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December 10, 2024

VIA ELECTRONIC FILING

Hon. David Jones, Chairman
c/o Ectory Lawless, Docket Room Manager
Tennessee Public Utility Commission
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RE: *Petition of Tennessee-American Water Company to Modify Tariff, Change and Increase Charges, Fees, and Rates, and for Approval of a General Rate Increase, TPUC Docket No. 24-00032*

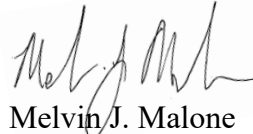
Dear Chairman Jones:

Attached for filing please find *Tennessee-American Water Company's Post-Hearing Brief* in the above-captioned matter.

One hard copy along with 2 USB drives will follow. Should you have any questions concerning this filing, or require additional information, please do not hesitate to contact me.

Very truly yours,

BUTLER SNOW LLP



Melvin J. Malone

clw

Attachment

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**BEFORE THE TENNESSEE PUBLIC UTILITY COMMISSION
NASHVILLE, TENNESSEE**

**PETITION OF TENNESSEE-)
AMERICAN WATER COMPANY TO)
MODIFY TARIFF, CHANGE AND)
INCREASE CHARGES, FEES, AND)
RATES, AND FOR APPROVAL OF A)
GENERAL RATE INCREASE)**

DOCKET NO. 24-00032

TENNESSEE-AMERICAN WATER COMPANY'S POST-HEARING BRIEF

TABLE OF CONTENTS

I.	Statement Of The Case	1
II.	Criteria for Establishing Just and Reasonable Rates.....	4
III.	Test Period and Attrition Period	5
IV.	Revenue Requirement and Deficiency.....	6
V.	Rate Base	7
A.	Utility Plant in Service (“UPIS”).....	8
B.	Depreciation and Amortization.....	9
C.	Materials & Supplies.....	10
D.	Cash Working Capital and Other Working Capital	11
1.	Cash Working Capital.....	11
2.	Other Working Capital.....	17
E.	Contributions in Aid of Construction (“CIAC”).....	19
F.	Customer Advances	20
G.	Jasper Highlands Regulatory Liability.....	21
H.	Utility Plant Acquisition Adjustment (“UPAA”): Jasper Highlands Acquisition Adjustment.....	21
VI.	Revenue.....	21
A.	Forecasted Revenues.....	21
1.	TAWC reasonably forecasted its customer water usage, while the CAD relied on a less reliable methodology.	22
2.	The Company’s methodology for development of Other Operating Revenues is reasonable and should be adopted.	25
B.	Tariff Changes	26
VII.	Expenses	27
A.	Operating and Maintenance Expenses	27
1.	Labor and Labor Related	28
2.	Rents Expense.....	41
3.	Maintenance Expense	43
4.	Contract Services Expense.....	44
5.	Telecommunications Expense	45
6.	Miscellaneous Expense.....	46
7.	Customer Accounting Expense.....	48
8.	Expenses Associated with Service Company	50
9.	Transportation Expense	56

10.	Insurance Other Than Group	56
B.	Production Costs	57
1.	Purchased Power and Chemicals	58
2.	Waste Disposal and Purchased Water.....	61
C.	Other Expenses	62
1.	Rate Case Expense	62
2.	Uncollectible Expense	64
3.	Taxes Other Than Income.....	64
4.	Income Tax Expense.....	69
5.	Pension and OPEB Expense	74
VIII.	Rate Of Return	77
A.	Capital Structure	79
B.	Cost of Equity	86
C.	Overall Rate of Return.....	107
IX.	Rate Design.....	107
A.	The Company’s Consolidated Rate Design Proposal is Reasonable and Appropriate.	107
B.	Intervenors’ Position on Consolidated Rate Design Ignores Important Rate- Making Considerations.	110
C.	TAWC’s Cost of Service Study is Appropriate and Useful for Purposes of Reviewing the Company’s Proposed Rate Increase Allocation.	113
X.	Revenue Conversion Factor.....	117
XI.	Universal Affordability Tariff.....	119
A.	Affordability	120
1.	The Company’s Affordability Assessment.....	120
2.	Universal Affordability Tariff.....	122
3.	The CAD’s Position on the UAT.....	126
4.	Flaws in the CAD’s Position and Why the UAT Should be Approved.....	126
XII.	Conclusion	128

I. STATEMENT OF THE CASE

Tennessee-American Water Company (“Tennessee-American,” “TAWC” or “Company”) has been proudly providing safe, reliable, and affordable water service to customers in Chattanooga, Tennessee, and the surrounding areas, for over 100 years. Presently, the Company provides water service to over 87,000 residential, commercial and industrial customers, and municipalities, as well as both private and public fire protection service.

This rate case filing is critical to the Company’s ability to continue to provide safe, reliable and efficient water service to its customers at reasonable costs over the long term. The proposed increase is driven largely by the Company’s capital investments that it has or plans to make through December 31, 2025. The Company’s capital investment, which makes up more than 50% of the Company’s total request, includes investments that have not been eligible for the Capital Recovery Riders over the last 12 years. No Intervenor in this proceeding has challenged the Company’s level of capital investment included in the Company’s proposed revenue requirement used to develop the new base rates. The Company’s filing is also designed to provide the Company with an opportunity to recover its cost of service, including earning a reasonable return on its investments and recovering its reasonable and prudently incurred costs. These 3 components – capital investment, cost of capital, and operation and maintenance and general tax expenses - represent traditional components of a rate case and operating a water utility. Without rate relief, Tennessee-American will incur a substantial revenue deficiency and earn an estimated return on common equity less than half of the 10% authorized by the Tennessee Public Utility Commission (“Commission” or “TPUC”) in 2012. The Company has demonstrated that even with this proposed rate increase, it will maintain the affordability of its service.

The Company's current base rates were set by the Commission's 2012 *Order Approving Settlement Agreement*.¹ Pursuant to the Tennessee General Assembly's establishment of the alternative regulatory methods in Tennessee Code Ann. § 65-5-103(d), *et. seq.*, coupled with the Commission's approval of TAWC's then-proposed Capital Recovery Riders and Production Costs and Other Pass-Through Rider ("PCOP") in TPUC Docket No. 13-00130, revenue at those base rates also includes Capital Recovery Riders and PCOP surcharges²~~OBJ~~³~~OBJ~~. Pursuant to Tennessee Code Annotated § 65-5-101, *et seq.*, on May 1, 2024, Tennessee-American submitted its Petition in this case requesting that the Commission approve its proposed tariff modifications and increased rates, finding them just and reasonable.⁴ More specifically, TAWC is seeking permission to increase its rate structure to recover a projected revenue deficiency of approximately \$13.8 million. As noted above, Tennessee-American has not submitted a general rate case before the Commission since 2012, and for good reasons. First, and as evidenced in the record, the Commission-approved Capital Recovery Riders have allowed TAWC to invest approximately \$149,037,001 in net rider eligible system improvements as of year-end 2023.⁵ The use of these alternative mechanisms has led to smaller annual adjustments over time, while avoiding the need for a full rate proceeding. This is what the parties and the Commission anticipated would emanate from the approval of the

¹ *Order Approving Settlement Agreement*, TPUC Docket No. 12-00049 (Nov. 20, 2012).

² *Order Approving Stipulation and Settlement Agreement*, TPUC Docket No. 19-00103 (Jan. 31, 2024); *Order Granting Petition as Amended by Agreement of the Parties*, TPUC Docket No. 23-00018 (Oct. 6, 2023).

³ *Order Approving the Revised 2024 Production Costs and Other Pass-Throughs Rider*, TPUC Docket No. 24-00002 (July 15, 2024). An adjustment for the Tax Cuts and Jobs Act of 2016 is also reflected in present rates. *Id.*

⁴ As requested by Commission Staff and presented by the Hearing Officer during the Status Conference held on November 6, 2024, TAWC agreed to voluntarily withdraw its customer-owned lead service line cost recovery issue from this case without prejudice and to refile it in a new, separate docket for consideration by the Commission. At that time the Company noted the following: "The Company appreciates the interest in, and importance of, this issue and desires to accommodate the Commission's request. In light of this approach, TAWC hopes that any interested parties in such new docket will work with the Commission and the Company in moving that matter forward in a timely and efficient manner."

⁵TPUC Docket No. 24-00011.

riders in Docket No. 13-00130.⁶ Second, the Company's sound and efficient management of operations over the past 12 years has also played a substantial role in delaying the Company's need to file a general rate case. Still, the alternative mechanisms and operational efficiency can only go so far. As outlined in the Petition, and as reflected at the hearing, existing rates for the Company's water service do not afford the Company an opportunity to recover its reasonable and prudent operating costs or to earn a just and reasonable rate of return.

Providing clean, safe, and reliable water service does not come without rising costs. Even though the Company has worked hard and effectively to control its O&M expenses since the last rate case, the high inflation that has swept across the globe has impacted all business, including Tennessee-American. The increased costs of materials, labor, and energy, along with customer growth, have all contributed to the need for this rate case. Under these post-COVID, new normal circumstances presented, the Consumer Advocate Division of the Office of the Tennessee Attorney General's ("Consumer Advocate Division," "Consumer Advocate" or "CAD") proposed \$4 million decrease in rates is not only unsupported by the record and contrary to the inflationary marketplace and real-world environment, but it is also not in the long-term best interests of Tennessee-American's customers. The Company's proposed 10.75% return on common equity ("ROE"), which produces a weighted average cost of capital or overall rate of return of 7.94% on a rate base of \$305.7 million is just and reasonable and supported by the record in this case.

The Consumer Advocate Division, the City of Chattanooga ("City" or "Chattanooga"), and the Utility Workers Union of America, AFL-CIO, and UWUA Local 121 ("Union") all petitioned

⁶ See, e.g., *Order Approving Petition* at 12, TPUC Docket No. 22-00072 (Jan. 31, 2022) ("[T]he hearing panel found that these three programs continue to benefit both consumers and Tennessee-American. The programs allow the utility timely recovery of investment related expenses to ensure safe and reliable drinking water and the promotion of economic development, while also benefitting consumers through reduced rate case and legal expenses which might otherwise result, absent these rider mechanisms.").

to intervene and were granted intervention by the Commission. Subsequent to an extensive discovery phase, along with responses to Commission data requests, the parties submitted pre-filed testimony.

With its Petition, the Company submitted pre-filed direct testimony for the following witnesses: Grant Allen Evitts, Grady Stout, Kevin Kruchinski, Robert (Bob) C. Lane, Dominic J. DeGrazia, John M. Watkins, Robert J. Prendergast, Charles Rea, Heath J. Brooks, Nicholas Furia, Ann E. Bulkley, Patrick L. Baryenbruch, Robert V. Mustich, Harold Walker, III, and Larry Kennedy. The Consumer Advocate presented the pre-filed testimony of William H. Novak, Clark Kaml, David N. Dittmore, and Alex Bradley, the City presented the pre-filed testimony of Mark E. Garrett, and the Union presented the pre-filed testimonies of Shawn Garvey and Danny Seebeck. Thereafter, the Company submitted pre-filed rebuttal testimony, which included testimony from an additional witness, Linda Schlessman.⁷

A hearing on the merits began on November 18, 2024, and concluded on November 19, 2024. The November 15, 2024 *Pre-Hearing Order* outlined the process for post-hearing briefs, and the Chair referred the parties to the same at the conclusion of the hearing.⁸

II. CRITERIA FOR ESTABLISHING JUST AND REASONABLE RATES

The Commission must fix just and reasonable rates, which requires the Commission to balance the interests of utilities with the interests of Tennessee consumers.⁹ The Commission must also ensure that the rate approved provides the utility with an opportunity to earn a just and reasonable return on its investments.¹⁰ Ultimately, the rate approved by the Commission should

⁷ TAWC and the Union submitted a Stipulation and Settlement Agreement to the Commission on November 13, 2024.

⁸ To ease the administrative burden upon the Commission and to comply with the due date of post-hearing briefs, TAWC incorporates by reference, as if fully set forth herein, its previously submitted pleadings, filings, support and arguments in this case. To the extent TAWC does not expressly address a matter at issue in this case in its post-hearing brief, TAWC relies on these prior submissions.

⁹ Tenn. Code Ann. § 65-5-101.

¹⁰ *Bluefield Waterworks and Improvement Co. v. Pub. Serv. Comm'n*, 262 U.S. 679, 690 (1923).

allow a utility “to operate successfully, to maintain its financial integrity, to attract capital, and to compensate investors for the risks assumed.”¹¹

With the foregoing in mind, the Commission should generally consider a petition for a rate increase with the following criteria:

1. The investment / rate base upon which the utility should be permitted to earn a fair rate of return;
2. The proper level of revenues for the utility;
3. The proper level of expenses for the utility; and
4. The rate of return the utility should earn.

As an initial matter, however, the Commission must first set the test period and attrition period.¹²

III. TEST PERIOD AND ATTRITION PERIOD

The first step in a rate case such as this is to set and determine the appropriate test period and attrition period. The test period takes into consideration the estimated impact of calculations related to investments, revenues, and expenses; it also helps indicate the rate of return that will be produced.

TAWC selected a historical test period of the twelve months ending December 31, 2023 (the “Test Period”).¹³ As for the attrition year, the Company selected the twelve months of January 1, 2025, through December 31, 2025 (the “Attrition Period” or “Attrition Year”).¹⁴ As discussed throughout this brief, the Company developed its Attrition Period proposals with reasoned analyses and forecasts supported by verifiable data. Generally, to arrive at its Attrition

¹¹ *Federal Power Comm’n v. Hope Natural Gas Co.*, 320 U.S. 591, 605 (1944).

¹² As this is a general rate case, consistent with Tenn. Code Ann. §§ 65-5-103(d)(6), *et. seq.*, TAWC respectfully requests that the Commission adopt in this case the methodologies required to allow for the consideration of an annual review of its rates, in the event the Company later determines, at some point in the future within the time frame established by statute, to pursue such an annual review petition before the Commission.

¹³ *Pre-Filed Direct Testimony of TAWC Witness Robert “Bob” C. Lane*, 5:1-3, TPUC Docket No. 24-00032 (June 27, 2024) (hereinafter “Lane”).

¹⁴ *Id.*

Period projections, TAWC started with an analysis of Test Period revenues, expenses and rate base. Then, it examined verifiable changes in those Test Period elements during the period between the Test Period and Attrition Period, *i.e.*, from January 1, 2024, through December 31, 2024. TAWC used a 13-month average for rate base and capitalization for the Attrition Period.¹⁵

According to CAD Witness Alex Bradley, “these period proposals are acceptable and...they [should] be adopted by the Commission.”¹⁶ TAWC agrees.

IV. REVENUE REQUIREMENT AND DEFICIENCY

The revenue requirement is the sum of its O&M expenses, depreciation expense, income taxes and taxes other than income, and its authorized fair rate of return. In Tennessee, a utility’s revenue requirement is based on its Attrition Year revenue and expenses as well as its rate base during the Attrition Year. A revenue deficiency exists, and a rate increase is needed, if a utility’s forecasted revenue requirement is greater than its forecasted revenues at present rates.¹⁷

TAWC’s Attrition Year Revenue Requirement is \$85,692,120. As Company Witness Bob Lane explains in his Pre-Filed Rebuttal Testimony, and as set forth on Rebuttal Exhibit-BL-1, this Revenue Requirement reflects a slight increase from what the Company originally proposed in its Petition.¹⁸ The Company calculates its Revenue Deficiency to be \$13,833,135, which is slightly less than its originally requested amount of \$14,131,001.¹⁹

CAD Witness Mr. Dittemore argues that the Company’s recent historical earnings indicate that it is not in need of a significant rate increase.²⁰ But, as the Commission knows, it must focus

¹⁵ *Id.* at 5:6-20.

¹⁶ *Pre-Filed Testimony of CAD Witness Alex Bradley* at 3:12-15, TPUC Docket No. 24-00032 (Sept. 17, 2024) (hereinafter “*Bradley*”).

¹⁷ *Lane* at 6:15-7:2.

¹⁸ *Rebuttal Testimony of TAWC Witness Robert “Bob” C. Lane*, 2 & Tbl. 1, TPUC Docket No. 24-00032 (October 22, 2024) (hereinafter “*Lane Rebuttal*”); Rebuttal Exhibit-BL-1.

¹⁹ *Id.*

²⁰ *See Pre-filed Direct Testimony of CAD Witness David N. Dittemore*, at 4-5, TPUC Docket No. 24-00032 (Sept. 17, 2024) (hereinafter “*Dittemore*”).

its analysis on whether a rate increase is needed on forecasted operations and investments for the 2025 Attrition Year, not on historical results.²¹

In that regard, it is without question that the Company's Rate Base grew from 2023 to 2024, which necessarily increases debt and equity investment.²² Even the CAD projects an Attrition Year Rate Base that shows significant growth from the Test Year. Moreover, it is irrefutable that the Company did not increase its Capital Recovery Rider in 2023 and 2024 and yet had over \$71.5 million in actual or projected investments during that same time period.²³

Accordingly, based on TAWC's Rate Base growth and investments alone, it is entitled to an increase in rates. Despite Intervenor's arguments to the contrary, and for the reasons identified by TAWC throughout this brief, the Commission should adopt TAWC's proposed rate increase.

V. RATE BASE

Rate base is the investment base to which a fair rate of return is applied to arrive at a net operating income requirement. Rate base measures the Company's net investment in the provision of water service, including the facilities for sourcing, treating, pumping, and distributing potable water for consumption, sanitation, and fire protection.²⁴ It also encompasses the assets necessary to support customer accounting, customer service, and basic business operations.²⁵

The Company proposes an Attrition Year rate base of \$305,777,368 while the CAD suggests that the Commission should approve a slightly lower rate base of \$297,805,860.²⁶ The City of Chattanooga does not offer an opinion on total Attrition Year rate base. The following table outlines the components and calculations of TAWC's Attrition Year rate base:

²¹ *Lane Rebuttal* at 7-12.

²² *Lane Rebuttal* at 9:18-12:2.

²³ *Id.*

²⁴ Petitioner's Rebuttal Exhibit BL-1, Line 23.

²⁵ *Id.*

²⁶ Petitioner's Exhibit RB-1-Summary-DD; *Pre-filed Testimony of CAD Witness William H. Novak*, 6, Table 1, TPUC Docket No. 24-00032 (Sept. 17, 2024) (hereinafter "*Novak*").

Line No.	Components of Rate Base	Schedule Reference	Per Books as of 12/31/2023	Attrition Year Adjustments	Attrition Year 13 Mo Avg 12/31/2024-12/31/2025
1	Utility Plant:				
2	Utility Plant in Service	Exhibit RB-2-UPIS-DD	\$472,080,671	\$43,749,753	\$515,830,424
3					
4	Total Utility Plant:		\$472,080,671	\$43,749,753	\$515,830,424
5					
6	Accumulated Depreciation:				
7	Accumulated Provision for Depreciation UPIS	Exhibit RB-6-Accumulated Depreciation-DD	\$112,114,198	\$14,634,297	\$126,748,495
8					
9	Total Accumulated Depreciation:		\$112,114,198	\$14,634,297	\$126,748,495
10					
11	Net Utility Plant:		\$359,966,473	\$29,115,456	\$389,081,929
12					
13					
14	Additions:				
15	Materials and Supplies	Exhibit RB-3-Materials and Supplies-DD	\$1,366,374	\$532,977	\$1,899,351
16	Cash Working Capital - Lead Lag Study	Exhibit RB-4-Cash Working Capital-DD	4,796,000	(405,000)	4,391,000
17	Working Capital - Other	Exhibit RB-5-Other Working Capital-DD	1,206,999	1,342,850	2,549,849
18	Total Additions:		\$7,369,373	\$1,470,827	\$8,840,200
19					
20	Deductions:				
21	Deferred Income Taxes	Exhibit RB-7-Deferred Taxes-DD	\$55,861,409	\$4,231,595	\$60,093,004
22	Customer Advances for Construction	Exhibit RB-8-Customer Advances-DD	7,500,963	750,002	8,250,965
23	Contributions in Aid of Construction	Exhibit RB-9-CIAC-DD	19,183,109	272,694	19,455,803
24	Unamortized Investment Tax Credit	Exhibit RB-10-Unamort ITC-DD	12,156	(7,146)	5,010
25	Jasper Highlands Reg Liab.	Exhibit RB-11-Jasper Highlands Reg Liab-DD	682,200	(91,800)	590,400
26	Utility Plant Acquisition Adjustment	Exhibit RB-12-UPAA-DD	3,749,579	0	3,749,579
27	Total Deductions:		\$86,989,416	\$5,155,345	\$92,144,761
28					
29					
30					
31	Original Cost Rate Base:		\$280,346,430	\$25,430,938	\$305,777,368

The components of rate base identified on the above table, which were generated from Petitioner’s Exhibit RB-1-Summary-DD, are discussed below.

A. Utility Plant in Service (“UPIS”)

UPIS consists of the original cost of all land, easements, land rights, structures, improvements, and other equipment used by the Company for the provision of water service. It is the largest component of rate base. TAWC’s proposed Attrition Year UPIS is \$515,830,424. To calculate this amount, the Company began with the per books UPIS balance as of December 31, 2024. It then calculated the forecasted monthly UPIS balances through December 31, 2025, by adding forecasted plant additions as they are placed into service and deducting forecasted plant retirements. Finally, the Company calculated the 13-Month (December 31, 2024-December 31, 2025) UPIS balance to determine the average amount for the Attrition Year.²⁷

²⁷ Pre-Filed Direct Testimony of TAWC Witness Dominic J. DeGrazia, 5:5-14, TPUC Docket No. 24-00032 (May 1, 2024) (hereinafter “DeGrazia”); Petitioner’s Exhibit RB-2-UPIS-DD.

The CAD, as discussed by Mr. Novak, accepts TAWC’s proposed Attrition Year UPIS of \$515,830,424 and “concluded that the Company’s plant addition forecast was both feasible and reasonable based on past activity.”²⁸ Accordingly, TAWC requests that the Commission accept the Company’s proposed Attrition Year UPIS balance.

B. Depreciation and Amortization

TAWC submitted a comprehensive depreciation study prepared by Larry E. Kennedy, a depreciation professional with Concentric Energy Advisors, Inc. (“Depreciation Study”).²⁹ The Depreciation Study determines the annual depreciation accrual rates and amounts for book purposes applicable to the original cost of investment, as of December 31, 2023, for the water assets of TAWC.³⁰ In preparing the Depreciation Study, Mr. Kennedy and his colleagues analyzed the historic plant account data of TAWC, met with Company management and operations representatives, and reviewed the average service life and net salvage indications of peer North American-based water utilities.³¹ The rates and amounts are based on the Straight-Line Method, incorporating the Average Life Group Procedure applied on a Remaining Life Basis.³² The Depreciation Study results in a depreciation rate related to Structures and Improvements of 2.09%; Transmission and Distribution of 2.52%; and General Plant of 10.84%.³³

Neither the Consumer Advocate nor the City of Chattanooga conducted its own depreciation study. No Intervenor challenged the analysis or conclusions reached by Mr. Kennedy in the Depreciation Study. Instead, City of Chattanooga witness Mr. Garrett argued that due to recent dramatic inflation, depreciation rates should remain the same “and there will be time to

²⁸ *Novak* at 6:4-11, 8:1-4.

²⁹ *Pre-filed Direct Testimony of TAWC Witness Larry E. Kennedy*, 1-2, TPUC Docket No. 24-00032 (Oct. 23, 2024) (hereinafter “*Kennedy*”); Exhibit LEK-2.

³⁰ *Id.*

³¹ *Id.* at 3-4.

³² *Id.* at 4-5.

³³ *Id.* at 7.

address any deficiencies in future rate cases when customer earnings are not so heavily stressed.”³⁴ Mr. Garrett’s argument is not based on any reviews of depreciation parameters, average service life estimates, cost of removal estimates, or depreciation methods and procedures. Instead, like many of his arguments, Mr. Garrett advocates without support for any possible rate mitigation mechanism, even when his position defies industry standards and methodologies.

TAWC’s currently-approved depreciation rates are based on 2007 accounting data and operating conditions.³⁵ As a result, TAWC’s accumulated depreciation accounts are in a deficient position by over \$22.9 million, with some accounts underfunded by as much as 5,768% and others overfunded by as much as 175.8%.³⁶ Mr. Garrett’s suggestion to simply defer these substantial deficits to future customers will result in an even more dramatic impact on later depreciation rates.³⁷ Adopting Mr. Garrett’s position will cause intergenerational inequities by further underfunding depreciation amounts and unfairly deferring necessary expenses to future generations.

Rather, the Commission should approve the Depreciation Study to ensure that the depreciation expense component of the revenue requirement will appropriately recover TAWC’s capital investment over the useful life of the assets providing utility service.

C. Materials & Supplies

The materials & supplies component of rate base recognizes the inventory balance of plant material, chemicals and other materials and supplies. TAWC calculated a proposed Attrition Year materials & supplies amount of \$1,899,351 by taking the average per books balance of materials

³⁴ *Pre-filed Testimony of Chattanooga Witness Mark E. Garrett*, 35, TPUC Docket No. 24-00032 (Sept. 17, 2024) (hereinafter “Garrett”).

³⁵ *Rebuttal Testimony of TAWC Witness Larry E. Kennedy*, 4, TPUC Docket No. 24-00032 (Oct. 22, 2024) (hereinafter “Kennedy Rebuttal”).

³⁶ *Id.* at 5.

³⁷ *Id.* at 5.

and supplies, using the 13-month ending balances of the Test Period, and then carrying this average through the Attrition Year.³⁸

The CAD, as discussed by Mr. Novak, accepts TAWC's proposed Attrition Year materials & supplies amount of \$1,899,351.³⁹ Accordingly, TAWC requests that the Commission also accept this amount for inclusion in rate base.

D. Cash Working Capital and Other Working Capital

1. *Cash Working Capital*

Cash working capital is a component of rate base. It represents the amount of funds necessary to finance the day-to-day operations of the utility and bridges the gap between the time when funds are provided to the Company by investors to allow the Company to provide service to customers, and the time revenues are received from customers as reimbursement for these services. The cash working capital component of rate base for the Attrition Year is \$4,391,000.⁴⁰ This amount was determined through a lead-lag study performed and sponsored by Mr. Harold Walker, III of Gannett Fleming Valuation and Rate Consultants, LLC.

In Tennessee, a utility's cash working capital is measured by calculating: (1) the amount of time elapsed between when the utility provides a service to its customers and when the utility receives payments from its customers ("revenue lag"); and (2) the amount of time elapsed between when the utility receives goods and services and when the utility pays its suppliers for those goods and services ("expense lead"). The difference between these two elapsed periods of time is known as the "net lag." The net lag in days is multiplied by the average daily cost of service (or revenue requirement) to determine the cash working capital requirement.

³⁸ *DeGrazia* at 5-6; Petitioner's Exhibit RB-3-Materials and Supplies-DD.

³⁹ *Novak* at 9.

⁴⁰ *Rebuttal Testimony of TAWC Witness Harold Walker III*, 2:10-16, TPUC Docket No. 24-00032 (Oct 22, 2024) (hereinafter "*Walker Rebuttal*").

The revenue lag is comprised of three components: service period lag, billing lag, and collection lag. The service period lag is the midpoint of average time between meter readings. This midpoint, based on average periodic (monthly or quarterly, as applicable) meter readings of approximately 37 days, is 18.7 days.⁴¹ The City of Chattanooga’s witness Mark Garrett incorrectly assumed that all customers are billed monthly and recommended adjusting the service period lag days to 15.2.⁴² The Commission should reject this faulty recommendation.⁴³

The billing lag is the time from the meter reading date to the date the customer is billed. This period is 2.7 days.⁴⁴ The collection lag is the average number of days from the date the bills are mailed to customers to the date payments are received by the Company, determined by summing the daily accounts receivable balance during the twelve months ended December 31, 2023, and dividing by the sum of the daily receipts for the same period. This period is 23.1 days.⁴⁵ The total revenue lag is, summing these together, 44.5 days.⁴⁶

For the expense lead calculation, Mr. Walker calculated expense lead days for each cost-of-service expense item based on the midpoints of the service periods to the dates the Company paid the invoices or accounts.⁴⁷ Mr. Walker provides a robust discussion of his methodology regarding expense lead calculations in his Direct Testimony.⁴⁸

The Consumer Advocate’s and the City of Chattanooga’s witnesses made certain recommendations regarding expense lead days, including (i) Service Company expense lead days, (ii) removal of depreciation & amortization, deferred income tax, and net income lead days, (iii)

⁴¹ *Id.* at 2; Schedule HW-2R.

⁴² *See Garrett* at 14:1-6.

⁴³ *Id.* at 4:1-9.

⁴⁴ *Id.* at 2; Schedule HW-2R.

⁴⁵ *Id.* at 3; Schedule HW-2R.

⁴⁶ *Id.* at 2.

⁴⁷ *Pre-filed Direct Testimony of TAWC Witness Harold Walker III*, 10-14, TPUC Docket No. 24-00032 (May 1, 2024) (hereinafter “*Walker*”).

⁴⁸ *Id.*

gross receipts tax lead days, (iv) payroll tax expense lead days, and (v) various other expense lead days.

Regarding the Service Company expense lead, Mr. Dittmore suggested increasing the lead days by 15.5 days, and Mr. Garrett suggested completely excluding the Service Company expenses from the lead-lag study, both based on the incorrect assumption that Tennessee-American pays for Service Company services before they are provided. But as noted by Mr. Walker, the Company pays service company expenses before the midpoint of the service period, not before it receives service.⁴⁹ Additionally, neither Mr. Dittmore nor Mr. Garrett dispute that amounts are actually owed to the Service Company under the terms of the contract between TAWC and the Service Company. This arrangement enables the Company to receive high quality services at a lower cost as compared to the cost of hiring their own full-time staff, as the services are provided at cost, without a markup for profit as would be the case in contracting with non-affiliated vendors.⁵⁰ The Commission should not penalize the Company for its efficient procurement of services⁵¹ or otherwise incentivize the utility to procure non-affiliated vendor services at a higher cost (though one that can be included in the lead-lag study). Accordingly, the Commission should reject the Intervenor's suggestions regarding Service Company expense lead days.

