18 those types of expenses from the Company's management fee expense in this
19 case. For instance, if the vendor name contained "limo" or "limousine service" he
20 evidently assumed that the AWWSC employees were riding around in stretch
21 limousines. In response to the Company's discovery request to the CAPD, Q9,
22 Mr. Buckner provided a multitude of web page print-outs for limo services, hotels,
23 and restaurant menus. It appears that Mr. Buckner provided this type information
24 for whatever public relations value he believes it has.

25
26 143. Q. AFTER SEEING MR. BUCKNER'S COMMENTS DID YOU UNDERTAKE
27 AN ANALYSIS OF THE TYPE OF EMPLOYEE EXPENSES MENTIONED IN
28 HIS TESTIMONY?

29 A. Yes.

30
31 144. Q. WHAT DID YOU FIND?

1 A. I limit my comments to expenses included in the test-year in this case. I
2 broadened the scope of my search of the various charges to capture all possible
3 expense types mentioned by Mr. Buckner. For instance, without looking at
4 business purpose, my search included any vendor with the words "limo" or
5 "limousine", "liquor", or "alcohol" in the name. This search determined the
6 following amounts were charged to TAWC in the test-year for this case, the 12
7 months ending November 30, 2007.

8	• Limo or limousine service	\$ 378.89
9	• Alcohol or liquor	\$ 40.89
10	• Sporting events	\$1,177.64
11	• Resorts or Resort Hotels	<u>\$1,970.81</u>
12	<u>Total</u>	<u>\$3,568.23</u>

13
14 This amount represents 0.08% of the total management fees requested in this case.

15
16 After the initial search was performed I looked at the business purpose for those
17 expenses and the type of service provided to AWWSC employees. For instance, I
18 looked at all charges paid to Champagne Limo Service, one of the web pages
19 supplied by Mr. Buckner, which lists services such as various stretch limos, Rolls
20 Royce cars, etc. Also listed on the web page is car and van service to the St.
21 Louis airport. Upon further review I found that the employees at the Alton Call
22 Center use Champagne Limousines shuttle service when they make trips to the
23 operating companies, to attend business meetings, etc. I also found the same type
24 of airport shuttle for other vendors whose name happened to include the word
25 limo or limousine. The Company will not contest that the \$40.89 for alcohol or
26 liquor is not service-related (although those charges related to receptions for
27 retiring employees, business meetings, AWWA receptions, etc.). I also found that
28 the sporting events were part of employee recognition programs where employees
29 of the month or employees who showed exception commitment or work were
30 awarded a trip to the ball park. In the resorts and resort category, I found business

1 purposes such as NARUC meetings, AWWA conferences, League of City
2 Conferences, etc.
3

4 145. Q. CAN YOU SUM UP YOUR DISCUSSION ON THE REMARKS BY MR.
5 BUCKNER IN THIS AREA?

6 A. Yes. The p-card expense approval process at AWW and its subsidiaries,
7 including AWWSC, includes providing copies of receipts and business purpose to
8 each employee's supervisor who approves the charge before it is paid by accounts
9 payable. I do this for each of the employees who work for me, and I provide my
10 information to my boss. This is being done across the American Water system
11 because it is a key SOX control.
12

13 **RATE CASE EXPENSE**
14

15 146. Q. WHAT LEVEL OF RATE CASE EXPENSE DID THE COMPANY REQUEST
16 IN THIS CASE?

17 A. The calculation of the Company's rate case expense was provided in the
18 Company's workpapers attached to its response to the discovery request TRA-01-
19 Q13 – MISC EXPENSES page 15 of 15. The Company included an estimate of
20 \$550,000 for the cost of this case, and requested a 3 year amortization. The
21 Company included the unamortized balance of the actual cost of its 2006 rate case
22 at the beginning of the attrition year of \$605,441 and requested this balance be
23 amortized over the remaining 21 months approved by the TRA. The Company
24 included an estimate of the cost of service study for this case of \$16,000 to be
25 amortized over 5 years, and \$30,000 estimated for the depreciation study filed in
26 this case to be amortized over 5 years. The total of the amortization of these costs
27 in the attrition year, plus the previously approved amortization of the cost of the
28 06-00290 case equaled a requested total amortization of rate case expense of
29 \$543,384. It is important to note that the Company absorbed the increased
30 amortization related to the actual cost of the 2006 rate case for 15 months, equal
31 to \$272,000 above the level recovered in current rates.

1
2 147. Q. WHAT DID THE CAPD AND CMA WITNESSES RECOMMEND?

3 A. Both Mr. Gorman and Mr. Buckner recommend that the amortization of the cost
4 of the 2006 rate case be limited to the estimated cost of \$400,000 included in the
5 Company's 2006 rate filing.
6

7 148. Q. WHAT WAS THE FINAL ACTUAL COST OF THE 2006 RATE CASE?

8 A. The final actual cost for that case was \$1,037,933.
9

10 149. Q. WHAT DROVE THE COST OF THAT CASE ABOVE THE ESTIMATED
11 USED BY THE COMPANY IN ITS FILING?

12 A. The Company based its estimate on the cost of a normal rate case. However, the
13 2006 rate case was not a normal rate case. The Company believes the final cost
14 of that case was driven by the actions of the intervenors. The Company believes
15 intervenors' excessive discovery (much of which related to the IPO and
16 information for the creation of multiple test years), motions to compel, late-filed
17 supplemental testimony, disputes over the Company's attempts to protect highly
18 sensitive data, and the increased cost of moving the hearing to Chattanooga at the
19 City's request, drove the cost of the case.
20

21 The late filed supplemental testimony of the CAPD alone lead to additional
22 hearings, the hiring of another expert witness, and additional depositions. This
23 process alone cost the Company over \$50,000.
24

25 One of the most notable aspects of this process was that the TRA upheld the
26 Company's position on almost every major contested area of the filing with the
27 exception of pension expense: (i) management fees, (ii) test-years, (iii) parent
28 capital structure, (ii) ECIS, (iv) going level revenues, (v) employee levels, and
29 (vi) property taxes. The TRA authorized a rate increase of \$4.079 million,
30 compared to the CAPD's unrealistic recommendation of a reduction of over \$2.0
31 million. Even more notable is that little of the massive amount of information

1 provided on management fees and the IPO was even used at the hearing. In fact,
2 the City's witness on management fees admitted from the witness stand that he
3 had not reviewed that large amount of information produced by the Company
4 concerning management fees in response to the City's massive discovery
5 requests.

6
7 As further information about drivers of the rate case cost by the intervenors, the
8 following is a recap of discovery requests and motions by the intervening parties
9 compared to previous TAWC rate cases.

	<u>03 Case</u>	<u>06 Case</u>	<u>08 Case</u>
• Discovery requests	223	274	454

10
11
12
13
14 150. Q. WILL THE COST OF THE CURRENT CASE EXCEED THE \$550,000
15 ESTIMATE?

16 A. I am confident it will by a substantial amount. The reasons are the same as in the
17 2006 case. In addition, the CAPD inserted a new issue by contracting with a
18 consultant that had an obvious conflict of interest with the Company. It appears
19 that the City is attempting to insert issues into this case which have no bearing on
20 the high levels of service or the cost of service issues that should be the only
21 inquiry in this rate case.

22
23 151. Q. WHAT HAS THE COMPANY DONE REGARDING THE ISSUES PUT
24 BEFORE THEM IN THIS RATE CASE AND THE PREVIOUS RATE CASE?

25 A. The Company believes it has attempted to be responsive to the intervening
26 party's requests, to the extent those requests were reasonable, but has had to
27 choose but to defend its positions and AWW and TAWC's reputation and
28 credibility in the face of an attack from all fronts in this case. The intervenors
29 drive the cost of the case up by their own actions and then call into question
30 TAWC's cost to process the case. The intervenors then claim the investors in
31 TAWC should be required to absorb the cost driven by the intervenors' actions.

1
2 152. Q. WHAT DO YOU RECOMMEND REGARDING RATE RECOVERY OF RATE
3 CASE EXPENSE IN THIS CASE?

4 A. The Company is fully aware that the cost of this case and the last case are higher
5 than they would be for a normal contested rate case. The
6 Company also knows this case and the previous case are not normal. The
7 Company does not believe it fair and reasonable that TAWC's investors be asked
8 to bear the entire increased cost of processing rate cases when that cost is being
9 driven by the intervenors' actions in this case and the previous case. The
10 Company believes it should recover the amortization of its rate case expense as
11 requested in this case based on the rebuttal testimony provided herein.

