TENNESSEE-AMERICAN WATER COMPANY, INC.

DOCKET NO. 22-__00072____

DIRECT TESTIMONY

OF

TRICIA N. SINOPOLE

ON

CHANGES TO THE QUALIFIED INFRASTRUCTURE INVESTMENT PROGRAM RIDER, THE ECONOMIC DEVELOPMENT INVESTMENT RIDER, AND THE SAFETY AND ENVIRONMENTAL COMPLIANCE RIDER

SPONSORING PETITIONER'S EXHIBITS:

PETITIONER'S EXHIBIT SUMMARY – TNS
PETITIONER'S EXHIBIT – AVERAGE IMPACT – TNS
PETITIONER'S EXHIBIT – QIIP 1 – TNS
PETITIONER'S EXHIBIT – QIIP 2 – TNS
PETITIONER'S EXHIBIT – EDI 1 – TNS
PETITIONER'S EXHIBIT – EDI 2 – TNS
PETITIONER'S EXHIBIT – SEC 1 – TNS
PETITIONER'S EXHIBIT – SEC 2 – TNS
PETITIONER'S EXHIBIT – ANNUAL APPROVED TARIFFS -- TNS
PETITIONER'S EXHIBIT – CURRENT TARIFF SHEET NO. 12 – CAP. RIDERS – TNS
PETITIONER'S EXHIBIT – CURRENT TARIFF SHEET NO. 12 – RIDERS – TNS
PETITIONER'S EXHIBIT – PROPOSED TARIFF SHEET NO. 12 – RIDERS – TNS

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Tricia N. Sinopole and my business address is 2223 Duke Street, Alexandria, Virginia 22314.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by American Water Works Service Company ("AWW") as Director, Rates and Regulatory for Tennessee-American Water ("TAWC" or "the Company") and Kentucky-American Water.

Q. HAVE YOU PREVIOUSLY FILED TESTIMONY BEFORE THIS OR ANY OTHER COMMISSION?

A. Yes. I recently filed written testimony in TAWC's 2022 Production Costs and Other Pass-Throughs Rider in TPUC Docket No. 22-00005 and in TAWC's 2021 Capital Rider Reconciliation in TPUC Docket No. 22-00021. I have also filed written testimony in Kentucky-American Water Docket Nos. 2021-00434 and 2022-00032.

Q. PLEASE STATE YOUR EDUCATIONAL AND PROFESSIONAL BACKGROUND.

A. I have a Bachelor of Science in Business Administration degree with an emphasis in Finance from Southeast Missouri State University. I also have a Master of Business Administration from Southeast Missouri State University. I have also completed the NARUC Utility Rate School.

A. I have over nine years of experience at AWW, three of which have been in the rates area. I accepted the role as Director of Rates and Regulatory for Tennessee and Kentucky in June 2021 and prior to that was the Senior Manager of Finance for Virginia and Maryland. I was also the Senior Manager of Finance for Indiana and Michigan before accepting the role for Virginia and Maryland. Prior to my Senior Manager of Finance roles, I was a Rates and Regulatory Analyst serving multiple American Water states and a Financial Analyst specializing in revenue analytics, also serving multiple American Water states. Before joining AWW in 2012, I worked as a Project Manager for a software company for over four years, where I led accounting and business software implementations for multi-million-dollar electric cooperatives throughout the United States.

Q. WHAT ARE YOUR DUTIES AS DIRECTOR, RATES AND REGULATORY?

A. My primary responsibilities encompass the coordination of regulatory issues in Tennessee and Kentucky. This includes coordinating all reports and filings, working with regulatory staff to make sure that all information produced addresses the requirements or requests, and overseeing the preparation and filing of rate cases and tariff changes. I work with senior management in both states on planning. I am also responsible for keeping abreast of changes in regulation, or trends in regulatory oversight across the United States that may impact our local operations. I report to the Presidents of Tennessee-American Water and Kentucky-American Water, dually. While I am not located in Tennessee, I work closely with the TAWC staff.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to support the calculation of the 2022 Capital Recovery Riders described in TAWC's Petition. On April 14, 2014, the Tennessee Public Utility Commission ("Commission" or "TPUC") approved four new alternative rate mechanisms for TAWC, effective April 15, 2014, in TPUC Docket No. 13-00130. Three of these alternative rate mechanisms, the Qualified Infrastructure Investment Program ("QIIP"), the Economic Development Investment Rider ("EDI") and the Safety and Environmental

Compliance Rider ("SEC"), are commonly referred to as the "Capital Recovery Riders," and one is for a rider for Production Costs and Other Pass-throughs ("PCOP"). The three Capital Recovery Riders are the only items included in this current Petition.

On June 29, 2015, the TPUC approved an adjustment to the three Capital Recovery Riders for 2015 in Docket No. 14-00121 with some modifications to one of the Capital Recovery Riders. Those modifications, set forth in the TPUC's February 1, 2016, *Order Granting, In Part, Denying, In Part, Petition*, have been incorporated into the current Petition for an adjustment for 2022. Additionally, TAWC has included the corrections made to the Capital Recovery Riders calculations in related dockets, including Docket Nos. 15-00111, 16-00022, 17-00020, and 18-00022.[1]

Q. ARE YOU SPONSORING ANY EXHIBITS?

A. Yes, I am. I am sponsoring the following exhibits:

Petitioner's Exhibit -- Summary – TNS
Petitioner's Exhibit – Average Impact – TNS
Petitioner's Exhibit – QIIP 1 – TNS
Petitioner's Exhibit – QIIP 2 – TNS
Petitioner's Exhibit – EDI 1 – TNS
Petitioner's Exhibit – EDI 2 – TNS
Petitioner's Exhibit – SEC 1 – TNS
Petitioner's Exhibit – SEC 2 – TNS
Petitioner's Exhibit – Annual Approved Tariffs -- TNS
Petitioner's Exhibit – Current Tariff Sheet No. 12 – Cap. Riders -- TNS
Petitioner's Exhibit – Current Tariff Sheet No. 12 – Riders – TNS
Petitioner's Exhibit – Proposed Tariff Sheet No. 12 – Riders - TNS

[1] [1] *See Order Approving Petition As Amended*, TPUC Docket No. 15-00111 (May 16, 2016); *Pre-filed Testimony of TAWC Witness Linda C. Bridwell*, TPUC Docket No. 16-00022; and *TPUC Transcript of Proceedings*, TPUC Docket No. 16-00022 (Oct. 10, 2016); *Rebuttal Testimony of TAWC Witness Linda C. Bridwell,* TPUC Docket No. 17-00020 (Mar. 15, 2018) and *Order Approving Petition*, TPUC Docket No. 17-00020 (June 29, 2018); *Order Approving Petition*, TPUC Docket No. 17-00124 (June 29, 2018); and See Tennessee-American Water Company Revised Exhibits, Schedules and Workpapers to Comply with Commission's April 15, 2019, Deliberations, TPUC Docket No. 18-00022 (May 7, 2019).