The Intervenor's also suggest removing depreciation & amortization, deferred income tax, and net income/return on equity from the lead-lag study. The basis for this suggestion is said to be a 2019 Commission decision, which the Intervenor's assert stands for the proposition that "non-cash items should be removed altogether from the CWC calculation."⁵² But when verifying this

⁴⁹ *Walker Rebuttal* at 5:5-9.

⁵⁰ *Walker Rebuttal* at 5:4-6, 7:20.

⁵¹ For a discussion of the Service Company's expertise and efficiency, see discussion of "Expenses Associated with Service Company" at section VII.A.8 below.

⁵² *Dittmore* at 42:8-11 (referencing *Order* at 47-49, TPUC Docket No. 18-00017 (Jan. 11, 2019)).

reference for accuracy, it is plain that the Intervenor's position is overstated.⁵³ Contrary to what the Intervenor would have the Commission believe, the January 11, 2019 Order in Docket No. 18-00017 did not even mention depreciation & amortization or deferred income tax in the section discussing working capital allowance.⁵⁴ More accurately, the Commission has previously declined *to remove* depreciation expense and deferred taxes, stating in a previous TAWC rate case that “[t]he panel does not agree that depreciation does not require a cash outlay.”⁵⁵

Here, depreciation & amortization and deferred tax expenses should be included in the working capital calculation. Regarding depreciation expenses, this should be included in a proper lead-lag study to account for the portion (*i.e.*, 12.2%) of depreciation expense that has not been collected or paid for by customers, because the Company collects cash associated with depreciation expense from customers in the same way it collects all other revenues—with a revenue lag. Furthermore, depreciation expense (accumulated depreciation) is subtracted from gross plant when rate base is determined. Therefore, at any point in time, the amount of depreciation expense (accumulated depreciation) that is subtracted when determining rate base is overstated because it is recorded using accrual accounting while the full cash amount of the expense has yet to be collected because, like all other revenues, it is uncollected from customers for 44.5 days.⁵⁶

These same principles apply to amortization and deferred income taxes. The reason for including deferred federal income taxes in a proper lead-lag study is to account for the portion (*i.e.*, 12.2%) of deferred federal income tax expense that has not been collected or paid for by customers. Specifically, deferred federal income taxes, or ADIT, are subtracted from net plant in

⁵³ Trial Volume I, Walker at 238:20-239:16.

⁵⁴ Order at 47-49, TPUC Docket No. 18-00017(Jan. 11, 2019).

⁵⁵ See Apr. 27, 2012 Final Order, TPUC Docket No. 10-00189 at pp. 114-115.

⁵⁶ See *Walker Rebuttal* at 11.

the determination of rate base under the premise that they are “cost free capital” provided by customers when customers pay their bills. But the Company collects cash associated with its deferred tax liability from customers in the same way it collects all other revenues, with a revenue lag of 44.5 days.⁵⁷ Given that the Company’s revenues are subject to a revenue lag of 44.5 days, this means that at any point in time, the amount of deferred taxes (ADIT) that is subtracted from rate base is overstated because it is recorded using accrual accounting, while the full cash amount (cash accounting) has yet to be collected, because, like all other revenues, it remains uncollected from customers for 44.5 days.⁵⁸

Excluding deferred taxes from the CWC calculation ignores the lag between the Company’s recorded deferred tax amount and its cash collection of that amount from customers. The situation begs the question: if 12.2% ($44.5 \text{ days} \div 365 \text{ days}$) of the deferred federal income tax expense has not yet been provided by customers, then who provided the 12.2% of the deferred federal income tax expense subtracted from net plant when determining rate base? The only possible answer is that investors provide 12.2% of the deferred federal income tax expense subtracted from net plant when determining rate base, which is the reason for its inclusion in the determination of the working capital allowance.

With respect to return on equity, while the Commission previously determined in Chattanooga Gas Company’s 2018 rate case, Docket No. 18-00017, that the utility there did not demonstrate that ROE caused a cash requirement, it was on this specific basis that the Commission removed ROE from working capital.⁵⁹ But as demonstrated by Mr. Walker, the net income/ROE should be included in the working capital calculation because operating income is the property of

⁵⁷ *Walker Rebuttal* at 10:3-11.

⁵⁸ *Walker Rebuttal* at 10:12-16.

⁵⁹ January 11, 2019 Order, TPUC Docket No. 18-00017 at 48.

investors when it is earned⁶⁰ but, like all other revenues, it is uncollected from customers for 44.5 days.⁶¹ Mr. Dittmore acknowledges that a lead-lag study “is intended to measure the amount of cash required (or provided by customers) in the provision of utility service.”⁶² Under *Bluefield*, the utility’s earned return is part of the provision of utility service.⁶³ Unless the Company is allowed a return on the uncollected 12.2% of net income through the cash working capital allowance, the Company does not have an opportunity to earn a return at the time the assets are being used, which runs afoul of *Bluefield*.⁶⁴ Accordingly, net income should be included in the working capital allowance.

As noted above, Mr. Garrett, on behalf of the City of Chattanooga, recommended increasing gross receipts tax expense lead days from -157.5 (negative) to 393.5, a total increase of 551.0 days. Mr. Garrett incorrectly reached out to a future, theoretical payment date of July 31, 2026, or 19 months after the end of the 12-month period that the lead-lag study is based on. The gross receipts tax expense is the only expense line item contained in the lead-lag study that Mr. Garrett treated in this fashion. According to the Tennessee Department of Revenue’s *Utilities Gross Receipts Tax Manual*, the gross receipts tax return “is due annually on or before August 1. The tax is imposed on the privilege of doing business during the period beginning with July 1 (immediately preceding the August 1 due date) through the next June 30, but it is measured by the taxpayer’s total receipts from sales of utilities during its most recent fiscal or calendar year ending

⁶⁰ See *Bluefield*, 262 U.S. at 690 (holding that under the Takings Clause, rates must yield a reasonable return on the value of the property used **at the time it is being used** to render the service (emphasis added)).

⁶¹ Trial Volume I, Walker at 241:11-243:10 (explaining that since customers are responsible, under the ratemaking formula, for paying for ROE along with other expenses approved by the Commission, the Company is not fully remunerated if ROE is excluded from working capital).

⁶² See *Dittmore* at 42:12-13.

⁶³ *Bluefield*, 262 U.S. at 690.

⁶⁴ See *Walker Rebuttal* at 11:4-10.

before that July 1.”⁶⁵ Therefore, the gross receipts tax is not a payment for a service previously provided but is primarily for future services. Moreover, the lead days for gross receipts tax expense that Mr. Walker developed and used in the Company’s lead-lag study reflect the correct service, billing, and payment dates and is consistent with the definition provided by the Tennessee Department of Revenue’s *Utilities Gross Receipts Tax Manual*.

Mr. Dittmore proposed increasing the Company’s payroll tax expense lead days from 10.5 to 12.0 days. Mr. Dittmore did not provide a basis for his departure from the Company’s 10.5 payroll tax expense lead days. The weighted average lead days for payroll tax expense, based on dollar days, is 10.5 days.⁶⁶ Because Mr. Dittmore’s 12.0 payroll tax expense lead days is arbitrary and unsupported, the Commission should reject his proposal and instead accept the Company’s 10.5 days.

Likewise, Mr. Dittmore recommended, without explanation or support, excluding general office expense; postage, printing and stationary expense; building maintenance and services expense; and employee related expense travel & entertainment expense. Having not provided any basis for removal of these items, Mr. Dittmore’s recommendation should be rejected. Each of the four operating expense line items are required for TAWC to provide service and should be included in the lead-lag study.

2. *Other Working Capital*

Other working capital accounts include (i) deferred regulatory expense, (ii) unamortized debt expense, and (iii) incidental collections.⁶⁷ For (i) deferred regulatory expense, the Company included \$1,295,000 representing the total estimated costs of this rate case, Docket No. 24-00032.

⁶⁵ Tennessee Department of Revenue, *Utilities Gross Receipts Tax Manual*, March 2023 at 6-7.
https://www.tn.gov/content/dam/tn/revenue/documents/tax_manuals/march-2023/Utilities-Gross-Receipts-Tax.pdf

⁶⁶ See Schedule HW-27 from TAWC Exhibit HW-1.

⁶⁷ See Petitioner’s Exhibit RB-5-Other Working Capital-DD.

The Consumer Advocate recommended a wholesale removal of the deferred regulatory expense, even though there is no dispute that the Company is entitled to recovery of rate case expenses. The Company's proposal, like that of Mr. Novak, defers rate case expense, creating a regulatory asset and amortizing it over a three-year period which could employ the use of the PCOP Rider as the mechanism of revenue recovery treatment. Additionally, as the regulatory asset balance would set the basis for recovery through any surcharge recovery mechanism, the Consumer Advocate's removal of the deferred regulatory expense balance should be rejected.⁶⁸

For (ii) unamortized debt expense, the Company included \$1,400,710, calculated by starting with the December 31, 2023 unamortized debt expense and subtracting the cumulative amortization of existing and forecasted debt issuances to arrive at the balance at the end of the attrition year. The Consumer Advocate recommended using a regression analysis to forecast unamortized debt cost balance, even though actual amortizations and specific forecasts based on projected issuances were available. The Commission should not adopt the use of a regression analysis for projected unamortized debt expenses. Accordingly, the Commission should adopt the Company's \$1,400,710 for unamortized debt expense.⁶⁹

For (iii) incidental collections, the Company included a reduction to rate base of \$145,861, comprised of sales and use tax performed on behalf of taxing authorities. The Consumer Advocate recommended increasing this amount to \$334,298 by departing from prior methodologies and using an additional service period lag day component. The Commission should adopt the Company's methodology, which was used in Docket No. 12-00049 & Docket No. 24-00011, and uses only the Payment Lag Days and applies this to the average daily funds for payments.⁷⁰

⁶⁸ See *Rebuttal Testimony of TAWC Witness Dominic J. DeGrazia*, 5:11-6:16, TPUC Docket No. 24-00032 (Oct. 22, 2024) (hereinafter "*DeGrazia Rebuttal*").

⁶⁹ See *id.* at 3:15-4:10.

⁷⁰ See *id.* at 4:11-5:5.

In conclusion, as addressed in the Rebuttal Testimony of Harold Walker, the Company's lead-lag study and other working capital components comprise a robust and supported working capital allowance. The amount of \$4,391,000 should be included in rate base as the working capital allowance.

E. Contributions in Aid of Construction ("CIAC")

CIAC is third-party, non-investor supplied capital in the form of non-refundable money or physical property. TAWC's proposed Attrition Year CIAC, which deducts from rate base, is \$19,455,803.⁷¹ The CAD's proposed Attrition Year CIAC is \$21,536,948.⁷²

There are two reasons these amounts differ. First, Mr. Novak included projects that are "work in progress" in his CIAC calculation even though TAWC excluded Construction Work in Progress ("CWIP") as a component of rate base.⁷³ Because TAWC excluded CWIP as a component of rate base, CIAC relating to capital projects should also be excluded. Otherwise, CIAC will be artificially inflated.

Second, Mr. Novak employed a regression analysis using a two-year trend of the 13-month average historical balances to forecast his attrition year balance, which further increased the CAD's Attrition Year CIAC by approximately \$1.5 million.⁷⁴ Mr. Novak's regression analysis should not be adopted as an appropriate forecasting method over TAWC's forecasted amounts, which are based on its actual Strategic Capital Expenditure Plan ("SCEP").⁷⁵ The former is attempting to predict what the latter already has.

⁷¹ *DeGrazia* at 8:17-9:2; Petitioner's Exhibit RB-5-CIAC-DD

⁷² *Novak* at 13:18-14:18.

⁷³ *Id.* at 13:18-14:18; *DeGrazia Rebuttal* at 7:17-21.

⁷⁴ *Novak* at 13:18-14:18; *DeGrazia Rebuttal* at 7:17-21.

⁷⁵ *DeGrazia Rebuttal* at 8:1-8.

The SCEP is developed to address priorities identified in the Company’s planning studies. Key inputs to the SCEP include the evaluations and inputs from the planning studies, which identify capital investment priorities and corresponding capital investment projects. These capital investment projects are the result of intensive analysis and evaluation of various factors, including demand projections, regulatory requirements, asset service reliability, condition of infrastructure, and environmental sustainability.⁷⁶ Moreover, in identifying capital investment projects, the Company takes into account asset investment strategy considerations such as safety, regulatory compliance, capacity and growth, infrastructure renewal, efficiency, resiliency, impacts resulting from failure of critical assets, reliability, quality of service, and sustainability of service.⁷⁷ Ultimately, the SCEP is the Company’s actual plan, which is the product of highly knowledgeable personnel conducting extensive consideration and which makes a third-party’s forecast based on past trends unnecessary, or at the least unnecessarily speculative.

Accordingly, because the CAD’s adjustments to CIAC are improper, the Commission should accept TAWC’s proposed Attrition Year CIAC of \$19,455,803.

F. Customer Advances

Like CIAC, customer advances are non-investor supplied funds from customers for the installation of new mains that deduct from rate base. TAWC’s proposed Attrition Year customer advances is \$8,250,965 while the CAD’s is \$10,636,908.⁷⁸ As with CIAC, the difference in these amounts is due to the CAD’s inappropriate inclusion of customer advances relating to capital

⁷⁶ *Direct Testimony of TAWC Witness Kevin Kruchinski*, 4:16-19, TPUC Docket No. 24-00032 (May 1, 2024) (hereinafter “*Kruchinski*”).

⁷⁷ *Id.* at 4:19-23.

⁷⁸ *DeGrazia* at 9:3-13; Petitioner’s Exhibit RB-8-Customer Advances-DD; *Novak* at 12:12-13:16.

projects when CWIP has been excluded from rate base and to Mr. Novak’s use of a regression analysis to forecast instead of relying on the SCEP.⁷⁹

Accordingly, because the CAD’s adjustments to customer advances are improper, the Commission should accept TAWC’s proposed Attrition Year customer advances of \$8,250,965.

G. Jasper Highlands Regulatory Liability

The Parties agree that the Attrition Year regulatory liability associated with the unamortized balance for the closing costs on the Company’s Jasper Highlands acquisition is \$590,400.⁸⁰ Accordingly, TAWC requests that the Commission also accept this amount as a deduction from rate base.

H. Utility Plant Acquisition Adjustment (“UPAA”): Jasper Highlands Acquisition Adjustment

The Parties agree that the Attrition Year UPAA associated with the unamortized balance for the Company’s Jasper Highlands acquisition is \$3,749,579.⁸¹ Accordingly, TAWC requests that the Commission also accept this amount as a deduction from rate base.

VI. REVENUE

A. Forecasted Revenues

TAWC’s total Attrition Year operating revenue at present rates is \$71,858,982.⁸² To arrive at this amount, the Company calculated its total Test Period revenue by using actual test period billing determinants for the twelve months ending December 2023. It then normalized Attrition

⁷⁹ *DeGrazia Rebuttal* at 6:19-7:14; *Novak* at 12:12-13:16.

⁸⁰ *Novak* at 15:7-12; *DeGrazia* at 10:4-14; Petitioner’s Exhibit RB-11-Jasper Highlands Reg Liab-DD.

⁸¹ *Novak* at 15:13-16; *DeGrazia* at 10:4-14; Petitioner’s Exhibit RB-12-UPAA-DD.

⁸² *Pre-filed Direct Testimony of TAWC Witness Heath Brooks*, 3:19-4:10, TPUC Docket No. 24-00032 (May 1, 2024) (hereinafter “*Brooks*”); Rebuttal Exhibit – BL – 1, Line 4; *Lane Rebuttal* at 3.

Year revenues under current rates, by using projected normalized billing determinants for the twelve months ending December 2025.⁸³

Mr. Novak, on behalf of the CAD, calculated an Attrition Year revenue total of \$72,400,026 based on adjustments for customer usage and customer growth.⁸⁴ While the difference in the parties' total revenues is less than 1%, Mr. Novak employed less reliable methodologies to perform his calculations, particularly with respect to his usage findings for industrial customers and sales for resale special contracts.⁸⁵ As an initial matter, however, it is necessary to understand how TAWC properly determined usage as the process to project water usage for each rate zone involves multiple steps and varies among rate classes.

1. *TAWC reasonably forecasted its customer water usage, while the CAD relied on a less reliable methodology.*

For *industrial*, TAWC normalized industrial usage for the Attrition Year by using a two-year average based on 2022 and 2023 usage. This multiyear average method utilized by TAWC is the superior method for forecasting non-homogenous class usage such as TAWC's industrial customers, which are all in the Chattanooga Rate Zone.⁸⁶ On the other hand, the use of a simple linear regression model, like the one performed by Mr. Novak, is a less reliable method for calculating usage for a non-homogenous group because a single customer can have a significant impact on the model results.⁸⁷

⁸³ *Rebuttal Testimony of TAWC Witness Heath Brooks*, 2:6-17, TPUC Docket No. 24-00032 (Oct. 22, 2024) (hereinafter "*Brooks Rebuttal*").

⁸⁴ *Novak* at 17:6-11.

⁸⁵ *Id.*; *Brooks Rebuttal* at 3:11-15.

⁸⁶ "Customer classes of a utility can generally be categorized into two groups – homogenous and non-homogenous – based primarily on consumption behavior. Homogenous customer classes contain a large number of customers that have similar consumption patterns while non-homogenous customer classes contain a small number of customers that do not have similar consumption patterns. Residential, commercial, and public authority classes are usually considered homogenous. Industrial, sales for resale, and special contract classes are usually considered non-homogenous." *Brooks Rebuttal* at 4:3-5:6.

⁸⁷ *Id.*

Here, the Company's industrial customer class has 114 customers with the four largest industrial customers accounting for 64% of industrial usage. This small class size, which is dominated by a small subset, explains why Mr. Novak's simple linear regression model has a correlation of just 31.7%, thus indicating that his regression model only explains 31.7% of the variation in usage.⁸⁸ Accordingly, Mr. Novak should have utilized a multi-year average methodology. If he had, his Attrition Year Revenue at present rates would adjust by (\$253,570).⁸⁹

For **SFR** (sale for resale), TAWC utilized the contracted minimum annual usage amounts for each customer to project total SFR usage for the Attrition Year.⁹⁰ The Company has four special contract SFR customers that all have designated contracted minimum usage amounts. These contracted minimum usage amounts are the guaranteed amount of usage in an annual period for which the Company will receive revenue.⁹¹ It is appropriate to set the usage at the respective guaranteed amount.

Mr. Novak, however, relied exclusively on Test Period actual usage for his Attrition Year usage projections.⁹² Because the Company does not reasonably expect to receive normalized revenue higher than the contracted minimum,⁹³ Mr. Novak's use of historical usages is a less desirable method. Additionally, any of these customers could invest in other sources of water within their respective water systems to reduce the amount of water needed from TAWC, as Walker County Water and Sewerage Authority is now doing by completing a water treatment plant that will significantly reduce its water needs from TAWC.⁹⁴ If Mr. Novak had used contractual minimum usage, his projected sales for resale special contract usage would be reduced by

⁸⁸ *Id.*

⁸⁹ *Id.* at 5:9-13.

⁹⁰ *Brooks* at 7:9-11.

⁹¹ *Brooks Rebuttal* at 5:20-6:6.

⁹² *Id.* at 6:9-10.

⁹³ *Id.* at 5:20-6:6.

⁹⁴ *Id.* at 6:1-4.

2,318,225 hundred gallons, which causes a revenue adjustment to his attrition year revenue under current rates of (\$446,503).⁹⁵

As discussed in detail in Company Witness Charles B. Rea's Pre-filed Direct Testimony, TAWC quantified **residential, commercial, and other public authority ("OPA")** usage projections by first determining normalized usage per customer at the consolidated Company level for each respective class.⁹⁶ Specifically, the Company determined usage by employing a statistical linear regression model,⁹⁷ which predicts trends in water usage and forecasts the effects/impacts of change.⁹⁸ Statistical linear regression analysis for these classes produces more reasonable and accurate forecasts than taking a simple multi-year average because it normalizes for numerous variables.⁹⁹ Moreover, after inputting variables into the model, the Company then normalized usage for each customer, which also makes it more accurate than a general average.¹⁰⁰ This statistical approach went unchallenged by the intervening parties.

Upon determining the projected annual normalized usage per customer, TAWC then multiplied this normalized usage by the projected average 2025 customer count to quantify total usage for each respective class. Next, TAWC allocated its determined total usage for the 2025 Attrition Year to each month of the Attrition Year based on historical total system delivery volume. Monthly usage was then allocated to each Service Area based on historical 2022 and 2023 usage totals. For the Chattanooga and Sequatchie Valley Service Areas, which include more than one

⁹⁵ *Id.* at 6:13-17.

⁹⁶ *Id.* at 6:10-15.

⁹⁷ The model can also be used to develop billing determinants and revenue projections in this proceeding. *See Direct Testimony of TAWC Witness Charles B. Rea*, 3:4-5, TPUC Docket No. 24-00032 (May 1, 2024) (hereinafter "*Rea*").

⁹⁸ *Rea* at 38:19-23-39:1-2.

⁹⁹ *Id.* at 4:14-17.

¹⁰⁰ *Id.* at 40:12-14; 42:1-3; 46:20-22.

rate zone, monthly usage for each class was allocated to each Rate Zone based on 2022 and 2023 historical usage totals.¹⁰¹

Ultimately, the table below displays the annual usage per customer that's being used to forecast normalized revenue for residential, commercial and OPA customers.¹⁰²

Period	Residential	Commercial	OPA
2024	45.80	336.39	1003.86
2025	45.61	334.03	989.78

2. *The Company's methodology for development of Other Operating Revenues is reasonable and should be adopted.*

The difference between the Company's and CAD's total other operating revenues, which are summarized by Mr. Novak on Table 9 of his pre-filed testimony (page 18), is minor. The methodology employed to set these values, however, is different. Novak simply adopted the Test Period amounts. The Company, on the other hand, calculated these revenues using the following:

Fees and Charges – TAWC employed a two-year average, utilizing 2022 and 2023, to determine a normalized level of occurrences and make revenue projections for Activity Fees, New Service Fees, Disconnection – Reconnection Charges, Returned Check Charges, and Usage Data Charges. To quantify the total revenue for each fee or charge, the Company then multiplied normalized billing determinants for each fee by each respective rate.¹⁰³

Late Payments – The Company quantified late payment revenues by calculating a ratio, based on a two-year average, of late payments to total revenue. It then applied the ratio to revenue projections in the Company's forecast to determine Attrition Year late payment revenues.¹⁰⁴

¹⁰¹ *Brooks Rebuttal* at 6:16-7:3.

¹⁰² *Id.* at 7:20-8-6.

¹⁰³ *Id.* at 8:9-14.

¹⁰⁴ *Id.* at 8:15-17.

Rents – TAWC relied on contractual revenue amounts to determine revenue projections for rents.¹⁰⁵

Miscellaneous Service Fees – For miscellaneous service fees, TAWC based revenues projections on a two-year average using 2022 and 2023 actuals.¹⁰⁶

In sum, like its customer class revenues, TAWC employed the preferred forecasting method by using a two-year average to determine a normalized amount. Mr. Novak simply adopted the Test Period amounts. One year may not be like the next, which is why averages are more reliable.

Based on the foregoing, the Commission should adopt TAWC’s projected normalized Attrition Year revenues at present rates and the methodologies it utilized to calculate the same. The difference between the projected normalized Attrition Year operating revenue at present rates and the Company’s total revenue requirement of \$85,692,120 is the basis for the requested increase in revenues of \$13,833,138.¹⁰⁷

B. Tariff Changes

The Company has proposed several tariff revisions, most of which are unopposed by the Intervenors.¹⁰⁸ The Consumer Advocate does oppose two of the Company’s proposed tariff changes – (1) the establishing of an \$40.00 After-Hours Charge and (2) the increase in the meter tampering penalty fee from \$92.00 to \$250.00.¹⁰⁹ Both fees/charges are appropriate and should be approved by the Commission.

As to the After-Hours Charge, the Consumer Advocate’s concern is that “After-Hours” was not specifically defined in the proposed tariff.¹¹⁰ The Company has agreed to define “Normal

¹⁰⁵ *Brooks* at 8:18.

¹⁰⁶ *Id.* at 8:19-20.

¹⁰⁷ *Brooks* at 3:19-4:10; Rebuttal Exhibit – BL – 1, Line 38; *Lane Rebuttal* at 3, Tbl 1.

¹⁰⁸ *See generally Lane* at 35:4-36:2; Exhibit-BL-2; *Brooks* at 32:2-33:22; and *Novak* at 27:16-30:3; 31:3-34:3.

¹⁰⁹ *Novak* 33:15-19.

¹¹⁰ *Lane Rebuttal* at 28:4-12.

Business Hours’ as 7:30 a.m. to 4:00 p.m. and has amended its proposed Tariff consistent with this revision.¹¹¹

For the meter tampering fee, the Company has not increased the fee since at least October 2012.¹¹² The intention of the fee is to deter a customer’s unauthorized manipulation of the meter to steal water.¹¹³ In 2023, the Company averaged 388 customers each month who illegally restored water service.¹¹⁴ This illegal use is not only theft, but it also drives up the total costs of all customers legally obtaining water service.¹¹⁵ Appropriate deterrence of this conduct by adjusting the tampering fee for 12 years of inflation is reasonable and should be approved.¹¹⁶

VII. EXPENSES

A. Operating and Maintenance Expenses

In TAWC’s 2012 rate case, the Commission authorized an O&M per customer cost of \$314. At the rate of inflation, that same per customer cost today would be \$380. In this rate case, TAWC is not requesting that the Commission authorize an O&M per customer cost of \$380. Rather, because TAWC has successfully managed its O&M costs, TAWC is requesting an O&M per customer cost of \$349, which amounts to a total O&M expense of approximately \$31.7 million.¹¹⁷ This requested increase is necessary because of increases in the cost of employee related expenses, insurance other than group, materials and contractors, and production costs – which includes water treatment chemicals, power, water division fees and waste disposal. If the Commission approves

¹¹¹ *Id.* See also *Lane Rebuttal*, Exhibit 3.

¹¹² *Lane Rebuttal* at 28:13-29:14.

¹¹³ *Id.*

¹¹⁴ *Id.*

¹¹⁵ *Id.*

¹¹⁶ *Id.*

¹¹⁷ *Pre-Filed Direct Testimony of TAWC Witness Grady Stout*, 26:9-27:2, TPUC Docket No. 24-00032 (May 1, 2024) (hereinafter “*Stout*”).

this reasonable and necessary increase, it will allow the Company to continue operating in a cost-effective manner to provide high quality water service over the long-term.¹¹⁸

1. Labor and Labor Related

a. TAWC's Proposed Employee Staffing Level and Attrition Year Forecast Should be Approved by the Commission as It Is Reasonable, Prudent, and Supported by the Record.

In order to operate effectively and efficiently to provide safe, reliable, and affordable water, Tennessee-American has an obligation and duty to staff the Company appropriately. This requires an ongoing evaluation of the appropriate levels of internal and contract labor, straight time versus overtime, training programs, and technology to maximize the optimum solutions for the unique and evolving challenges that confront operations.¹¹⁹

A significant part of the Company's cost structure is for labor, and when vacancies occur, TAWC reviews and evaluates the internal and operational value of that position to determine the best course of action. Options include transfers, modifications and possibly even position elimination, with performance, efficiency, and safety as intricate components of the overall evaluation. Consistent with business and operational needs, including the onset of new and ever-evolving regulatory requirements and advancements in technology, new positions are considered as well.¹²⁰

As set forth in the Pre-filed Direct Testimony of TAWC Witness Grady Stout, as of December 31, 2023, TAWC had 101 full time employees.¹²¹ This staffing level does not adequately support the needs of the Company to perform and complete all of the necessary day-to-day work.¹²² So, the Company has utilized overtime, contracted labor and contractors in order

¹¹⁸ *Id.* at 27:3-15.

¹¹⁹ *Stout* at 37-38.

¹²⁰ *Id.*

¹²¹ *Id.* 38:3-6.

¹²² *Stout* 38:4-6.

to maintain appropriate service levels.¹²³ The Company has forecasted 117 full-time employees for the Attrition Year, which is an increase of 16 positions over the 101 full-time positions at the end of the Test Period.¹²⁴

The forecasted staffing level is required to maintain the Company's current level of operations and to manage increased organic customer growth and increased water regulation.¹²⁵ Since 2012, the Company has added 11,449 new customers. TAWC's rate of growth in recent years has accelerated and the increasing customer count requires more infrastructure improvement projects, produces more customer inquiries, and necessitates more meter readings and water quality testing. Increasing state and federal regulations has also added to the Company's workload.¹²⁶

i. **The Company has Support and Justification for the Company's Attrition Year Forecast.**

Although current staffing levels are not sufficient to support the Company's operations going forward as cost effectively as possible, the Consumer Advocate and the City of Chattanooga both contend that the Company's request for additional staffing, and associated labor expenses should be denied.¹²⁷ As detailed in the Rebuttal Testimony of TAWC Witness Stout, the Company maintains that the additional employee positions are essential to support its operations. Without the new positions, Tennessee-American will neither be able to service the communities continued growth, as demonstrated by its advancing customer count, nor effectively comply with more

¹²³ *Id.* at 37-39; *see also Rebuttal Testimony of TAWC Witness Robert Prendergast*, 5:10-14, TPUC Docket No. 24-00032 (Oct. 22, 2024) (hereinafter "*Prendergast Rebuttal*").

¹²⁴ *Rebuttal Testimony of TAWC Witness Grady Stout*, 4:17-20, TPUC Docket No. 24-00032 (Oct. 22, 2024) (hereinafter "*Stout Rebuttal*"). As of October 2024, TAWC has 105 employees, with an additional employee slated to start. *Stout Rebuttal* 6:2-4.

¹²⁵ *Stout* 36:4-6.

¹²⁶ *Stout* at 38-39 and *Stout Rebuttal* at 4-5; *see also Stout Rebuttal* 5: 11-14 ("[N]either Mr. Dittemore nor Mr. Garrett disputed our claim that the amount of work has increased nor that we need more manpower to continue to serve our customers safely and reliably.").