12
13 However, the Company is willing to offer a compromise position for the TRA to
14 consider if chooses to disagree with the Company's position on this matter. The
15 Company would suggest an amortization of the unamortized actual cost of the
16 2006 rate case of \$605,461 and a revised estimate for the cost of this case of
17 \$1,000,000 over a five year period. If the TRA were to adopt this position, the
18 Company would also suggest that the unamortized balance of rate case expense of
19 \$1,020,269 be eliminated from the Company's working capital. This would cause
20 the TAWC investors to share in the cost of processing this case and the 2006 rate
21 case. The Company would also ask the TRA to consider, if it is inclined to use
22 this compromise position, that it be made clear in its order that this treatment is
23 non precedent-setting for the cost of future rate cases.

24
25 **DEFERRED INCOME TAX EXPENSE**
26

27 153. Q. PLEASE DESCRIBE HOW THE COMPANY DETERMINED THE
28 DEFERRED INCOME TAX EXPENSE FOR THE ATTRITION YEAR?

29 A. The Company determined both its accumulated deferred income tax and its
30 deferred income tax expense as prescribed by FAS 109. FAS 109 requires that
31 accumulated deferred income tax liability be recorded gross. FAS 109 also

1 requires that regulatory assets be established for the portion of deferred income
2 taxes that will be recovered in future rates once the assets reach the end of their
3 tax life, and the deferred income tax reverses over the remaining book life of
4 those assets (in the case of mains, for instance, the tax life is 25 years, and the
5 book life is 71 years).

6
7 154. Q. DID MR. BUCKNER TAKE THE FAS 109 IMPACTS INTO ACCOUNT IN
8 HIS DEFERRED INCOME TAX CALCULATIONS?

9 A. No, he did not.. He limited deferred income tax expense to the statutory tax rates
10 applied to current year timing differences (FIT schedule M items) between tax
11 and book basis. His approach does not consider the FAS 109 turn around of
12 previous years accumulated tax items that have never been recovered in rates.

13
14 155. Q. WHAT PROBLEMS DOES MR. BUCKNER'S APPROACH CREATE?

15 A. This is a very important issue for the Company because it has very negative
16 complications associated with it, if Mr. Buckner's approach is used. The first
17 problem is that Mr. Buckner's approach is a violation of the IRS normalization
18 rules regarding rate recovery of the tax benefit created by IRS accelerated
19 depreciation regulation. Normalization rules do not permit the tax benefit of the
20 accelerated depreciation to flow through to the rate payers, but those benefits
21 should be provided over the book life of the property.

22
23 Mr. Buckner's approach only considers one side of the equation. Under the FAS
24 109 approach used by the Company, the rate base reduction for accumulated
25 deferred income taxes is higher than it should be under Mr. Buckner's non-FAS
26 109 approach. Mr. Buckner does not adjust the Company's FAS 109 determined
27 accumulated deferred income tax rate base reduction to reflect the lower deferred
28 income tax expenses generated under his approach. This results in Mr. Buckner's
29 approach understating the revenue requirement associated with the Company's
30 deferred income tax accounting under FAS 109.

1 156. Q. WHAT WOULD BE THE IMPACT TO THE COMPANY IF MR. BUCKNER'S
2 APPROACH TO DEFERRED INCOME TAX EXPENSE IS ACCEPTED
3 WITHOUT MODIFICATION?

4 A. I have attached Rebuttal Exhibit MAM-11 to assist in providing the answer to this
5 question. The Company must be able to demonstrate to its outside financial
6 auditors that it is recovering in rates the amortization of the FAS 109 regulatory
7 assets. If the Company cannot demonstrate that by the Order in this case or the
8 positions of the parties if settlement were to be reached, the Company would have
9 to write-off the FAS 109 regulatory assets recorded on its books. As shown on
10 Rebuttal Exhibit MAM-11, that write-off would be \$9,160,322. This would have
11 a very negative impact on the Company, and ultimately on the ratepayers.
12

13 157 Q. HOW WOULD THIS IMPACT THE RATEPAYERS?

14 A. The Company would have to recalculate its accumulated deferred income taxes
15 for regulatory accounting purposes on a non-FAS 109 basis. This would lead to a
16 lower accumulated deferred income tax rate base reduction for filing rate cases
17 and a higher rate base. The higher rate base then will result in higher rates to the
18 customers over the book life of the property.
19

20 158. Q. WHAT IS THE COMPANY'S RECOMMENDATION ON THIS ISSUE?

21 A. It is not fair and reasonable to set rates in this case using Mr. Buckner's non-FAS
22 109 deferred income tax expense, and at the same time leave the rate base
23 reduction for accumulated deferred income taxes at the higher FAS 109 level.

24 The Company believes its FAS 109 approach used to determine deferred
25 income tax expense and accumulated deferred income taxes in this case properly
26 match the revenues and expenses in the attrition year. Mr. Buckner's approach
27 only takes into consideration the deferred income tax expense in the non-FAS 109
28 approach and also provides the benefit to the customers of the higher rate base
29 reduction under the FAS 109 approach. Mr. Buckner's method does not meet the
30 matching principal of properly matching revenues and expenses in this case. The

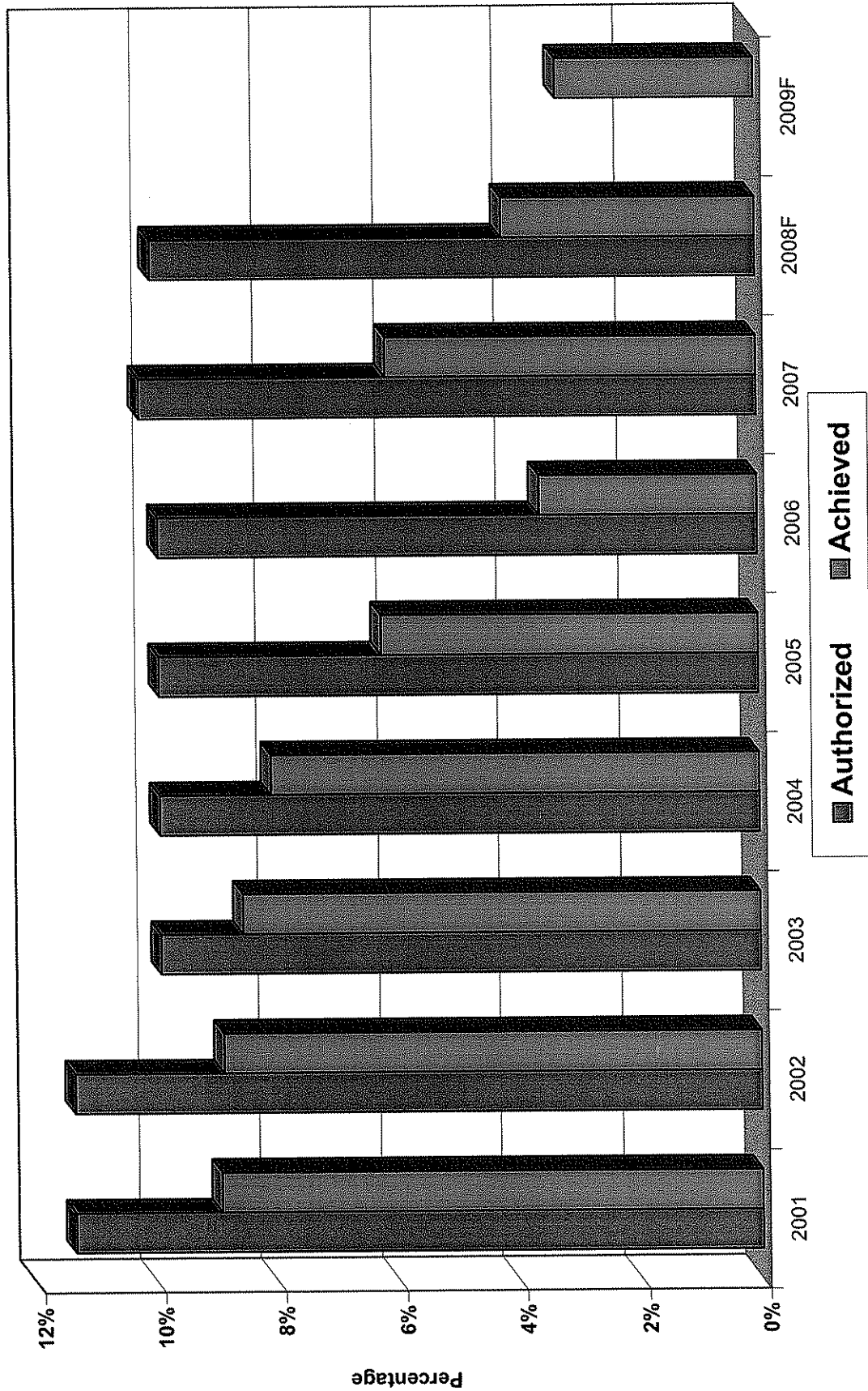
1 Company believes that the TRA should adopt its FAS 109 determinations of
2 deferred income tax expense and accumulated deferred income taxes.