I will discuss these exhibits in further detail in my testimony below.

Q. WERE THE PETITIONER'S EXHIBITS LISTED ABOVE PREPARED BY YOU OR UNDER YOUR DIRECTION AND SUPERVISION?

A. Yes.

Q. WHAT WERE THE SOURCES OF THE DATA USED TO PREPARE THE PETITIONER'S EXHIBITS LISTED ABOVE?

A. The data used to prepare the exhibits was acquired from the books of account and business records of TAWC and other internal sources which I examined in the course of my investigation of the matters addressed in this testimony.

Q. DO YOU CONSIDER THIS DATA TO BE RELIABLE AND OF A TYPE THAT IS NORMALLY USED AND RELIED ON IN YOUR BUSINESS FOR SUCH PURPOSES?

A. Yes.

Q. DO THE PETITIONER'S EXHIBITS LISTED ABOVE ACCURATELY SUMMARIZE SUCH DATA AND THE RESULTS OF ANALYSIS USING SUCH DATA?

A. Yes, they do.

Q. WHAT ARE THE THREE CAPITAL RECOVERY RIDERS APPROVED BY THE TPUC?

A. Pursuant to Tennessee Code Annotated Section 65-5-103 *et seq*., the three Capital Recovery Riders authorized in Docket No. 13-00130 are based on certain categories of capital expenditures to cover the investment period of calendar year 2014. The first Capital Recovery Rider is the Qualified Infrastructure Investment Program or QIIP Rider. This rider is designed to recover the costs associated with the capital investment in non-revenue producing plant made between rate cases. "Non-revenue plant" is not constructed or installed for the purpose of serving a new customer, e.g., replacing aging infrastructure. "Revenue producing" plant is plant constructed or installed for serving a new customer. Examples of revenue producing plant are main extensions specifically for a new development, or new services or meters for new customers. As outlined in Docket No. 13-00130, and subsequent Capital Recovery Rider dockets, aging water and wastewater infrastructure is a growing problem across the United States, including Tennessee, which will require significant investments over the next few decades to continue to provide clean and reliable water service. This rider helps TAWC address the replacement of this critical, aging infrastructure. The QIIP Rider includes replacement of existing infrastructure in the areas of mains, meters, services, hydrants, water treatment equipment, pumping equipment, and tank painting.

The second Capital Recovery Rider is the Economic Development Investment or EDI Rider. This rider is primarily for the recovery of investment made in infrastructure to assist in economic development in the communities and areas served by TAWC. Communities across the country are competing for economic development opportunities to provide growth in jobs, tax base, and overall quality of life for residents. This rider provides an opportunity for TAWC to partner with the communities it serves to assist in economic development.

The third Capital Recovery Rider is the Safety and Environmental Compliance or SEC Rider. This rider is for the recovery of investment made to comply with safety and environmental regulations since the previous rate case. TAWC, like other utilities, is faced with increasing capital investment requirements to comply with safety and environmental regulations. This rider assists TAWC in addressing those requirements.

The table below summarizes the adjustments previously authorized by the Commission:

Docket No.	Investment Period	Adjustment #
14-00121	Calendar Year 2015	1
15-00111	Calendar Year 2016	2
16-00126	Calendar Year 2017	3
17-00124	Calendar Year 2018	4
18-00120	Calendar Year 2019	5
19-00105	Calendar Year 2020	6
20-00128	Calendar Year 2021	7

The purpose of this Petition is to comply with the tariffs approved in TPUC Docket No. 13-00130 and provide the required information and supporting documentation for each of the Capital Recovery Riders based on the actual and projected investment period of 2022.

Attached to my testimony is Petitioner's Exhibit Current Tariff Sheet No. 12—Riders – TNS, which is a copy of all three Capital Recovery Riders tariff sheets as approved in TPUC Docket No. 13-00130, and as modified in TPUC Docket No. 14-00121 and as further clarified in TPUC Docket Nos. 15-00029, 15-00111, 16-00022, 16-00126, 17-00020, 17-00124, 18-00022, 18-00120, 19-00105, 19-00031, 20-00028, 20-00128, 21-00030 and 22-00021. [2]

[2] , In RE: Petition of Tennessee-American Water Company in Support of the Calculation of the 2021 Capital Recovery Riders Reconciliation, TPUC Docket No. 22-00021, is currently pending before the Commission.

Q. HOW IS THE PROCESS UNDER THE APPROVED CAPITAL RECOVERY RIDERS DIFFERENT FROM THE PREVIOUS AND HISTORICAL REGULATORY APPROACH WITH RESPECT TO INVESTMENT METHODS?

A. As far as the projects and the investment into those projects are concerned, there isn't any difference. The only difference between the riders and the future test year regulatory approach that has been used by TAWC in rate cases is in the method and procedure of filing, the deferral of full rate cases and the lessening of rate shock, and the multiple benefits of the streamlined alternative mechanisms. If it were not for the alternative regulatory methods available to the Commission and the regulated community, TAWC would likely have had to file a rate case in 2021 or earlier. These new methods have deferred the need to file a full rate case. These petitions make the regulatory process much more streamlined and less burdensome, without reducing effective and meaningful regulatory oversight. As intended under the statute and approved by the Commission, the whole process is more efficient, timely and much less expensive. There is no doubt that the alternative rate adjustment methods are working.