¹²⁷ *Dittemore* 21:1-19; *Garrett* 32:10-19.

stringent water and environmental standards and regulations without incurring substantial additional overtime and contracted labor expense.¹²⁸ Neither the CAD nor the City addressed how the Company would meet these increasing and challenging demands going forward without additional staffing to help ensure the provision of safe, clean and reliable water service.¹²⁹

While the Intervenor has criticized the Company's historical staffing levels,¹³⁰ TAWC is actively recruiting for 8 additional positions.¹³¹ Moreover, staffing numbers are always fluctuating and such fluctuations and turnover occur with most businesses, including utilities.¹³² For instance, in 2024 alone, TAWC hired 17 new employees and lost 13 employees.¹³³ The Intervenor did not address these historical fluctuations. Moreover, the City of Chattanooga Witness Mr. Garrett failed to acknowledge that TAWC's current rates, established in its 2012 rate case, are based on 2012 labor costs. Therefore, since that time until the present, the Company has been able to efficiently and effectively manage its resources, including labor costs, to provide safe and reliable water service.¹³⁴ No one would challenge that labor expenses have increased over the past twelve years.¹³⁵ Even though the Intervenor opposes the request for additional staffing, neither the CAD nor the City adjusted their projected level of expense to include additional overtime or contractors expense, potential short-term options for the Company to meet its forecasted needs to operate.¹³⁶

¹²⁸ *Stout* 38:11-12.

¹²⁹ *Prendergast Rebuttal* 3:7-12 ("Moreover, the vacancy adjustments are particularly inappropriate given that Mr. Dittmore and Mr. Garrett do not provide any corresponding upwards adjustment to overtime and/or contract services. For example, the Company is projecting 12,965 overtime hours in this case (see TAWC Schedule EXP -5.3 and TAWC Schedule EXP-5.4) even though the 3-year average of overtime hours is 14,043 (see TAWC Schedule EXP-5.6) and the overtime hours during the base period of 2023 was 16,120 (see CADDR 1-112).").

¹³⁰ *Dittmore* 22:1-4. *Garrett* 31:6-14.

¹³¹ *Stout* 6:4-6. *See also* Trial Volume I, *Stout* 186:10-24.

¹³² Trial Volume I, *Stout* 190:21-23 (*Stout* testifying that "There will be movement, and there will be days the number fluctuates without a doubt.").

¹³³ *Stout* 6:6-8.

¹³⁴ *Id.* at 7:3-7.

¹³⁵ *Id.* at 12:8 and *Stout Rebuttal* 7:7-9.

¹³⁶ *Stout Rebuttal* 8:1-11.

ii. **The Company's Historic Staffing Levels.**

TAWC regularly evaluates its workload to align work to better serve its customers, while simultaneously balancing employee departures, retirements, promotions, reorganizations, and similar changes.¹³⁷ When replacements or new hires are necessary, doing so in a manner that is most effective long-term takes time and flexibility.¹³⁸ As explained by TAWC Witness Mr. Prendergast, the Company has averaged 104 full-time employees a year since 2012,¹³⁹ which is fairly remarkable given the constant fluctuations and turnover.

Union Witness Garvey's reliance on the Company's 2010 rate case to support his argument that the Company may not staff its operations at the level authorized in its current rate case is not well-grounded.¹⁴⁰ TAWC's 2012 rate case settlement resulted in base rates being reset from those established in its 2010 rate case. In essence, no new staffing level was established in the 2012 rate case for purposes of setting rates. In fact, in its 2012 rate case, the Company actually proposed to reduce its full-time staffing level to 107 full-time employees.¹⁴¹

iii. **Conclusion Supporting Approval of the Company's Request for Number of Full-Time Employees.**

As has been recognized previously by the Commission, the Company must have the operational flexibility to manage its operations and its workload. No credible evidence has been presented that should result in hampering, if not crippling, Tennessee-American's ability to effectively and efficiently provide safe, reliable, and affordable water service to the growing and thriving communities it serves. As reflected in the record, the Intervenor's did not challenge the

¹³⁷ *Prendergast Rebuttal* 3:13-19; *see also* Trial Vol. 1, Stout at 190:5 (Stout testifying that "retirements happen every day[.]").

¹³⁸ *Stout Rebuttal* at 9-11 (Witness Stout describes the need for flexibility).

¹³⁹ *Prendergast Rebuttal* at 4-5.

¹⁴⁰ *Revised Testimony of Union Witness Shawn Garvey*, 6:7-9 (Oct. 21, 2024) (hereinafter "*Garvey*").

¹⁴¹ *Stout Rebuttal* at 11-12.

Company's increasing workloads or offer a meaningful resolution to the same.¹⁴² Rather, the Intervenor only presented outcome-driven opposition that is not in the best interest of the Company's customers. As Mr. Stout testified, accepting overtime is not mandatory.¹⁴³ Even Union Witness Mr. Danny Seebeck conceded that an overtime-based solution is "not sustainable."¹⁴⁴

The Company's employee level forecast for the Attrition Year is well-supported by the evidentiary record and is also supported by the Union.¹⁴⁵ The proposal to include the full Attrition Year workforce request of 117 full-time employees should be granted consistent with the Petition. The unsupported and inappropriate adjustments recommended by the Intervenor should be rejected.¹⁴⁶

b. The Company's Performance Compensation is Reasonable and Comparable to Other Market-Based Incentive Programs.

The Company structures its compensation strategy around attracting and retaining committed, dedicated and highly qualified employees.¹⁴⁷ Its overall philosophy is to provide employees with a total compensation package that is market-based and competitive.¹⁴⁸ As part of this compensation philosophy, the Company targets its total direct compensation (base and variable compensation) for near the market median.¹⁴⁹ This approach provides competitive market-based compensation, while continuing to motivate employees to achieve goals that improve performance and efficiency—an approach the Company believes better benefits both customers and employees

¹⁴² *Id.* at 8-9 ("No party has submitted evidence to the contrary, nor has any party to this case disputed the Company's increased workload or its need to increase its labor-force.").

¹⁴³ *Id.* 7:17-19 ("[O]vertime is offered to our employees but is not mandated, meaning that the Company cannot rely on overtime as an alternative to staffing at the appropriate level.").

¹⁴⁴ Trial Volume IIB, Seebeck 206:11-13.

¹⁴⁵ *Garvey* at 2:20-21 ("UWUA supports TAWC's request for approval to recover in rates expenses for its forecasted 117 full-time employees."); *see also* Trial Volume IIB, Seebeck 196:22-24.

¹⁴⁶ *Prendergast Rebuttal* at 2-4 and *Stout Rebuttal* at 13-14.

¹⁴⁷ *Stout* at 39:1-40:2.

¹⁴⁸ *Pre-Filed Direct Testimony of TAWC Witness Robert Mustich*, 4:10-16, TPUC Docket No. 24-00032 (May 1, 2024) (hereinafter "*Mustich*").

¹⁴⁹ *Id.*

alike.¹⁵⁰ The Company’s compensation philosophy is generally consistent with other utilities and other employers.¹⁵¹

TAWC has three classifications of employees: union hourly employees, non-union hourly employees, and exempt employees.¹⁵² All employees receive base pay.¹⁵³ Union and non-union hourly employees receive variable pay in the form of overtime pay and are eligible for performance pay. Exempt employees are eligible for performance pay.¹⁵⁴

i. **Overview of the Company’s Performance Compensation**

Performance pay is awarded under the Annual Performance Plan (“APP”), a short-term performance plan, and the Long-Term Performance Plan (“LTPP”), a long-term performance plan. All full-time employees participate in the APP. Eligibility for the LTPP is limited to certain exempt employees.¹⁵⁵

The APP rewards performance under key performance goals and targets. For 2024, the APP goals are as follows:¹⁵⁶

¹⁵⁰ *Stout* at 39:1-40:2.

¹⁵¹ *Mustich* at 4:18-5:3.

¹⁵² *Stout* at 40:3-11.

¹⁵³ *Id.*

¹⁵⁴ *Id.*

¹⁵⁵ *Id.* at 40:14-16.

¹⁵⁶ “EPS,” as described in the table, is earnings per share.

STRATEGY	GOAL	TARGET	WEIGHT
GROWTH	EPS Range	\$5.10 - \$5.20	50%
CUSTOMER	Customer Satisfaction	1st Quartile	15%
SAFETY	OSHA Recordable Injury Rate (ORIR)	.61 or less	5%
	Days Away, Restricted and Transfer (DART) severity rate	.29 or less	10%
ENVIRONMENTAL LEADERSHIP	Drinking Water Compliance Notice of Violation (NOVs)	6	5%
	Drinking Water Quality Notice of Violations (NOVs)	2	10%
PEOPLE	Women Representation	25%	2.5%
	Ethnic and Racial Diversity Representation	21%	2.5%

Under the LTPP, American Water provides restricted stock units (“RSUs”) and performance stock units (“PSUs”) as long-term variable compensation. The RSUs and PSUs are based on three-year vesting period, where RSUs are based on time-based vesting only and PSUs are based on performance vesting conditions over that three-year period.¹⁵⁷

ii. **Performance Compensation Based on Operational and Financial Objectives Benefit Customers**

The Company’s performance compensation plans have both operational and financial objectives. These performance objectives focus employees’ efforts towards benefitting customers. The operational goals of the APP are designed to focus plan participants on the results that can most directly influence customer satisfaction, health and safety, environmental performance, and

¹⁵⁷ Stout at 41-42. See also 2024 TAWC MFG Q038_Attachment3_CONFIDENTIAL, p.6. The RSUs represent 30% of the LTPP, which is paid to all eligible employees without consideration for financial performance.

workforce diversity.¹⁵⁸ For example, goals limiting the number of Notices of Violation (“NOV”) for drinking water regulations help maintain a focus on providing safe and reliable water service, while goals for customer satisfaction measure the level to which customers value the activities and services performed by employees throughout the business.¹⁵⁹ Customers benefit because operational performance is improved by controlling costs, capturing efficiencies, promoting effective safety and risk management practices, and enhancing customer service.¹⁶⁰

Likewise, the financial goals of the APP and LTPP are complementary to the operational goals and benefit customers in many ways. Achieving financial goals, such as targeted earnings per share (“EPS”), requires attention to operating efficiency from employees at all levels of the organization, and not just the upper ranks.¹⁶¹ Maintaining operating efficiency mitigates increases in costs, and also benefits customers due to the Company’s enhanced ability to invest in its infrastructure. Every dollar of operating expenses saved can fund approximately \$8 of investment.¹⁶² Finally, the impact of a utility’s financial health on its access to capital at reasonable rates must be considered as well.¹⁶³ Because utilities are capital intensive and must routinely and consistently access the capital markets, customers ultimately benefit when their utility has the financial health to do so at reasonable rates.¹⁶⁴ Simply put, a financially healthy utility benefits customers because it enables the utility to meet its service obligations at reasonable financing costs.¹⁶⁵

¹⁵⁸ *Id.* at 42:11-43:2.

¹⁵⁹ *Id.* at 42:17-22.

¹⁶⁰ *Id.* at 42:14-17.

¹⁶¹ *Id.* at 43:3-15.

¹⁶² *Id.* at 43:3-44:2.

¹⁶³ *Prendergast Rebuttal* at 8:6-20.

¹⁶⁴ *Id.*

¹⁶⁵ *Stout* at 44:5-13.

iii. **The Company's Performance Compensation Plan is Reasonable and Allows TAWC to Attract Talent in a Highly Competitive Market.**

Compensation of TAWC's employees is a necessary cost of providing utility service in providing safe and reliable drinking water service, much like any other prudently incurred costs of service recoverable in rates. Thus, as for all operating costs, if it is prudently incurred and reasonable in amount, relative to what the industry pays for the same services, it should be recoverable through rates.¹⁶⁶ Furthermore, based on the Company's experience, competition among companies to attract and retain the best quality and highest performing employees is fierce.¹⁶⁷ Therefore, the Company's compensation program must provide employees with a total compensation package on par with those offered by companies with which it competes for employees.¹⁶⁸

To evaluate whether the total compensation provided to TAWC employees is at market levels, the Company retained the services of Willis Towers Watson ("WTW") to perform a total compensation study.¹⁶⁹ The study concluded that the Company's compensation package is "within the range of the competitive market median" and comparable to and competitive with plan designs of other utilities.¹⁷⁰

iv. **The CAD and the City of Chattanooga argue that the Company's Request for Performance Compensation Recovery should be Drastically and Unreasonably Reduced.**

Mr. Dittmore, on behalf of the CAD, argues that 55% of the APP compensation recovery requested by the Company should be removed.¹⁷¹ He argues that the 50% weighting of the EPS in the APP primarily benefits the Company's shareholders and therefore should not be recoverable in

¹⁶⁶ *Stout* at 45:11-15; *Prendergast Rebuttal* at 9:1-21.

¹⁶⁷ *Id.* at 47:13-16

¹⁶⁸ *Id.* at 49:3-6.

¹⁶⁹ *Mustich* at 3:2-17.

¹⁷⁰ *Id.* at 7:19-9:5.

¹⁷¹ *Dittmore* at 25:16-17.

rates. In support of his argument, he cites the 2018 Chattanooga Gas Company rate case, TPUC Docket No. 18-00017, which, he states, specifically excluded this type of metric.¹⁷² Mr. Dittmore further argues that an additional 5% of the APP should be removed from recovery since it is the percent allocated to meeting thresholds for women and ethnic representation in the workforce.¹⁷³ Mr. Dittmore also argues that 100% of the LTPP recovery must be removed because the LTPP costs only benefit shareholders and offer no benefit to the customers.¹⁷⁴

Mr. Garrett likewise argues that incentive pay should be largely unrecoverable. He looks to the 50% weighting of the EPS to argue that performance pay benefits shareholders, as opposed to customers, and also cites TPUC Docket No. 18-00017.¹⁷⁵ Based on that, Mr. Garrett argues that only 50% of the APP costs should be recoverable. Mr. Garrett, like Mr. Dittmore, argues that 100% of the LTPP costs should be removed.¹⁷⁶

Mr. Dittmore and Mr. Garrett fail to recognize that including financial goals in performance pay programs, like the approach that TAWC takes, reflects the connection between the Company's financial performance and its operational success.¹⁷⁷ Customers benefit from the Company's strong financial performance. All types of organizations implement forms of performance compensation in order to stress to employees the importance of financial efficiency and viability and how it is tied to delivering on customer expectations.¹⁷⁸ Mr. Dittmore and Mr. Garrett also fail to recognize that thirty percent of the LTPP compensation, the RSU award portion described above, is not based on financial metrics at all.¹⁷⁹ It is simply paid based on time-based

¹⁷² *Id.* at 25:1-12.

¹⁷³ *Id.* at 25:12-16.

¹⁷⁴ *Id.* at 24:20.

¹⁷⁵ *Garrett* at 17:7-13-18:1-25.

¹⁷⁶ *Id.* at 31:1-5.

¹⁷⁷ *Rebuttal Testimony of TAWC Witness Robert V. Mustich*, 6:6-8, TPUC Docket No. 24-00032 (Oct. 22, 2024) (hereinafter "*Mustich Rebuttal*").

¹⁷⁸ *Id.* at 4:10-16.

¹⁷⁹ *See* 2024 TAWC MFG Q038_Attachment3_CONFIDENTIAL, p.6; Trial Volume I, Mustich, at 263:5-15

vesting over a three-year period and it is used by the Company to retain critical management employees.¹⁸⁰

The APP's purpose is to attract and retain a performance-oriented workforce, while the LTPP helps retain that workforce and reduces the costs and disruptions associated with employee turnover. If TAWC employees did not receive performance pay, their compensation would be at the low end of reasonable and below competitive levels. As noted, both of these types of plans are quite common in American business and employees expect to participate in such plans, and as such the absence of them would make TAWC less competitive.¹⁸¹

Other regulatory authorities have seen the reasonableness and benefit to customers of including performance compensation in rate recovery. West Virginia-American Company, Indiana-American Water Company, Pennsylvania-American Water Company, and Virginia-American Water Company all recover 100% of performance pay in rates.¹⁸² The Public Service Commission of West Virginia has acknowledged, in a rate case filed by West Virginia-American Water Company, that “[Annual Incentive Plans] that tie some portion of an employee’s compensation to an employee’s actual performance are prevalent in the compensation packages for larger businesses and has become the ‘norm’ for major utility companies.”¹⁸³ West Virginia further agreed that “the [Annual Incentive Plan] is an integral part of the overall compensation plan of [West Virginia-American Water Company] that the total compensation (the combination of base pay and incentive pay) to eligible employees is intended to place that total compensation at or near the market rate for each particular job or salary band.”¹⁸⁴ In 2021, West Virginia went further than in

¹⁸⁰ *Id.*

¹⁸¹ *Id.* at 3:1-15.

¹⁸² *Mustich Rebuttal* at 5:14-18.

¹⁸³ *Stout* at 49:11-15.

¹⁸⁴ *Id.* at 49:14-19.

2015 in allowing 100% of the demonstrated long-term performance compensation in its revenue requirements finding after concluding that “[i]t is not reasonable to pick one expense and arbitrarily eliminate it or reduce it by 50% because it indirectly benefits shareholders.” West Virginia affirmed this decision in 2023.¹⁸⁵

The appropriate regulatory question for the Commission to consider is whether the amount of compensation received by the Company’s employees is reasonable and necessary to provide service to customers.¹⁸⁶ Neither Mr. Dittmore nor Mr. Garrett offer any argument or evidence that the total compensation paid to the Company’s employees is unreasonable and the conclusions reached by Mr. Mustich as to the overall reasonableness are not disputed.¹⁸⁷ Instead, it is *how* the Company’s employees are compensated, not *how much*, that the Intervenors dispute. Taking the Intervenors’ argument to its logical conclusion, if the Company were to eliminate its performance compensation plans and instead simply pay all employee compensation as base pay, the Intervenors would concede that the total amount should be recovered. Certainly, sound regulatory policy should not turn on an arbitrary distinction as to whether an employee is reasonably compensated entirely through base pay or whether an employee is reasonably compensated both through base pay and performance compensation. The Company – along with most of its peer utilities (and most major businesses) – has determined that it is in the best interests of its employees and its customers to align a portion of its employees’ compensation with the Company’s financial goals. The Company’s judgment in this regard should not be punished by the Commission considering the undisputed reasonableness of its employees’ total compensation.

¹⁸⁵ *Id.* at 50:1-7.

¹⁸⁶ *Prendergast Rebuttal* at 9:1-21.

¹⁸⁷ *Id.* at 10:1-11:9.

v. **The Commission is not shackled to its decision in TPUC Docket No. 18-00017.**

Both Mr. Dittemore and Mr. Garrett argue that the Commission should deny full recovery of performance compensation to TAWC because the Commission denied full recovery in TPUC Docket No. 18-00017.¹⁸⁸ No other cases or precedent are cited by either witness. This narrow viewpoint ignores that compensation programs and perspectives evolve over time and are mutually beneficial to both employees and customers. As noted, the Public Service Commission of West Virginia has acknowledged the importance of performance compensation.¹⁸⁹ American Water affiliates have also been allowed to recover 100% of all performance compensation in Indiana, Pennsylvania, and Virginia.¹⁹⁰

Moreover, in 2023, legislation passed in Texas related to the consideration of performance compensation and benefits in establishing the rates of electric utilities. The legislation states: “when establishing an electric utility’s rates, the regulatory authority shall presume that employee compensation and benefits expenses are reasonable and necessary if the expenses are consistent with market compensation studies issued not earlier than three years before the initiation of the proceeding to establish rates.”¹⁹¹

When the Commission is presented with any issue, but especially one that is part of a changing and progressing landscape like performance compensation, it must be allowed the flexibility and ability to adapt. The Commission “is and must be free to change its mind.”¹⁹² Here, TAWC has shown that its performance compensation plans are market-based and reasonable and that there are significant policy justifications that support the Commission’s divergence from

¹⁸⁸ *Dittemore* at 24:20–25:4; *Garrett* at 18:3–19:25.

¹⁸⁹ *Mustich Rebuttal* at 7:1-7.

¹⁹⁰ *Id.* at 5:14-18.

¹⁹¹ *Id.* at 7:8-15.

¹⁹² *United Cities Gas Co. v. Tennessee Public Service Comm’n*, 789 S.W.2d 256, 259 (Tenn. 1990).

TPUC Docket No. 18-00017. As the Tennessee Supreme Court has found: “reverse course if public policy demands it.”¹⁹³

2. *Rents Expense*

TAWC’s rents expense reflects the costs it incurs to lease office space, copy machines and other miscellaneous items, as well as cover easements. To develop its Attrition Year rent expense amount of \$29,985.00, TAWC began with the Test Period rent expense amount of \$8,429 and adjusted this amount to the three-year average spend amount of \$18,288 to normalize it. TAWC then adjusted the normalized amount of \$26,717 for inflation based on CPI data from the Bureau of Labor Statistics (“BLS”) to arrive at its Attrition Year rent expense amount of \$29,985.¹⁹⁴

The CAD, through Mr. Bradley, agrees that TAWC’s Test Period rent expense amount of \$8,429 should be normalized by the three-year average spend to arrive at an amount of \$26,717. However, the CAD disagrees with TAWC’s Attrition Year adjustment for inflation and instead applies Mr. Bradley’s “non-production costs yearly growth factor”¹⁹⁵ to arrive at a recommended Rents Expense of \$26,727, which has since been amended.¹⁹⁶

The CAD originally arrived at its “non-production costs yearly growth factor of .02%” by performing a Compound Annual Growth Rate (“CAGR”) analysis. Specifically, Mr. Bradley compared the Company’s 2019 per books expenses amount and its per books Adjusted Test Period Amount to arrive at a CAGR of .02%.¹⁹⁷ Mr. Bradley opines that CAGR is a better growth factor than the Company’s application of CPI indices from BLS because CAGR uses the Company’s own

¹⁹³ *Id.*

¹⁹⁴ *Prendergast Rebuttal* at 12:7-14; Petitioner’s Exhibit EXP-15-Rents-RP.

¹⁹⁵ In fact, Mr. Bradley advocates for the use of his deflated CAGR, instead of a factor based on category specific inflation data, for the expenses of Rents, Maintenance, Contract Services, Telecommunications, Miscellaneous and Customer Accounting. As explained below, Mr. Bradley has already amended his CAGR from .02% to 1.18%, which demonstrates the unreliability of his CAGR as a whole.

¹⁹⁶ *Bradley* at 6:12-19.

¹⁹⁷ *Id.* at 12:1-13:3.

operations data and because non-production costs, like rents, tend to be “volatile year over year and were independent from production related expenses with known and measurable changes.”¹⁹⁸

Mr. Bradley applies his CAGR adjustment to the following expenses: rents, contracted services, customer accounting, uncollectible expense, telecommunications, miscellaneous and maintenance.¹⁹⁹

In summarily concluding that his growth factor was superior, Mr. Bradley failed to explain why he chose the Company’s 2019 per books expenses, as opposed to any other year, to formulate his growth rate.²⁰⁰ Indeed, the problem with the use of CAGR is that it is entirely dependent on the baseline data, which can be, and was, hand-selected to generate a desired outcome.

The Commission should disregard the CAD’s attempt to ignore inflation and deflate non-production costs like rents through application of a subjective CAGR. The use of CPI values, which are specific to each category of expense, is a more accurate way to forecast than the use of CAGR, which is based on hand-picked historic values.²⁰¹ In fact, while Mr. Bradley advances CAGR as the better indicator, Mr. Dittemore (who Mr. Bradley relies on and defers to extensively) recently accepted the use of CPI in the Iowa American Water General Rate Case, RPU-2024-0002.²⁰²

Moreover, Mr. Bradley admitted that his original CAGR analysis was flawed. While admitting his error, he did not fully rectify it. Specifically, Mr. Bradley overstated the data in 2019 by including \$200,508 of building maintenance twice. In response to the Company’s Discovery Request No. 14, he admitted his error and submitted revised testimony and a file entitled *Revised*

¹⁹⁸ *Id.* at 13:4-14.

¹⁹⁹ *Dittemore* at 7:10-12.

²⁰⁰ *Bradley* at 13:4-14.

²⁰¹ *DeGrazia Rebuttal* at 10:12-11:3.

²⁰² *Id.* See also *Pre-filed Testimony of Office of Consumer Advocate Witness David N. Dittemore*, 36:4:41:11, Iowa Docket No. RPU-2023-0002 (Sept. 6, 2024).

AB-1 Attrition Adjustments 10-9-24, which increased the CAD's overall O&M expense by \$98,504 and his growth rate from .02% to 1.18%.²⁰³

Mr. Bradley, however, did not address the fact that his inclusion of \$332,182 for collection agencies in 2019 without adjustment caused his 2019 data to remain overstated. Indeed, while the Company demonstrated to Mr. Bradley in Discovery Request No. 15 parts c. through d. that \$332,182 for collection agencies was an extreme outlier that needed adjustment when compared to years 2020-2023 (where the amounts for collection agencies were (\$1,563), (\$348), (\$379) and (\$1,077)), Mr. Bradley chose to rely on this outlier²⁰⁴ to keep his revised growth rate at 1.18%. But Mr. Bradley admitted that if proper adjustments were made to address this outlier, his growth rate should be 3.27%.²⁰⁵

Overall, the flaws in Mr. Bradley's CAGR analysis show why it is not as reasonable as the Company's use of CPI data to forecast to future expenses. CAGR is too susceptible to manipulation, as it is only as good as the historical values selected, whereas CPI is based on reliable third-party data. The Commission should adopt TAWC's Attrition Year rent expense amount of \$29,985 and disregard all expense adjustments made by Mr. Bradley based on CAGR.

3. *Maintenance Expense*

TAWC's proposed Attrition Year maintenance expense totals \$1,691,431. The Company determined this amount by first adjusting the Test Period amount through a calculation of a three-

²⁰³ *Rebuttal Testimony of TAWC Witness John Watkins*, 10:3-11:8, TPUC Docket No. 24-00032 (Oct. 22, 2024) (hereinafter "*Watkins Rebuttal*").

²⁰⁴ Mr. Bradley clearly recognized that this outlier collection agency charge artificially skewed his results and conclusions. In fact, he submitted three successive revised testimonies, including one on the eve of the hearing. Despite these constant revisions, even Mr. Bradley's third submission continued to use incorrect numbers. For instance, Line 4, part a, reads "Line 2 is changed from 47.47 to \$47.11." But these numbers are percentages, not dollars. Mr. Bradley's lack of attention to detail calls his conclusions into question.

²⁰⁵ *Id.* at 11:9-13:2.

year average of costs. TAWC then applied an inflation factor of 4.05% based on CPI data from BLS to inflate the three average expense to 2024 and then 2025.²⁰⁶

Mr. Bradley, on the other hand and without explanation, did not adjust the Test Period amount by calculating a three-year average of costs, but simply took the Test Period amount and applied his revised growth factor of 1.18% to arrive at a proposed Attrition Year maintenance expense of \$1,599,432.²⁰⁷ For the reasons stated above in the rents expense section, Mr. Bradley's use of his 1.18% CAGR would lead to an inaccurate and unreasonable Attrition Year maintenance expense.

Ultimately, the Commission should adopt the Company's proposed Attrition Year maintenance expense of \$1,691,431, which applies a reasonable inflation factor based on reliable data.

4. *Contract Services Expense*

The contract services expense reflects the costs associated with the Company's engagement of contractors to provide necessary services. TAWC's proposed Attrition Year contract services expense amount of \$966,015, is the product of two adjustments. First, TAWC excluded lobbying from the Test Period amount. Second, the Company then applied an inflation factor of 2.54%, based on BLS data, to determine the 2024 cost amount and then compounded it to project the Attrition Year contract services expense amount of \$966,015.²⁰⁸

The CAD started with an adjusted Test Period amount of \$796,882, which is based on Mr. Dittmore's belief that legal costs associated with TPUC Docket No. 19-00103 incurred in the Test

²⁰⁶ *DeGrazia* at 16:12-17.

²⁰⁷ *Bradley* at 5:1-8; *Bradley* 11/14/24 Revised Sch. 8.

²⁰⁸ *Pre-filed Direct Testimony of TAWC Witness John M. Watkins*, 10:8-17, TPUC Docket No. 24-00032 (May 1, 2024) (hereinafter "*Watkins*"); Petitioner's Exhibit EXP-9-Contracted Services-JW.

Period should be removed.²⁰⁹ Specifically, Mr. Dittmore opines that these legal costs are either non-recurring or should not be borne by customers because the parties recently reached a resolution on TPUC Docket No. 19-00103, which provides a framework for the rider calculation going forward. As a result, Mr. Dittmore rationalizes that TAWC should have updated its capital rider tariff, rather than attempt to recover the legal fees in this case.²¹⁰ Mr. Bradley then applied his revised 1.18% growth factor to Mr. Dittmore's adjusted Test Period amount of \$796,882 to arrive at a proposed Attrition Year amount of \$815,810.²¹¹

The problem with Mr. Dittmore's argument is that while TPUC Docket No. 19-00103 may not repeat, its subject matter – capital riders – do. As such, the legal costs associated with capital riders are recurring and recoverable.²¹² Ultimately, the Commission should reject Mr. Dittmore's proposed adjustment and Mr. Bradley's application of an inaccurate 1.18% CAGR, which really should be 3.27% as explained above. The Commission should instead adopt the Company's proposed Attrition Year contract services expense of \$966,015, which applies a reasonable inflation factor of 2.54% based on reliable data. If any adjustment needs to be made, however, it should be in the amount of \$19,574, "which is the variance between Docket No. 19-00103 amount of \$56,368 and the adjustment to the annual Capital Rider amount of \$36,793."²¹³

5. *Telecommunications Expense*

TAWC's telecommunications expense consists of costs for its data lines, telephone systems, network carrier plan, communication systems maintenance and integration, and related administrative activities. TAWC's proposed Attrition Year telecommunications expense is

²⁰⁹ *Bradley* at 5:12-18; *Dittmore* at 29:6-11.

²¹⁰ *Dittmore* at 29:15-30:4.

²¹¹ *Bradley* at 5:12-18; 11/14/24 Revised *Bradley* Sch. 8.

²¹² *Watkins Rebuttal* at 15:5-12

²¹³ *Id.* at 17:1-9.