3
4 159. Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

5 A. Yes.

6
7
8
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10 |
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15 6955676.2

Tennessee American Water Company Return on Stockholders Investment



**Tennessee American Water Company
Return on Stockholders Investment
and Comparison to ROE in Surrounding States**

(in Thousands)	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008F</u>	<u>2009F</u>
<u>Tennessee American:</u>									
Net Income Available to Stockholders	3,131	3,177	3,162	3,040	2,340	1,485	2,614	2,108	1,793
Common Equity	35,096	35,823	37,061	37,737	37,589	41,466	42,704	50,622	55,011
Achieved Return to Stockholders	8.92%	8.87%	8.53%	8.06%	6.23%	3.58%	6.12%	4.16%	3.26%
Authorized by TN TRA	11.35%	11.35%	9.90%	9.90%	9.90%	9.90%	10.20%	10.00%	
Over/(Under) Achieved Authorized ROE	-2.43%	-2.48%	-1.37%	-1.84%	-3.67%	-6.32%	-4.08%	-5.84%	

**TAWC Analysis of Capital Structure's
Rebuttal of Mr. Gorman**

	<u>Amount</u>	<u>% of Total</u>	<u>CMA Cost Rate</u>	<u>WACC</u>
Per Filing:				
(000 Omitted)				
TAWC's Total Capital	119,552	100.00%		
External TAWC Debt:				
9.25% Series	2,500	2.09%	9.25%	2.62%
7.84% Series	5,700	4.77%	7.84%	5.06%
9.489% Series	632	0.53%	9.49%	0.68%
Total	8,832	7.39%		8.36%
Internal Financing	110,720	92.61%		
Parent*				
LT Debt	4,756,799	65.77%	6.26%	4.12%
ST Debt	368,137	5.09%	3.25%	0.17%
Preferred Stock	4,568	0.06%	5.00%	0.00%
Common Stock	2,102,471	29.07%	10.20%	2.97%
Total	7,231,975	100.00%		7.25%
TAWC				
TAWC financing	8,832	7.39%	8.36%	0.62%
Parent Financing	110,720	92.61%	7.25%	6.71%
Total	119,552	100.00%		7.33%

Mr. Gorman claims a portion the Parent's Equity is not available to invest in the Equity of the Subsidiaries. The Company would also claim that if that is the approach Mr. Gorman supports that the TRA should also eliminate the Subsidiary Debt included in Mr. Gorman's proposed capital structure since that capital is certainly not available for reinvestment in the equity of those same AWW Subsidiaries.

**Gorman Capital Structure Amended to Exclude Subsidiary Debt:
(000 omitted)**

	<u>Amount</u>	<u>CMA Eliminate Sub. Capital (See Note 1)</u>	<u>Revised Amount</u>	<u>% of Total</u>	<u>Cost Rate</u>	<u>WACC</u>
TAWC's Total Capital	119,552			100.00%		
External TAWC Debt:						
9.25% Series	2,500			2.09%	9.25%	2.62%
7.84% Series	5,700			4.77%	7.84%	5.06%
9.489% Series	632			0.53%	9.49%	0.68%
Total	8,832			7.39%		8.36%
Internal Financing	110,720			92.61%		
Parent*						
LT Debt	4,732,503	(3,550,217)	1,182,286	35.84%	6.26%	2.24%
ST Debt	368,137	(353,779)	14,358	0.44%	3.25%	0.01%
Preferred Stock	28,864	(28,864)	0	0.00%	5.00%	0.00%
Common Stock	2,102,471	0	2,102,471	63.73%	10.20%	6.50%
Total	7,231,975	(3,932,860)	3,299,115	100.00%		8.76%
TAWC						
TAWC financing	8,832,018			7.39%	8.36%	0.62%
Parent Financing	110,719,989			92.61%	8.76%	8.11%
Total	119,552,007			100.00%		8.73%

Note: Calculation for elimination of subsidiary capital using March 2008 AWW 10Q for AWW Capital Structure and response to TRA-01-66 (Second Supplemental).

	<u>AWW Par. Co. Stand Alone</u>	<u>AWW Cap. Str Consolidated @ 3-31-08</u>	<u>Cap. Str. Per Response to TRA-01-Q66</u>	<u>Debt & Pref. Stock of Subs Difference</u>
Long-term Debt	4,732,503	1,182,286	3,550,217	
Short-term Debt	368,137	14,358	353,779	
Preferred Stock	28,864	0	28,864	
Common Equity	3,809,423	3,809,423	0	
Total	8,938,927	5,006,067		

**TAWC Analysis of Capital Structure's
Rebuttal of Dr. Brown**

	<u>Amount</u>	<u>% of Total</u>	<u>CAPD</u> <u>Cost Rate</u>	<u>WACC</u>
Per Filing:				
(000 Omitted)				
TAWC's Total Capital	119,552	100.00%		
External TAWC Debt:				
9.25% Series	2,500	2.09%	9.30%	2.55%
7.84% Series	5,700	4.77%	7.80%	4.88%
9.489% Series	902	0.75%	9.80%	0.97%
Total	9,102	7.61%		8.41%
Internal Financing	110,450	92.40%		
Parent*				
LT Debt		55.10%	5.86%	3.23%
ST Debt		1.90%	2.87%	0.05%
Preferred Stock		0.00%	0.00%	0.00%
Common Stock		43.00%	7.50%	3.23%
Total		100.00%		6.51%
TAWC				
TAWC financing	9,102	7.61%	8.41%	0.64%
Parent Financing	110,450	92.39%	6.51%	6.01%
Total	119,552	100.00%		6.65%

Dr. Brown claims to have based his Parent Capital Structure on the information contained in the 10Q of AWW as of 3/31/08, adjusted for what he incorrectly calls off book transactions. While I can find no reference to the \$200 million which Dr. Brown bases his adjustments, I do find on page 9 of the 10Q reference to an equity infusion by RWE on May 13, 2008 of \$245 million. This equity infusion was required by conditions placed upon RWE in the Divestiture Cases in several states to maintain an equity ratio of 45%. Prior to the 10Q being filed on Mayh 14, 2008 with the SEC, RWE made the equity infusion in order to comply with the conditions in the Divestiture Case. The Capital Structure below reflects the actual 10Q capital structure for AWW as adjusted correctly for the equity infusion.

Dr. Brown's Capital Structure Amended to Reflect AWW 10Q as discussed above:
(000 omitted)

	<u>Amount</u>	<u>CAPD</u> <u>Properly</u> <u>Reflect RWE</u> <u>Equity Infusion</u>	<u>Revised</u> <u>Amount</u>	<u>% of Total</u>	<u>Cost Rate</u>	<u>WACC</u>
TAWC's Total Capital	119,552			100.00%		
External TAWC Debt:						
9.25% Series	2,500			2.09%	9.25%	2.54%
7.84% Series	5,700			4.77%	7.84%	4.91%
9.489% Series	902			0.75%	9.49%	0.94%
Total	9,102			7.61%		8.39%
Internal Financing	110,720			92.61%		
Parent*						
LT Debt	4,732,503	0	4,732,503	52.94%	5.86%	3.10%
ST Debt	368,137	(245,000)	123,137	1.38%	2.87%	0.04%
Preferred Stock	28,864	0	28,864	0.32%	5.00%	0.02%
Common Stock	3,809,423	245,000	4,054,423	45.36%	7.50%	3.40%
Total	8,938,927	0	8,938,927	100.00%		6.56%
TAWC						
TAWC financing	8,832			7.39%	8.39%	0.62%
Parent Financing	110,720			92.61%	6.56%	6.08%
Total	119,552			100.00%		6.70%