Q. IN DOCKET NO. 14-00121, THE TPUC ORDERED CHANGES TO THE ELIGIBLE ITEMS WITHIN THE EDI RIDER. ARE THE ITEMS EXCLUDED BY THE COMMISSION EXCLUDED IN THIS PETITION?

A. Yes. In Docket No. 14-00121, the TPUC made modifications to the eligible items within the EDI Capital Recovery Rider, removing new services, new meters, and alternative fuel vehicles. These changes were recognized in Docket No. 15-00111 and are reflected fully in this Petition. TAWC has removed those items from the EDI for not only the current review period of 2022, but also removed the previously authorized cumulative amounts of such items in the EDI Rider from all the review periods of 2014, 2015, 2016, 2017, 2018, 2019, 2020, and 2021.

Q. IN DOCKET 15-00029, THE TPUC ORDERED THAT GOING FORWARD, TAWC SHOULD FILE WORKPAPERS IN A FORMAT THAT DOESN'T USE ARRAY FORMULAS IN CALCULATIONS, AND FOLLOWS A CLEAR AUDIT TRAIL FOR CALCULATIONS. HAS TAWC DONE THAT IN THIS FILING?

A. Yes. TAWC prepared the files in an excel workbook similar to what was prepared in Docket No. 13-00130 and Docket No. 14-00121. TAWC then prepared a "Proof" worksheet in the Excel file of the tabs that utilized array formulas for calculation, but went through the calculations without array formulas. In the electronic version, the "Proof" worksheets are found at the end of the Excel workbook. There are also two reconciliation worksheets that demonstrate the rider additions by year, as well as a total reconciliation for 2021. Consistent with the directive, this will provide a clear audit trail of the calculations and formulas contained in the workpapers.

Q. ARE THERE OTHER CHANGES TO THE EXCEL WORKBOOK OR CALCULATIONS FROM THE INITIAL FILES IN DOCKET NO. 17-00124?

A. Yes. In addition to any corrections that were carried forward from previous dockets, TAWC made additional changes to the Excel workbook to make it more user-friendly. They are as follows:

1) TAWC updated the workbook for the 2022 actual and forecasted numbers and actual 2021 capital expenditures from TPUC Docket No. 22-00021, and updated all formulas. Rather than use a full year forecast for 2022, TAWC has included actual in-service amounts for January to May 2022 for all Recurring and Investment Projects, as well as any actual

spend prior to June 2022 for Investment Projects that are scheduled to go in-service in 2022. In addition, TAWC used forecasted spend for June to December 2022. This can be seen on the EXH 2022 SCEP worksheet.

2) TAWC forecasted retirement and cost of removal amounts by NARUC account based on the average actual retirements and cost of removal by account in 2019 – 2021. In Docket No. 17-00124, TAWC proposed a revised methodology to utilize the actual eligible rider retirements and cost of removal by account, using the most recent three-year actual average. This eliminated an estimate of those amounts. This methodology was applied to the 2022 forecast for this filing.

3) TAWC updated the forecasted plant additions' allocation % to utility account to utilize the average from 2019 – 2021. Similar to #2 above, this methodology was applied to the 2022 forecast for this filing.

4) TAWC removed workpapers related to the reconciliation dockets for calendar years 2015 – 2020 since those amounts have been approved by the Commission. This eliminates many unneeded pages from this filing and is consistent with our joint initiative with the Consumer Advocate to find ways to streamline our capital rider filings.

5) TAWC removed the accumulated depreciation and deferred tax columns from the In-Serviced SCEP tabs, as that data is found on other workpapers summarized below. This is consistent with our joint initiative with the Consumer Advocate to find ways to streamline our capital rider filings.

6) TAWC updated the workpapers for the 2022 Average Accumulated Depreciation, Retirements, CIAC and Cost of Removal less Salvage to provide more transparency in this

filing. These tabs lay out the amounts by year in order to show how the balances have rolled-forward from 2014 to 2022.

7) TAWC added 2022 columns to the deferred tax workpapers. The repairs percentages and NOLC balance have been updated to reflect actuals since the last filing.

8) Like in the 2021 Capital Riders filing, TAWC removed the Retirements and Cost of removal recon worksheets due to the addition of #6 above. The same data is now referenced in these new tabs that support the 2022 average calculations.

9) TAWC removed the 2020 In-Serviced SCEP proof, since the 2020 reconciliation filing was approved in Docket No. 21-00030. In-Serviced SCEP Proof tabs remain for the forecasted part of this filing, which includes June to December 2022.

Q. CAN YOU EXPLAIN HOW THE EXCEL SPREADSHEET FILED WITH THIS PETITION IS STRUCTURED TO PRESENT THE CALCULATIONS?

A. Certainly. In TPUC Docket No. 16-00126, TAWC made some organizational changes to improve the review process of the workpapers and exhibits. First, TAWC added a "Workbook Info" worksheet to the Excel workbook that gives a general description of each worksheet in the workbook. This is the very first worksheet or tab in the left-most position. This tab lists the purpose of each worksheet in the file and essentially provides a table of contents.

Next, TAWC reorganized the tabs and color coded the tabs labelled at the bottom of the workbook. There is a blank, blue coded tab labelled "Exhibits" that is to the left of all of the exhibit tabs. The tabs for all of the exhibits are colored green in the label at the bottom. There is a second blank, blue coded tab labelled "Workpapers" to the left of all of the workpaper tabs which are color coded red. The workpaper tabs now start with the 2022 calculations in the left-most position of the "Workpapers" section, with 2021 and 2020 tabs consecutively to the right. A third blank, blue colored tab labelled "Reconciliations" is to the left and the start of all of the reconciliation tabs now colored purple. Finally, there is a fourth blank, blue coded tab labelled "Proofs" to the left of all of the proof tabs that are color coded yellow. This reorganization should help anyone looking in the excel workbook to more easily locate the information they are seeking.