\$352,451. To determine this proposed amount, TAWC began with the Test Period amount and then adjusted for inflation to determine the 2024 expense amount. Specifically, the Company applied a 6.03% inflation factor based on the three-year average (ending 12/30/23) of the general CPI derived from the BLS report. Finally, TAWC then inflated the 2024 expense amount to arrive at a proposed Attrition Year telecommunications expense of \$352,451.²¹⁴

As explained by Mr. Bradley, the CAD accepted TAWC's methodology of beginning with the Test Period amount and then adjusting to determine future values. Mr. Bradley, however, determined future value not on a CPI inflation factor but through CAGR, using his revised factor of 1.18%. As a result, the CAD's proposed Attrition Year telecommunications expense is \$320,950.²¹⁵ For the reasons stated above, Mr. Bradley's use of his 1.18% CAGR leads to an inaccurate and unreasonable Attrition Year telecommunications expense and should be rejected.

Accordingly, the Commission should adopt the Company's proposed Attrition Year telecommunications expense of \$352,451, which applies a reasonable inflation factor based on reliable data.

6. *Miscellaneous Expense*

The miscellaneous expense consists of the following: (1) building maintenance expenses, including janitorial services, trash, groundskeeping, building security, wastewater services, water, electricity and HVAC for office facilities; (2) shipping, printing and postage expenses; (3) office supplies, including software licenses and uniforms; (4) employee expenses for activities such as conferences, meals and relocation; and (5) other miscellaneous, including maintenance and

²¹⁴ *Watkins* at 11:11-23; Exhibit-EXP-16-Telecommunications-JW; *Watkins Rebuttal* at 17:11-18:7.

²¹⁵ *Bradley* at 10:15-21; 11/14/24 Revised Bradley Sch. 8.

support, customer education, and community relations. TAWC's proposed Attrition Year miscellaneous expense is \$1,699,078.²¹⁶

TAWC determined this amount by first adjusting the Test Period amount of \$1,311,779, through a reduction of the lobbying expense amount and a removal of COVID-19 related expenses included in 2021, to then calculate a three-year average by line item. The Company then determined inflation factors for each of the five main components based on CPI data from BLS. Specifically, TAWC applied the following inflation factors to inflate the three-year average to 2024 and then to 2025: (1) 4.05% for building maintenance; (2) 4.02% for postage; (3) 2.08% for office supplies; (4) 6.03% for employee related expenses; and (5) 6.03% for other miscellaneous expenses.²¹⁷

The CAD made its own adjustments to the Test Period amount and applied Mr. Bradley's revised growth factor of 1.18% to reach a proposed Attrition Year miscellaneous expense of \$1,462,123.²¹⁸ Specifically, Mr. Dittemore alleges that the Test Period amount should be adjusted by eliminating TAWC's community partnership expenses in the amount of \$108,820. Mr. Dittemore reasons that community partnership costs "benefit the community and generate goodwill for the Company but are unrelated to water service provision and should not be built into base rates."²¹⁹ He makes this conclusion without explaining or analyzing what community partnership costs actually fund. The truth of the matter is, as explained by Company Witness Grant Evitts, these expenses support "innovative programs that improve, protect or restore drinking water supplies and surrounding watersheds" in addition to providing other benefits.²²⁰ Accordingly,

²¹⁶ *Watkins* at 12:2-13; Petitioner's Exhibit-EXP-18-Miscellaneous Expense-JW.

²¹⁷ *Watkins* at 12:14-22; Petitioner's Exhibit-EXP-18-Miscellaneous Expense-JW.

²¹⁸ *Dittemore* at 32:19-21 and 33:1-5; Exhibit DND-9; *Bradley* at 11:6-15; 11/14/24 Revised Bradley Sch. 8.

²¹⁹ *Dittemore* at 33:1-5.

²²⁰ *Pre-filed Direct Testimony of TAWC Witness Grant A. Evitts*, at 23:7-25:15, TPUC Docket No. 24-00032 (May 1, 2024) (hereinafter "*Evitts*"); *Watkins Rebuttal* at 18:14-20.

because community partnership expenses do benefit customers and relate to the provision of water services, Mr. Dittmore's conclusion is incorrect and his proposed adjustment eliminating \$108,820 in community partnership expenses should be rejected.

Moreover, as explained in greater detail above, Mr. Bradley's growth factor based on CAGR is flawed and should be rejected in favor of the Company's recommended inflationary percentages. Therefore, the Commission should adopt the Company's proposed Attrition Year miscellaneous expense of \$1,699,078, which applies reasonable inflation factors based on reliable third-party data, *i.e.* the CPI from the BLS.

7. *Customer Accounting Expense*

The customer accounting expense encompasses the costs associated with lockbox fees for processing customer payments, bank charges, and miscellaneous other like expenses. TAWC proposes an Attrition Year customer accounting expense of \$577,105. The Company reasonably calculated this amount by first adjusting the actual Test Period expenses of \$84,683 to remove nonrecurring items and to add the costs associated with electronic payment fees (\$487,514). Next, TAWC applied a 2.54% inflationary adjustment based on CPI data from the BLS to determine the 2024 expense amount, which the Company inflated again to arrive at Attrition Year customer accounting expense of \$577,105.²²¹

The CAD accepted TAWC's adjusted Test Period amount as a starting point, but applied Mr. Bradley's growth factor based on CAGR, instead of accepting inflationary percentages based on irrefutable government data. The CAD then removed the Company's proposal to add \$487,514 in electronic payment fees to arrive at a proposed Attrition Year customer accounting expense of \$87,229.²²²

²²¹ *Watkins* at 9:19-10:6; Petitioner's Exhibit-EXP-13-Customer Accounting-JW.

²²² *Bradley* at 10:5-14; 11/14/24 Bradley Revised Sch. 8.

Electronic payment fees should be included. As explained by Company Witness Bob Lane, the Company proposes to include credit card and e-check payment fees assessed by its vendor for customer payments as an operating expense.²²³ At present, the number of customers that choose to pay by credit card or e-check is growing each year. Customers paying by credit card are assessed the fee at the time of payment. By including these fees as an operating expense, it will “help more customers pay their bill on time, avoid late fees and potential disconnections, and improve timely connections.”²²⁴ Moreover, by including electronic payment fees as an operating expense, payments by credit card or e-check will have the same treatment as more traditional payment practices. Indeed, the handling costs associated with processing a payment by check or money order are already included in base rates as an operating expense.²²⁵

Despite the benefits and fairness that would be realized by including electronic payment fees as an operating expense, Mr. Bradley opposes on the basis that doing so would create a customer cross-subsidy and send inappropriate price signals.²²⁶ There is no cross subsidy because including electronic payment fees as an operating expense puts such payment methods on equal footing with payment by check or money order. If anything, because the handling costs associated with processing a payment by check or money order are already included in base rates as an operating expense, the inclusion of electronic payment fees offsets an existing cross subsidy.²²⁷

Moreover, Mr. Bradley’s concern for inappropriate price signals is entirely speculative. He cites to no evidence whatsoever to support his concern.²²⁸ The truth of the matter is that “consumer use of credit and debit cards to pay water bills is increasing, up 45.5% since 2019.”²²⁹ Moreover,

²²³ *Lane* at 15:11-19; Petitioner’s Exhibit EXP-13-Customer Accounting-JW.

²²⁴ *Id.* at 16:5-6.

²²⁵ *Lane Rebuttal* at 19:10-21.

²²⁶ *Bradley* at 14:11-13.

²²⁷ *Lane Rebuttal* at 19:10-21.

²²⁸ *Bradley* at 15:1-15.

²²⁹ *Lane Rebuttal* at 21:18-22:2.

Mr. Bradley’s unsupported concern ignores the fact that actual customers are dissatisfied with being required to pay an addition fee for using their credit or debit card, and the inclusion of such fees as operating expenses will contribute to customer satisfaction.²³⁰

Furthermore, since 2012, the National Association of State Utility Consumer Advocates has encouraged state public utility commissions to give consumers the ability to make direct payments by debit or credit card instead of through a third-party vendor. California, Illinois, Missouri, Pennsylvania, and West Virginia have seen the wisdom in this policy, and TAWC believes the Commission should allow these expenses to be included here as well.²³¹

8. *Expenses Associated with Service Company*

The support services expense item relates to the costs associated with the provision of services by American Water Works Service Company, Inc. (“Service Company”) to TAWC and its customers. The services provided by the Service Company for the benefit of TAWC and its customers include:

customer service,²³² water quality testing,²³³ innovation and environmental stewardship, human resources, communications, information technology, finance, accounting, payroll, tax, regulatory, legal, engineering, accounts payable, supply chain, and risk management services. Included as part of the broad range of services summarized above, the Service Company provides a variety of financial and accounting services for Tennessee-American that include payroll, human resource data management, utility plant accounting, cash management, general accounting and reporting, accounts payable, and tax accounting.²³⁴

²³⁰ *Id.* at 20:1-21:17.

²³¹ *Lane* at 16:10-20.

²³² The Service Company’s customer service organization handles customer calls, billing, and collection activities for the Company and its regulated utility affiliates. The customer service organization responds to customer inquiries and correspondence, and processes service order requests. In addition, the Service Company operates field resource coordination centers responsible for tracking and dispatching service orders for our field representatives and distribution crews. *Watkins* at 3:6-4:2.

²³³ The Service Company operates the Central Laboratory, located in Belleville, Illinois, which employs chemists, laboratory technicians, analysts, and support employees to perform water quality testing and research. The Central Laboratory also conducts sophisticated testing and analysis for all American Water subsidiaries, including Tennessee-American. *Watkins* at 3:6-4:2.

²³⁴ *Watkins* at 3:6-4:2.

As supported by Company Witness Mr. Baryenbruch in his Pre-Filed Direct Testimony, “the services that Service Company provides are necessary, consistent with services customarily provided by service companies of other utility holding companies and are reasonable in cost.”²³⁵ Indeed, TAWC receives these services and the expertise of the Service Company’s personnel at cost. Specifically, Service Company expenses are charged to TAWC either directly at 100% of *cost* or by percentage allocation based on factors such as a per customer allocation across all American Water regulated subsidiaries.²³⁶

The Company also benefits from the size and breadth of the Service Company, which allows TAWC to realize increased purchasing power that it would not have on its own as well as discounts on equipment and supplies needed for utility operations, including, for example – pipe, fittings, and water treatment chemicals. Accordingly, TAWC achieves costs savings that it would not otherwise realize.²³⁷

Ultimately, TAWC’s proposed Attrition Year support services expense is \$8,636,676 while the CAD’s is \$7,631,522.²³⁸ Most of the difference in these two amounts is related to disputes about labor, benefits and other benefits costs, which are discussed above. The other items that makeup the support services expense (as broken down by Mr. Bradley)²³⁹ are support services maintenance, miscellaneous, contract services, other insurance, rents, transportation, uncollectible, and non-O&M – which are all discussed in below.

²³⁵ *Pre-filed Direct Testimony of TAWC Witness Patrick L. Baryenbruch*, 5:4-7, TPUC Docket No. 24-00032 (May 1, 2024) (hereinafter “*Baryenbruch*”).

²³⁶ *Watkins* at 5:3-10.

²³⁷ *Id.* 4:3-5:2.

²³⁸ *Bradley* at 6:20-24.

²³⁹ *Id.*

a. Support Services: Maintenance and Miscellaneous

For both the maintenance and miscellaneous items, the CAD's proposed Attrition Year amount is higher than the Company's proposal (\$380,987 vs. \$386,386 for maintenance and \$1,715,947 vs. \$1,757,625 for miscellaneous). Among the various items that make up the support services expense, the maintenance and miscellaneous items are the only ones where Mr. Bradley started his analysis with the Company's proposed adjusted Test Period amount and then applied a 3.26% CAGR. In both instances, Mr. Bradley's analysis results in the CAD's proposed Attrition Year amount being higher than the Company's proposal. According to Mr. Bradley, the Company's proposed Attrition Year maintenance amount within the overall support services expense is \$380,987 while the CAD's is \$386,386. For the Miscellaneous amount within the overall support services expense, the Company's Attrition Year amount is \$1,715,947 while the CAD's is \$1,757,625.²⁴⁰

The Company, however, does not believe the Commission should adopt the CAD's proposed Attrition Year amount for these subcategories as the use of a 3.26% CAGR is inappropriate. As explained above in the discussion on rents, a growth factor based on CAGR is simply not a reliable way to project future costs in an inflationary environment.

b. Support Services: Uncollectible and Non-O&M

The Company did not adjust the Test Period amounts of the uncollectible and non-O&M items relating to Service Company, before calculating to the Attrition Period, which resulted in a proposed Attrition Year uncollectible amount of (\$769) and a proposed Attrition Year non-O&M amount of \$403,268. Mr. Bradley started his analysis the same way (with the per books Test Period amount of each) before then applying a 3.26% CAGR. Mr. Bradley's application of his 3.26%

²⁴⁰ *Id.* at 6:20-9:13.

CAGR causes the CAD's proposed Attrition Year amounts for uncollectible to be (\$780) and non-O&M to be \$384,366.²⁴¹

Again, the Commission should disregard Mr. Bradley's use of CAGR, which is unreliable and unsupported in this instance to forecast future values.

c. Support Services: Contract Services, Other Insurance, Rents, and Transportation

For each of these items within the support services expense, Mr. Bradley begins his analysis with "the Consumer Advocate's proposed Test Period Adjustments for Business Development and External Affairs & Public Policy, as recommended by Mr. Dittmore."²⁴² From there, he arrives at an adjusted Test Period total before adjusting to the Attrition Year by applying his 3.26% CAGR.²⁴³ With the exception of a slightly higher Attrition Year amount for contract services as compared to the Company's proposal, Mr. Bradley's analysis – which relies heavily on Mr. Dittmore – results in the CAD's proposed Attrition Year amounts being less than the Company's.²⁴⁴

According to Mr. Dittmore, his *Test Period Adjustments for Business Development and External Affairs & Public Policy* "eliminate Support Services costs totaling \$113,209 in the test period allocated from AWSC, that either do not provide benefits to customers or are related to a reasonable apportionment of lobbying charges."²⁴⁵ The CAD apparently believes that only costs that can be shown to *directly* benefit customers are appropriate and that business development, public policy and ID&E do not. This logic is short cited and contrary to the legal standards associated with regulated utilities.

²⁴¹ *Id.* at 6:20-9:13.

²⁴² *Id.* at 7:5-8:36.

²⁴³ *Id.* at 6:20-9:13.

²⁴⁴ *Id.*

²⁴⁵ *Dittmore* at 35:12-21.

As Company witness Mr. Watkins explains in his Pre-Filed Rebuttal Testimony, the Service Company's business development efforts benefit TAWC customers "in both the short term and long-term, by mitigating the costs to be recovered per customer, enhancing purchasing power and spurring activities that contribute to their local economies."²⁴⁶ Likewise, the Service Company's external affairs & public policy services provide education to customers and ensure "that the laws that are enacted are in the best interest of the Company and its customers."²⁴⁷ As for ID&E, Mr. Dittmore and the CAD wrongfully assume that ID&E not essential to the provision of water service. In reality, these efforts help increase the Company's ability to attract and retain employees, which serve a diverse customer base. It is important for the Company to understand and anticipate the needs and perspectives of its diverse customer base, which it best accomplishes with a diverse workforce.²⁴⁸

The CAD does not offer any proof to rebut the foregoing. It simply tries to opine that there is not a 1:1 benefit to customers. This is clearly flawed logic. It also ignores that the interests of the Company and its shareholders must also be considered. Under *Hope* and *Bluefield*, the analysis cannot rest on customer benefits alone. Ultimately, if the Commission adopts the CAD's politically motivated logic, it is proclaiming that business development, public policy, and ID&E efforts in the workplace are not important. However, the Company, its shareholders, employees and customers desire and require business development, public policy, and ID&E efforts. The Commission should not ignore this, especially when the CAD offers no real justification to the contrary.

- d. TAWC's support services expense total of \$8,636,676 is reasonable as it is less than the Company received in 2012 when adjusting to today's**

²⁴⁶ *Watkins Rebuttal* at 5:3-12.

²⁴⁷ *Id.* at 5:13-6:5.

²⁴⁸ *Id.* at 7:1-9:12.

dollars and accounting for known and measurable changes plus inflation.

Company Witness John Watkins explains that TAWC's support services expense has increased since TAWC's 2012 rate case for two primary reasons. First, the increase is primarily the result of reasonable and necessary annual merit increases since 2012. Second, effective January 2020, postage and customer accounting services shifted from TAWC to the Service Company. Despite the increase in the support services expense from 2012, the approximately \$8.64 million that TAWC is requesting in this case is less than what the Company received in 2012 when including the annual merit increases and the postage and accounting expenses and when adjusting for inflation in today's dollars. Specifically, in today's dollars and when taking into account the annual merit increases and inflation, the amount awarded in 2012 would be approximately \$9.2 million.²⁴⁹

Moreover, TAWC's proposed Attrition Year support services expense is reasonable when considering the cost savings of TAWC's relationship with the Service Company. TAWC witness Patrick Baryenbruch discusses the reasonableness of Service Company costs charged to TAWC and as part of his direct testimony and Exhibit PLB-2, Market-to-Cost Comparison of Service Company Charges to the Company, concluding that the services are necessary, their cost is both reasonable and necessary, and lower than TAWC would pay if the services were obtained at market rates from entities other than the Service Company.²⁵⁰ If TAWC had to obtain pipes, fittings, chemicals etc. on the open market without the bargain power of the Service Company, TAWC's rate base and costs would be even higher.²⁵¹

²⁴⁹ *Watkins* at 6:11-8:2; Petitioner's Exhibit EXP-8-Support Services-JW.

²⁵⁰ *Baryenbruch* at 5:4-14:13; Exhibit-PLB-2.

²⁵¹ *Watkins Rebuttal* at 5:3-12.

Accordingly, the Commission should approve TAWC's proposed Attrition Year support services expense in the amount of \$8,636,676.

9. *Transportation Expense*

TAWC's transportation expense reflects the costs associated with its vehicle fleet, including costs for fleet administration, repairs, fuel, maintenance, tag, tax and title.²⁵² To calculate its Attrition Year Transportation Expense of \$428,594, the Company added to its 2023 fleet total four new vehicles in 2024 and two new vehicles in 2025. It then took the average price per vehicle type from 2023 to project costs in 2024 and 2025. TAWC then multiplied the number of new vehicles by type to the average expense amounts per year by type. Thereafter, TAWC made additional Test Year adjustments to the natural account and the capitalized credits account to determine the actual impact of capitalized credits. Finally, the Company utilized the pro forma labor capitalization rate to calculate the 2024 and 2025 capitalized credits.²⁵³

The CAD accepts the Attrition Year Transportation expense of \$428,594 "as the Company's proposal is based on known and measurable changes."²⁵⁴ TAWC requests the Commission accept it as well.

10. *Insurance Other Than Group*

Insurance Other Than Group ("IOTG") includes auto liability, general liability, excess liability worker's compensation and property. It also includes the Company's coverage for directors and officers liability, employment practices, cyber liability, crimes, fiduciary, travel, special contingency risk, aviation of unmanned vehicles, and consultation fees.²⁵⁵ The premiums associated with these policies renew at various times throughout the calendar year:

²⁵² *Watkins* at 10:20-21.

²⁵³ *Id.* at 11:1-10; Exhibit-EXP-17-Transportation-JW.

²⁵⁴ *Bradley* at 10:22-27.

²⁵⁵ *Watkins* at 8:4-19.

- January Renewals– Auto Liability, General Liability, Worker’s Compensation, Property, Cyber Liability, and Special Contingency Risk (every 3 years).
- April Renewals – D&O Liability, Crime, Employment Practices, Fiduciary, Travel (every 3 years), and Excess Liability.²⁵⁶
- September Renewals – Aviation of Unmanned Vehicles.²⁵⁷

The cost of these premiums make-up the majority of TAWC’s IOTG expenses. To develop the IOTG Attrition Year Expense of \$1,205,504, TAWC began with the premium amounts²⁵⁸ as of March 2024 to establish Test Period IOTG results. It then removed, from the Test Period IOTG results, the expense related to the December 2023 insurance casualty reserve adjustment, which created a normalized Test Period prior to Attrition Year pro forma adjustments. From there, the amounts were adjusted by applying specific policy escalation factors for each policy group at their corresponding renewal dates to arrive at the IOTG Attrition Year expense of \$1,205,504.²⁵⁹

The CAD accepts IOTG Attrition Year expense of \$1,205,504 “as the Company’s proposal is based on known and measurable changes.”²⁶⁰ TAWC urges the Commission to do so as well.

B. Production Costs

Production costs consist of (1) purchased power and fuel expense (“Purchased Power”); (2) chemicals; (3) waste disposal; and (4) purchased water.²⁶¹

²⁵⁶ Excess Liability Policies were extended from the previous annual policy period by three months to the end of March, based on policy rates from the immediately preceding three months. Going forward, these policies will be renewed annually in April. *See Watkins* at 9:4-7.

²⁵⁷ *Id.* at 8:20-9:17.

²⁵⁸ Additionally, for Worker’s Compensation, the Company multiplied these premiums by the labor capitalization rate to eliminate the portion of that cost that would be capitalized. *Watkins* at 8:20-9:17; Petitioner’s Exhibit EXP-12-Insurance Other than Group-JW.

²⁵⁹ *Watkins* at 8:20-9:17; Petitioner’s Exhibit EXP-12-Insurance Other than Group-JW.

²⁶⁰ *Bradley* at 5:38-6:2.

²⁶¹ *DeGrazia* at 11:19-21

1. *Purchased Power and Chemicals*

At its core, Purchased Power is the energy costs associated with treating, pumping and delivering water. TAWC's requested Attrition Year Purchased Power expense amount is \$3,062,540, which it forecasted by adjusting Test Period expenses to remove closed accounts and credit balances, to annualize electricity costs for active accounts, and to capture known changes in the prices charged by vendors for calendar year 2024.²⁶²

The market for the chemicals utilized by TAWC to test, treat and provide high quality drinking water has been very volatile in the last two years due to high labor costs, fluctuating energy costs inflationary increases in transportation and commodity prices, and overall supply pressure within a consolidated chemicals market.²⁶³ As a result, TAWC's 2025 Attrition Year chemical expense is \$2,307,000. TAWC forecasted this attrition year chemical expense by first determining the 2025 quantity of chemicals, which it determined by using a three-year average of the quantity of each chemical by plant for years ending December 31, 2021-2023 and then made future usage adjustments based on operational experience. Specifically, to make its adjustment, TAWC eliminated chemicals it no longer plans to use in the future and added new chemicals it plans to use beginning in the attrition year. The Company then calculated its per chemical cost for the 2025 Attrition Year by adjusting 2024 Q1 per chemical costs to align with expected 2025 pricing changes. Finally, to arrive at its overall chemical expense, TAWC multiplied the 2025 forecasted chemical quantity amount by each chemical's corresponding 2025 unit cost.²⁶⁴

The CAD agrees with TAWC's Attrition Year Purchased Power expense and chemicals expense, including its calculations thereof, except that the CAD, through Mr. Dittmore,

²⁶² *DeGrazia* at 12:1-10; Petitioner's Exhibit EXP-2-Purchased Power-DD.

²⁶³ *Id.* at 12:11-13:5; Petitioner's Exhibit EXP-2-Purchased Power-DD.

²⁶⁴ *Id.*

recommends an additional downward adjustment of \$253,309 for Purchased Power and an additional downward adjustment of \$190,816 for chemicals. The Commission should not adopt these recommended downward adjustments as they are based entirely on a unilaterally CAD-created 15% non-revenue water (“NRW”) limitation factor.²⁶⁵ According to Mr. Dittmore, “the Commission has a long-standing precedence of allowing up to a 15% non-revenue water factor,” which he believes “the Company acknowledged...in TPUC Docket No. 24-00002.”²⁶⁶ This claim (an outcome-driven maneuver) is not only unsupported but defies the acknowledgement of well-known, justifiable and necessary uses for water that neither produces revenue nor is lost.

Indeed, Mr. Dittmore readily admits that in TRA Docket No. 10-00189 – which is the “precedence” on which he relies – the Commission did not state that it is imposing a limitation on NRW but rather “lost and unaccounted for water.” To circumvent this clear language, Mr. Dittmore opines that NRW and “lost and unaccounted for water” are one and the same.²⁶⁷ As reflected in the evidentiary record, the truth of the matter is that the Commission has not set a 15% NRW limitation factor. Moreover, NRW and lost and unaccounted for water (“UFW”) are not the same.²⁶⁸

In TRA Docket No. 10-00189, the Commission adopted a 15% UFW limitation factor, not a 15% NRW limitation factor – which would be completely unreasonable and punitive. Indeed, while NRW is the difference between the amount of produced water and the amount of water billed to customers, UFW is just the portion of NRW that a water utility cannot track/measure, *e.g.* meter inaccuracies, data errors and unauthorized non-metered charges.²⁶⁹ In other words, while there is

²⁶⁵ *Dittmore* at 30:6-12, 32:13-17.

²⁶⁶ *Id.* at 32:13-18.

²⁶⁷ *Id.* at 31:1-11.

²⁶⁸ *Stout Rebuttal* at 34:13-35:11.

²⁶⁹ *Id.* at 34:12-35:11.

a portion of NRW for which a utility company cannot account, there is also a portion for which it can. Moreover, that accounted for portion of NRW may be productively used water. For example, it could be water used for firefighting, fire hydrant testing, flushing pipes to maintain water quality or performing flow tests.

Further, as Mr. Stout testified in his Pre-Filed Rebuttal Testimony, the cornerstone of the CAD's adjustment is the unproven and unsupported assumption that there is a direct 1-to-1 linear relationship between the amount of lost and unaccounted for water and the level of purchase power costs and chemical costs.²⁷⁰ Chemical and Purchased Power costs do not have a direct 1-to-1 relationship with the amount of water produced as TAWC's purchased power costs also have fixed demand charges that do not necessarily vary with the amount of electricity consumed.²⁷¹ Chemical costs vary based on the amount of water produced as well as the water chemistry and temperature at the time the water is produced.²⁷²

The unreasonableness of the CAD's NRW Limitation Factor is further demonstrated by evidence presented by Mr. Stout that the statewide average NRW of the 375 water utilities in Tennessee, for Fiscal Year 2023, was 31.1% and the median was 30.91%; over twice that of the standard that the CAD seeks to have the Commission apply to TAWC.²⁷³

Accordingly, it would be completely unreasonable for the Commission to adopt the unilaterally CAD-developed definition of NRW and impose a 15% limitation factor, which is why the Commission did not do so in TRA Docket No. 10-00189 and why it has not done so otherwise.²⁷⁴

²⁷⁰ *Id.* at 38:1-4

²⁷¹ *Id.* at 38:4-39:4

²⁷² *Id.* at 39:5-10

²⁷³ *Id.* at 40:17-20

²⁷⁴ *Id.* at 36:1-37:19.

While there is no precedent for an NRW limitation factor, there is Commission precedent for a 15% UFW delineation, as well as the Tennessee state standard of 40% that the Tennessee Board of Utility Regulators established under Tenn. Code Ann. § 7-82-702(a)(16) when it defined “Water Loss” as any system with non-revenue water above 40%.²⁷⁵ If the Commission decides for the first time to impose an NRW limitation factor on TAWC, it should be more in line with the 40% standard set by the Tennessee Board of Utility Regulators and applicable to publicly owned water utilities.²⁷⁶ As for the 15% UFW limitation, TAWC is below this limit as its UFW currently is 14.3% and was 13.9% in 2023.²⁷⁷

2. *Waste Disposal and Purchased Water*

TAWC’s waste disposal expense refers to the wastewater disposal costs it incurs to necessarily and beneficially reuse sludge and other by-products that result from water treatment, which includes the monthly chemical costs for waste removal and monthly accrual for anticipated costs associated with periodic basin cleanings (dictated by EPA standards). The Company’s Attrition Year waste disposal expense is \$749,830. To calculate this amount, TAWC used actual waste disposal expenses for the Test Period ending December 31, 2023, by vendor and then adjusted these expenses for known and measurable changes. It then further adjusted these expenses for inflation to arrive at the 2025 Attrition Year waste disposal expense amount of \$749,830.²⁷⁸

The CAD accepts this expense amount “as the Company’s proposal is based on known and measurable changes.”²⁷⁹ TAWC urges the Commission to do so as well.

²⁷⁵ *Id.* at 40:8-20.

²⁷⁶ Trial Vol. I, Stout at 92; *see also Stout Rebuttal* at 40.

²⁷⁷ *Stout Rebuttal* at 35:17-21.

²⁷⁸ *DeGrazia* at 13:6-14:2; Petitioner’s Exhibit EXP-4-Waste Disposal-DD.

²⁷⁹ *Bradley* at 10:28-32.

TAWC's purchased water expense refers to the costs it incurs to purchase water from other utilities. The Company's proposed Attrition Year purchased water expense is \$194,199. To calculate this amount, TAWC used actual purchased water expenses for the Test Period ending December 31, 2023, by vendor and then adjusted by expected rate increase or inflation for the Attrition Year.²⁸⁰

The CAD accepts TAWC's Attrition Year purchased water expense of \$194,199 as it "is based on known and measurable changes."²⁸¹ TAWC requests that the Commission do so as well.

C. Other Expenses

1. Rate Case Expense

The Company's rate case expense is the costs incurred by TAWC to prepare its rate case filing and comply with the regulatory process required by the Commission to adjust rates. These costs include legal fees, consultant's fees, travel expenses, and other expenses. TAWC estimates that its rate case expense will be \$1,554,000. The Company proposes amortizing its forecasted total rate case expense over a three-year period and recovering it through base rates.²⁸²

To ensure proper recovery of the actual rate case costs incurred in this proceeding, the Company proposes to use its PCOP Rider to reconcile the forecasted amount of rate case costs with the actual amount incurred, and refund or recover any difference through the Rider.²⁸³ Moreover, upon the rate case expense being fully amortized and thus fully recovered, TAWC will adjust the PCOP Rider to remove the rate case expense from base rates.²⁸⁴

Neither the City of Chattanooga nor the CAD dispute that TAWC is entitled to recover its actual and reasonable rate case costs. However, they both request that the Commission remove

²⁸⁰ *DeGrazia* at 14:3-9; Petitioner's Exhibit EXP-1-Purchased Water-DD.

²⁸¹ *Bradley* at 6:7-11.

²⁸² *Lane* at 11:12-12:4; Petitioner's Exhibit EXP-11-Regulatory Expense-BL

²⁸³ *Lane Rebuttal* at 16:6-10.