**Tennessee American Water Company
Embedded Cost of LT Debt for AWW - Parent Stand-alone
At 12-31-2007**

Portfolio Name	Issuance	Maturity	Int Rate	Original Amount	Ending Amount	Annual Issuance Expense	Annual Int Exp	Annual Debt Expense	Unamortized Debt Expense	Carrying Value	Embedded Cost Rate
American Water Works Company	10/22/2007	10/15/2037	6.59	302,750,000	302,750,000	209,328	19,951,225	20,160,553	6,209,855	296,540,145	
	10/22/2007	10/15/2017	6.09	750,000,000	750,000,000	81,888	45,675,000	45,756,888	805,426	749,194,574	
	3/29/2007	3/29/2019	5.62	40,000,000	40,000,000	10,882	2,248,000	2,258,882	122,427	39,877,573	
	1/31/2007	12/21/2013	5.39	1,000,000	1,000,000	482	53,900	54,382	2,997,107		
	2/15/2007	12/21/2021	5.77	4,000,000	4,000,000	894	230,800	231,694	12,522	3,987,478	
	1/31/2007	12/21/2018	5.62	500,000	500,000	139	28,100	28,239	1,532	498,468	
	12/21/2006	12/21/2021	5.77	66,000,000	66,000,000	14,597	3,808,200	3,822,797	204,355	65,795,645	
12/9/2005	3/29/2011	6.87	30,000,000	24,000,000	0	1,648,800	1,648,800	0	24,000,000		
American Water Works Company Total				1,194,250,000	1,188,250,000	318,211	73,644,025	73,962,236	7,359,010	1,180,890,990	6.26%

**Tennessee American Water Company
Calculation of Short-term Interest Rate
Based on 5 Months ending June 2008**

	Weighted Monthly Avg. ST Debt <u>Interest Rate</u>	Avg. Fed Funds Rate for the <u>Month</u>	<u>Avg. Spread</u>
June	3.04%	2.00%	1.04%
May	3.28%	2.00%	1.28%
April	3.22%	2.25%	0.97%
March	3.48%	2.63%	0.85%
February	4.12%	3.00%	<u>1.12%</u>
Quarterly Average Spread			1.05%
Forecast of 2009 Fed Funds Rate Per "Value Line" Publication of 5-23-08			<u>2.80%</u>
Forecasted ST Interest Rate For the 2009 Rate Year			3.85%

Tennessee American Water
Comparison of Authorized ROE's - American Water Subsidiaries & Other Water Utilities

<u>Company:</u>	<u>Order</u> <u>Date</u>	<u>Authorized</u> <u>ROE</u>	<u>Value Line</u> <u>"A" Utility</u>		<u>Spread</u> <u>over "A"</u> <u>Util. Bonds</u>
			<u>Bonds</u>	<u>Date</u>	
New York - Am.	3/5/2008	9.50%	6.13%	Jan. 08	3.37%
New Mexico - Am.	6/19/2007	9.72%	6.03%	Apr. 07	3.69%
California-Am. - Felton	3/13/2008	9.95%	6.13%	Jan. 08	3.82%
Ohio-Am.	3/7/2007	10.00%	5.79%	DEC. 06	4.21%
New Jersey-Am.	4/2/2007	10.00%	5.88%	Jan. 07	4.12%
Missouri-Am.	10/4/2007	10.00%	6.22%	Aug. 07	3.78%
Indiana-Am.	10/10/2007	10.00%	6.22%	Aug. 07	3.78%
Kentucky-Am.	11/27/2007	10.00%	6.22%	Sep. 07	3.78%
California-Am. - Los Angeles	3/13/2008	10.00%	6.13%	Jan. 08	3.87%
West Virginia-Am.	3/18/2008	10.00%	6.13%	Jan. 08	3.87%
Virginia-Am.	6/15/2004	10.10%	6.18%	JUN. 04	3.92%
California-Am. - Monterey	3/13/2008	10.10%	6.13%	Jan. 08	3.97%
California-Am. - Coronado	3/13/2008	10.15%	6.13%	Jan. 08	4.02%
California-Am. - Larkfield	3/13/2008	10.15%	6.13%	Jan. 08	4.02%
California-Am. - Sacramento	3/13/2008	10.15%	6.13%	Jan. 08	4.02%
California-Am. - Village	3/13/2008	10.15%	6.13%	Jan. 08	4.02%
Tennessee-Am.	5/15/2007	10.20%	5.99%	Mar. 07	4.21%
Illinois-Am.	8/8/2008	10.35%	6.24%	Jul. 08	4.11%
Arizona-Am.	3/13/2007	10.40%	5.74%	FEB. 07	4.66%
Iowa-Am.	1/23/2008	10.40%	6.03%	Nov. 08	4.37%
Aqua Illinois	12/20/2006	10.45%	5.94%	Oct. 06	4.51%
Maryland-Am.	8/1/2007	10.50%	6.36%	Jun. 07	4.14%
Hawaii-Am.	5/6/2004	10.60%	5.49%	MAR. 04	5.11%
Pennsylvania-Am.	11/29/2007	10.60%	6.22%	Sep. 07	4.38%
Aqua Pennsylvania	7/31/2008	11.00%	6.25%	Jun. 08	4.75%
SW Utilities, Inc. (AWWC)	2/1/2004	12.00%	5.77%	DEC. 04	6.23%

Averages	10.25%	6.07%	4.18%
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CAD witness opinion of proper ROE	7.50%	6.35% Aug. 08	1.15%
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CAD variance from average	2.75%		3.03%
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<u>Conclusion:</u>	<u>4 Quarter</u> <u>Average</u>	<u>2 Quarter</u> <u>Average</u>	<u>Latest 1</u> <u>Qtr. Avg.</u>
Current Bond Rates per Rebuttal Exhibit MAM-5, page 4 of 4	6.16%	6.14%	6.19%
Average Spread of AWW Companies	<u>4.18%</u>	<u>4.18%</u>	<u>4.18%</u>
ROE Calculated on Average Spread	10.34%	10.32%	10.37%

**Tennessee American
Analysis of Interest Rates in Relation to ROE**

Per Value Line Publications:

Publication Dated May 11, 2007:

	Value Line Listed Rates	ROE Awarded in Case 06-00290	<u>Spread</u>
30-yr, A-rated Utility Bonds	6.01%	10.20%	4.19%
30-yr, BBB-rated Utility Bonds	6.17%	10.20%	4.03%
10-yr, A-rated Corp. Bonds	5.61%	10.20%	4.59%
30-yr T-Bonds	4.82%	10.20%	5.38%
10-yr. T-Bonds	4.64%	10.20%	5.56%
13-week T-Bills	4.87%		
Fed Funds	5.25%		

Publication Dated August 8, 2008:

		Spread Last Case	<u>ROE</u>
30-yr, A-rated Utility Bonds	6.31%	4.19%	10.50%
30-yr, BBB-rated Utility Bonds	6.78%	4.03%	10.81%
10-yr, A-rated Corp. Bonds	6.38%	4.59%	10.97%
30-yr T-Bonds	4.65%	5.38%	10.03%
10-yr. T-Bonds	4.04%	5.56%	9.60%
13-week T-Bills	1.68%		
Fed Funds	2.00%		