Third, any hard-coded numbers within the workbook are now colored in a blue font to enable a reviewer to identify them easily and quickly. On the same tab as any blue hard coded numbers, there will be a footnote at the bottom of the tab identifying the reference and source of the number. This should make comparisons to previous filings a much faster process.

Finally, in an effort to improve quality control, TAWC implemented a process to audit the workbook. There are a number of places in the workpapers and exhibits that now have a "tie-point" to verify that numbers are calculating accurately. These tie-points will not be printed on the pdf pages but should streamline any review of the calculations.

Q. HOW HAS THE APPLICATION OF THE EDI RIDER BEEN DIFFERENT FROM THE PREVIOUS INVESTMENT REGULATORY METHODS UTILIZED BY TAWC PRIOR TO THE APPROVAL OF THE RIDERS IN TPUC DOCKET NO. 13-00130?

A. In his testimony, Grady Stout discusses the individual projects included in the EDI Rider. Without the EDI Rider, these projects may not have been as successful or potentially would not have developed at all. Under its previous investment methods for development, TAWC would have required the developers to pay for the relocation and replacement of assets, thus increasing the upfront costs to them. Given the amount of the investment, coupled with the growth, jobs, and other positive attributes attached to these projects, losing one or more of the projects would have been a disappointment to the communities. These projects demonstrate that the EDI Rider is an extremely valuable tool that can enhance a community's ability to attract future economic development opportunities. Successes such as these will help the area gain an upper hand in the vigorous competition among communities, which ultimately benefits all of TAWC's customers. For instance, additional water sales have the potential to help offset the ongoing declining use that TAWC has experienced, maintaining a water sales level close to authorized and thus contribute to cover a portion of the Company's fixed expenses. This helps maintain lower rates to all of our customers.

Q. HOW IS THE SEC RIDER ALSO DIFFERENT FROM PREVIOUS INVESTMENT METHODS THAT WERE AVAILABLE TO TAWC PRIOR TO THE APPROVAL OF THE RIDERS IN TPUC DOCKET NO. 13-00130?

A. The overall strategy is similar, but an important difference is that the investment is made through a program that expressly delineates and highlights the reason needed for the investment. To the extent that additional investments are made for safety and environmental compliance measures under the SEC Rider, the purpose of the investment will be more transparent to the customer and to the Commission.

Q. DO THE CAPITAL RECOVERY RIDERS BENEFIT THE CUSTOMERS?

A. Yes. The QIIP, EDI, and SEC Riders are mutually beneficial to our customers, the general public, and TAWC. The Qualified Infrastructure Program Rider, the Economic Development Investment Rider, and the Safety and Environmental Compliance Rider, in part, reduce the need for general rate cases, lessen the occurrence of customer “rate shock,” support the maintenance and improvement of essential infrastructure, support opportunities for successful economic development, growth and job creation, ensure safety and reliability, and allow for more efficient, streamlined regulation. The customers and the public benefit from the safety and reliability components and from the more seamless and timely capital investment in infrastructure, coupled with the related support to economic development, growth and job creation. The Company benefits from a more efficient, streamlined regulatory process that presents TAWC with the opportunity to timely recover its expenses and earn a fair rate of return on its investments.

Q. YOU MENTIONED THAT THE COMPANY BENEFITS FROM THE RIDERS BECAUSE THE RIDERS PROVIDE THE COMPANY WITH THE OPPORTUNITY TO TIMELY RECOVER ITS EXPENSES AND EARN A FAIR RATE OF RETURN ON ITS INVESTMENTS. CAN YOU ELABORATE ON THIS?

A. Certainly. The Capital Recovery Riders permit TAWC to recover the cost of capital investment between rate cases in an efficient, streamlined regulatory process. As outlined in my testimony, each year TAWC estimates or forecasts the amount of qualified capital investment (QIIP), economic development infrastructure investment (EDI) and safety and environmental compliance investment (SEC) that it expects to spend for the upcoming calendar year, in this Petition for 2022. The Company will then calculate what it costs to recover the expenditures associated with such forecasted capital investment. For example, if the Company were to invest $1 million dollars on a QIIP project in the forecast year, the Company would not recover that entire $1 million that year. Rather, it will only recover a return on that investment (which includes a weighted return on equity and interest on debt as authorized in the most recent rate case), as well as depreciation expense and taxes. After it calculates what it costs to recover the expenditures associated with the forecasted capital investment and expenses, TAWC then determines – through a second calculation – the percentage of the costs to recover those expenditures as an amount of the overall revenue authorized in the last rate case. This is the surcharge amount. The surcharge then represents recovery for the costs to support the capital investments. So, under the Capital Recovery Rider tariffs as approved, the monthly surcharge over 12 months in the forecasted year would represent the annual recovery of the cost to support the capital investment.

Q. BEFORE THE TPUC APPROVED THE CAPITAL RECOVERY RIDERS, WHAT PROCESS DID TAWC USE TO RECOVER THE EXPENSES ASSOCIATED WITH CAPITAL INVESTMENT AND HAVE THE OPPORTUNITY TO EARN A FAIR RETURN?

A. Regulated utilities cannot increase their rates in Tennessee without approval of the TPUC, which prior to the passage of the alternative regulation statute required a full rate case filing. So, TAWC employed rate cases for appropriate recovery.

Q. IS THERE A DRAWBACK TO RATE CASES?

A. In part, this goes back to my earlier testimony concerning the benefits of the Capital Recovery Riders to the public. Further, regulated utilities continue to invest money in infrastructure (utility plant) and expenses may continue to increase in between rate cases. This "regulatory lag" lessens the opportunity for the Company to earn its authorized return on equity.

Q. CAN YOU EXPLAIN THE CALCULATION OF THE CAPITAL RECOVERY RIDERS?

A. Certainly. As set forth in the approved tariffs, all three Capital Recovery Riders are established on an annual prospective basis utilizing average end-of-month balances and should reflect only those qualified plant additions installed after the conclusion of the initial rate year in Docket No. 12-00049. Consistent with the tariffs, the qualified plant additions are reduced by the projected retirements associated with the Capital Recovery Rider additions in the calculation of applicable depreciation and property tax expense. TAWC has not included any operating expenses for the EDI or SEC riders in this Petition. In this case, TAWC has proposed to begin the attrition period for each of the Capital Recovery Riders on January 1, 2022, ending December 31, 2022. This annual review period was established in the tariffs submitted on March 25, 2014, and approved in Docket No. 13-00130 on April 14, 2014.