²⁸⁴ *Lane* at 18:1-12.

the Company's rate case expense from base rates. Mr. Garrett, on behalf of the City, recommends that instead of including rate case expense in base rates, these expenses be deferred and considered in a subsequent docket.²⁸⁵ Mr. Novak, on behalf of the CAD, similarly recommends that the Commission establish a separate surcharge to recover these costs in a separate docket.²⁸⁶ The rationale behind both these recommendations is that they will allow actual costs to be recovered instead of estimates.²⁸⁷

Messrs. Garrett's and Novak's recommendations are neither necessary nor an efficient use of resources. First, their rationale for recommending a completely separate procedural process is undermined by TAWC's existing proposal. Again, the Company proposes to use the PCOP Rider as a true-up mechanism to ensure that only the actual amount of costs is incurred. Indeed, the Company will refund or recover any difference once the actual costs are known and, once the rate case expense has been fully recovered, the expense will be removed from the costs customers pay for service going forward.²⁸⁸

Second, it is inefficient and burdensome to require a separate docket, or even surcharge, after actual costs become known to recover the rate case expense from the present proceeding. Inevitably, such a separate proceeding would create additional regulatory burden on the parties and administrative load on the Commission. Moreover, the expense of this undue burden would ultimately be borne by customers. Ultimately, the burden and cost proposed by Messrs. Garrett and Novak is wholly unnecessary. It is also inapposite to the intent behind alternative regulatory methods set forth in Tennessee Code Annotated § 65-5-103.²⁸⁹

²⁸⁵ *Lane Rebuttal* at 16:11-15; *Garrett* at 41:3-42:2.

²⁸⁶ *Lane Rebuttal* at 16:15-18.

²⁸⁷ *Id.*

²⁸⁸ *Lane Rebuttal* at 16:6-10; *Lane* at 18:1-12.

²⁸⁹ One of the purposes of alternative regulatory methods is to streamline the regulatory process and reduce the cost and time associated with the ratemaking processes. *See* Tenn. Code Ann. § 65-5-103(d)(7).

Accordingly, the Commission can and should avoid this inefficiency by rejecting the proposals of the City and CAD and by adopting the Company's proposal.²⁹⁰

2. *Uncollectible Expense*

The uncollectible expense captures the Company's costs associated with bad debt. TAWC's proposed Attrition Year uncollectible expense is \$585,203. To arrive at this amount, the Company first determined an average uncollectible percentage by analyzing its historical uncollectible dollars to revenue ratio for years 2021, 2022 and 2023. The Company then applied this average uncollectible percentage to pro forma revenue for the Attrition Year to calculate the Attrition Year uncollectible expense is \$585,203.²⁹¹

The CAD used a different methodology to arrive at its proposed Attrition Year uncollectible expense of \$491,153. Specifically, while the CAD and TAWC agree on the past three years' figures for uncollectible expense, the revenue numbers to which those expenses are applied to determine a percentage are different. TAWC used actual billed revenues. The Consumer Advocate appears to have re-tabulated revenue data by hand. It is this re-tabulation of granular revenue data that is the source of the inconsistency. Accordingly, the Commission should accept the Company's Attrition Year uncollectible expense of \$585,203.²⁹²

3. *Taxes Other Than Income*

Taxes other than income include the following expenses: (1) property tax, (2) franchise tax, (3) gross receipts tax, (4) TPUC inspection fees, and (5) payroll taxes.²⁹³

²⁹⁰ *Lane Rebuttal* at 18:13-20.

²⁹¹ *Lane* at 15:4-9; Petitioner's Exhibit EXP-14-Uncollectible Expense-BL.

²⁹² *Bradley* at 10:33-11:5.

²⁹³ *DeGrazia* at 14:12-13.

a. **The Company's Expenses and Position on Taxes Other Than Income is Reasonable and Should be Adopted.**

i. **Property Tax**

The forecasted property tax expense is based on the forecasted UPIS & CWIP balance for the attrition year. The Company then applies an assumed equalized assessment percentage to the assessed value using the same proportional amount of assess value to UPIS & CWIP in the test period. The forecasted equalized assessment incorporates the Hamilton County Equalized Percentage increasing back to 100%. The rate decreased to 70.53% for the year 2023. The forecasted Property Tax rate is then applied to the equalized assessment amount to calculate the attrition year property tax. The attrition year Property Tax expense is \$4,940,912.²⁹⁴

ii. **Franchise Tax**

The Franchise Tax is paid to the State of Tennessee for the legal right to provide water to its customers. The attrition year forecast is calculated by applying the tax rate of 0.25% to the Company's forecasted balances of Utility Plant and Materials & Supplies less Depreciation & Utility Plant acquisitions adjustment.²⁹⁵

iii. **Gross Receipts Tax**

The Gross Receipts Tax is a tax imposed by the state on the Company's gross receipts. The Attrition Year forecast is calculated by applying the tax rate of 3% to the Company's forecasted taxable revenues less the maximum exemption of \$5,000. The amount is then reduced by the forecasted Franchise/Excise Tax for the net gross receipts tax amount.²⁹⁶

²⁹⁴ *Id.* at 14:14-22.

²⁹⁵ *Id.* at 15:5-8.

²⁹⁶ *Id.* at 15:13-16.

iv. **TPUC Inspection Fee Expense**

The TPUC Inspection Fee is a fee imposed on all utilities by the Commission. The attrition year forecast is calculated by applying the test period tax rate of 0.425% to the Company's Tennessee forecasted taxable revenues less the exemption of \$5,000.²⁹⁷

v. **Payroll Tax Expense**

Payroll taxes are related to salaries and wages. Taxes must be paid to fund the Federal Insurance Contributions Act, which is divided into two pieces: Old Age Survivors & Disability Insurance ("OASDI," or more commonly "FICA"), and Hospital Insurance (or more commonly "FICA Medicare"). Payroll taxes must also be paid for Federal Unemployment Tax ("FUTA") and State Unemployment Tax ("SUTA"). Attrition Year payroll taxes were calculated on a position-by-position basis, using the Attrition Year wages and 2024 tax rates. Following a methodology similar to salaries and wages, each employee's gross payroll taxes are multiplied by their O&M percentage (one minus the capitalization percentage) to arrive at an O&M payroll tax expense for each employee.²⁹⁸

vi. **Inflation**

For expenses on which the Company does not have anticipated prices or rates, the inflation factors used are based on the United States Bureau of Labor Statistics ("US BLS") Consumer Price Index ("CPI") data. The US BLS CPI data utilized is a three-year average of values from December 2021, 2022, and 2023. Categories of data utilized from the US BLS include general inflation, maintenance, office supplies and stationery, rent, electricity, fuel and utilities, professional services, garbage and trash collection/waste disposal. the Company utilized respective inflationary

²⁹⁷ *Id.* at 15:21-23-16:1

²⁹⁸ *Pre-filed Direct Testimony of TAWC Witness Robert J. Prendergast*, 10:8-18, TPUC Docket No. 24-00032 (May 1, 2024) (hereinafter "*Prendergast*").

factors, as derived from the U.S. BLS based on a three-year average annual change, to develop the forecasted expenses.²⁹⁹

b. The CAD's and the City's Position on Taxes Other Than Income is Flawed.

Mr. Dittmore takes issue with the Company's computation of property tax. He argues that the appraisal increase driving the increase in the attrition period property tax will not be reflected as an expense on the books of TAWC until 2026 (outside the forecasted attrition period). Mr. Dittmore suggests that the Commission should not apply a 2026 forecasted expense within the 2025 attrition period. He argues that accepting this Company's proposal would require customers to pay higher rates in 2025, while the Company would not incur the cost until 2026. His computation eliminates the higher assessment rate, instead using Hamilton County's lower 2024 appraisal ratio, resulting in a decrease in the Company's attrition period property tax of \$1,343,890.³⁰⁰

Mr. Garrett, on behalf of the City, argues that the 2023 equalized assessment percentage should be applied to the 2024 Plant and CWIP balance, which of course results in a reduction of the property tax expense.³⁰¹

Finally, Mr. Dittmore modifies the gross revenue conversion factor in his testimony.³⁰² He removes both the TPUC fee and the gross receipts tax percentage from the gross conversion factor. He also argues for this elimination because the excise and franchise taxes are a deduction to the gross receipts.³⁰³

²⁹⁹ *DeGrazia* at 17:1-9.

³⁰⁰ *Dittmore* at 34:4-22; *DeGrazia Rebuttal* at 1:21-22, 2:1-2.

³⁰¹ *Garrett* at 32-34; *DeGrazia Rebuttal* at 2:17-19.

³⁰² *Dittmore* at 43-44.

³⁰³ *Lane Rebuttal* at 6:1-6.

c. The Commission Should Accept the Company's Computation of Taxes Other than Income.

Mr. Dittmore's adjustment to the property tax is flawed because the Hamilton County appraisal ratio represents only one county out of the three that the Company serves.³⁰⁴ Furthermore, using the lower assessment rate does not properly incorporate the change in the appraisal ratio in 2025.³⁰⁵

Mr. Garrett's argument is likewise flawed. Using the 2023 ratio would also disregard the change in the Hamilton County rate that will be applied in 2025. Additionally, TAWC is seeking the expense on the Total Plant and CWIP as of the end of the 2025 attrition period, which reflects the proper forecasted expense TAWC will incur.³⁰⁶

Finally, Mr. Dittmore's modification of the gross revenue conversion factor is inappropriate. The exclusion of the TPUC fee and the gross receipts tax is unacceptable given that these expenses will be incurred based on the revenue requirement increase requested in this proceeding.³⁰⁷ Additionally, the basis for Mr. Dittmore's exclusion of the excise tax is incorrect because the deduction is based on capital balances, not revenue, and has been reflected in TAWC's present rate expense adjustment.³⁰⁸

Both Mr. Dittmore's and Mr. Garrett's proposals are inappropriate; therefore, for the foregoing reasons, the Company requests that the Commission accept and approval its proposals for taxes other than income.

³⁰⁴ *DeGrazia Rebuttal* at 2:4-5.

³⁰⁵ *DeGrazia Rebuttal* at 2:6-12.

³⁰⁶ *DeGrazia Rebuttal* at 3:5-6.

³⁰⁷ *Lane Rebuttal* at 6:12-15.

³⁰⁸ *Lane Rebuttal* at 6:15-18.

4. *Income Tax Expense*

a. The Company's Calculation of Income Tax Should be Adopted.

To calculate the Company's current tax expense in this filing, the Company used the 21% federal corporate income tax rate enacted as part of the TCJA, and the 6.5% Tennessee corporate income tax rate. Generally, the amounts of state and federal income tax expense included in the revenue requirement are calculated by applying the statutory state and federal income tax rates to operating income before income taxes.³⁰⁹ This method of income tax calculation was not disputed by the intervening parties.

Mr. Dittmore accepts the Company's calculation and inclusion of income tax expense to be used for the revenue requirement in this case, except for the Repairs Deduction. Mr. Dittmore argues that the Repairs Deduction should be treated under the flow-through method. The City's Witness Mr. Garrett also argues for the flow-through method, but suggests a less consistent (*i.e.*, much more burdensome) method for the sole purpose of avoiding a rate increase in the current docket.³¹⁰ The Repairs Deduction is discussed below.

b. Continuing the Tradition and Long-Standing Practice of Normalizing Routine Repairs Reductions is the Better Approach.

The IRS allows an immediate deduction for certain expenditures such as repairs which, for regulatory accounting purposes, are capitalized rather than expensed. Taking an immediate deduction when the taxes are actually paid later creates a timing difference between when the repair expenses are deducted on the tax return and when the depreciation on the capitalized asset is expensed for book/accounting purposes.³¹¹ This means that the Company can deduct the repairs on the tax return prior to recognizing the expense on the books; therefore, the Company records a

³⁰⁹ *Lane* at 17:4-9.

³¹⁰ *Garrett* at 43.

³¹¹ *Rebuttal Testimony of TAWC Witness Linda Schlessman*, 7:16-23, TPUC Docket No. 24-00032 (May 1, 2024) (hereinafter "*Schlessman*").

deferred tax liability (*i.e.*, the ADIT account) for future taxes to be paid. Then, the Company evenly spreads out (“normalizes”) this timing difference over the life of the asset, providing a source of financing from the government to customers by reducing rate base by the ADIT balance, as is consistent with the Company’s practice since 2008.³¹²

In the context of a regulated utility, normalized tax accounting spreads out the recovery of income tax expenses over time.³¹³ Normalized income tax accounting calculates income tax expense on the pre-tax income and expenses recorded for financial statement purposes, which are included in the cost of service for ratemaking purposes. Tax expense is then separated between the amount currently payable to the IRS (“current”) and the amount that must be paid in the future (“deferred”). This division is calculated based on temporary differences between book and taxable income. The deferred tax expense is recorded on the balance sheet as an Accumulated Deferred Income Tax, or ADIT, liability or asset, whichever category applies.³¹⁴

The parties agree that the repairs deduction is an “unprotected” timing difference, meaning that the IRS does not require the deduction to be normalized.³¹⁵ For repairs deductions, the IRS permits, but does not require, a utility to flow-through the entire deduction by reducing current and total income tax expense (which, in a rate case, reduces the revenue requirement).³¹⁶ So, the proper question is not *whether* the Commission can require flow-through treatment of repairs deductions, but rather, *should* the Commission require flow-through treatment of repairs deductions.

Consistent with long-standing Commission practice, TAWC proposes to continue to normalize the repairs deduction in this rate case. Again, the Company has used the normalized

³¹² *Id.* at 8:2-11.

³¹³ *Id.* at 3:4-5.

³¹⁴ *Id.* at 3:17-22-4:1-2.

³¹⁵ See, e.g., *Dittemore* at 18:8-9 (“The Commission has traditionally normalized all book/tax timing differences in the computation of income tax expense in rates.”).

³¹⁶ *Id.* at 13:7-15.

accounting method for repairs deductions since 2008, and it was the method approved by the Commission in TAWC's previous rate case. All customers since that time have shared equally in the benefits of the accelerated depreciation and deferred tax liability reduction to rate base. No set of customers has been treated preferentially under this method.³¹⁷

Mr. Dittemore argues that the flow-through method should be mandated because it aligns income tax expense recovered in rates with the taxes paid by the Company at a specific point in time. Mr. Dittemore recognizes that the temporary repairs timing difference will eventually result in the same amount of recognized revenue and expenses for both book and taxable income.³¹⁸ Therefore, over a given period of time, the Company will owe the same amount of tax under both the flow-through and normalized methods, but the customer, under flow-through, does not benefit from the stability in rates that normalization provides.³¹⁹

Mr. Dittemore raised the Commission's August 3, 2020, Final Order in TPUC Docket No. 18-00039 as support for using flow-through of the repairs deduction. Mr. Dittemore, to his credit, concedes that the issue addressed in Docket No. 18-00039 was limited to excess ADIT resulting from the Tax Cuts and Jobs Act ("TCJA")'s dramatic reduction in corporate tax rates. As noted by Ms. Schlessman, the Commission's solution to remedying the excess ADIT account produced by the TCJA's tax rate reduction was to return the unprotected portion of the ADIT to customers over an amortized three-year period.³²⁰ The Commission's decision in 18-00039 does not compel flow-through treatment of the repairs deduction here. Importantly, the TCJA's corporate tax rate reduction was an isolated event that required a targeted solution. The repairs deduction, quite distinctly, is an ongoing account that requires a long-term mindset, not a quick-fix mentality.

³¹⁷ *Id.* at 3:4-5.

³¹⁸ *Dittemore* at 10.

³¹⁹ *Schlessman* at 9.

³²⁰ *Schlessman* at 14:5-15:9.

The considerable ramification of mandating flow-through treatment of repairs deductions is that the flow-through method *does not treat all customers equally over time*. Customers in near-term years would benefit from paying less tax expense, but over time, customers in later years would bear the burden of both paying more tax and suffering the compounding increase in rate base.³²¹ To be clear, flow-through would treat today's customers preferentially to the detriment of tomorrow's customers.

As explained by Ms. Schlessman, normalization provides stability in customer rates by not having large fluctuations in bills when the utility's taxes come due. It allows the utility to recover costs more evenly over time. Both today's and tomorrow's customer will benefit because the timing difference is reflected as a zero-cost source of capital over the life of the repaired asset, which results in an overall lower net operating income for the Company. Normalization matches the tax benefits and collections of taxes owed with the useful life of the assets.³²²

In contrast, flow-through gives 100% of the benefit of the tax deduction to today's customers, leaving none of the benefit for tomorrow's customers. Current customers receive the immediate benefit of the timing difference through lower rates at the front end; but when the utility must pay the taxes that are owed, future customers will then pay higher rates to cover the taxes owed to the government.

Additionally, flow-through method results in a higher revenue requirement over the life of a timing difference. Mr. Dittmore states that the flow-through methodology would result in a reduction to income tax expense by 100% of the tax benefit of the repair deduction thereby reducing the revenue requirement by the full amount. But this considers only the first year of the

³²¹ *Schlessman* at 9:1-4.

³²² *Id.* at 9:8-17.

timing difference in isolation. Over the life cycle of the timing difference, the revenue requirement is higher in the flow-through method because there is no ADIT account to reduce rate base.³²³

Mr. Garrett argues for an even more unworkable solution in his testimony on behalf of the City. He acknowledges that utilizing this method would mean that tax benefits would not be available to future rate payers.³²⁴ But he still recommends that the Commission require “as needed” flow-through treatment of repairs deductions to eliminate a rate increase. While this may be a beneficial solution to customers in the Attrition Year, it would have long-term ramifications. Moreover, it would be overly burdensome, if not impossible, to attempt to conduct repairs operations and decide for each repair as it is made whether to account for any given repair under either normalization or flow-through. The Commission should reject this ad hoc approach.

Additionally, as Mr. Furia testified, if the Commission abandons tradition and requires the Company to flow through repairs deductions, this will have a negative effect on the Company’s financing plans.³²⁵ Flow-through treatment significantly (>\$3M) reduces cash flows from operations.³²⁶ The Company would be required to replace that funding with debt or equity, which cost customers more than the “interest-free” loan that normalization provides.³²⁷ Neither Mr. Dittemore nor Mr. Garrett addressed this significant operational issue.

At this point, it should be clear that continuing the tradition and long-standing practice of normalizing routine repairs deductions is the better approach. While flow-through provides a sort of payday loan to Attrition Year customers in the form of lower rates, over the long term, there are serious consequences to later years’ customers when those customers have to pay the taxes when

³²³ See TAWC Schlessman Rebuttal Exhibit 2.

³²⁴ *Garrett* at 43:16-19.

³²⁵ *Rebuttal Testimony of TAWC Witness Nicholas Furia*, 11:15-16:2, TPUC Docket No. 24-00032 (Oct. 22, 2024) (hereinafter “*Furia Rebuttal*”)

³²⁶ *Id.*

³²⁷ *Id.*

they come due and in the form of overall higher rates due to the compounding increase in rate base. For these reasons, the Commission should not shift course and require the Company to flow-through repairs deductions.

Finally, the Company notes that if the Commission *does* make the considerable shift to requiring flow-through treatment of repairs deductions, that Mr. Dittmore's adjustments were not accurate. The correct adjustment to income tax expense are shown in TAWC Schlessman Rebuttal Exhibit 1: a reduction in tax expense of \$3,603,122; a corresponding increase in rate base; and a total reduction in revenue requirement of \$3,317,034 (as opposed to Mr. Dittmore's \$3,641,589).³²⁸ Mr. Dittmore agreed with these corrections in his testimony at the hearing.³²⁹

5. *Pension and OPEB Expense*

a. *Pension Expense*

Company employees that are eligible pension benefits include union employees hired before January 1, 2001, and non-union employees hired before January 1, 2006.³³⁰ Pension expenses are recorded according to ERISA, the Employee Retirement Income Security Act of 1974. As of January 2024, the estimated ERISA amount, or cash contribution for TAWC is \$730,400. The annual service cost is \$296,173, a portion of which is capitalized according to the attrition year capitalization percentage. The non-service costs are \$434,227. The attrition year cost was calculated by using the 2024 estimates after applying the capitalization percentage to the service costs.³³¹

³²⁸ *Schlessman* at 12:3-17.

³²⁹ Trial Volume II(B), Dittmore at 211:25-212:12.

³³⁰ *Lane* at 21; fn. 3.

³³¹ *Prendergast* at 11:1-11.

b. OPEB Expense

Other Post-Employment Benefits, or OPEBs, are offered to a portion of TAWC employees. Generally, this includes union employees hired before January 1, 2006, and non-union employees hired before January 1, 2002.³³² OPEB expense is recorded according to ASC 715. As of January 2024, the estimated annual service cost is \$60,364 for TAWC, a portion of which is capitalized according to attrition year capitalization percentage. The non-service costs are (\$886,036). The attrition year service cost was calculated by using the current 2024 estimates after applying the capitalization percentage to the service costs.³³³

c. The Company's Regulatory Treatment of Pension and OPEB Expenses is in the Public's Interest.

TAWC is proposing to use the Production Costs and Other Pass-Throughs, or PCOP, Rider to reconcile the pension and OPEB expenses, which will be recovered in base rates, with the actual pension and OPEB costs incurred for each year.³³⁴ Any difference between the forecasted and actual amounts will be returned to or recovered from customers via the PCOP Rider, similar to the way the current PCOP Rider eligible costs are recorded. (See also the Company's regulatory treatment proposal for Rate Case Expense.)³³⁵

This is the appropriate treatment for pension and OPEB expenses because these expenses can and do fluctuate significantly depending on the performance of financial markets. The expenses are further influenced by the timing of employees' retirement and the retired employees' utilization of the benefits provided, among other factors, all of which are generally outside the Company's control.³³⁶ Therefore, it is appropriate to recover these expenses through the PCOP

³³² *Lane* at 21; fn. 3.

³³³ *Id.* at 11:16-23-12:1-3.

³³⁴ *Id.* at 20:4-6.

³³⁵ *Id.* at 20:6-11.

³³⁶ *Id.* at 20-21.

Rider so that they are recovered from ratepayers incrementally, with stability, and with the ability to timely return any overcollection.

d. The CAD's Position on Pension and OPEB Expenses is Misplaced.

Mr. Dittmore's main argument against the Company's treatment of the pension and OPEB expense is the expansion of the PCOP Rider to include the incremental (or decremental) costs associated with pension and OPEB expenses. Instead, he argues, the Company should adopt an Annual Review Mechanism ("ARM").³³⁷ He acknowledges the annual volatility of TAWC costs, but states an ARM would address them.³³⁸ Mr. Dittmore also argues that the PCOP is a "duplicative" mechanism to the ARM and that "the Commission should avoid piecemeal regulation."³³⁹ His other stated concerns with the regulatory treatment of pension and OPEB expenses include the Company's elimination of its risk of under-earning with no offsetting reduction in its proposed ROE.³⁴⁰ Additionally, he argues that the Company has the discretion to make changes to these employee benefit plans and has made such changes in the past.³⁴¹

e. The Commission Should Adopt the Company's Regulatory Treatment of Pension and OPEB Expenses.

Mr. Dittmore's opposition to the PCOP Rider to recover pension and OPEB expenses is misplaced. His categorization of the PCOP as "duplicative" and "piecemeal" seems to overlook the Tennessee General Assembly's establishment of regulatory alternative methods.³⁴² In fact, the Commission has approved the Company's PCOP Rider each time the Company presents it. The Commission stated in TAWC's most recent PCOP Rider docket that, "the PCOP Rider continues to benefit the Company by allowing timely recovery of expenses without having to file base rate

³³⁷ *Dittmore* at 44.

³³⁸ *Id.* at 44.

³³⁹ *Id.* at 45:1-2.

³⁴⁰ *Id.* at 45:4-9.

³⁴¹ *Id.* at 45:10-13.

³⁴² *Lane Rebuttal* at 17.

cases. Additionally, customers receive immediate refunds when expenses within the PCOP Rider decrease. For these reasons, the panel found the PCOP Rider mechanism remains in the public interest and voted unanimously to approve the Petition.”³⁴³ The PCOP also serves as an efficient regulatory tool to return any overcollection of expenses related to pension and OPEB. For the foregoing reasons, the Company requests that the Commission adopt the Company’s proposed regulatory treatment of pension and OPEB.

VIII. RATE OF RETURN

An investor-owned utility raises capital through investors, who require a return on their investment in exchange for the capital they provide. Under U.S. Supreme Court precedent, the utility is entitled to a return “commensurate with returns on investments in other enterprises having corresponding risks” and that is “sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital.”³⁴⁴

Utilities raise capital primarily through debt and equity. Debt investment is made at specified interest rates and under specified repayment terms. Equity investors acquire an ownership interest in the company with the expectation that the company will pay dividends to shareholders (income), that the stock price will increase (growth), or both. Capital markets trade both debt (bonds) and equity (stock) securities. Debt investors, who are contractually entitled to both principal and interest, are paid before equity investors in a liquidation/bankruptcy event. Debt is generally considered a less risky investment than equity.

Equity investment is competitive. All companies whose shares are publicly traded are continuously competing with other companies for capital. If an investor views two companies as

³⁴³ *Lane Rebuttal* at 14:12-16 (quoting *Order Approving the Revised 2024 Production Costs and Other Pass-Throughs Rider* at 6, TPUC Docket No. 24-00002 (July 15, 2024)).

³⁴⁴ *Hope*, 320 U.S. at 603.

having similar risk, the investor will provide their funds to the company that has the higher expected return. It is incumbent on the Commission to authorize a return on equity that positions the utility well related to companies with similar risk. Otherwise, if the utility is granted a non-competitive authorized return, the company will be less attractive to investors. A less-attractive authorized return leads to the inability to attract the capital needed to provide safe, adequate and efficient water service at reasonable rates, increased credit risk, and financial instability.³⁴⁵ To be sure, the Commission *must* consider the Company's attractiveness as an investment, its access to capital, and its creditworthiness along with the interests of customers in setting rates.³⁴⁶

Here, the Commission is charged with setting two data points that determine the level of funds the Company must collect in rates to provide the investor-required return: the percentage of common equity in the utility's capital structure; and the authorized return on common equity.³⁴⁷ Each of these are discussed below. For context, the *Order* in the Company's last general rate case, Docket No. 12-00049, included a 10.0% return on common equity and an overall rate of return of 7.23%. In the present case, due to the increased cost of equity since the last rate case, the Company's expert witness Ann Bulkley recommended a return on equity of 10.75%, which, considering the Company's projected capital structure, equates to an overall rate of return of 7.94%.³⁴⁸

³⁴⁵ See *Pre-filed Direct Testimony of TAWC Witness Ann E. Bulkley*, 41:1-43:18, TPUC Docket No. 24-00032 (May 1, 2024) (hereinafter "*Bulkley*") (discussing real-world examples of credit rating downgrades, drastic share price drops, and major analyst criticisms following below-average ROE decisions); *Rebuttal Testimony of TAWC Witness Ann E. Bulkley*, 21:6-22:12, TPUC Docket No. 24-00032 (Oct. 22, 2024) (hereinafter "*Bulkley Rebuttal*") (discussing two utilities' difficulty in obtaining reasonably-priced debt in jurisdiction viewed as not being credit supportive).

³⁴⁶ *Hope*, 320 U.S. at 603.

³⁴⁷ While the cost of debt is also a component of calculating the overall rate of return, no intervening party challenged the Company's Attrition Year cost of debt, which is reasonable. Therefore, the Commission must determine only the common equity and return on equity components.

³⁴⁸ This overall rate of return is consistent with Mr. Dittmore's testimony in which he offered an 8% return that TAWC's customers achieve on incremental prepayment of deferred tax liabilities in the form of the Company earning its authorized ROE on those funds. See Trial Volume II(B), Dittmore at 217:18-218:5.

A. Capital Structure

As explained by TAWC Witness Nicholas Furia, the Company has actual and planned financings such that it projects an Attrition Year capital structure consisting of 54.52% common equity, 43.49% long-term debt, and 1.99% short-term debt.³⁴⁹ TAWC's proposed capital structure is based upon the stand-alone principle of ratemaking, which establishes that the Commission should set rates by evaluating TAWC on a basis independent from its parent, American Water Works Company, Inc. (traded as "AWK").

In recommending a range of reasonable ROEs for Tennessee-American, expert witness Ann Bulkley also examined the equity ratios of the risk-comparable operating subsidiaries in her proxy group.³⁵⁰ Ms. Bulkley concluded that TAWC's proposed equity ratio of 54.52% is reasonable compared to her proxy group. Specifically, Ms. Bulkley analyzed the capital structures for the utility subsidiaries of the proxy group and determined that, for the period 2021-2023, the actual common equity ratio for these operating subsidiaries ranged from 46.25% to 60.03% and had a mean equity ratio of 54.06%. Accordingly, TAWC's equity ratio of 54.52% falls well within the range of actual common equity ratios for the operating subsidiaries of Ms. Bulkley's proxy group and, in fact, is consistent with the average equity ratio (54.06%) of the operating subsidiaries.³⁵¹

Ms. Bulkley further noted that because the Company's proposed equity ratio is well within the range based on the proxy group operating subsidiaries, the Company's proposed capital structure aligns with guidance from NARUC that "capital structure ratios cannot be deemed to be inappropriate unless the ratios greatly diverge from sound industry practice and cause of a lack of

³⁴⁹ *Pre-Filed Direct Testimony of TAWC Witness Nicholas Furia*, 4:4-12, TPUC Docket No. 24-00032 (May 1, 2024) (hereinafter "*Furia*").

³⁵⁰ *Bulkley* at 63:1-13.

³⁵¹ *Id.* at 78:13-79:5; Rebuttal Exhibit AEB-10.

financial flexibility that may lead to higher overall costs.”³⁵² Mr. Aaron Rothschild, on behalf of the Consumer Advocate, recommended that the Commission reject the Company’s actual projected capital structure and instead impose a hypothetical capital structure consisting of 50.9% common equity. The basis for Mr. Rothschild’s recommendation is that the Commission should only allow a utility the average equity ratio of the proxy group (holding) companies.³⁵³ This method for setting an operating utility’s common equity ratio is wholly unsupported and goes against NARUC guidance.