Average on all bond rates

10.38%

Average on Corp. Bonds only

10.76%

Analysis of Interest Rates - July 16, 2008
Prepared by Michael Miller

Value Line Publication Date	As of Market Date	"A" Rated Utility Bonds	30-year Treasury Bonds	Spread	"BBB" Rated Utility Bonds	30-year Treasury Bonds	Spread	10-year Corporate Bonds	10-year Treasury Bonds	Spread	13-Week Treasury Bills	Federal Reserve Rate
4/13/2007	4/4/2007	5.980%	4.840%	1.140%	6.150%	4.840%	1.310%	5.540%	4.650%	0.890%	5.030%	5.250%
4/20/2007	4/11/2007	6.110%	4.910%	1.200%	6.280%	4.910%	1.370%	5.670%	4.730%	0.940%	5.010%	5.250%
4/27/2007	4/18/2007	6.010%	4.820%	1.190%	6.190%	4.820%	1.370%	5.630%	4.650%	0.980%	4.970%	5.250%
5/4/2007	4/25/2007	6.030%	4.830%	1.200%	6.180%	4.830%	1.350%	5.620%	4.650%	0.970%	4.950%	5.250%
5/11/2007	5/2/2007	6.010%	4.820%	1.190%	6.170%	4.820%	1.350%	5.610%	4.640%	0.970%	4.870%	5.250%
5/18/2007	5/9/2007	6.040%	4.840%	1.200%	6.180%	4.840%	1.340%	5.630%	4.660%	0.970%	4.850%	5.250%
5/25/2007	5/16/2007	6.070%	4.860%	1.190%	6.210%	4.860%	1.330%	5.680%	4.710%	0.980%	4.730%	5.250%
6/1/2007	5/23/2007	6.180%	5.000%	1.180%	6.340%	5.000%	1.340%	5.800%	4.850%	0.950%	4.890%	5.250%
6/8/2007	5/30/2007	6.180%	5.000%	1.180%	6.310%	5.000%	1.310%	5.840%	4.870%	0.970%	4.830%	5.250%
6/15/2007	6/6/2007	6.240%	5.080%	1.160%	6.400%	5.080%	1.320%	5.920%	4.960%	0.960%	4.780%	5.250%
6/22/2007	6/13/2007	6.430%	5.280%	1.150%	6.580%	5.280%	1.300%	6.210%	5.200%	1.010%	4.640%	5.250%
6/29/2007	6/20/2007	6.410%	5.240%	1.170%	6.580%	5.240%	1.340%	6.160%	5.130%	1.030%	4.720%	5.250%
7/6/2007	6/27/2006	6.360%	5.190%	1.170%	6.530%	5.190%	1.340%	6.090%	5.090%	1.010%	4.770%	5.250%
Quarterly Average		6.158%	4.979%	1.178%	6.315%	4.979%	1.336%	5.801%	4.829%	0.972%	4.849%	5.250%
7/13/2007	7/3/2007	6.310%	5.140%	1.170%	6.470%	5.140%	1.330%	6.040%	5.040%	1.000%	4.950%	5.250%
7/20/2007	7/11/2007	6.370%	5.190%	1.180%	6.540%	5.190%	1.350%	6.150%	5.090%	1.060%	4.940%	5.250%
7/27/2007	7/18/2007	6.250%	5.120%	1.130%	6.440%	5.120%	1.320%	6.080%	5.030%	1.050%	4.950%	5.250%
8/3/2007	7/25/2007	6.140%	5.020%	1.120%	6.300%	5.020%	1.280%	5.970%	4.900%	1.070%	4.970%	5.250%
8/10/2007	8/1/2007	6.130%	4.920%	1.210%	6.250%	4.920%	1.350%	5.950%	4.790%	1.160%	4.880%	5.250%
8/17/2007	8/8/2007	6.210%	5.040%	1.170%	6.370%	5.040%	1.330%	6.070%	4.880%	1.190%	4.940%	5.250%
8/24/2007	8/15/2007	6.280%	5.030%	1.250%	6.410%	5.030%	1.380%	6.040%	4.720%	1.280%	4.890%	5.250%
8/31/2007	8/22/2007	6.280%	4.960%	1.320%	6.440%	4.960%	1.480%	6.140%	4.560%	1.580%	4.000%	5.250%
9/7/2007	8/29/2007	6.220%	4.880%	1.340%	6.360%	4.880%	1.480%	5.990%	4.470%	1.520%	4.380%	5.250%
9/14/2007	9/5/2007	6.110%	4.770%	1.340%	6.270%	4.770%	1.500%	5.820%	4.470%	1.350%	4.380%	5.250%
9/21/2007	9/12/2007	6.050%	4.770%	1.280%	6.190%	4.770%	1.420%	5.800%	4.550%	1.460%	3.900%	4.750%
9/28/2007	9/19/2007	6.310%	4.840%	1.470%	6.440%	4.840%	1.600%	6.010%	4.620%	1.470%	3.690%	4.750%
10/5/2007	9/28/2007	6.310%	4.890%	1.420%	6.490%	4.890%	1.600%	6.090%	4.620%	1.470%	3.690%	4.750%
Quarterly Average		6.228%	4.967%	1.282%	6.382%	4.967%	1.415%	6.027%	4.752%	1.275%	4.441%	5.175%
10/12/2007	10/3/2007	6.220%	4.800%	1.420%	6.310%	4.800%	1.510%	5.970%	4.560%	1.410%	3.940%	4.750%
10/19/2007	10/10/2007	6.270%	4.870%	1.400%	6.340%	4.870%	1.470%	5.970%	4.650%	1.320%	4.040%	4.750%
10/26/2007	10/17/2007	6.210%	4.830%	1.380%	6.270%	4.830%	1.440%	5.930%	4.550%	1.380%	3.990%	4.750%
11/2/2007	10/24/2007	6.030%	4.640%	1.390%	6.090%	4.640%	1.450%	5.680%	4.340%	1.340%	3.870%	4.750%
11/9/2007	10/31/2007	6.130%	4.750%	1.380%	6.220%	4.750%	1.470%	5.880%	4.470%	1.410%	3.910%	4.500%
11/16/2007	11/7/2007	6.070%	4.650%	1.420%	6.150%	4.650%	1.500%	5.810%	4.310%	1.500%	3.440%	4.500%
11/23/2007	11/14/2007	6.090%	4.600%	1.490%	6.180%	4.600%	1.580%	5.950%	4.250%	1.700%	3.390%	4.500%
11/30/2007	11/20/2007	6.040%	4.500%	1.540%	6.140%	4.500%	1.640%	6.010%	4.100%	1.910%	3.280%	4.500%
12/7/2007	11/27/2007	6.030%	4.420%	1.610%	6.110%	4.420%	1.690%	5.940%	4.040%	1.900%	3.030%	4.500%
12/14/2007	12/5/2007	6.070%	4.400%	1.670%	6.220%	4.400%	1.820%	5.920%	3.960%	1.960%	3.050%	4.500%
12/21/2007	12/12/2007	6.250%	4.540%	1.710%	6.350%	4.540%	1.810%	6.260%	4.090%	2.170%	2.860%	4.250%
12/28/2007	12/21/2007	6.140%	4.450%	1.690%	6.240%	4.450%	1.790%	6.010%	4.030%	1.980%	2.890%	4.250%
1/4/2008	12/26/2007	6.280%	4.670%	1.610%	6.420%	4.670%	1.750%	6.270%	4.280%	1.990%	3.310%	4.250%
Quarterly Average		6.141%	4.625%	1.516%	6.234%	4.625%	1.609%	5.969%	4.279%	1.690%	3.462%	4.519%
1/11/2008	1/2/2008	5.940%	4.350%	1.590%	6.110%	4.350%	1.760%	5.860%	3.900%	1.960%	3.250%	4.250%

1/18/2008	1/9/2008	5.980%	4.340%	1.650%	6.170%	4.340%	1.830%	5.790%	3.820%	1.970%	3.230%	4.250%
1/25/2008	1/16/2008	6.070%	4.340%	1.730%	6.220%	4.340%	1.880%	5.790%	3.740%	2.050%	3.130%	4.250%
2/1/2008	2/1/2008	6.130%	4.310%	1.820%	6.260%	4.310%	1.890%	5.860%	3.600%	2.260%	2.220%	3.500%
2/6/2008	1/30/2008	6.060%	4.380%	1.680%	6.150%	4.380%	1.770%	5.600%	3.670%	1.930%	2.150%	3.000%
2/15/2008	2/6/2008	6.020%	4.360%	1.660%	6.200%	4.360%	1.840%	5.540%	3.590%	2.050%	2.090%	3.000%
2/22/2008	2/13/2008	6.200%	4.540%	1.660%	6.350%	4.540%	1.810%	5.780%	3.730%	2.050%	2.260%	3.000%
2/29/2008	2/20/2008	6.150%	4.610%	1.540%	6.330%	4.610%	1.720%	5.820%	3.890%	1.930%	2.220%	3.000%
3/1/2008	2/27/2008	6.200%	4.650%	1.550%	6.480%	4.650%	1.830%	5.810%	3.850%	1.960%	1.960%	3.000%
3/14/2008	3/5/2008	6.260%	4.600%	1.680%	6.390%	4.600%	1.790%	5.960%	3.670%	2.290%	1.490%	3.000%
3/21/2008	3/12/2008	6.080%	4.600%	1.670%	6.270%	4.600%	1.860%	6.050%	3.460%	2.590%	1.410%	3.000%
3/28/2008	3/19/2008	5.960%	4.210%	1.750%	6.140%	4.210%	1.930%	5.890%	3.300%	2.590%	0.560%	2.250%
4/4/2008	3/26/2008	6.030%	4.310%	1.720%	6.240%	4.310%	1.930%	6.060%	3.460%	2.600%	1.270%	2.250%
Quarterly Average		6.084%	4.416%	1.688%	6.250%	4.416%	1.834%	5.832%	3.688%	2.164%	2.095%	3.212%
4/11/2008	4/2/2008	6.160%	4.410%	1.750%	6.250%	4.410%	1.840%	6.300%	3.600%	2.700%	1.370%	2.250%
4/18/2008	4/9/2008	6.140%	4.320%	1.820%	6.280%	4.320%	1.960%	6.060%	3.480%	2.580%	1.300%	2.250%
4/25/2008	4/16/2008	6.280%	4.490%	1.790%	6.400%	4.490%	1.910%	6.110%	3.690%	2.420%	1.200%	2.250%
5/2/2008	4/23/2008	6.150%	4.490%	1.660%	6.270%	4.490%	1.780%	6.030%	3.730%	2.300%	1.210%	2.250%
5/9/2008	4/30/2008	6.120%	4.470%	1.650%	6.310%	4.470%	1.840%	5.910%	3.730%	2.180%	1.380%	2.000%
5/16/2008	5/7/2008	6.390%	4.610%	1.780%	6.390%	4.610%	1.780%	5.740%	3.850%	1.890%	1.660%	2.000%
5/23/2008	5/14/2008	6.100%	4.610%	1.490%	6.410%	4.610%	1.800%	5.680%	3.910%	1.770%	1.820%	2.000%
5/30/2008	5/21/2008	6.040%	4.540%	1.500%	6.360%	4.540%	1.820%	5.540%	3.810%	1.730%	1.860%	2.000%
6/6/2008	5/28/2008	6.130%	4.690%	1.440%	6.470%	4.690%	1.780%	5.720%	4.000%	1.720%	1.880%	2.000%
6/13/2008	6/4/2008	6.230%	4.700%	1.530%	6.500%	4.700%	1.800%	5.740%	3.980%	1.760%	1.840%	2.000%
6/20/2008	6/11/2008	6.230%	4.690%	1.540%	6.500%	4.690%	1.810%	5.860%	4.070%	1.790%	1.940%	2.000%
6/27/2008	6/18/2008	6.270%	4.710%	1.560%	6.500%	4.710%	1.790%	6.100%	4.140%	1.960%	1.920%	2.000%
7/4/2008	6/25/2008	6.250%	4.640%	1.610%	6.480%	4.640%	1.840%	6.220%	4.100%	2.120%	1.790%	2.000%
Quarterly Average		6.192%	4.567%	1.625%	6.394%	4.567%	1.827%	5.924%	3.853%	2.071%	1.622%	2.077%