The tariffs also established a reconciliation period for each of the Capital Recovery Riders, which will occur 60 days after the close of the attrition period. The table below summarizes details of the annual rider filings, including attrition periods, reconciliation docket numbers, and the date of the filings:

Docket No.	Attrition Period	Recon Docket	Date of Filing
13-00130	January 1, 2014 – December 31, 2014	15-00029	March 1, 2015
14-00121	January 1, 2015 – December 31, 2015	16-00022	March 1, 2016
15-00111	January 1, 2016 – December 31, 2016	17-00020	March 1, 2017
16-00126	January 1, 2017 – December 31, 2017	18-00022	March 1, 2018
17-00124	January 1, 2018 – December 31, 2018	19-00031	March 1, 2019
18-00120	January 1, 2019 – December 31, 2019	20-00028	March 1, 2020
19-00105	January 1, 2020 – December 31, 2020	21-00030	March 1, 2021
20-00128	January 1, 2021 – December 31, 2021	22-00021	March 1, 2022

Based upon the process outlined in the tariffs and clarified in Docket No. 14-00121, the reconciliations are not, and were not intended to be, a part of this Petition.

As approved, the Capital Recovery Riders are cumulative and remain in place until reset back to zero at the conclusion of the Company's next rate case filing, at which point the capital costs, depreciation and taxes, and any other operating expenses approved and previously recovered through the Capital Recovery Riders are then subsumed within Base Rates.

Q. CAN YOU DISCUSS DETAILS OF THE OPERATION OF THE CAPITAL RECOVERY RIDERS NOT ADDRESSED ABOVE?

A. Yes. TAWC utilizes an annual prospective approach to the utility plant additions that qualify for recovery through the Capital Recovery Riders. The Capital Recovery Riders provide for the recovery of revenue sufficient to cover the capital cost, depreciation and tax expense related to the projected investment in qualified utility plant. These costs consider the effects of associated retirements ("Net Plant"), Contributions in Aid of Construction ("CIAC"), and Cost of Removal Spending net of Salvage value for the attrition period. To determine the rate of return recovery, an average of the month-end balances of new utility plant in service is calculated, less ½ of the anticipated annual associated CIAC, plus ½ of the anticipated annual associated cost of removal net of salvage spending, to derive the "Net Plant" amount. As discussed in Docket No. 16-00022, in the first year TAWC used a 12-month average to calculate the Capital Recovery Riders, representing all of the activity within the 12 months of the attrition period. Beginning in the second year, TAWC used a 13-month average from the end of the previous year through the end of the attrition period. The current approved pre-tax rate of return ("PTR") is applied to this net amount to determine the revenue requirement of the rate base portion. The PTR is calculated from the weighted common equity and preferred equity, grossed up to include state and federal taxes, plus the weighted cost of long-term debt and the weighted cost of short-term debt. Next, the annual depreciation expense of the additional Net Plant is calculated ("NetDep"), utilizing the current TPUC approved depreciation rates by account and then added. From there, incremental new property and Franchise taxes ("PFT") is added. For the EDI Rider and SEC Rider, additional operating expenses would be added as appropriate. The sum of these components are grossed up to include the recovery of the associated additional Gross Receipts taxes, Uncollectible expense, and forfeited discounts ("RT") to derive the final revenue requirement. Then, any over or under Capital Recovery Rider collection of prior periods would be added or subtracted as applicable ("R"). The over or under Capital Recovery Rider adjustment is not included as part of this Petition. This total is then divided by the authorized annual level of general metered service and private fire service customer revenues ("PAR") from the prior docket (Docket No. 12-00049), i.e. not including any other revenues, to render each of the new Capital Recovery Rider percentages.

Q. YOU MENTIONED THAT THE OVER/UNDER RECONCILIATION IS NOT INCLUDED IN THIS PETITION. CAN YOU EXPLAIN WHY NOT?

A. Yes. The authorized tariff specifies the forecasted adjustments for new investment, by December 1, to be effective January 1. The reconciliation factor is to be filed by March 1, to be effective April 1 to December 31 only each calendar year. The table below summarizes the authorization and effective dates for the previous reconciliation filings:

Recon Docket	Authorization Date	Effective Date
15-00029	October 19, 2015	November 1, 2015 - December 31, 2015
16-00022	October 10, 2016	October 11, 2016 - December 31, 2016

17-00020	August 15, 2017	August 16, 2017 – December 31, 2017
18-00022	December 17, 2018	December 18, 2018 – December 31, 2018
19-00031	December 9, 2019	December 9, 2019 – December 31, 2019
20-00028	September 14, 2020	September 14, 2020 – December 31, 2020
21-00030	August 9, 2021	August 9, 2021 – January 31, 2022*

*The 2020 reconciliation percentage was inadvertently charged until January 31, 2022 rather than December 31, 2021, but the additional revenue collected in January 2022 was included in the 2021 reconciliation filing that was made on March 1, 2022 to ensure customers were credited back the amount that had been over collected.

This Petition is intended to adjust the Capital Recovery Riders for investment in 2022. The calculation includes the cumulative investment for rider for 2014, 2015, 2016, 2017, 2018, 2019, 2020 and 2021. In this Petition, TAWC has included the actual investment for each rider in 2014, 2015, 2016, 2017, 2018, 2019, 2020 and 2021. The reconciliation filed on March 1, 2022 applies as a true-up for the actual 2021 calendar year investment and revenues, including any over/under collection of the reconciliation approved in 21-00030. Therefore, it is not appropriate or necessary to include a reconciliation in the calculation included in this Petition.