As noted above, NARUC has provided valuable guideposts for regulators as they endeavor to set utility capital structures.³⁵⁴ The Association states that “management must be permitted latitude, discretion, and flexibility in managing capital structure ratios” and that “hypothetical capital structures that micro-manage a utility’s capital structure ratios by a 1% or 5% increment offer minimal opportunity to actually reduce the WACC.”³⁵⁵ NARUC’s capital markets primer further directs that only where a utility’s capital structure “significantly deviate[s] from relevant standards of comparison”—which is where the utility has less than 20% or more than 80% common equity—should the regulators impose a hypothetical capital structure.³⁵⁶ Here, Mr. Rothschild’s recommended 50.9% common equity does just what NARUC says not to do: he attempts to micro-manage a reasonable projected common equity ratio by a 3.6% increment. Because the Company’s proposed 54.52% common equity is well within the range of proxy group

³⁵² John D. Quackenbush, CFA, *Cost of Capital and Capital Markets: A Primer for Utility Regulators*, National Association of Regulatory Utility Commissioners (December 2019) at 12.

³⁵³ See *Direct Testimony of CAD Witness Aaron Rothschild*, 78:7-11, TPUC 24-00032 (Sept. 17, 2024) (hereinafter “*Rothschild*”) (“Q. Is TAWC’s requested capital structure of 54.52% common equity and 43.49% [sic] appropriate? A. No. TAWC’s requested capital structures are not appropriate for setting rates in this proceeding. It has a higher common equity (54.52%) than the average common equity ratio used by other water utility companies in the country (50.9%).”).

³⁵⁴ Quackenbush, *Cost of Capital and Capital Markets: A Primer for Utility Regulators*.

³⁵⁵ *Id.* at 12-13.

³⁵⁶ *Id.* at 13.

company ratios, the Commission should not take away the “latitude, discretion, and flexibility” that NARUC instructs should be given by micro-managing the common equity ratio by a 3.6% increment.

Even if there was any authority supporting Mr. Rothschild’s average-of-the-proxy-group method of setting a utility’s common equity ratio, two flaws in his analysis would need to be corrected. First, Mr. Rothschild only examined his proxy group companies’ capital structures at the *non-regulated holding* company level as opposed to the *regulated operating subsidiary* level. Using the holding company data means that the Commission would be considering corporate-level debt that is not part of the regulated operation. Also, to perform this analysis soundly, Mr. Rothschild would have had to use the market value of the debt and equity to estimate the mixture of debt and equity in the capital structure, not the book value. Furthermore, Mr. Rothschild’s recommended hypothetical equity ratio is not reflective of how the Company actually funds its investments or consistent with the average equity ratio (54.06%) of the operating subsidiaries of a proper proxy group of publicly traded, risk-similar utilities.³⁵⁷

Second, Mr. Rothschild included Tennessee-American’s parent company in his proxy group to determine the average common equity ratio which he then says should be adopted as the Company’s ratio. Using American Water’s equity ratio to set its wholly owned subsidiary’s equity ratio is circular logic and skews the results. As NARUC notes, “parent companies may have significant non-utility operations of different risk that may render the use of the parent company capital structure inappropriate.”³⁵⁸ Mr. Rothschild failed to provide the Commission with adequate support for including American Water—or any other non-regulated holding company—when determining a reasonable capital structure for the regulated utility. Accordingly, the Commission

³⁵⁷ The flaws in Mr. Rothschild’s proxy group are discussed below.

³⁵⁸ Quackenbush, *Cost of Capital and Capital Markets: A Primer for Utility Regulators* at 12.

should reject Mr. Rothschild's average-of-the-proxy-group method for setting capital structure. Based on NARUC guidance and Ms. Bulkley's testimony that the ratio is reasonable compared to a proper proxy group of *subsidiary* companies, the Commission should accept the Company's proposed capital structure consisting of 54.52% common equity, 43.49% long-term debt, and 1.99% short-term debt.

The City of Chattanooga, through its witness Mr. Mark E. Garrett, takes an even less reasonable approach to setting capital structure. Mr. Garrett's opinion on TAWC's capital structure is internally inconsistent. For most of his testimony, he argues that because TAWC is wholly owned by American Water, the Commission should ignore the operating utility's capital structure and instead impose the parent company's capital structure onto the subsidiary.³⁵⁹ But then Mr. Garrett himself departs from American Water's capital structure and instead recommends that the Commission use the lowest common equity ratio of the companies in Ms. Bulkley's proxy group.³⁶⁰ Mr. Garrett gives no basis, logic, or reasoning for these two inconsistent approaches. Even if he did, both approaches are flawed and should be rejected.

As discussed further below, Mr. Garrett's first argument is the so-called "double leverage" adjustment. This theory is based on the idea that a wholly owned subsidiary which is not publicly traded could have its equity infusions comprised of parent company debt, which is generally at a lower cost rate than equity. Even if this were a valid consideration in modern ratemaking, here, it is at best pure conjecture. There is simply no evidence in the record that the Company's actual or planned financings will be comprised of "lower-cost" debt rather than equity. Mr. Garrett even concedes that he's guessing: he compared TAWC's capital structure to American Water's capital structure, then makes an impermissible leap in logic: he says that simply by comparing the two

³⁵⁹ *Garrett* at 36:11-39:4.

³⁶⁰ *Id.* at 39:9-11.

capital structures that “the equity of the subsidiary is *likely* funded in part by debt held by the parent company.”³⁶¹ Again, Mr. Garrett provides no data, no support, and no basis for this conclusion. As such, it should be disregarded.

1. *The Company’s stand-alone capital structure is more just and reasonable than a consolidated capital structure.*

The stand-alone ratemaking principle is the foundation of jurisdictional ratemaking.³⁶² This principle requires that the rates that are charged in any operating jurisdiction be for the costs incurred in that jurisdiction. It also ensures that customers in each jurisdiction only pay for the costs of the service provided in that jurisdiction and are not influenced by the business operations in other operating companies. TAWC’s proposal is consistent with the stand-alone ratemaking principle in that it relies on the actual and planned debt and equity financings of the operating company in the return calculation.³⁶³ To comply with this principle, the cost of capital is determined using the subsidiary’s capital structure and cost of debt; and the cost of equity is estimated by reference to a proxy group of firms with comparable risk.³⁶⁴

Said another way, how the equity investment was financed should not affect the operating company’s capital structure or cost of equity.³⁶⁵ Whether an investor uses existing cash or decides to borrow funds does not affect the riskiness of the investment – which is the determining variable under *Hope* and *Bluefield*. Riskiness of investment, not source of funds.

As Ms. Bulkley pointed out, let us assume an investor bought stock in Apple, Inc. with borrowed funds. His expected return on that investment is the same expected return that all other Apple investors have. That the investor has a debt to pay on the source of the investment cannot

³⁶¹ *Id.* at 37; fn. 51 (emphasis added).

³⁶² Roger Morin, *Modern Regulatory Finance*, Public Utilities Reports, Inc. (2021) at 251-252.

³⁶³ *Furia Rebuttal* at 10:19-11:13.

³⁶⁴ *Id.* at 4:3-5:5.

³⁶⁵ *Bulkley Rebuttal* at 13:1-9.

and does not change Apple’s operations, its riskiness, or its expected dividends or share price growth.³⁶⁶ It is worth noting that academic support for the stand-alone ratemaking principle is robust. Ms. Bulkley provides references to competent and trusted authorities in support of the notion that the cost of capital should be determined on the basis of the utility’s use of the funds, not the investor’s source of equity financing.³⁶⁷ From a practical standpoint, double leverage cannot reliably be put into practice. To apply it here, American Water would need to conduct forensic-level accounting “tracing” on every dollar invested and borrowed in perpetuity, an obviously unworkable exercise.³⁶⁸

What is more is that continued application of double leverage to TAWC by the Commission would return Tennessee to the status as an outlier jurisdiction. As the Iowa Utilities Board stated in 2017, “[w]ith Iowa being only one of two states left in the country that applies double leverage, this can put Iowa utilities on unequal footing when attracting investment.”³⁶⁹

The Iowa Utilities Board noted that the foundation of a “double leverage” downward adjustment to the utility’s common equity ratio is the concern that the parent company would manipulate its own capital structure to have higher debt than equity and then use that surplus of lower-cost debt to finance equity infusions in the subsidiary.³⁷⁰ This potential abuse is not a concern here. As Mr. Garrett aptly points out, “the consolidated parent company has made significant improvements in its capital structure, *increasing equity* by nearly ten percent over the ten year period [since the last rate case].”³⁷¹ If the basis for double leverage is a concern that the

³⁶⁶ *Id.* at 83:1-21.

³⁶⁷ *Bulkley* at 13:1-21; *Bulkley Rebuttal* at 84:1-86:23.

³⁶⁸ *Furia Rebuttal* at 4:3-5:5.

³⁶⁹ *Final Decision and Order* (Feb. 27, 2017), Iowa Utilities Board Docket No. RPU-2016-0002, available at <https://efs.iowa.gov/filing/2923306> at 41.

³⁷⁰ *Id.* at 42 (noting that potential abuse that double leverage was designed to prevent include “artificially inflating the common equity return by increasing the amount of debt at the parent level”).

³⁷¹ *Garrett* at 37:5-7 (emphasis added).

publicly traded parent increases debt to use as subsidiary equity infusions, Mr. Garrett has actually *dispelled* any concern that it should be applied to TAWC.

At this point, considering Tennessee being the only regulatory jurisdiction still imposing double leverage and with Tennessee-American being the only regulated utility still being imposed a double leverage reduction in subsidiary common equity, the Commission should reject Mr. Garrett's capital structure recommendations. The Consumer Advocate's witness, Mr. Rothschild, would agree.³⁷² The Commission is on good ground to say in its order in this case just what the Iowa Utilities Board said: "The Board finds the arguments against the application of double leverage for [Tennessee]-American to be persuasive and will no longer apply the adjustment to [Tennessee]-American."³⁷³ Additionally, "prior decisions of the agency do not mandate the use and application of double-leverage in this proceeding."³⁷⁴

Ultimately, the Commission is responsible for balancing the interest of all stakeholders in the ratemaking process, which includes customers and investors. Imputing the capital structure of TAWC with a higher debt component simply to lower rates is not in keeping with TPUC's charge. Unless the proposed stand-alone capital structure is found to be unreasonable, the stand-alone capital structure should be used for ratemaking purposes as it is the capital structure that is used to operate the business and that appropriately reflects its distinct risk profile.³⁷⁵ Moreover, if the Commission rejects the stand-alone capital structure methodology, it will cement Tennessee as an outlier jurisdiction in terms of credit supportiveness.

³⁷² See *Rothschild* at 79:1-4 (recommending capital structure based on reference to proxy group, not TAWC's parent company AWK).

³⁷³ *Final Decision and Order* (Feb. 27, 2017), Iowa Utilities Board Docket No. RPU-2016-0002, available at <https://efs.iowa.gov/filing/2923306> at 41.

³⁷⁴ *Order* at 60, TPUC Docket No. 18-00017 (Jan. 11, 2019).

³⁷⁵ *Furia Rebuttal* at 5:6-15.

B. Cost of Equity

After deciding whether TAWC's projected Attrition Year capital structure should be micro-managed or is so extreme that a hypothetical capital structure should be imposed upon it, the Commission's next data point to set is the authorized return on equity ("ROE"). Again, under the *Order* in TAWC's last rate case, the Company is currently authorized a 10.0% ROE.

The Commission is well versed in the complex considerations that go into estimating and authorizing a utility's ROE and doing so in a way that balances the interests of investors and consumers. "There are a number of factors used to determine the equity return, including: the results of the parties' models, prevailing economic conditions, rulings of other state commissions, and other factors that may provide evidence about the risk of investing in [the utility or publicly-traded parent]." ³⁷⁶ Under *Hope* and *Bluefield*, the use of data from a group of risk-similar utilities as a proxy for estimating the level of return that equity investors in the petitioner utility expect is the most frequently and well-accepted method of setting ROE.

After a proxy group is selected, multiple financial models should be used to estimate the returns that investors expect for those proxy group companies, which estimate is then extrapolated to the petitioner utility. These financial models include the discounted cashflow method (DCF), the capital asset pricing model (CAPM), and the empirical capital asset pricing model (ECAPM). This section explains first how Ms. Bulkley's proxy group is superior to Mr. Rothschild's, and then discusses the financial models and explains how Ms. Bulkley's results are superior to Mr. Rothschild's.

³⁷⁶ *Amended Order*, at p. 63, TPUC Docket No. 18-00017 (Jan. 15, 2019).

1. *Ms. Bulkley's proxy group is more robust and representative of TAWC.*

Ms. Bulkley notes that “it is necessary to establish a group of companies that are both publicly traded and comparable to Tennessee-American in certain fundamental business and financial respects to serve as its ‘proxy’ for purposes of estimating the cost of equity.”³⁷⁷ To select an appropriate proxy group, Ms. Bulkley started with a group of 16 water utilities and natural gas distribution utilities and a group of 36 electric utilities. For the water and natural gas utilities, Ms. Bulkley applied the following screening criteria to ensure risk comparability and adequate sample size. The proxy group companies should have the following characteristics:

- pay consistent quarterly cash dividends (companies without consistent dividends cannot be reliably analyzed);
- have investment grade long-term issuer ratings from S&P and/or Moody’s;
- are covered by more than one utility industry analyst;
- have positive long-term earnings growth forecasts from at least two utility industry equity analysts;
- derive more than 70.00 percent of their total operating income from regulated operations; and
- were not parties to a merger or transformative transaction during the analytical periods relied on.³⁷⁸

For the electric utilities, Ms. Bulkley applied the criteria above plus the following additional criteria:

- have owned generation comprising less than 10 percent of the Company’s MWh sales to ultimate customers (to ensure risk-comparability to TAWC, *i.e.*, that the electric utilities included did not own a substantial amount of generation and therefore had operations, like TAWC, that were primarily transmission and distribution); and

³⁷⁷ *Bulkley* at 28:9-12.

³⁷⁸ *Id.* at 29:6-19.

- own water and wastewater operations.³⁷⁹

This process generated the following proxy group of eleven utilities:³⁸⁰

Figure 7: [Bulkley] Proxy Group

Company	Ticker
Atmos Energy Corporation	ATO
NiSource Inc.	NI
Northwest Natural Gas Company	NWN
ONE Gas, Inc.	OGS
Spire, Inc.	SR
Eversource Energy	ES
American States Water Company	AWR
California Water Service Group	CWT
Middlesex Water Company	MSEX
SJW Group	SJW
Essential Utilities, Inc.	WTRG

Importantly, TAWC’s proxy group does not include its parent company, American Water (AWK).³⁸¹ Indeed, to include AWK would create an issue of circular logic. AWK’s financial data consolidates results from (i) other operating subsidiaries, which may not have risk profiles similar to TAWC, as well as (ii) non-regulated operations. As NARUC notes, “most parent companies have operations of different risk than the utility.”³⁸² Including AWK would mean that the consolidated parent financial data would be used to determine its own subsidiary’s ROE since the ROE for TAWC contributes to the consolidated earnings at the holding company level.³⁸³ Ms. Bulkley explains that this is improper.³⁸⁴ TAWC’s proxy group thus excludes AWK.

To ensure an adequate sample size and further ensuring risk-comparability of the proxy group, Ms. Bulkley included certain electric utilities and natural gas distribution companies. This

³⁷⁹ *Id.* at 29:20-30:7.

³⁸⁰ *Id.* at 30:16-31:2; Exhibit AEB-3.

³⁸¹ *Id.* at 30:8-15.

³⁸² Quackenbush, *Cost of Capital and Capital Markets: A Primer for Utility Regulators*, at 15.

³⁸³ *Bulkley Rebuttal* at 25:1-9.

³⁸⁴ *Id.* at 25:1-9.

is because the *Value Line Investment Survey* (“*Value Line*”), similarly utilized by Mr. Rothschild, currently classifies only seven companies as water utilities, one of them being AWK.³⁸⁵ With such a small number, it is not appropriate to rely on such a small sample size of only a handful of proxy group companies. As Ms. Bulkley explained, obstinately using only the few available water utilities’ data would have introduced an increased likelihood that the financial model results would have been skewed by the idiosyncratic results of one company.³⁸⁶

Therefore, to generate more accurate results and a better comparison group, Ms. Bulkley appropriately considered distribution-focused electric utilities and natural gas utilities that met the screening criteria in the proxy group.³⁸⁷ Indeed, “similar to the water utilities, the electric and natural gas utilities included in [Ms. Bulkley’s] proxy group generate a substantial portion of their operating income from regulated distribution operations,” and therefore “there are significant similarities between the business and operating risks” of these utilities and TAWC.³⁸⁸

Free from the false notion that only water utilities are risk similar to other water utilities, other commissions have agreed that it is appropriate to consider other types of utility companies when setting water (and wastewater) ROEs. Ms. Bulkley explained that these include the Massachusetts Department of Public Utilities, the Florida Public Service Commission, the Illinois Commerce Commission and the Iowa Utilities Commission.³⁸⁹ TPUC is on good ground in not unnecessarily limiting the proxy group companies to only other water utilities, especially to ensure that the financial model results are appropriately representative and are not skewed.

³⁸⁵ *Bulkley* at 31:3-12.

³⁸⁶ *Bulkley Rebuttal* at 25:19-21.

³⁸⁷ *Bulkley* at 31:3-12.

³⁸⁸ *Bulkley Rebuttal* at 26:4-8.

³⁸⁹ *Id.* at 27:13-19.

Mr. Rothschild, for the Consumer Advocate, has two significant flaws in his proxy group that deserve careful attention by the Commission. The first is that he refused to consider any non-water utility, leaving his proxy group with only six companies. The second problem is that he included American Water and thus allowing circular logic to infiltrate his entire recommendations. As noted above, it is inappropriate to include the subject utility's holding company in the proxy group.

Ideally, there would be a sufficient number of water utility companies to form a sufficiently large and robust sample size, but the practical reality is that the water industry has experienced consolidation in recent years along with the utility industry at large.³⁹⁰ In fact, the industry has seen the merger of a natural gas utility with a water utility and the merger of an electric utility with a water utility.³⁹¹ Ultimately, the Commission should find that the composition of Ms. Bulkley's proxy group, with eleven comparable utilities, is reasonable and appropriate. As such, this proxy group should be utilized for purposes of analyzing and determining overall capital structure and cost of equity.

a. Financial Models

Unlike the costs of debt and preferred stock, which can be directly observed, the cost of equity is market based, which means that it must be estimated based on observable market data.³⁹² To perform this estimation, it is necessary to produce a range of estimates through analytical techniques that rely on market-based data to quantify investor expectations regarding equity returns.³⁹³ The analytical methodologies used to determine investors' expected returns (referred to as the "cost of equity" or "COE") must reasonably reflect, in the context of the proxy group,

³⁹⁰ *Bulkley* at 31:3-12.

³⁹¹ *Bulkley Rebuttal* at 26:14-20.

³⁹² *Bulkley* at 32:15-22.

³⁹³ *Id.* at 33:1-9.

investors' general views of the financial markets and specific views of a subject company. Against the range of COE estimates, a review of the business, regulatory, and financial risks of the subject utility as compared with the proxy group, including the capital structure of the subject utility, is employed to arrive at a recommended ROE.³⁹⁴

To estimate the investor-required cost of equity for TAWC, Ms. Bulkley applied the Constant Growth form of the Discounted Cash Flow ("DCF") model, the Capital Asset Pricing Model ("CAPM"), and the Empirical Capital Asset Pricing Model ("ECAPM").³⁹⁵ The most recently updated range of results from these models is shown below:³⁹⁶

³⁹⁴ *Id.* at 33:1-9.

³⁹⁵ *Id.* at 5:8-11.

³⁹⁶ *Bulkley Rebuttal* at 22:19-23:2.

Figure 51: Summary of Updated Cost of Equity Results³⁹⁷

	Minimum Growth Rate	Average Growth Rate	Maximum Growth Rate
Constant Growth DCF			
Mean Results:			
30-Day Average	8.99%	9.97%	10.86%
90-Day Average	9.18%	10.17%	11.05%
180-Day Average	9.29%	10.27%	11.16%
Average	9.15%	10.14%	11.02%
Median Results:			
30-Day Average	8.94%	9.77%	10.45%
90-Day Average	9.20%	10.03%	10.67%
180-Day Average	9.26%	10.05%	10.81%
Average	9.13%	9.95%	10.64%
	Current 30-day Average Treasury Bond Yield	Near-Term Blue Chip Forecast Yield	Long-Term Blue Chip Forecast Yield
CAPM:			
Current <i>Value Line</i> Beta	10.89%	10.88%	10.90%
Current Bloomberg Beta	10.13%	10.10%	10.14%
Long-term Avg. <i>Value Line</i> Beta	10.03%	10.00%	10.05%
ECAPM:			
Current <i>Value Line</i> Beta	11.19%	11.18%	11.20%
Current Bloomberg Beta	10.61%	10.59%	10.62%
Long-term Avg. <i>Value Line</i> Beta	10.54%	10.52%	10.55%

Within the range from these models, Ms. Bulkley ultimately concluded “an ROE range from 10.25 to 11.25 percent is reasonable ... [and that an] authorized return on equity of 10.75 percent is appropriate.”³⁹⁸ She based her finding that a 10.75% ROE was appropriate based on “Tennessee-American’s regulatory, business and financial risk relative to the proxy group”, which appropriately account for any residual differences in risk.³⁹⁹ Ms. Bulkley also appropriately

³⁹⁷ Ms. Bulkley’s DCF results exclude the results for Middlesex Water Company because they do not provide a reasonable equity risk premium over the current yields on the Moody’s A rated and Baa rated utility bond indices, which were 5.45 percent and 5.67 percent, respectively, based on a 30-day average ending August 31, 2024.

³⁹⁸ *Bulkley* at 9:26-103.

³⁹⁹ *Id.* at 7:16-26.

considered capital market conditions in arriving at a 10.75% ROE, including long-term interest rates.⁴⁰⁰

Mr. Rothschild attempted to criticize Ms. Bulkley's analyses and offered analyses of his own, which predictably yielded a much lower ROE range. Specifically, he testified that an ROE range from 7.09% to 8.28% was more reasonable and recommended an ROE of 8.28% (the high end of his range).⁴⁰¹ To arrive at this range and recommendation, Mr. Rothschild performed a constant growth DCF analysis, a non-constant growth DCF analysis, and a CAPM analysis, but ultimately excluded his non-constant growth DCF model because the results were "not sufficiently higher than the cost of debt"⁴⁰² and further limited his range of reasonableness to the middle 80 percent of his results.⁴⁰³

As for the City of Chattanooga, Mr. Garrett did not conduct any proxy group selection or analysis and did not model any financial data. Like he did with his capital structure opinion, his ROE testimony is internally inconsistent. On one hand, he blindly supported *whatever* Mr. Rothschild's recommendation was, whatever it was. In other words, if Mr. Rothschild recommend 6%, Mr. Garrett would have supported it. This is truly arbitrary and capricious, and such a position should not be entertained.

On the other hand, after falling in line with whatever ROE Mr. Rothschild recommended, Mr. Garrett then opined that the highest reasonable ROE for TAWC would be 10.0%, the Company's ROE authorized in the 2012 rate case. In support of this 10.0% ceiling, Mr. Garrett

⁴⁰⁰ *Id.* at 9:4-25.

⁴⁰¹ *Rothschild* at 12:8-9.

⁴⁰² *Rothschild* at 13, fn. 12.

⁴⁰³ *Id.* Mr. Rothschild incorrectly states that he relied on the middle 90 percent of his cost of equity results. However, in Exhibit ALR-2, Mr. Rothschild does not give weight to any of the model results that are above the 90th percentile or below the 10th percentile. In other words, Mr. Rothschild has only considered those results between the 90th percentile and the 10th percentile, which is 80 percent of his results.

relies completely on his belief that “the cost of equity is lower now than it was then.”⁴⁰⁴ Inexplicably, Mr. Garrett offered no authority or market data or analyst statement or any *basis* for this statement. In rebuttal, Ms. Bulkley soundly demonstrated that Mr. Garrett is incorrect; that the cost of equity is most certainly higher now than it was in 2012.⁴⁰⁵ She explained that three capital market benchmarks—the Federal Funds rate, the 30-year Treasury bond yields, and the core inflation rate—are all substantially higher now than they were in 2012. Her Rebuttal Figure 2⁴⁰⁶ is worth a thousand words explaining what we all know: that we are in a tremendously high inflationary environment not seen in more than three decades:

Figure 2: Change in Market Conditions Since Tennessee-American’s Last Rate Proceeding¹²

Docket	Date	Federal Funds Rate	30-Day Avg of 30-Year Treasury Bond Yield	Core Inflation Rate
<u>12-00049</u>				
Decision Date	11/20/2012	0.16%	2.86%	1.95%
<u>24-00032</u>				
Company Direct	3/31/2024	5.33%	4.38%	3.80%
Company Rebuttal	8/31/2024	5.33%	4.23%	3.27%
<i>Change from Nov-12 to Aug-24:</i>		<i>5.17%</i>	<i>1.38%</i>	<i>1.31%</i>

It should be evident from this market data that the cost of equity is higher now than it was in 2012. So, while Mr. Garrett agrees that a 10.0% ROE would be reasonable, for him to say it should serve as a ceiling is against the great weight of the evidence. As such, the Commission should decline to consider 10.0% as a maximum reasonable ROE.

⁴⁰⁴ *Garrett* at 40:10-11.

⁴⁰⁵ *Bulkley Rebuttal* at 9:1-10:3.

⁴⁰⁶ *Id.*

i. **The Constant Growth DCF Model.**

The DCF model is based on the financial theory of the time value of money. It is an equation designed to calculate how much in current value is a long-term investment worth. In other words, assume a person buys one share of a company at \$100 per share. If we conclude that the stock is reasonably expected to generate dividends of \$2 per share each year, if we conclude that the stock price is expected to grow 10% per year, and if we set a 10-year time period for holding the stock, the DCF model calculates how much in today's dollars those future cash flows and 10th-year share selling price is worth. Generally, the DCF model is expressed as follows:

$$P_0 = \frac{D_1}{(1+k)} + \frac{D_2}{(1+k)^2} + \dots + \frac{D_\infty}{(1+k)^\infty} \quad [1]$$

Where P_0 represents the current stock price, $D_1 \dots D_\infty$ are all expected future dividends, and k is the discount rate, or required ROE. Equation [1] is a standard present value calculation that can be simplified and rearranged into the following form:

$$k = \frac{D_0(1+g)}{P_0} + g \quad [2]$$

Equation [2] is often referred to as the constant growth DCF model in which the first term is the expected dividend yield and the second term is the expected long-term growth rate (*i.e.*, “ g ”).⁴⁰⁷

Ms. Bulkley applied this formula based on the following:

- The dividend yield utilized is based on the proxy companies' current annual dividend and average closing stock prices over the 30, 90 and 180 trading days as of March 31, 2024, and in her rebuttal as of August 31, 2024.⁴⁰⁸
- To calculate the term P_0 , Ms. Bulkley used an average of recent trading days to ensure that the cost of equity is not skewed by anomalous events that may affect stock prices on any given trading day.⁴⁰⁹

⁴⁰⁷ Bulkley at 35:9-19.

⁴⁰⁸ *Id.* at 36:8-12; Bulkley Rebuttal at 22:13-18.

⁴⁰⁹ Bulkley at 36:13-17; Bulkley Rebuttal at 22:13-18.

- Ms. Bulkley adjusted dividend yield to ensure that the first-year dividend yield is representative of the coming 12-month period by assuming that dividend increases evenly distribute over calendar quarters. Based on this assumption, Ms. Bulkley applied one-half of the expected annual dividend growth rate to calculate the expected dividend yield component.⁴¹⁰
- Because dividend growth rates are not as likely as earnings growth rates to reflect investor perception of a company's growth potential, Ms. Bulkley utilized several sources of long-term EPS growth rates: (1) Zacks Investment Research; (2) Yahoo! Finance; and (3) Value Line.⁴¹¹ She then calculated a range of results using the low, average and high EPS growth rates of the three sources for each of the proxy group companies.⁴¹²

Based on the foregoing, Ms. Bulkley's Constant Growth DCF Model produced the following updated results as of August 31, 2024:⁴¹³

Figure 5: Summary of Updated Cost of Equity Results³¹

	Minimum Growth Rate	Average Growth Rate	Maximum Growth Rate
Constant Growth DCF			
Mean Results:			
30-Day Average	8.99%	9.97%	10.86%
90-Day Average	9.18%	10.17%	11.05%
180-Day Average	9.29%	10.27%	11.16%
Average	9.15%	10.14%	11.02%
Median Results:			
30-Day Average	8.94%	9.77%	10.45%
90-Day Average	9.20%	10.03%	10.67%
180-Day Average	9.26%	10.05%	10.81%
Average	9.13%	9.95%	10.64%

Moreover, while the Commission should consider a number of different models, it is important to note that the DCF model is susceptible to understating the utility cost of equity in the

⁴¹⁰ Bulkley at 36:18-37:3.

⁴¹¹ Id. at 37:4-23.

⁴¹² Id. at 38:1-8.

⁴¹³ Bulkley Rebuttal at 23:1.

current capital market conditions of high inflation and increased interest rates. Indeed, because of this, the Pennsylvania Public Utility Commission⁴¹⁴ recently noted and found:

Historically, we have relied primarily upon the DCF methodology in arriving at ROE determinations and have utilized the results of the CAPM as a check upon the reasonableness of the DCF derived equity return. As such, where evidence based on other methods suggests that the DCF-only results may understate the utility's ROE, we will consider those other methods, to some degree, in determining the appropriate range of reasonableness for our equity return determination. In light of the above, we shall determine an appropriate ROE for Aqua using informed judgement based on I&E's DCF and CAPM methodologies.⁴¹⁵

Likewise, the Massachusetts Department of Public Utilities⁴¹⁶ found that recent increases in interest rates caused "greater certainty" that DCF model results were understating the cost of equity.⁴¹⁷

(A) **Mr. Rothschild's DCF model produces unreasonable results.**

Mr. Rothschild also performed a constant growth DCF analysis. He used two forms of growth: (1) retention growth rates, which produced a mean results of 7.65% and 7.69%, and (2) option-implied growth rates, which produced a mean results of 8.03% and 8.38%.⁴¹⁸ The retention growth rate results of 7.65% and 7.69% are unreasonable and irresponsible as such returns are lower than any comparable authorized returns for electric, natural gas and water utilities in decades.⁴¹⁹ These returns would be hundreds of basis points below what the Commission has been authorizing for other utilities in Tennessee over the past decade. Accordingly, these growth rates fail under the *Hope* and *Bluefield* standard that requires the authorized return to be comparable to other returns available to investors in companies with similar risks.⁴²⁰ It is also important to note

⁴¹⁴ Pennsylvania Public Utility Commission, Docket Nos. R-2021-3027385 and R-2021-3027386, *Opinion and Order*, May 12, 2022, at 154-155.