Current Bond Rates	30 Yr.		May 23 Value		May 23 Value		10 Yr.		May 23 Value	
	"A" Rated	2009 Bond	T-Bond Forecast	Avg. Spread	Rate	2009 Bond	Rate	2009 Bond	T-Bond Forecast	Avg. Spread
Latest 4 qtr. Avg.	6.161%		4.644%	1.518%	6.315%		1.671%	5.938%	4.138%	1.800%
Latest 2 Qtr. Avg.	6.139%		4.492%	1.646%	6.322%		1.830%	5.878%	3.760%	2.117%
Latest Qtr.	6.192%		4.567%	1.625%	6.394%		1.827%	5.924%	3.853%	2.071%

**TAWC Analysis of Capital Structure's
Recommendation of Michael Miller**

Amount WACC

Dr. Brown Capital Structure Amended to Reflect Actual AWW @ June 30, 2008:
(000 omitted)

<u>CAPD</u>				
<u>Amount</u>	<u>Capital</u>	<u>% of Total</u>	<u>Cost Rate</u>	<u>WACC</u>
TAWC's Total Capital	119,552	100.00%		
External TAWC Debt:				
9.25% Series	2,500	2.09%	9.25%	2.54%
7.84% Series	5,700	4.77%	7.84%	4.91%
9.489% Series	<u>902</u>	0.75%	9.49%	0.94%
Total	9,102	7.61%		8.39%
Internal Financing	110,450	92.40%		
Parent*				
LT Debt	4,801,127	52.46%	6.26%	3.28%
ST Debt	243,418	2.66%	3.85%	0.10%
Preferred Stock	4,560	0.05%	5.00%	0.00%
Common Stock	<u>4,102,902</u>	<u>44.83%</u>	10.40%	<u>4.66%</u>
Total	9,152,007	100.00%		8.05%
TAWC				
TAWC financing	9,102	7.61%	8.39%	0.64%
Parent Financing	<u>110,450</u>	<u>92.39%</u>	8.05%	<u>7.44%</u>
Total	119,552	100.00%		<u>8.08%</u>

* AWW Consolidated Capital Structure @ 6-30-2008.

Test Year: Twelve Months Ended: November 30, 2007
Exhibit No. 1, Schedule 3
Page 4 of 6

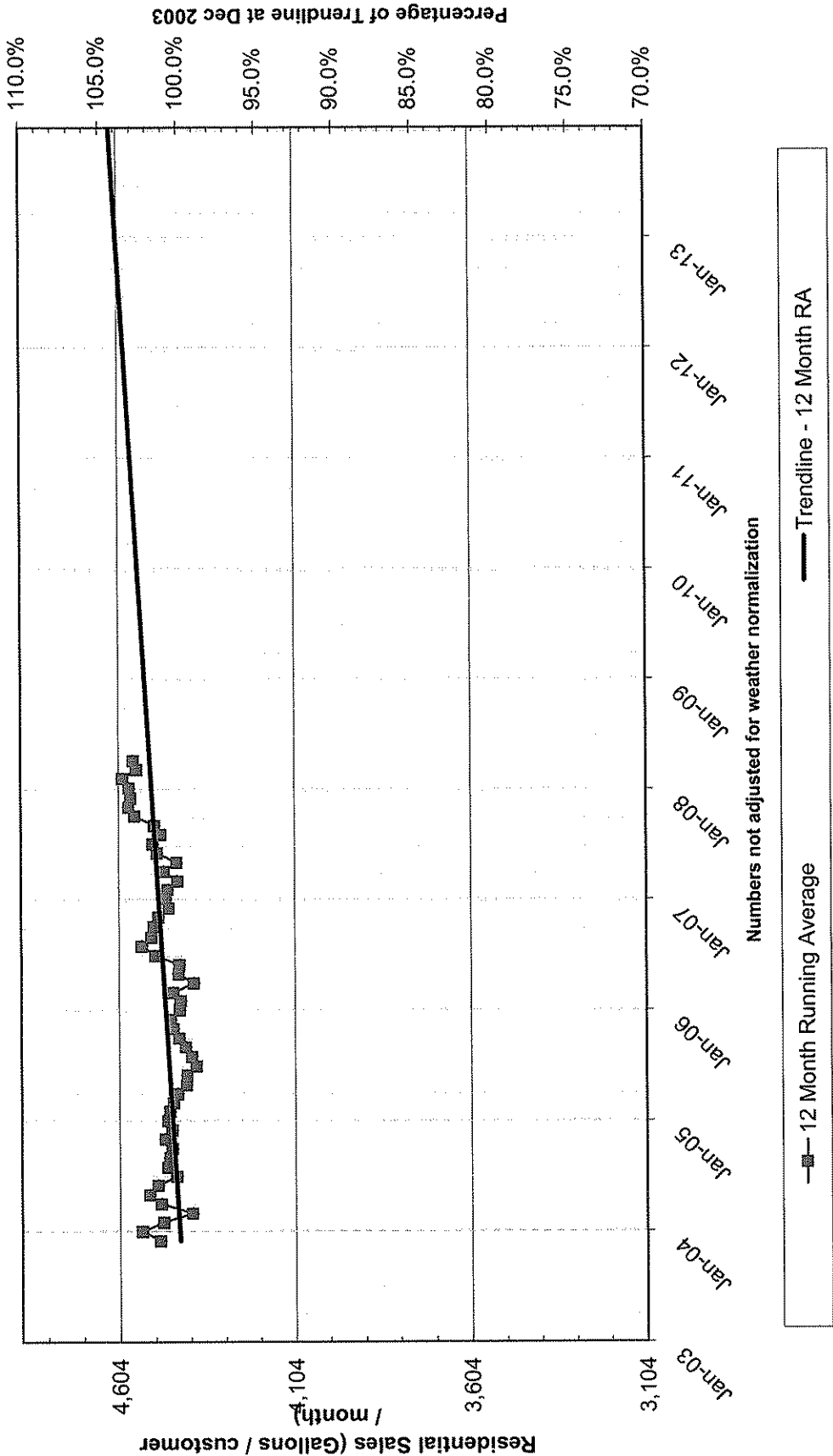
**Average Days Interval between Number of Days
From Date Services are Furnished to Date Collections are Received**

Tennessee Regulatory Authority
Company: Tennessee-American Water Company
Case No:

Line No.	Revenues Amount	Median Service Days	Dollar Days
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12	Revenues less private fire 34,283,659	15.21	521,454,457
13			
14	Private Fire billed in advance 1,489,608	(45.63)	(67,970,813)
15			
16	Total 35,773,267		453,483,644
17			
18			
19			
20			
21			
22			
23			
24	Average Median Service Days	12.68	
25			
26	Number of Days between the Reading Date and the Date the Bills are issued	4.62	
27			
28	Number of Days between the Billed Date and the Date the Bills are paid	24.43	
29			
30			
31			
32	Total Average Days' Interval between Number of Days from Date Services are Furnished to Date Collections are Received	41.73	
33			
34			
35			
36			
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38			
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40			
41			
42			
43			
44			
45			





















Notes: private fire Quarterly is billed in advance
All monthly customers are billed in arrears

**Tennessee American Water
Comparison of Historic Trend in
Residential Sales Per Customer
(Trend from Dec. 2003)**










TENNESSEE AMERICAN WATER








Climate Data

	Temperature Data for the Summer (June - August) 1998 - 2007	Precipitation Data for the Summer (June - August) 1998 - 2007
1998		
1999		
2000		
2001		
2002		
2003		
2004		
2005		
2006		
2007		

Precipitation Key:

						
Record Wettest (wettest period on record)	Much Above Normal (one of 11 wettest periods on record)	Above Normal (one of the 38 wettest periods on record)	Near Normal (not one of the 38 wettest or 38 driest on record)	Below Normal (one of the 38 driest periods on record)	Much Below Normal (one of the 11 driest periods on record)	Record Driest (driest period on record)

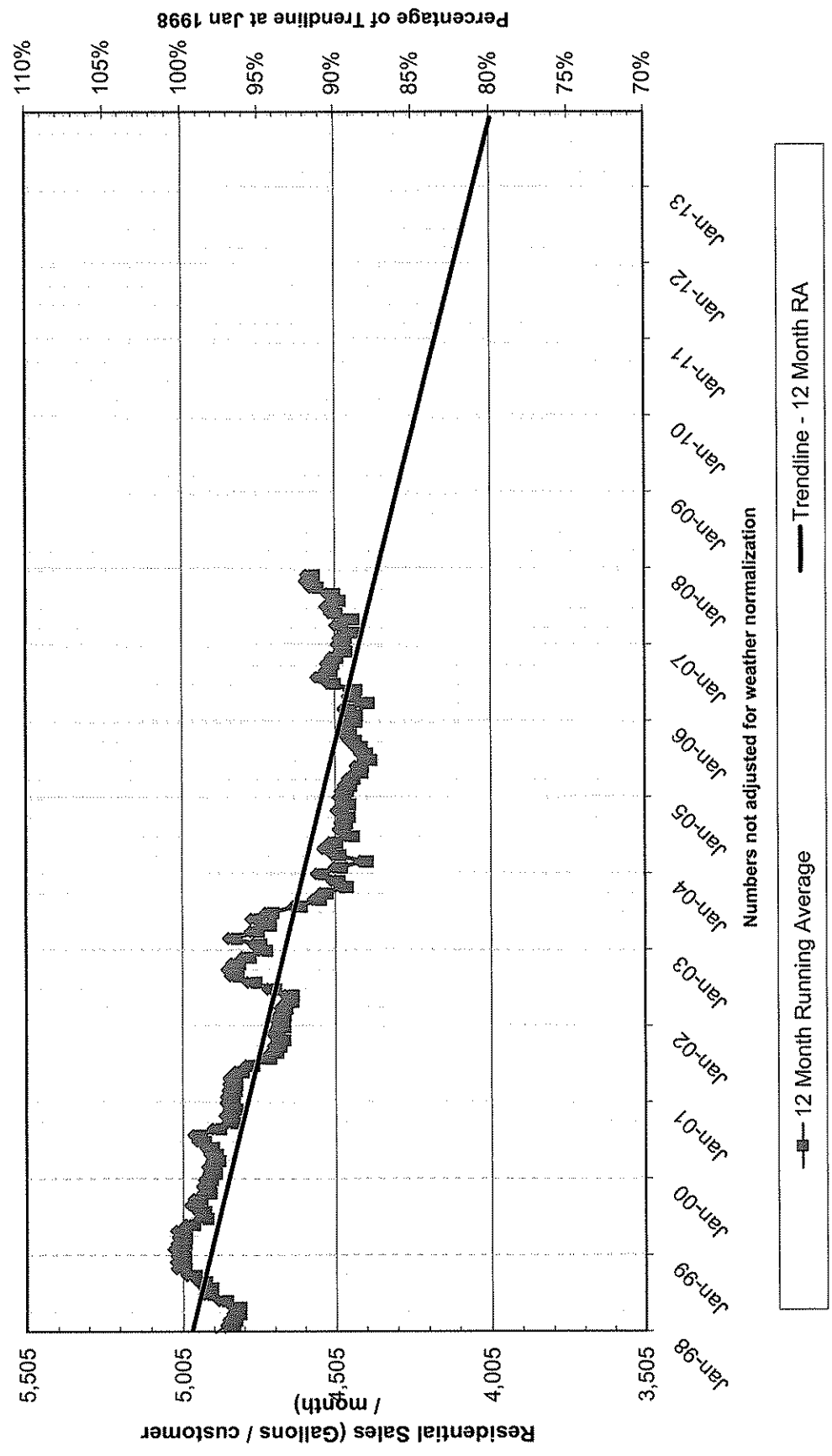
Temperature Key:

						
Record Coldest (coldest period on record)	Much Below Normal (one of 11 coolest periods on record)	Below Normal (one of the 38 coolest periods on record)	Near Normal (not one of 38 warmest or 38 coolest on record)	Above Normal (one of the 38 warmest periods on record)	Much Above Normal (one of 10 warmest periods on record)	Record Warmest (warmest period on record)

Note:

* Climate data was obtained from the National Oceanic and Atmospheric Administration (NOAA) whose records cover a 114 year period from 1895 to 2007.

**Tennessee American Water
Comparison of Historic Trend in
Residential Sales Per Customer
(Trend from Jan. 1998)**



Tennessee American Water Company
Analysis of System Delivery, Water Sales, Unaccounted for Water (UFW)
(in 1,000 gallons)

	In 1000 gallons						YTD	In 1000 gallons	In CCF
	2003	2004	2005	2006	2007	7-Nov	7-Nov	Attrition yr	Attrition yr
Water Sales	9,929,136	10,453,887	10,623,509	11,731,408	11,554,259	10,691,428	11,482,381	10,773,534	14,364,712
Non-revenue water	200,323	219,629	224,171	235,654	238,079	220,080	234,506	219,877	293,169
System delivery	12,555,495	13,765,559	14,050,224	15,141,713	14,731,718	13,635,062	14,650,395	13,736,496	18,315,328
Unaccounted for Water (per AWWA Definition) (See Note 1 Below)	2,426,036	3,092,043	3,202,544	3,174,651	2,939,380	2,723,554	2,933,508	2,743,085	3,657,447
Total of Unaccounted for Water & Authorized but unmetered water See Note 2 Below. Also agrees to workpaper provided in response to discovery request TN-TRA-01-Q13-Chemicals 9 (page 3)									3,950,616
% UFW & Auth. Unmetered water to water sales									27.50%
unaccounted for water %	19.32%	22.46%	22.79%	20.97%	19.95%	19.97%	20.02%	19.97%	19.97%

Note 1 : The AWWA definition as defined on page 136 of the document titled "Benchmarking Performance Indicators for Water and Wastewater Utilities: Survey Data and Analyses Report and attached to the Response to TAWC's Discovery request to the CMA. DR: TN-CMA-1-Q12.
*distribution water loss (%) = 100 [(volume distributed - (volume billed + volume unbilled but authorized)/volume distributed)] Copy of page 136 is page two of this exhibit.

Note 2: Mr. Gorman claims TAWC's unaccounted for water is 27.50%. This claim is incorrect. He determined this percentage by incorrectly dividing total Unaccounted for Water & Authorized unmetered usage by water sales. The first error made by Mr. Gorman was to state any relationship of unaccounted for water to water sales. I believe it is universal to state the % of unaccounted for water to system delivery. The second error made by Mr. Gorman is that he failed to eliminate Authorized but unmetered usage prior to determining the % of unaccounted for water. I would also note that both AWWA and other state jurisdictions where I have been involved use AWWA's definition for unaccounted for water.