Q. HAVE YOU INCLUDED THE CALCULATION OF THE THREE CAPITAL RECOVERY RIDERS IN THE PETITION?

A. Yes. I have attached an exhibit that reflects the calculation of each of the three Capital Recovery Riders by project. A summary is attached to my testimony as **Petitioner's Exhibit Summary – TNS**. The detailed calculations are attached in six exhibits to my testimony as **Petitioner's Exhibit QIIP 1 – TNS**, **Petitioner's Exhibit QIIP 2 – TNS**, **Petitioner's Exhibit EDI 1 – TNS**, **Petitioner's Exhibit EDI 2 – TNS**, **Petitioner's Exhibit SEC 1 – TNS**, and **Petitioner's Exhibit SEC 2 – TNS.** The calculations are consistent with the calculations that were made in the approved tariff in Docket No. 13-00130, Docket No. 14-00121, Docket No. 15-00111, Docket No. 16-00126, Docket No. 17-00124, Docket No. 18-00120, Docket No. 19-00105 and Docket No. 20-00128.

Further, to assist in the streamlined regulatory process, TAWC is including with the Petition its detailed work-papers supporting the calculation of the three Capital Recovery Riders. Again, these work-papers are consistent with the calculations made to support the approved tariff in Docket No. 13-00130, Docket No. 14-00121, Docket No. 15-00111, Docket No. 16-00126, Docket No. 17-00124, Docket No. 18-00120, Docket No. 19-00105 and Docket No. 20-00128. The workpapers are also consistent with the calculations made to support the reconciliations in TPUC Docket Nos. 15-00029, 16-00022, 17-00020, 18-00022, 19-00031, 20-00028 and 21-00030.

Q. HAS TAWC INCLUDED DETAILED INFORMATION REGARDING THE PROJECTS THAT MAKE UP EACH OF THE PROPOSED CAPITAL RECOVERY RIDERS?

A. Yes. Company Witness Grady Stout will discuss the details regarding the proposed capital expenditures included in the QIIP, EDI and SEC Riders for 2022.

Q. HOW ARE THE QIIP, EDI, AND SEC RIDER REVENUES RECOVERED?

A. The QIIP, EDI and SEC Riders are expressed as a percentage. The current tariff Twenty-Seventh Revised Sheet No. 12 – Riders – 1 is attached to my testimony as Petitioner's Exhibit Current Tariff Sheet No. 12 – Riders – TNS, and the proposed tariff sheet Twenty-Ninth Revised Sheet No. 12 – Riders - 1 is attached to my testimony as Petitioner's Exhibit Proposed Sheet No. 12 – Riders – TNS. The proposed tariff Twenty-Eighth Revised Sheet No. 12 was proposed in the rebuttal testimony of Tricia N. Sinopole in Docket No. 22-00021, with a proposed effective date of July 21, 2022. They are each applied to the total amount billed to each customer under the otherwise applicable rates and charges for basic service, metered usage charges, and private fire charges, and are applied prior to the inclusion of any other taxes, charges, or surcharges. All three Capital Recovery Riders are combined into one line item on the bill of each customer, which also includes the TCJA tax expense offset approved in Docket No. 18-00039.

Q. HAS TAWC INCLUDED A CHART SHOWING THE PROGRESSION OF THE APPROVED RIDERS IN EACH DOCKET SINCE THE LAST RATE CASE?

A. Yes. I have included a chart reflecting each of the annual approvals with its filing. This is shown as **Petitioner's Exhibit – Annual Approved Tariffs – TNS**.

Q. WHAT WILL HAPPEN TO THE CAPITAL RECOVERY RIDERS UPON APPROVAL OF NEW RATES IN A RATE CASE PROCEEDING?

A. The QIIP, EDI, and SEC Riders will all be reset to zero as of the effective date of the new Base Rates, which Base Rates then provide for the recovery of the annual costs that had theretofore been recovered through the Capital Recovery Riders. Thereafter, and consistent with the tariffs, only the new QIIP, EDI, and SEC Rider qualified plant additions and expenses not previously included in rate base and Base Rates will be reflected in the future filings subject to TPUC Approval.

Q. WHAT COST OF CAPITAL IS UTILIZED IN THE FORMULA OF THE CAPITAL RECOVERY RIDERS?

A. The cost of capital is the established rate of return (on a pre-tax basis) in the Company's immediately preceding Base Rate case Order, currently TPUC Docket No. 12-00049.

Q. WHAT DEPRECIATION RATES ARE USED TO DETERMINE THE DEPRECIATION EXPENSE RECOVERED BY THE QIIP, EDI AND SEC RIDERS?

A. The depreciation rates last approved by the TPUC in Docket 12-00049 for the respective plant accounts in which the specific items of qualified infrastructure under each rider are recorded are the depreciation rates used to determine the depreciation expense. New depreciation rates would be used only after depreciation rates are changed during a general rate proceeding. These are the rates that were used in Docket Nos. 13-00130, 14-00121, 15-00029, 15-00111, 16-00022, 16-00126, 17-0020, 17-00124, 18-00022, 18-00120, 19-00031, 19-00105, 20-00028, 20-00128, 21-00030 and 22-00021.

Q. WHAT PROPERTY TAX RATE IS USED TO DETERMINE THE PROPERTY TAX EXPENSE RELATED TO THE ADDITIONAL INVESTMENT TO BE RECOVERED BY THE QIIP, EDI AND SEC RIDERS?

A. The property tax rate is based on the proportion of property taxes authorized in Docket No. 12-00049 to the utility plant in service, multiplied by the additional utility plant less retirements. This is the same rate used in Docket Nos. 13-00130, 14-00121, 15-00029, 15-00111, 16-00022, 16-00126, 17-00020, 17-00124, 18-00022, 18-00120, 19-00031, 19-00105, 20-00028, 20-00128, 21-00030 and 22-00021.

Q. WHAT IS THE FEDERAL INCOME TAX RATE USED TO DETERMINE THE APPROPRIATE INCOME TAX EXPENSE RELATED TO THE ADDITIONAL REVENUES GENERATED BY THE QIIP, EDI AND SEC RIDERS?