⁴¹⁵ *Bulkley* at 39:4-40:18.

⁴¹⁶ Massachusetts Department of Public Utilities, D.P.U. 22-22, November 30, 2022, at 385-386.

⁴¹⁷ *Bulkley* at 40:28-31.

⁴¹⁸ *Rothschild* at 53:7-9.

⁴¹⁹ *Bulkley Rebuttal* at 29:5-15 (citing S&P Capital IQ Pro).

⁴²⁰ *Id.* at 29:5-15.

that while Mr. Rothschild criticizes the use of analyst projections in Ms. Bulkley's analyses, he relies on the very same information. Indeed, his DCF model is based on analysts' projected equity returns as reported by Value Line and Zacks.⁴²¹

Even if his results produced somewhere close to comparable returns, the Commission would not be on good ground in relying upon Mr. Rothschild's *option-implied growth rates* to estimate COE. The use of these growth rates lack academic support, significantly vary from week-to-week, and are inconsistent with constant growth DCF models being sustainable in perpetuity. Moreover, there is a lack of reliable options contract data for utilities, which caused Mr. Rothschild to simply make-up his own growth rates when the actual data was missing.⁴²²

Ultimately, rather than rely on the growth rates selected by Mr. Rothschild to drive an outcome, the more appropriate growth rate is the EPS growth rate utilized by Ms. Bulkley. As set forth in Ms. Bulkley's Rebuttal Testimony, EPS growth rates are more appropriate because:

- Earnings are the fundamental determinant of a company's ability to pay dividends, and over the long-term dividend growth can only be sustained by earnings growth.⁴²³ Therefore, EPS should be relied on in the DCF analysis.
- As noted previously, there is significant academic research demonstrating that EPS growth rates are most relevant in stock price valuation. For example, Liu, *et. al.* (2002) examined "the valuation performance of a comprehensive list of value drivers" and found that "forward earnings explain stock prices remarkably well" and were generally superior to other value drivers analyzed. Gleason, *et. al.* (2012) found that the sell-side analysts with the most accurate stock price targets were those whom the researchers found to have more accurate earnings forecasts.
- Investment analysts report predominant reliance on EPS growth projections. In a survey completed by 297 members of the Association for Investment Management and

⁴²¹ *Id.* at 30:8-19.

⁴²² *Id.* at 34:12-38:3.

⁴²³ As noted by Brigham and Houston: "Growth in dividends occurs primarily as a result of growth in earnings per share (EPS). Earnings growth, in turn, results from a number of factors, including (1) inflation, (2) the amount of earnings the company retains and invests, and (3) the rate of return the company earns on its equity (ROE). Eugene F. Brigham and Joel F. Houston, *Fundamentals of Financial Management*, at 317 (Concise Fourth Edition, Thomson South-Western, 2004).

Research, the majority of respondents ranked earnings as the most important variable in valuing a security (more important than cash flow, dividends, or book value).⁴²⁴

- Projected EPS growth rates such as those available from *Yahoo! Finance* and *Zacks* are based on consensus estimates from multiple sources and thus the results are less likely to be biased in one direction or another. Moreover, the fact that projected EPS growth estimates are available from multiple sources on a consensus basis attests to the importance of projected EPS growth rates to investors when developing long-term growth expectations.⁴²⁵

Moreover, despite Mr. Rothschild's attempt to discredit EPS growth rates based on bias, the 2003

Global Analysts Research Settlement⁴²⁶ should quell Mr. Rothschild's worries about bias:

Introduced in 2002, the Global Settlement and related regulations had an even bigger impact than Reg FD on analyst behavior. After the Global Settlement, the mean forecast bias declined significantly, whereas the median forecast bias essentially disappeared. Although disentangling the impact of the Global Settlement from that of related rules and regulations aimed at mitigating analysts' conflicts of interest is impossible, forecast bias clearly declined around the time the Global Settlement was announced. These results suggest that the recent efforts of regulators have helped neutralize analysts' conflicts of interest.⁴²⁷

Mr. Rothschild's attack of EPS growth rates is also belied by the fact that at least one other regulatory commission relies on them. The Pennsylvania Public Utility Commission⁴²⁸ relies on EPS growth rates, reasoning that "the best measure of growth in the DCF model are forecasted earnings growth rates."⁴²⁹

Ultimately, it is clear why Mr. Rothschild attacks the use of EPS growth rates; applying the EPS growth rates utilized by Ms. Bulkley to his proxy group "results in a cost of equity of 9.46 percent using the average of the high and low stock price for the year ending August 31, 2024, and

⁴²⁴ Stanley B. Block, "A Study of Financial Analysts: Practice and Theory," *Financial Analysts Journal*, July/August 1999.

⁴²⁵ *Bulkley Rebuttal* at 39:5-26.

⁴²⁶ Armen Hovakimian and Ekkachai Saenyasiri, "Conflicts of Interest and Analyst Behavior: Evidence from Recent Changes in Regulation," *Financial Analysts Journal*, July/August 2010, at 195.

⁴²⁷ *Bulkley Rebuttal* at 40:1-42:19.

⁴²⁸ Pennsylvania Public Utility Commission, Docket No. R-2020-3018929, *Opinion and Order*, June 17, 2021, at 160 (emphasis added.)

⁴²⁹ *Bulkley Rebuttal* at 44:7-20.

9.33 percent using the stock prices as of August 31, 2024.”⁴³⁰ Apparently, because “the best measure of growth” for the DCF model produced a result that Mr. Rothschild did not like, he used a substandard and obscure method of growth projection. Accordingly, the Commission should reject Mr. Rothschild’s use of option-implied growth rates.

ii. **The CAPM and ECAPM Models.**

The Capital Asset Pricing Model (CAPM) and its slightly modified but enhanced cousin the Empirical Capital Asset Pricing Model (ECAPM) are additional, well-accepted models for estimating the investor required COE. Both the CAPM and the ECAPM are based on the idea that an investor requires a certain premium over and above what a risk-free investment would yield, and that premium is affected by the stock’s volatility of returns compared to the overall market, which is called the beta coefficient. As the NARUC capital markets primer further explains: the CAPM is “based on the theory that the required rate of return for a given security is equal to the risk-free rate of return plus a risk-adjusted risk premium.”⁴³¹

The CAPM is defined by four components:

$$r_f + \beta(r_m - r_f) \quad [3]$$

Where:

K_e = the required market ROE;

β = beta coefficient of an individual security;

r_f = the risk-free rate of return; and

r_m = the required return on the market as a whole.

The term $(r_m - r_f)$ represents the market risk premium. According to the theory underlying the CAPM, because unsystematic risk can be diversified away, investors should only be concerned

⁴³⁰ *Id.* at 45:1-9.

⁴³¹ Quackenbush, *Cost of Capital and Capital Markets: A Primer for Utility Regulators* at 17.

with systematic or non-diversifiable risk. Systematic risk is measured by beta, which is a measure of the volatility of a security as compared to the overall market. Beta is defined as:

$$\beta = \frac{\text{Covariance}(r_e, r_m)}{\text{Variance}(r_m)} \quad [4]$$

Variance (r_m) represents the variance of the market return, which is a measure of the uncertainty of the general market. *Covariance* (r_e, r_m) represents the covariance between the return on a specific security and the general market, which reflects the extent to which the return on that security will respond to a given change in the general market return. Thus, beta represents the risk of the security relative to the general market.⁴³²

The ECAPM addresses the tendency of the “traditional” CAPM to underestimate the cost of equity for companies with low beta coefficients such as regulated utilities. In that regard, the ECAPM is not redundant to the use of adjusted betas in the traditional CAPM; rather, it recognizes the results of academic research indicating that the risk-return relationship is different (in essence, flatter) than estimated by the CAPM, and that the CAPM underestimates the “alpha,” or the constant return term.⁴³³

The ECAPM calculates the product of the adjusted beta coefficient and the market risk premium and applies a weight of 75.00 percent to that result. The model then applies a 25.00 percent weight to the market risk premium without any effect from the beta coefficient. The results of the two calculations are summed, along with the risk-free rate, to produce the ECAPM result, as noted in Equation [5] below:

$$k_e = r_f + 0.75\beta(r_m - r_f) + 0.25(r_m - r_f) \quad [5].^{434}$$

⁴³² *Bulkley* at 44:3-19.

⁴³³ *Bulkley Rebuttal* at 47:14-19.

⁴³⁴ *Bulkley* at 47:1-22.

Ms. Bulkley performed these formulas with the following information:

- For the risk-free rate, Ms. Bulkley utilized: (1) the current 30-day average yield on 30-year Treasury bonds;⁴³⁵ (2) the average projected 30-year Treasury bond yield for the second quarter of 2024 through the second quarter of 2025;⁴³⁶ and (3) the average projected 30-year Treasury bond yield for 2025 through 2029^{437, 438}.
- For beta coefficients, Ms. Bulkley used the beta coefficients reported by Bloomberg Professional (calculated on 10 years of weekly returns relative to the S&P) and Value Line (calculated on 5 years of weekly returns relative to the NYSE Composite) for each of the proxy group companies. Additionally, TAWC performed an additional analysis using the long-term average (2013-2023) of Value Line's beta coefficients.⁴³⁹
- For the market risk premium, Ms. Bulkley took the difference between the expected equity market return and the risk-free rate. TAWC found that the estimated required market return for the S&P 500 as of March 31, 2024, is 12.7%, which is reasonable given that the realized return was at least 12.7% 50 out of the last 97 years.⁴⁴⁰

As noted above, the results were updated based on August 31, 2024 data in Ms. Bulkley's rebuttal testimony.

Based on the foregoing, Ms. Bulkley's CAPM and ECAPM analyses produced the following results:⁴⁴¹

	Current 30-day Average Treasury Bond Yield	Near-Term Blue Chip Forecast Yield	Long-Term Blue Chip Forecast Yield
CAPM:			
Current <i>Value Line</i> Beta	10.89%	10.88%	10.90%
Current Bloomberg Beta	10.13%	10.10%	10.14%
Long-term Avg. <i>Value Line</i> Beta	10.03%	10.00%	10.05%
ECAPM:			
Current <i>Value Line</i> Beta	11.19%	11.18%	11.20%
Current Bloomberg Beta	10.61%	10.59%	10.62%
Long-term Avg. <i>Value Line</i> Beta	10.54%	10.52%	10.55%

⁴³⁵ Bloomberg Professional as of March 31, 2024.

⁴³⁶ *Blue Chip Financial Forecasts*, Vol. 43, No. 4, April 1, 2024, at 2.

⁴³⁷ *Blue Chip Financial Forecasts*, Vol. 42, No. 12, December 1, 2023, at 14.

⁴³⁸ *Bulkley* at 45:1-5.

⁴³⁹ *Id.* at 6-14; Exhibits AEB-5 and AEB-6.

⁴⁴⁰ *Id.* at 45:15-46:10; Exhibit AEB-7.

⁴⁴¹ *Bulkley Rebuttal* at 23:2.

(A) **Mr. Rothschild's CAPM analysis is unreliable.**

There are several problems with Mr. Rothschild's CAPM analysis:

- Mr. Rothschild's risk-free rate component is unreliable as he uses a 3-month U.S. Treasury bill in four of eight versions of his analysis, which does not match the life of the underlying investment. Utility companies are generally long-term investments, which is why the 30-year Treasury yield is appropriate, not the 3-month Treasury bill.⁴⁴²
- Mr. Rothschild's approach to calculating beta varies significantly from case to case as do the resulting estimates of beta, which has a significant effect on the results produced by his CAPM analyses.⁴⁴³
- Mr. Rothschild's recommendation that calculating a 3-month weighted average of a weekly time series for both the option-implied betas and historical betas over the three-month period of May 28, 2024, through August 27, 2024, will produce a more accurate estimate of beta to be used in a forward-looking CAPM analysis completely lacks empirical study and academic support. This "methodology" is entirely his own financial engineering.⁴⁴⁴
- While Mr. Rothschild includes options contracts that expire up to 61 months in the future for his market risk premium calculation, he still relies on options contracts for a single trading day, which, as discussed, are sensitive to trading day volatility and do not produce consistent results. Depending on the day chosen, this type of volatility will result in significant changes in the market return using Mr. Rothschild's estimation process. Accordingly, it is not appropriate to estimate the cost of equity for Tennessee-American using a calculation that can vary greatly from day-to-day.⁴⁴⁵
- Mr. Rothschild has provided no support to show that his methodology has been used by either investors or equity analysts. Since the purpose is to estimate the cost of equity consistent with investors' expectations, it is important that the methodologies used reflect the methodologies that investors would actually rely on to develop their return requirements. Therefore, it would be reasonable and appropriate to disregard Mr. Rothschild's market return calculation in favor of a more defensible and traditional methodology.⁴⁴⁶

Moreover, Mr. Rothschild's pre-filed testimony has the potential to mislead the Commission wherein Mr. Rothschild implies that commissions in South Carolina and California

⁴⁴² *Id.* at 50:15-60:7.

⁴⁴³ *Id.* at 60:14-61:10.

⁴⁴⁴ *Id.* at 57:1-16.

⁴⁴⁵ *Id.* at 61:12-62:3.

⁴⁴⁶ *Id.* at 68:3-69:2.

based their respective ROE's on his approach.⁴⁴⁷ The Commission should give these references a closer look. In the 2020 South Carolina decision he references,⁴⁴⁸ the ROE was determined in that proceeding “considering the quality of service issues known to exist with Blue Granite”⁴⁴⁹ Notably, the utility there had over 500 people attend its public comment hearings, with over 150 people testifying about myriad poor service issues.⁴⁵⁰ The South Carolina PSC ultimately stated that while it was prohibited by the South Carolina Supreme Court from outright denying the utility's rate increase request, it was intent on “creating incentives for the utility to improve its business practices, cut costs, improve efficiency, and enhance quality of service.”⁴⁵¹ It should also be noted that the utility there was previously authorized to earn an ROE of 8.62%, but was actually earning *negative* 3% on an adjusted basis.⁴⁵² To say that comparing Blue Granite's 2020 rate case to TAWC's 2024 rate case is not an apples-to-apples comparison is an understatement. In any event, the South Carolina PSC's order did not discuss Mr. Rothschild's use of option-implied betas.

As for the California Commission, the referenced order authorized a 9.77 percent, which was the midpoint of Mr. Rothchild's range of 8.49 percent to 11.04 percent excluding his 16-basis-point downward adjustment for financial risk.⁴⁵³ This range is significantly greater than the cost of equity range proposed by Mr. Rothschild in the current proceeding for Tennessee-American of 7.09 percent to 8.28 percent. Given that the California Commission adheres to the standards outlined in *Hope* and *Bluefield*, including that it is not the methodology that is important but that the methodology relied on produces a fair rate of return, there is no reason to conclude that the

⁴⁴⁷ *Rothschild* at 14:6-15:2.

⁴⁴⁸ South Carolina Public Service Commission, Docket No. 2019-290-WS, *Order No. 2020-306*, April 9, 2020, at 38.

⁴⁴⁹ *Id.* at 3.

⁴⁵⁰ *Id.* at 15.

⁴⁵¹ *Id.*

⁴⁵² *Id.* at 21.

⁴⁵³ California Public Utilities Commission, Application No. 22-09-003, *Decision No. 24-09-021*, September 16, 2024, at 23.

California Commission would find Mr. Rothchild's methodologies in this proceeding reasonable since the results produced by the models are well below the range of recent comparable returns for water, electric and natural gas utilities.⁴⁵⁴ Further, the California Commission has specifically said in other rate proceedings that "we find no reason to adopt the financial modeling results of any one party."⁴⁵⁵ Throughout that order's discussion of ROE, the California Commission was clear that it was considering all the model results while simultaneously discounting the results of any one party's models.⁴⁵⁶

Anticipating that this Commission would likewise carefully consider the differing methodologies, Ms. Bulkley endeavored to conduct her own CAPM analysis using Mr. Rothschild's unorthodox methods, but would use proper, robust inputs. As shown in Rebuttal Exhibit AEB-9, by making corrections to Mr. Rothschild's CAPM analysis, the cost of equity results range from 9.86 percent to 11.66 percent, which is significantly higher than the 7.07 percent to 7.91 percent range developed by Mr. Rothschild.⁴⁵⁷ The Commission should place greater weight on this revised CAPM analysis, as it is internally consistent and more appropriately reflects investor-expected return requirements than the CAPM estimates developed by Mr. Rothschild, which produce unjust and unreasonable results.⁴⁵⁸

Mr. Rothschild also attempts to buttress his low ROE recommendations by relying on overall market return expectations.⁴⁵⁹ He testified that utility companies should not be awarded ROEs higher than unregulated companies like Tesla and Amazon, and that "major financial institutions" have equity return expectations for the overall market between 6.2% and 7.9%.⁴⁶⁰ Mr.

⁴⁵⁴ *Bulkley Rebuttal* at 49: 16-51:2.

⁴⁵⁵ California Public Utilities Commission, Application No. 21-05-001, *Decision No. 23-06-025*, June 29, 2023, at 28.

⁴⁵⁶ *Id.* at 10-28.

⁴⁵⁷ *Rothschild* at 13:7-8, Table 2.

⁴⁵⁸ *Bulkley Rebuttal* at 73:5-74:3.

⁴⁵⁹ *Rothschild* at 9:16-19.

⁴⁶⁰ *Id.* at 18:2-7, 9:16-19.

Rothschild does not attempt, though, to reconcile his testimony with the fact that this Commission has been awarding ROEs to utilities well above this “overall market” expectation range for years. So, either the Commission has been consistently authorizing excessively high ROEs, or Mr. Rothschild’s reliance on analyst expectations of overall market returns is misplaced. To help visualize how severely Mr. Rothschild’s range departs from *Hope* and *Bluefield*’s comparable-risk standard, Ms. Bulkley prepared a summary, reproduced below, of ROEs for utilities across the country since 2021:⁴⁶¹

Figure 42: Average Annual Authorized ROEs for Water, Natural Gas, and Electric Utilities, 2021 – August 31, 2024

Year	Mean	Low	High
2021	9.54%	8.80%	10.24%
2022	9.53%	9.00%	10.20%
2023	9.56%	8.70%	10.50%
2024	9.62%	9.10%	11.88%

This chart also shows that TAWC’s requested ROE of 10.75% is within the zone of reasonableness, especially when considering that interest rates have increase significantly since 2021. Ms. Bulkley did not simply rely on the range of results produced by the various models she performed. Rather, she appropriately considered several additional factors to determine where TAWC’s cost of equity reasonably fell within the range of results, which include flotation costs/issuance costs, regulatory risk, and small size risk.⁴⁶² Accordingly, given the testimony and data in the record, and considering the standards of *Hope* and *Bluefield*, the Commission should conclude that TAWC’s Attrition Year cost of equity can be estimated to be between 10.25% and

⁴⁶¹ *Bulkley Rebuttal* at 20:21-21:5. The data underlying this summary was provided in response to Commission Staff’s Question 1 in its November 4, 2024 Data Request. See TAW_R_TPUCDR2_001, Attachment 1 CONFIDENTIAL.xlsx.

⁴⁶² *Bulkley Rebuttal* at 48:8-61:20.

11.25%. Within this range, TAWC should be authorized to earn a return on common equity of 10.75%.

C. Overall Rate of Return

The overall rate of return, also referred to as the weighted average cost of capital (“WACC”), is calculated by summing the component costs of the capital structure, with each component weighted by its respective proportion to total capitalization. Here, the WACC is used as the authorized overall rate of return on rate base in this proceeding. Given the Company’s projected attrition year capital structure and recommended ROE, the Company is requesting a 7.94% weighted average cost of capital.⁴⁶³ In his direct testimony and accompanying exhibits, Mr. Furia describes the bases for the various components of the 7.94%. This weighted average reflects the significant increase in the cost of capital that has occurred since the Company’s last rate case and the recommended return on equity found appropriate by Ms. Bulkley.

IX. RATE DESIGN

A. The Company’s Consolidated Rate Design Proposal is Reasonable and Appropriate.

The Company proposes to simplify and consolidate its rate design. There are several important principles that regulators and policymakers consider when developing appropriate rate designs for water service. While cost causation is an important foundation of rate design, cost causation is not the be-all and end-all. Typically layered on top of cost causation are other rate making principles, including simplicity, feasibility, and affordability.

As explained by Company Witness Heath Brooks, the Company currently has seven (7) rate zones that include multiple customer classes.⁴⁶⁴ Service charge rates, volumetric rates and the

⁴⁶³ *Furia* at 9, Ex. CS-1, Schedule CS-1.1.

⁴⁶⁴ *Brooks* at 20:8-21:15.

volumetric rate block structure vary across most rate zones.⁴⁶⁵ Service charges for customers in Chattanooga, Lookout Mountain, and Lakeview escalate with meter size.⁴⁶⁶ Service charges applicable to customers in Suck Creek, Whitwell Inside City, Whitwell Outside City, and Jasper Highlands are flat.⁴⁶⁷ The volumetric rate block structures in Chattanooga, Lookout Mountain and Lakeview include six volumetric rate blocks while Whitwell Inside City and Whitwell Outside City include four rate blocks with a usage allowance of 2,000 gallons.⁴⁶⁸ Suck Creek and Jasper Highlands have their own unique volumetric rate structures as well.⁴⁶⁹ As a result of these varying service and volumetric rate structures, the Company has over 175 unique rates across its different rate zones, some of which vary by as little as a penny.⁴⁷⁰

The Company proposes to simplify this existing rate design by moving to tariff pricing that consolidates rate zones and rate structures applicable to Chattanooga, Lookout Mountain, Lakeview, Suck Creek, Whitwell Inside City, and Whitwell Outside City.⁴⁷¹ These rate zones will be defined as Rate Zone 1 while Jasper Highlands will remain separately defined as Rate Zone 2.⁴⁷² All residential customers in Rate Zone 1 will be served under a residential tariff, and all other customers, excluding special contracts and private fire, will be served under a non-residential tariff.⁴⁷³

The Company proposes to further simplify its residential rate structure by replacing the current volumetric block structures with a single volumetric rate and setting fixed service charges

⁴⁶⁵ *Id.*

⁴⁶⁶ *Id.*

⁴⁶⁷ *Id.*

⁴⁶⁸ *Id.*

⁴⁶⁹ *Id.*

⁴⁷⁰ *Brooks Rebuttal* at 13.

⁴⁷¹ *Brooks* at 21:16-22:16.

⁴⁷² *Id.*

⁴⁷³ *Id.*

that are dependent on meter size.⁴⁷⁴ Non-residential rates will similarly be simplified to fixed service charges based on meter size and a six-block volumetric rate structure.⁴⁷⁵ Of the total proposed water revenue recovery, 42% of the total will be collected through fixed charges while 58% will be collected through volumetric charges.⁴⁷⁶

On a per class basis, the Company's rate proposal will impact customer class as follows:

TABLE 5: Rate Proposal Impact by Customer Class⁴⁷⁷

Class	Current Revenue	Proposed Revenue	Increase \$	Increase %
Residential	\$ 32,458,901	\$ 39,218,107	\$ 6,759,206	20.82%
Commercial	\$ 22,715,453	\$ 27,461,381	\$ 4,745,927	20.89%
Industrial	\$ 5,750,304	\$ 6,581,262	\$ 830,958	14.45%
OPA	\$ 4,322,067	\$ 5,153,148	\$ 831,081	19.23%
SFR	\$ 1,286,516	\$ 1,288,075	\$ 1,559	0.12%
Private Fire	\$ 3,973,889	\$ 4,357,369	\$ 383,480	9.65%

For residential customers by rate zone, the proposed consolidated tariff will have the following average residential bill impact:

TABLE 6: Average Residential Bill Impact⁴⁷⁸

Rate Zone	Current	Proposed	\$ Change	% Change
Chattanooga	\$ 26.76	\$ 31.75	\$ 4.98	18.6%
Lookout Mountain	\$ 34.86	\$ 31.75	\$ (3.12)	-8.9%
Lakeview	\$ 30.95	\$ 31.75	\$ 0.79	2.6%
Suck Creek	\$ 61.00	\$ 31.75	\$ (29.25)	-48.0%
Whitwell Inside City	\$ 39.82	\$ 31.75	\$ (8.07)	-20.3%
Whitwell Outside City	\$ 46.45	\$ 31.75	\$ (14.70)	-31.7%
Jasper Highlands	\$ 94.69	\$ 66.68	\$ (28.00)	-29.6%

⁴⁷⁴ *Id.*

⁴⁷⁵ *Id.*

⁴⁷⁶ *Id.* at 25:8-14; Trial Volume IIA, Brooks at 95:14-17.

⁴⁷⁷ *Id.* at 26:2.

⁴⁷⁸ *Supplemental Direct Testimony of Heath J. Brooks*, 3:18, TPUC Docket No. 24-00032 (May 6, 2024) (hereinafter "*Brooks Supplemental Direct*").

B. Intervenor’s Position on Consolidated Rate Design Ignores Important Rate-Making Considerations.

CAD witness Novak, CAD witness Kaml, and City of Chattanooga witness Garrett address the Company’s proposed rate design. Mr. Novak argues that the consolidated tariff creates “winners and losers.”⁴⁷⁹ Both Mr. Kaml and Mr. Garrett criticize the Company’s proposed rate design because it is not directly based on a cost-of-service analysis establishing the difference in cost necessary to deliver water service to the current rate zones.⁴⁸⁰

As a practical matter, the Company does not currently maintain the capability of isolating discreet costs of service by rate zone.⁴⁸¹ As explained by Company Witness Kruchinski, with the variable nature of the Company’s delivery system, water source and distribution routes can fluctuate day-to-day depending on demands on the system.⁴⁸² This variability can cause significant difficulties in accurately assessing service costs at a rate zone level.⁴⁸³ Even if the technical ability to track costs by rate zone existed, as explained by Mr. Kruchinski, infrastructure and capital investments in one rate zone can benefit other rate zones.⁴⁸⁴

The Intervenor’s criticisms also ignore that the *current* rate zone structure is not based on a cost-of-service analysis. The Chattanooga rate zone is geographically massive, with many areas separated by mountains or significant elevation changes. East Ridge and Red Bank are both currently in the Chattanooga rate zone and yet the cost of providing service to those two areas are likely higher due to unique geographic characteristics.⁴⁸⁵ While East Ridge is at a relatively low

⁴⁷⁹ Novak at 23, 26.

⁴⁸⁰ *Pre-filed Testimony of CAD Witness Clark Kaml*, 14, 18, TPUC Docket No. 24-00032 (Sept. 17, 2024) (hereinafter “*Kaml*”); Garrett at 46-50.

⁴⁸¹ Trial Volume IIA, Kruchinski, at 24:16-25:18; Brooks at 131:18-132:1.

⁴⁸² Trial Volume IIA, Kruchinski, at 24:16-25:18.

⁴⁸³ *Id.* at 24:16-25:18.

⁴⁸⁴ *Id.* at 44:17-45:20.

⁴⁸⁵ *Id.* at 23:16-24:13.

elevation, water must be pumped across Missionary Ridge to reach East Ridge.⁴⁸⁶ Water for the Red Bank area must be fed through pipes under the Tennessee River and into the Hill City pump station before it reaches Red Bank.⁴⁸⁷ And yet the average Lookout Mountain resident pays 30% more than the average Chattanooga rate zone resident while the average Suck Creek resident pays 128% more without any substantiation that the cost of service to the residents of these areas is demonstrably more than East Ridge or Red Bank in the Chattanooga rate zone.⁴⁸⁸ While Mr. Novak argues that the Company's proposal would create "winners and losers," in fact, a consolidated tariff would only increase revenue recovery from the Chattanooga Rate Zone by 1.77% compared to applying the rate increase uniformly across the Company's current seven rate zones.⁴⁸⁹ For the average Chattanooga residential customer, this is a difference of less than 31 cents per month on the customer's bill.⁴⁹⁰ Approximately a penny a day for the average residential customer.

Furthermore, the Intervenor's suggestion that the Commission should force the Company to perform cost-of-service studies by rate zone to justify a consolidated tariff is similarly short-sighted. Given the lack of current reporting infrastructure, the Company would be required to invest heavily in developing a system to track costs on a rate zone level. However, even developing such a system would have limited utility for the reasons described by Mr. Kruchinski. Once completed, the Company and the Commission would be equipped with a static cost study, which would need to be regularly updated to avoid a distorted picture of the true, long-term cost differences – if any – of serving a particular rate zone. These studies are expensive and the

⁴⁸⁶ *Id.* at 23:16-24:13.

⁴⁸⁷ *Id.* at 23:16-24:13.

⁴⁸⁸ *Brooks* at 26:10, Table 6.

⁴⁸⁹ *Id.* at 31; Trial Volume IIA, *Brooks* at 133:2-133:18.

⁴⁹⁰ *Id.* at 26, 31; Table 6.

administrative and regulatory costs required to perform the studies would be borne by the Company's customers.⁴⁹¹

Requiring the Company to incur these unnecessary costs is further undermined by the benefits of a consolidated rate structure. The National Association of Regulatory Utility Commissioners ("NARUC") has recognized consolidated rates as a best practice.⁴⁹² Other regulatory commissions have also approved rate consolidation⁴⁹³ or have utilized American Water's consolidated COSS to gradually set rates for each customer class based on the total consolidated cost of service for the service territory.⁴⁹⁴ Generally, the shift to consolidate rate designs is based on a number of important rate-making considerations:

- Affordability – Consolidated rate designs improve affordability for all customers over the long-term planning horizon by enlarging the overall customer base which can more easily absorb capital investment costs. At some point in the future, the Company will need to invest in all of the areas that it serves. For smaller rate zones, needed capital investment without consolidated tariff pricing could lead to rate shock and significantly impact water affordability. But even for larger rate zones such as Chattanooga, a more substantial customer base in a consolidated rate zone will afford economies of scale and improved affordability long-term. Eventually, investment will need to be made in all areas off the system and all customers benefit by sharing the cost and impact of improved water system infrastructure.⁴⁹⁵
- Administrative Costs – As would be expected, simplifying rate structures (and avoiding the administrative burden of over 175 rates) also leads to lower administrative costs, lower cost of billing and collections, and reduced regulatory costs.⁴⁹⁶
- Support for Smaller Water Systems – Many smaller water systems cannot attain the economies of scale required to support necessary infrastructure investment. As a result, water quality can suffer. Consolidated tariffs remove the financial disincentive to invest in smaller water companies by allowing larger utilities to recover the cost of needed investment over a larger customer base.