**Tennessee American Water
Labor & Management Fee Analysis That Demonstrates the Shift From
Fully Loaded Company Labor to Management Fees**

In Rebuttal to Testimony of Mr. Terry Buckner - From the CAPD

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	As Approved in TAWC Case No. 03-00118 Attrition Yr. 3/31/2004	2004 Labor Cost Inflated	2005 Labor Cost Inflated	2006 Labor Cost Inflated	2007 Labor Cost Inflated	2008 Labor Cost Inflated	2009 Labor Cost Inflated	Current Case Attrition Year Request by Company	Calculation of Net Savings	Current Case Recommended by CAPD
Labor (Used normal % pay increase of 3.5%)	5,066,666	5,243,999	5,427,539	5,617,503	5,814,116	6,017,610	6,228,226	5,058,987	(1,169,239)	4,877,537
Group Insurance	1,463,924	1,725,805	2,060,248	1,912,718	1,868,573	1,900,960	1,909,096	1,714,550	(194,546)	1,660,506
Pensions	387,985	141,820	344,846	1,151,099	689,269	1,319,163	1,062,937	1,161,108	98,171	1,156,442
Fully Loaded Labor Cost	6,918,575	7,111,624	7,832,634	8,681,320	8,371,957	9,237,733	9,200,260	7,934,645	(1,265,615)	7,694,545
Management Fees	2,507,276	2,535,587	2,607,538	3,010,950	2,886,018	3,206,383	3,095,477	4,335,190	1,239,713	3,453,223
Total Labor & Management Fees	9,425,851	9,647,211	10,440,172	11,692,270	11,257,975	12,444,117	12,295,737	12,269,835	(25,902)	11,147,768

Footnotes:

- Note 1:** The calculation of inflation factors used to determine the pro-forma 2007 costs shown in column 5 above are included on page 2 of this Exhibit.
- Note 2:** The CAPD costs recommended in this case do not reflect the shift in labor from the local operation to management fees as a result of the reorganization that began in 2004 and was completed in 2006.
- Note 3:** The CAPD recommendation starts with the management fee level included in the Settlement Agreement of TAWC case 04-00288 and does not capture the full impact of the reorganization and causes the CAPD to significantly understate the appropriate management fee expense for the attrition year.
- Note 4:** This schedule clearly shows that there is an offset to the increased management fees related to lower employee and benefits costs at TAWC.
- Note 5:** The CAPD puts forth the unsupported position that management fees should be limited to the rate of inflation. The CAPD provides no support for their position that the management fees approved in the 2004 TAWC rate case provides a better test-year base to develop management fees for the attrition year (the 12 months ending August 2009) in this case than the 12 months ended November 2007 historical test-year (as adjusted) used to base the management fees in the Company's filing.
- Note 6:** The CAPD approach completely ignores the shift between TAWC labor and benefits in 2005 to AWWSC services now as quantified by the section highlighted in yellow above. There have been shifts in these costs as highlighted to operate more efficiently, utilize AWWSC expertise, and reduce costs.
- Note 7:** The CAPD approach completely ignores that increases in benefit costs shown in the section below have increased above the rate of inflation due to changes in financial market conditions, asset returns, medical cost increases, and changes in other actuarial assumptions. These costs are also a part of the prudent, at cost, AWWSC charges to TAWC.
- Note 8:** The CAPD does not mention or recognize the increased service being provided by a 24/7 call center, improvements in meter reading, or the increased service related to real-time access through mobile computing to just name a few of the service improvements resulting from the effective use of TAWC and AWWSC employees.

	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u> <u>Projected</u>	<u>2009</u> <u>Projected</u>
<u>TAWC Actual Loaded Labor Costs</u>							
AVG. # Employees	118.17	100.17	96.33	102.33	107.08	111.08	114.00
Labor	4,858,845	4,212,010	3,765,383	4,256,528	4,664,401	4,940,000	5,058,000
Group Insurance	1,363,154	1,362,217	1,583,967	1,542,409	1,576,752	1,664,000	1,715,000
Pensions	<u>439,288</u>	<u>136,107</u>	<u>318,289</u>	<u>1,128,624</u>	<u>707,180</u>	<u>1,404,000</u>	<u>1,161,000</u>
Fully Loaded Cost	6,661,267	5,710,334	5,647,639	6,927,561	6,948,333	8,008,000	7,934,000
Management Fees	2,324,942	4,012,316	3,752,617	4,312,528	4,725,529	4,868,000	4,860,000
Note: management fee level included in case 04-00288							
<u>Cost per Employee</u>			3,062,940				
Labor	41,119	42,050	39,087	41,595	43,559	44,471	44,368
Group Insurance	11,536	13,600	16,235	15,072	14,725	14,980	15,044
Pensions	<u>3,717</u>	<u>1,359</u>	<u>3,304</u>	<u>11,029</u>	<u>5,604</u>	<u>12,639</u>	<u>10,184</u>
Fully Loaded Cost per employee	56,372	57,008	58,626	67,696	64,887	72,090	69,596
			% Increase	% Increase	% Increase	% Increase	% Increase
Labor	1,023	0.930	1,064	1.047	1.021	0.995	
Group Insurance	1,179	1,194	0.928	0.977	1.017	1.004	
Pensions	<u>0.366</u>	<u>2.432</u>	<u>3.338</u>	<u>0.599</u>	<u>1.814</u>	<u>0.806</u>	
Fully Loaded Cost per customer	1,011	1,028	1,155	0.959	1.111	0.965	

**Tennessee American Water Company
FAS 109 Deferred Income Taxes**

Exhibit MAM-11

Rate Base:

		<u>Balance @ 11/2007</u>
186030 Reg Asset - AFUDC - CWIP		103,374
186035 Reg Asset AFUDC Equity		909,540
186040 Reg Asset Plant Flow Through	FAS 109	5,041,287
186045 Reg Asset Other	FAS 109	1,454,477
186051 Reg Asset State Tax Change	FAS 109	2,664,557
186055 Reg Asset Accum Amortization		(177,576)
		<u>9,995,660</u>

252204 Def Fit Other Property		(16,812,437)
253113 Def Fit Other interim		961,930
253202 Def Fit Flow Through Depreciation		(1,388,200)
253203 Def Fit Norm Property		4,930
253301 Def Fit Other		(3,616,831)
253309 Def FIT ATM		116,460
253602 Def Sit Flow Through Depreciation		(253,168)
253604 Def Sit Other Property		(3,077,535)
253613 Def SIT Interim other		(236,660)
253701 Def SIT Other		(913,339)
		<u>(25,214,851)</u>

256211 Reg Liab Exc Def AFUDC FIT	FAS 109	(470,542)
256220 Reg Liab Deficit Def Fit	FAS 109	553,076
256232 Reg Liab Exc Def Depr SIT - balance of \$288,584 transferred from account 253701 9/07	FAS 109	281,521
256250 Reg Liab ARO/NNS-reclassified to accumulated depreciation		(0)
256310 Reg Liab ITC Grossup 3%	FAS 109	(24,045)
256311 Reg Liab ITC Grossup 4%	FAS 109	(56,761)
256312 Reg Liab ITC Grossup 10%	FAS 109	(575,692)
		<u>(292,444)</u>

Total deferred taxes included in rate base		<u>(15,511,634)</u>
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186040 Reg Asset Plant Flow Through		5,041,287
186045 Reg Asset Other		1,454,477
186051 Reg Asset State Tax Change		2,664,557
WRITE OFF IF FAS 109 IS NOT RECOGNIZED		<u>9,160,322</u>

Deferred Tax Expense:

690630.001 Def FIT - Reg Asset	489,532	
690630.002 Def FIT - Reg Liability	(34,777)	454,755
690730.001 Def SIT - Reg Asset	53,248	
690730.002 Def SIT - Reg Liability	(220)	53,028
	<u>507,783</u>	<u>507,783</u>

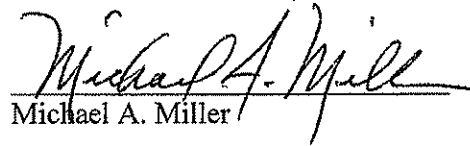
TENNESSEE REGULATORY AUTHORITY

STATE OF WEST VIRGINIA

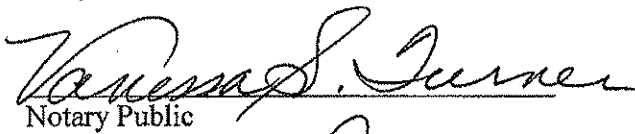
COUNTY OF KANAWHA

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

He is appearing as a witness on behalf of Tennessee-American Water Company before the Tennessee Regulatory Authority, and if present before the Authority and duly sworn, his rebuttal testimony would set forth in the annexed transcript consisting of 11 pages.


Michael A. Miller

Sworn to and subscribed before me
this 13th day of August 2008.


Notary Public

My commission expires