A. As noted previously, TAWC has revised the federal income tax rate to 21% based on the 2017 Tax Cuts and Jobs Act.

Q. HOW ARE BASE RATE ANNUAL REVENUES DETERMINED FOR THE QIIP, EDI AND SEC RIDERS?

A. The projected annual revenues will be the authorized water services revenues from the last case, Docket No. 12-00049, including all service charges and volumetric charges for all classes that are subject to the Capital Recovery Riders. These are the same annual revenues used in Docket Nos. 13-00130, 14-00121, 15-00029, 15-00111, 16-00022, 16-00126, 17-00020, 17-00124, 18-00022, 18-00120, 19-00031, 19-00105, 20-00028, 20-00128, 21-00030 and 22-00021.

Q. HAS TENNESSEE AMERICAN INCLUDED ANY OPERATING EXPENSES IN THE CURRENTLY PROPOSED EDI RIDER OTHER THAN THE DEPRECIATION AND TAX EXPENSES?

A. No. In the tariffs approved in Docket No. 13-00130, TAWC included expenses related to specific economic development within the community as a component of the EDI Rider and operating expenses related to specific investment in the SEC Rider. However, in Docket No. 14-00121, the operating expenses related specifically to TAWC contributions to economic development agencies were not approved by the TPUC. In that same Docket, TAWC removed proposed SEC Rider operating expenses, as those expenses would be captured in the PCOP. Other types of operating expenses related to economic development or the SEC Rider are not included in this current Petition, but TAWC will continue to review and evaluate potential and appropriate operating expenses for the EDI and SEC Riders and submit them for consideration as appropriate.

Q. HAS TENNESSEE AMERICAN INCLUDED ANY OPERATING EXPENSES IN THE CURRENTLY PROPOSED SEC RIDER OTHER THAN THE DEPRECIATION AND TAX EXPENSES?

A. No.

Q. COULD THE AMOUNT OF INVESTMENT RIDER REVENUES COLLECTED FROM TENNESSEE AMERICAN'S CUSTOMERS VARY FROM THE ACTUAL AMOUNT OF REVENUE NEEDED TO COVER A RETURN OF AND A RETURN ON THE COMPANY'S QIIP, EDI AND SEC RIDER INFRASTRUCTURE INVESTMENT AND TAXES?

A. Yes. This would occur as a result of a difference between the actual and the allowed water operating revenues upon which the Capital Recovery Riders are based.

Q. AS A REGULATORY SAFEGUARD TO CONSUMERS AND TO SERVE THE PUBLIC INTEREST, DOES EACH OF THE CAPITAL RECOVERY RIDERS INCLUDE A RECONCILIATION MECHANISM IN THE EVENT THAT THE LEVEL OF INVESTMENT, EXPENSE, OR REVENUE APPROVED VARIES FROM THE ACTUAL COSTS?

A. Yes. As discussed earlier, the QIIP, EDI, and SEC Riders are all subject to an annual reconciliation or true-up in which the revenue received under each of the Capital Recovery Riders for the reconciliation period will be compared to the revenue necessary for the Company to recover its return of and return on investment plus taxes, for that QIIP, EDI and SEC Rider year. Any over or under recovery will be included in the calculation of the next adjustment to the QIIP, EDI and SEC Riders. For the reason I stated earlier, the reconciliation is not part of the currently proposed change to the QIIP, EDI or SEC Riders. The Capital Recovery Rider reconciliations for the period ending December 31, 2021, was filed on March 1, 2022.

Q. HOW DOES THE RECONCILIATION WORK?

A. Consistent with the approved tariffs, TAWC will file a reconciliation for all three Capital Recovery Riders no later than March 1, 2023. There are actually two steps to the reconciliation. The first is an adjustment for budget to actual investment. This is a regulatory oversight and public interest component of the mechanism that results in a true-up if the investment does not occur (up or down) as forecasted. The second is an adjustment for the over or under recovery of revenues as projected, including interest. In this way, the consumers are protected if sales exceed the amount authorized in the previous rate case proceeding. This could occur if there is a significant amount of customer growth, or if dry and hot conditions occur in any given year. This second adjustment also allows TAWC to adjust if sales are less than the amount authorized in the last case, as could occur with declining usage that TAWC has experienced in recent years. The reconciliation percentage, pending approval by April 1, 2023, as contemplated in the tariffs, will be applied to customer bills for 9 months in 2023.

Finally, there is also a consumer safeguard in the reconciliation process that reviews the earnings for TAWC during the attrition period. If it is determined that TAWC earned a rate of return above the authorized amount from the previous rate case during the attrition period, the amount above the authorized is an adjustment to the customers, with interest. This could occur if sales exceed the amount authorized in the previous rate case as well.

Q. YOU ALSO INDICATED THAT TAWC HAS NOT FILED ANYTHING IN THIS PETITION TO INCLUDE THE RECONCILIATION OF THE PRODUCTION

COSTS AND OTHER PASS-THROUGHS RIDER. WHY IS TAWC NOT INCLUDING THE PCOP RECONCILIATION IN THIS PETITION?

A. The PCOP differs from the Capital Recovery Riders, in that at the end of a year, it looks at the historical period and compares the actual production expenses to the amount of production expenses authorized in the previous rate case. It then applies an adjustment over the next year to account for any differences between the two amounts, either over or under the authorized amount. The table below summarizes the approved and pending PCOP details:

Docket	Review Period
	December 1, 2012 – November 30, 2013
15-00001	December 1, 2013 – November 30, 2014
15-00131	December 1, 2014 – November 30, 2015
16-00148	December 1, 2015 – November 30, 2016
18-00009	December 1, 2016 – November 30, 2017
19-00010	December 1, 2017 – November 30, 2018
20-00008	December 1, 2018 – November 30, 2019
21-00006	December 1, 2019 – November 30, 2020
22-00005*	December 1, 2020 – November 30, 2021

- Pending PCOP filed with the TPUC on January 17, 2022

The next review period for the PCOP will be December 1, 2021 through November 30, 2022. Because that review period is not complete, there is nothing regarding the PCOP in this Petition. TAWC anticipates filing the reconciliation of the PCOP in a separate petition.