⁴⁹¹ *Id.* 26; Trial Volume IIA, Brooks at 131:18-132:1.

⁴⁹² *Brooks* at 30:4-14, fn. 1.

⁴⁹³ *Id.* at fn. 2.

⁴⁹⁴ *Brooks Rebuttal* at 26:6-20; Ex. HB-2.

⁴⁹⁵ *Brooks* at 29:12-30:3.

⁴⁹⁶ *Id.* at 27:1-28:19.

The Company's proposed consolidated tariff would eliminate these inconsistencies, simplify the current rate design and generally promote long-term stability across its entire customer base.

C. TAWC's Cost of Service Study is Appropriate and Useful for Purposes of Reviewing the Company's Proposed Rate Increase Allocation.

Because the Company's expenses and rate base are not directly assigned to a specific customer class, TAWC witness Heath Brooks produced a class cost of service ("COSS") study, provided as TAWC Exhibit COS-1, to calculate TAWC's total investment and operating costs incurred to provide service to various customer groups, or service classes, for the purpose of establishing cost-based rates.⁴⁹⁷ The COSS study provided in this proceeding allocates the Company's total revenue requirement for water operations to various cost categories.⁴⁹⁸ The revenue requirement for each of those cost categories are then allocated to customer classes using allocation factors that differ depending on the nature of the costs.⁴⁹⁹ The costs allocated to each customer class include variable costs, capacity-general, capacity-source of supply, capacity-water pumping, capacity-water treatment, capacity-transmission mains, capacity-distribution mains, storage, meters, services, customer related, fire protection, and miscellaneous costs.⁵⁰⁰

TAWC applied variations of the Base/Extra capacity method to allocate most costs related to capacity requirements.⁵⁰¹ As explained in detail in the American Water Works Association AWWA M1 Manual, the Base/Extra capacity method is generally accepted as a sound method for allocating the cost of water service and relies upon a combination of the average water consumption across the year for each customer class and each class's estimated maximum daily

⁴⁹⁷ *Id.* at 8-22.

⁴⁹⁸ *Id.*

⁴⁹⁹ *Id.*

⁵⁰⁰ *Id.* at 15-16.

⁵⁰¹ *Id.* at 12.

consumption for the year to allocate fixed costs of the water production and distribution system to customer classes.⁵⁰² The Base/Extra capacity allocator is a two-part allocator, the first part being the “Base” component and the second part being the “Extra” component.⁵⁰³

The Base component for each class is simply the average daily consumption for the year (total annual sales divided by 365 days).⁵⁰⁴ For each class, the “Base” allocation component is each class’s average consumption divided by the total sum of average consumption for all classes.⁵⁰⁵ The “Extra” component is the difference between the maximum daily consumption for a given class and the average daily consumption for that class.⁵⁰⁶ For each class, the “Extra” allocator is each class’s extra demand value divided by the total sum of the extra demand values for all customer groups.⁵⁰⁷

For each class, the Base/Extra allocator is calculated as a weighted average of the Base and Extra allocators.⁵⁰⁸ The Base component is weighted by the total system load factor expressed as a percentage (average daily system production divided by maximum day production), and the Extra component is weighted by one minus the system load factor.⁵⁰⁹ These Base components and Extra components for each class result in Base/Extra Daily factors that are then used in the cost-of-service study to allocate revenue requirements for various cost categories to customer classes.⁵¹⁰ Variations of Base/Extra allocation factors are utilized to recognize hourly demand and fire protection.

⁵⁰² *Id.* at 12-14.

⁵⁰³ *Id.*

⁵⁰⁴ *Id.*

⁵⁰⁵ *Id.*

⁵⁰⁶ *Id.*

⁵⁰⁷ *Id.*

⁵⁰⁸ *Id.*

⁵⁰⁹ *Id.*

⁵¹⁰ *Id.*

The extension of the Base/Extra allocation methodology to individual customer classes is a direct result of average usage and the estimates of maximum day use and maximum hour use by customer class.⁵¹¹ These estimates result in Base/Extra factors that are used to allocate costs to customer classes that are subject to the Base/Extra methodology.⁵¹²

A summary of the results of the Company's COSS study is as follows:

Class	COSS Adjustment %
Residential	33%
Commercial	-4%
Industrial	30%
OPA	40%
SFR	89%
Private Fire	-24%

CAD Witness Mr. Novak addresses the Company's COSS.

First, Mr. Novak argues that the individual allocation factors utilized by TAWC are “inherently judgmental” and that the Company failed to “fully explain its rationale for each individual allocation assignment.”⁵¹³ Notably, Mr. Novak (through the CAD) did not promulgate a single discovery request to the Company asking for further explanation of TAWC's cost allocation factors.⁵¹⁴ Moreover, Mr. Novak did not perform his own COSS analysis or suggest any revisions to the Company's allocation factors. While the Company is required to exercise some degree of judgment in allocating costs, TAWC does so based on well-established industry

⁵¹¹ *Id.*

⁵¹² *Id.*

⁵¹³ *Novak* at 21.

⁵¹⁴ *Brooks Rebuttal* at 8-9.

standards for determining its allocations that are supported by the American Water Works Association M1 Manual.⁵¹⁵ The majority of Commissions presiding in states served by American Water (including Indiana, Iowa, Kentucky, New Jersey, Pennsylvania, Virginia and West Virginia) consider the Company's COSS as a reasonable guide for adjusting rates and have either used the results of the COSS to set rates to cost of service or used the results to make meaningful adjustments towards cost of service.⁵¹⁶

Second, Mr. Novak argues that peak day consumption alone is used to allocate a significant portion of costs and that he could easily justify allocating several of these same costs based on each class's usage.⁵¹⁷ Mr. Novak misunderstands the Company's COSS. All Base/Extra allocators based on usage within the Company's model are dependent on a combination of base usage, representative of average daily load, and extra usage, representative of peak day demands.⁵¹⁸ The Base/Extra allocators are not solely based on peak day usage.⁵¹⁹

Third, Mr. Novak also mistakenly suggests that "[t]he result of the Company's COSS is to allocate 0.01% of its proposed \$13.6 million rate increase to sale for resale customers."⁵²⁰ In fact, the COSS recommends an 89% increase in sales for resale special contract rates.⁵²¹

In sum, the Commission should adopt the cost of service study proposed by Witness Brooks, as modified on rebuttal, as it is appropriate and useful for purposes of reviewing the Company's proposed rate increase allocation.

⁵¹⁵ *Id.* at 10.

⁵¹⁶ *Id.* at 12-13.

⁵¹⁷ *Novak* at 21.

⁵¹⁸ *Brooks Rebuttal* at 12.

⁵¹⁹ *Id.* at 12.

⁵²⁰ *Novak* at 20.

⁵²¹ *Brooks Rebuttal* at 12.

X. REVENUE CONVERSION FACTOR

A revenue conversion factor is the adjustment that translates any surplus or deficiency in net operating income (“NOI”) into a revenue deficiency or surplus, which rates will be designed to produce. Company Witness Bob Lane explains the revenue conversion factor as “the gross up of the effective tax rate of the current state and federal tax rates, uncollectible expense rate, the current gross receipts tax rate, and any applicable [TPUC] fees.”⁵²² TAWC proposes a revenue conversion factor of 1.414331 to be applied to its increase in net operating income required, which TAWC revised with the Rebuttal Testimony of Bob Lane to be \$9,841,572 – set forth on Rebuttal Exhibit-BL-1 and shown below:⁵²³

Line Number	Description	Rebuttal Adjustments	As Filed
1			
2	Present Rate Utility Operating Income:		
3			
4	Operating Revenue at Present Rates:	\$ 71,858,982	\$ 71,724,922
5			
6	Less: Deductions:		
7	Operating and Maintenance:	\$ 31,470,953	\$ 31,615,021
8	Depreciation:	15,659,739	15,763,872
9	Amortization:	1,116	1,116
10	General Taxes:	7,772,089	7,748,014
11	State Income Taxes:	694,176	670,658
12	Federal Income Taxes:	1,823,758	1,752,717
13	Total Deductions:	\$ 57,421,831	\$ 57,551,398
14			
15	Pro Forma Present Rate Utility Operating Income:	\$ 14,437,151	\$ 14,173,524
16			
17			
18			
19			
20			
21	Revenue Requirement and Increase Comparison:		
22			
23	Net Original Cost Rate Base	\$ 305,777,368	\$ 305,126,372
24	Rate of Return	7.94%	7.94%
25			
26	Net Operating Income Required for Return on Original Cost Rate Base	\$ 24,278,723	\$ 24,227,034
27			
28	Less: Pro Forma Net Operating Income Based on Current Rates	\$ 14,437,151	\$ 14,173,524
29			
30	Increase in Net Operating Income Required	\$ 9,841,572	\$ 10,053,510
31			
32	Gross Revenue Conversion Factor	141.4331%	141.4331%
33			
34	Increase in Revenue Requirement (Based on Net Original Cost Rate Base)	\$ 13,919,240	\$ 14,218,991
35			
36	Less: Additional Late Payment Fee Attributable to Rate Increase	\$ 86,102	\$ 87,990
37			
38	Total Revenue Requirement Increase Requested	\$ 13,833,138	\$ 14,131,001
39			
40	Percentage Increase in over Operating Revenue at Present Rates:	19.25%	19.70%
41			
42	Total Proposed Revenue Requirement	\$ 85,692,120	\$ 85,855,923

⁵²² *Id.*

⁵²³ *Id.* at 7:8-18; Rebuttal Exhibit-BL-1.

CAD witness Mr. Dittmore challenges TAWC's revenue conversion factor by alleging that the TPUC fee and gross receipts tax percentage should be eliminated.⁵²⁴ Mr. Dittmore further adjusted the revenue conversion factor by using a forfeited discount of .5373% as a ratio of late fees to water revenues outside of the conversion factor where TAWC utilized .61882%.⁵²⁵ These adjustments caused Mr. Dittmore to arrive at a revenue conversion factor of 1.355850.

First, regarding the TPUC fee, Mr. Dittmore argues that it should be excluded because it is not set to *increase* during the Attrition Year.⁵²⁶ This does not change the fact that the Company will incur the TPUC fee based on the requested revenue requirement increase. Thus, TAWC properly included this fee in its gross up calculation.

As for the exclusion of gross receipts, Mr. Dittmore alleges that TAWC is essentially double dipping as TAWC's franchise and excise tax payments are direct credits to the amount of gross receipts tax.⁵²⁷ As shown on Petitioner's Exhibit EXP-22-General Taxes and Fees-DD, Mr. Dittmore is mistaken about franchise and excise tax payments being direct credits because the excise tax deduction is based on capital balances, not revenue.⁵²⁸ As such, Mr. Dittmore's exclusion of gross receipts should be rejected.

Finally, TAWC properly determined a forfeited discount of .61882% by examining the two-year (2022 and 2023) average percentage of late payment fees to revenue even though the CAD's .5373% calculation would ultimately increase the revenue conversion factor, assuming the Commission rejects Mr. Dittmore's other adjustments for the reasons stated above. While the

⁵²⁴ *Dittmore* at 43:18-19.

⁵²⁵ *Lane Rebuttal* at 6:1-10.

⁵²⁶ *Dittmore* at 43:18-44:8.

⁵²⁷ *Id.*

⁵²⁸ *Lane Rebuttal* at 6:12-7:7.

outcome of the CAD's .5373% calculation would certainly benefit TAWC, the Company does not believe in artificially inflating or deflating any amounts to drive a particular outcome.

XI. UNIVERSAL AFFORDABILITY TARIFF

It is undisputed that it is important for customers to have access to drinking water service that is safe, reliable, and affordable. As such, the Company knows that its water service is essential, but also that it is important to consider affordability across its customer base. Therefore, the Company is proposing in this case to offer a Universal Affordability Tariff ("UAT").⁵²⁹

The UAT is designed to assist the affordability of water service for lower income customers by providing discounted rates for basic water service at or below 2% of annual household income.⁵³⁰ An essential factor of the UAT is that it would assist in addressing the very real, although unintended, consequence that lower-income customers are actually subsidizing higher income customers under the Company's current rate design.⁵³¹ As stated in the Direct Testimony of TAWC Charles Rea, "the Company's affordability assessment, rate design analysis, and cost of service analysis provides the Commission all of the factual support necessary to demonstrate that the Company could effectively target bills for all residential customers at 2% of household income or less without unduly discriminating against any customer group."⁵³² While there is no definitive standard for affordability as a percentage of median household income, bills that are less than 2.0% or 2.5% of median household income are considered affordable by some.⁵³³

⁵²⁹ *Rea* at 5.

⁵³⁰ *Id.* at 4:1-3.

⁵³¹ *Id.* at 4:3-4.

⁵³² *Id.* at 4:5-7.

⁵³³ *Id.* at 10:3-6 (*citing* Teodoro, Manuel P., "Measuring Household Affordability for Water and Sewer Utilities," *Journal AWWA* (2018), doi:10.5942/jawwa.2018.110.0002).

A. Affordability

1. *The Company's Affordability Assessment*

The Company conducted two types of affordability analyses for its water service. The first is an Enterprise-Level analysis that considers affordability of service at a high level over a multi-year period. The second is a Community-Level analysis that takes a deep dive into the affordability of service at the individual customer level under current economic conditions and current or proposed rates.⁵³⁴ The Enterprise-Level Analysis and the Community-Level Analysis are two different but complementary views of affordability.⁵³⁵

a. The Enterprise-Level Analysis

The Enterprise-Level analysis of affordability for water service compares the historical average of TAWC's residential monthly bills to household income for the Company's residential customers. The purpose of this analysis is to provide general perspective on how the affordability of service has been trending over time and how it is expected to continue to trend under proposed rates.⁵³⁶

This analysis uses the Bill-to-Income ("BTI") Ratio to evaluate average residential monthly bills for all customers over time compared to the median household income for the residential customer base.⁵³⁷ The important factor to consider is the impact that proposed rates and bills have on customer finances and how those impacts have trended over time and are expected to trend going forward. This is so even though the Company is proposing to increase customer rates in this case. This analysis must consider not only trends in rates and bills but trends in household income.⁵³⁸

⁵³⁴ *Id.* at 5:19-22-6:1-2.

⁵³⁵ *Id.* at 11:11-12.

⁵³⁶ *Id.* at 7:15-23-8:1.

⁵³⁷ *Id.* at 7:17-20. BTI Ratio is further defined as annual water bills divided by estimated annual household income.

⁵³⁸ *Id.* at 8:1-5.

b. The Community-Level Analysis

The Community-Level Analysis looks to the local level, taking a deeper dive into the affordability of water service across different customer demographics and proposed rates for each community that the Company serves. The information used to assess affordability at the community and individual customer level includes, but is not limited to, the number of customers served in each community, the average number of people per household in each community for both owner-occupied and renter-occupied households, the standard definition of Basic Water Service, and current or proposed rates.⁵³⁹

i. Basic Water Service

To understand the Company's Community-Level Analysis, it is important to understand how the Company is defining Basic Water Service. Basic Water Service is the level of water consumption for basic human services, such as cooking, cleaning, sanitation, and general health requirements. This water usage level is assumed to be constant from month-to-month, i.e., not subject to significant seasonal changes or weather conditions. This definition of Basic Water Service does not include discretionary seasonal water usage for filling swimming pools, lawn irrigation, etc.⁵⁴⁰ The Company considers Basic Water Service to be 40 gallons of water per household member per day.⁵⁴¹

ii. Customers at the Federal Poverty Level ("FPL")

The main demographic that the Community-Level Analysis provides is the estimated number of customers at different levels of the Federal Poverty Level, or FPL.⁵⁴² As set by the U.S.

⁵³⁹ *Id.* at 12:7-20.

⁵⁴⁰ *Id.* at 13:4-11.

⁵⁴¹ *Id.* at 13:14-15 ("This figure is based on the review of relevant literature on the subject and a review of Company billing data for residential customers in months with minimum levels of discretionary water usage, all of which support the definition of 40 gallons of water per household member per day.")

⁵⁴² *Id.* at 14:11-13.

Department of Health and Human Services, FPL is the minimum amount of annual income that is needed for people to afford essentials, such as room and board, clothes, and transportation.⁵⁴³ As discussed below, the FPL is an important component of the UAT.

c. Results of the Affordability Assessment

The detailed results of both the Enterprise-Level and Community-Level analyses are discussed in the direct testimony of TAWC Witness Charles Rea. Generally, however, the Enterprise-Level analysis results show that, from 2012 through 2023, the BTI Ratios for water service have consistently remained in the 0.55% to 0.65% of median household income. The BTI Ratio under the Company's proposed rates in this proceeding is expected to be 0.63%.⁵⁴⁴

The results of the Community-Level Analysis show that, under the Company's proposed rate structure, 91% of the Company's residential water customers can expect to see bills for Basic Water Service to be less than 2% of their household income.⁵⁴⁵ Conversely, the Company estimates that approximately only 9% of the total customer population for water service (approximately 6,800 customers) will see bills for Basic Water Service above 2% of their household income.⁵⁴⁶

2. Universal Affordability Tariff

The Company does not currently have a low-income discount tariff and therefore is proposing the UAT in this proceeding.⁵⁴⁷ The UAT includes several tiers of discounts based on different levels of household income under the FPL. The UAT offers discounts on both the basic 5/8" meter charge and the volumetric charges for water services.⁵⁴⁸ Essentially, the UAT will offer a discount of 70% for customers with a household income that is 0%-50% of the FPL. It will offer

⁵⁴³ *Id.* at 14:13-16.

⁵⁴⁴ *Id.* at 9:1-5.

⁵⁴⁵ *Id.* at 15:1-4.

⁵⁴⁶ *Id.* at 15:5-7.

⁵⁴⁷ *Id.* at 21:3-9.

⁵⁴⁸ *Id.* at 21:12-16.

a discount of 40% for customers with a household income that is 51%-100% of the FPL. Finally, the UAT will offer a discount of 10% for customers with a household income that is 101%-150%.⁵⁴⁹

For 2024, the household income levels that would qualify customers for this program are as follows:⁵⁵⁰

TABLE 4 Household Size		Household Income at 50% FPL	Household Income at 100% FPL	Household Income at 150% FPL
1		\$7,530	\$15,060	\$22,590
2		\$10,220	\$20,440	\$30,660
3		\$12,910	\$25,820	\$38,730
4		\$15,600	\$31,200	\$46,800
5		\$18,920	\$35,580	\$54,870
6		\$20,980	\$41,960	\$62,940
7		\$23,670	\$47,340	\$71,010

The Company estimates that there are approximately 16,700 water customers with household incomes at or below 150% of FPL that would qualify for service under the Company's proposed UAT.⁵⁵¹ For those qualifying customers that choose to participate, their discounts would be such that the expected bill for Basic Water Service (40 gallons of water/household member/day) will be no more than 2% of their annual household income.⁵⁵²

a. TAWC's Recovery of Costs Associated with the UAT.

The expense that the Company may incur related to the UAT can be broken down into two components. The first component is the cost associated with management of the program, e.g., customer education, application processing, recertification, etc., and that cost is not known at this

⁵⁴⁹ *Id.* at 21:12-17.

⁵⁵⁰ *Id.* at 21:17-18-22:1.

⁵⁵¹ *Id.* at 23:11-14.

⁵⁵² *Id.* at 3-6.

time.⁵⁵³ The second component is the cost associated with the discount provided to participating customers and the impact on revenues. These costs are difficult to predict as they are entirely dependent upon customer enrollment and participation in the program.⁵⁵⁴

Therefore, the Company is requesting that actual costs associated with the management and discounts related to the UAT be deferred to a future regulatory proceeding. On January 15th of each year, the Company will provide a summary of the level of customer participation in the UAT, the amount of discounts provided to customers, the costs associated with administering the program, and the annual and total amount of costs deferred through November of the previous year.⁵⁵⁵

b. Customer Impacts

The impact on TAWC's lower-income customers who participate in the UAT will be significant. The analyses show that household incomes at 50% FPL will still see bills for Basic Water Service at 2% to 3% of household income. The Company's proposed tiered discounts provide customers at each interval of FPL the opportunity to have Basic Water Service bills in the 1% to 2% range of household income.⁵⁵⁶ With low-income discounts included and assuming full participation, the overall affordability of service to TAWC's customers improves dramatically.⁵⁵⁷

c. Cost-based Justification for the UAT—The Seasonal Use of Water and Partial Cost of Service Analysis

In general, lower-income customers do not use water for as many discretionary purposes in the summertime as higher income households do; these lower-income households generally only use Basic Water Service as described above.⁵⁵⁸ Daily consumption information derived from

⁵⁵³ *Lane* at 29:16-20.

⁵⁵⁴ *Id.* at 29:20-21-21:1-2.

⁵⁵⁵ *Id.* at 30:11-16.

⁵⁵⁶ *Rea* at 25:2-5.

⁵⁵⁷ *Id.* at 26:1-2.

⁵⁵⁸ *Id.* at 27:6-13.

metering data across American-Water states shows that higher-income households have an average summer monthly usage at least 20% higher than their higher winter monthly usage, as opposed to lower-income customers whose usage is flat throughout the year.⁵⁵⁹

In addition to the analysis for seasonal use and Basic Water Service customer groups, the Company has conducted a partial cost of service analysis. This analysis shows that the allocated cost for 1,000 gallons of providing service for the production, transmission, and delivery functions to customer in the high-income group is almost 25% higher than the cost of providing the same service to customers in the low-income group. Just as with seasonal use versus Basic Water Service, this difference in cost of service is related entirely to the differences in consumption patterns for these two groups of customers.⁵⁶⁰

All of this information informs the subsidization of service by lower-income customers of higher-income customers. For one, if seasonal water service is more expensive on a per unit basis to serve than Basic Water Service, then higher income customers are more likely to have higher-cost seasonal water use than lower-income customers.⁵⁶¹ Similarly, if a single volumetric rate applies to all service for all customers, both Basic Water Service and seasonal service as is the case in the Company's service territory, then lower-income customers are actually subsidizing higher-income customers.⁵⁶² Hence, the driving force of the UAT.⁵⁶³

⁵⁵⁹ *Id.* at 28:8-18.

⁵⁶⁰ *Id.* at 30:17-23-31:1-10.

⁵⁶¹ *Id.* at 36:3-6.

⁵⁶² *Id.* at 36:6-10.

⁵⁶³ *See also* Trial Vol. IIA, Rea at pp. 143-144, for TAWC Witness Rea's detailed explanation regarding why and how the UAT is not a subsidy for lower-income customers because lower-income customers are actually already subsidizing higher income customers under the Company's current rate structure.

3. *The CAD's Position on the UAT.*

CAD Witness Mr. Clark Kaml argues that the Company's UAT proposal lacks several components necessary for him to make an informed analysis of the program.⁵⁶⁴ His concerns center around information that has not been, in his opinion, sufficiently provided by the Company, including how the program will be administered; an estimate of the cost of implementing and managing the program; an estimate of the revenue reduction; an estimate of the rate impact (of collecting the administrative costs or discount) on other customers; how potential applicant's income will be verified; and how customers will be informed of the existence of the tariff or the application process.⁵⁶⁵

The CAD also argues that the UAT may cause unreasonable or preferential rates. Mr. Kaml states that "some individuals who fall outside the UAT eligibility may be in effectively the same situation as those who meet the eligibility requirements. With a firm parameter at 150% of the FPL, it is possible for those who miss the threshold by a minimal amount, as little as one dollar to be required to contribute to the cost of providing service to individuals who fall within the threshold. The difference in household income between these two can be as little as one dollar."⁵⁶⁶

4. *Flaws in the CAD's Position and Why the UAT Should be Approved.*

As Mr. Rea points out in his rebuttal testimony, many of the reasons for Mr. Kaml's opposition to the Company's UAT are operational in nature and not on the basis of principle.⁵⁶⁷

With respect to Mr. Kaml's first concern that the Company has not specifically explained how the program would be administered, Mr. Kaml fails to consider that the Company has affiliated companies in Illinois, Pennsylvania, and New Jersey that have similar programs in place.

⁵⁶⁴ *Kaml* at 9:5-6.

⁵⁶⁵ *Id.* at 9:7-16.

⁵⁶⁶ *Id.* at 9:21-26-10:1-3.

⁵⁶⁷ *Rebuttal Testimony of TAWC Witness Charles Rea*, 2:8-9, TPUC Docket No. 24-00032 (Oct. 22, 2024) (hereinafter "*Rea Rebuttal*").

Affiliates also have similar pending requests in rate proceedings in Missouri, Iowa, and Virginia. American Water has a successful history of managing these types of programs. Upon Commission approval of the UAT, the Company plans to contract with a third party to administer the program consistent with how American Water manages these programs in other states.⁵⁶⁸ As Mr. Rea testified to at the hearing, the Company generally uses “an organization called ‘Dollar Energy’ to administer discount programs that we have in states where they have been approved and where we are offering them.”⁵⁶⁹

As for an estimate of the costs, the Company has accounted for them. The Company is asking that costs associated with the discounts and administration of this program be deferred to a future regulatory proceeding. Every January 15th, the Company will provide a summary of the level of customer participation in the UAT, the amount of discounts provided to customers, the costs associated with administering the program, and the annual and total amount of costs deferred through November of the previous year.⁵⁷⁰

With respect to how an applicant’s income will be verified, the Company does not have and will not have, nor should it have, income information on any specific individual customer. Income verification for the UAT will be done through the contracted third-party administrator.

The Company does not agree with Mr. Kaml that the UAT may give rise to unreasonable or preferential rates. Discount programs for low-income customers are common in the industry and are common in other American Water jurisdictions.⁵⁷¹ Any program that has parameters governing eligibility parameters will have situations where individuals do not qualify for eligibility

⁵⁶⁸ *Id.* at 5:1-9.

⁵⁶⁹ Trial Vol. IIA at 142:6-9.

⁵⁷⁰ *Id.* at 4:1-9.

⁵⁷¹ *Id.* at 6:10-17.

by narrow margins. As Mr. Rea correctly states in his rebuttal, this is unavoidable and does not make the program unfair or unreasonable.⁵⁷²

The affordability of water service will never be as simple as a “yes” or “no” answer. One can generally measure average water bills against any given benchmark and come up with a yes or no answer, but affordability of service is always a continuum.⁵⁷³ For some customers, affordability will always be a challenge. However, the Company seeks in its UAT proposal a way to alleviate some of the burden for those people below a certain income level for access to safe, reliable drinking water, as well as strengthen the financial stability of the Company from which all customers can benefit.

XII. CONCLUSION

Periodic increases in the costs of goods and services are not an endearing part of the intricacies of the marketplace. Still, the reality is that the increased costs of materials, labor, and energy have all substantially contributed to the underlying need for this rate case. For Tennessee-American to continue providing the safe, clean, and affordable water that our communities expect and rely upon, TAWC must continue to invest in the future of these growing communities.

The United States Environmental Protection Agency has opined that Tennessee will require more than \$10 billion in combined water and wastewater investment over the next 20 years.⁵⁷⁴ Similarly, a Tennessee Department of Environment and Conservation report (the TN H2O Report)

⁵⁷² *Id.* at 6:17-21.

⁵⁷³ *Id.* at 10:9-11.

⁵⁷⁴ 1 See EPA, “Clean Watersheds Needs Survey 2012 Report to Congress,” p. A-2, Table A-1 (Jan. 2016) (available at <https://www.epa.gov/cwns/clean-watersheds-needs-survey-cwns-report-congress-2012>) (\$1.55B for wastewater); EPA, “Drinking Water Needs Survey Sixth Report to Congress,” p.36, Exhibit 2.1 (March 2018) (available at <https://www.epa.gov/dwsrf/epas-6th-drinking-water-infrastructure-needs-survey-and-assessment>) (\$8.76B for drinking water).

predicts an even greater need – \$15.6 billion – to accommodate Tennessee’s projected growth.⁵⁷⁵

One of the reasons that the Commission is not overrun with customer commentary on the age of the Company’s over 100-year old system is because Tennessee-American continuously invests in the system’s infrastructure.

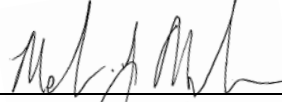
Among other things, the balances inherent in the regulatory compact embrace the opportunity to earn a reasonable return. The essential, and oftentimes delicate, balance that utility regulation aims for can achieve both the best interests of the utility’s customers and the financial health of the utility.

TAWC supported the entirety of its request for rate relief through record evidence in this proceeding. The Company carried its burden of proof with respect to demonstrating the reasonableness of its proposed rate base and revenue requirement, including capital investments, O&M expenses, revenue forecasting, working capital allowance, electronic payment fees, production costs and rate case expenses. The capital structure and ROE that TAWC proposed are just, reasonable, and premised on the prudent application of a host of COE estimation models. The Company would be placed at a competitive disadvantage if the CAD’s or City of Chattanooga’s recommended ROE or capital structure were adopted. In addition, the Company has proposed a more reasonable and efficient rate design that will provide a lasting benefit to all customers. Finally, the UAT and other reasonable tariff revisions that went unchallenged by the Intervenor should also be adopted.

⁵⁷⁵ Tenn. Dept. of Environment and Conservation, “TN H2O: Tennessee’s Roadmap to Securing the Future of Our Water Resources,” p.39 (Nov. 2018) (available at <https://www.tn.gov/environment/program-areas/wr-waterresources/tn-h2o/the-plan.html>) (“TN H2O Report”) (“Meeting those [future infrastructure] needs and the need to repair or replace existing infrastructure will require an estimated investment of \$15.6 billion between now and 2040.”).

For the reasons set forth in this Post-Hearing Brief, Tennessee-American respectfully requests the Commission to approve its Petition.

RESPECTFULLY SUBMITTED,



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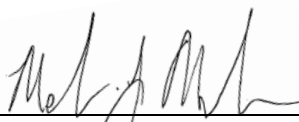
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This the 10th day of December 2024.



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