Q. WILL THE PCOP HAVE A TWO-STEP RECONCILIATION PROCESS?

A. Yes. Similar to the Capital Recovery Riders, the PCOP reconciliation has 1) a reconciliation of the actual expenses in the historical review period to the authorized levels in the previous rate case; and 2) a reconciliation of the implementation of the PCOP during that same historical review period. In Docket No. 15-00001, the TPUC approved a single reconciliation of the PCOP.

Q. WHEN DID TAWC FILE THE PCOP RECONCILIATION?

A. TAWC filed the reconciliation on the PCOP Rider on January 17, 2022. As set forth in the tariffs, new PCOP rates were anticipated to be effective by February 17, 2022, but have been suspended by the Commission until August 8, 2022 or until further notice of the TPUC. TAWC requested a tariff change to allow 15 more days to the filing date and effective date than was originally approved in 13-000130. This request was accepted by the Commission.

Q. WHAT IS THE PROPOSED ADJUSTED QIIP RIDER?

A. TAWC is proposing a QIIP Rider that would result in an annualized revenue recovery of $11,399,082 for the 2022 calendar year or a surcharge of 24.22%. The surcharge is a cumulative amount since 2014. Again, the annualized revenue recovery is the monthly surcharge, times 12 months, to cover the cost to support all of the QIIP capital investment. This is an increase of requested QIIP Riders surcharge recovery from the previous year of $2,388,563 and an increase in the total QIIP Rider surcharge from the previous year of 5.08%.

Q. HAS TENNESSEE AMERICAN FILED A TARIFF ADDRESSING THE PROPOSED QIIP RIDER?

A. Yes. A new tariff Twenty-Ninth Revised Sheet No. 12 – Riders – 1 reflects all three Capital Recovery Riders and is attached to my testimony as **Petitioner's Exhibit Proposed Sheet No. 12 – Riders – TNS**.

Q. WHAT IS THE PROPOSED EDI RIDER?

A. TAWC is proposing an EDI Rider that would result in an annualized revenue recovery of $900,367 for the 2022 calendar year or a surcharge of 1.91%. The surcharge is a cumulative amount. Again, the annualized revenue recovery is the monthly surcharge, times 12 months, to cover the cost to support all of the EDI capital investment. This is an increase in the requested EDI Rider surcharge recovery from the previous year of $313,454 and an increase in the total EDI Riders surcharge over the previous year of 0.66%. Again, this is shown on the new tariff Twenty-Ninth Revised Sheet No. 12 – Riders – 1 which reflects all three Capital Recovery Riders and is attached to my testimony as **Petitioner's Exhibit Proposed Sheet No. 12 – Riders – TNS**.

Q. WHAT IS PROPOSED SEC RIDER?

A. TAWC is proposing a SEC Rider that would result in an annualized revenue recovery of $4,692,865 for the 2022 calendar year or a surcharge of 9.97%. Again, the annualized revenue recovery is the monthly surcharge, times 12 months, to cover the cost to support all of the SEC capital investment. This is an increase in the requested SEC Rider surcharge recovery from the previous year of $128,556 and an increase in the total SEC Rider surcharge over the previous year of .27%. Again, this is shown on the new tariff Twenty-Ninth Revised Sheet No. 12 – Riders – 1 which reflects all three Capital Recovery Riders and is attached to my testimony as **Petitioner's Exhibit Proposed Sheet No. 12 – Riders – TNS**. The sum of the three riders is an increase of 6.01% on the current base bill.

Q. IN DOCKET 18-00039, TAWC RECOMMENDED USING EXCESS ACCUMULATED DEFERRED INCOME TAX ("EADIT") NORMALIZATION RESULTING FROM THE TCJA TO OFFSET THE CAPITAL RECOVERY RIDERS. DOES TAWC STILL RECOMMEND THAT?

A. Yes, TAWC still recommends that excess ADIT normalization be used as an offset to Capital Recovery Rider increases or reconciliations. The EADIT credit percentage effective January 1, 2021 was 4.54% and can be seen on the new tariff Twenty-Ninth Revised Sheet No. 12 – Riders – 1 which is attached to my testimony as **Petitioner's Exhibit Proposed Sheet No. 12 – Riders – TNS**.

Q. DOES TAWC ANTICIPATE AN UPDATE TO THE EADIT PERCENTAGE IN 2023?

A. Yes, TAWC anticipates filing for an update to the EADIT percentage late in 2022 or early in 2023. This update will be consistent with the TPUC order in Docket No. 18-00039, in which the Commission ordered that the protected portion of EADIT be amortized using the ARAM method and that the Unprotected EADIT be amortized over a three-year period. EADIT amortization began in 2020 and therefore the Unprotected EADIT amount will conclude amortizing at the end of 2022, thus an update to the rate will be necessary.

Q. IN DOCKET NO. 18-00039 THE COMMISSION AUTHORIZED USING AN OFFSET TO THE CAPITAL RECOVERY RIDERS FOR TCJA SAVINGS. DOES TAWC STILL RECOMMEND THAT?

A. Yes, TAWC still recommends that TCJA savings be used as an offset to the Capital Recovery Rider increases or reconciliations. The TCJA credit percentage effective September 1, 2019 was 6.62% and can be seen on the new tariff Twenty-Ninth Revised Sheet No. 12 – Riders – 1, which is attached to my testimony as **Petitioner's Exhibit Proposed Sheet No. 12 – Riders – TNS**.

Q. DOES TAWC ANTICIPATE AN UPDATE TO THE TCJA OFFSET PERCENTAGE IN 2022?

A. Yes, TAWC anticipates filing for an update to the TCJA savings percent on or before August 1, 2022 with the new rate to become effective September 1, 2022. This update will be consistent with the TPUC order in Docket No. 18-00039, in which the Commission approved the *Stipulation and Settlement Agreement Regarding Phase One Issues* filed on July 24, 2019. The agreement concluded that TAWC shall offset its annual Capital Recovery Riders surcharge mechanism by the sum of the annual level of Base Rates Tax Savings ($2,035,031) and additionally, for a three-year period (September 2019 – August 2022), one-third of the outstanding balance of deferred Base Rates Tax Savings accrued from January 1, 2018 through August 31, 2019 (that is one-third of the estimated $3,237,169) shall also be offset against TAWC's annual Capital Recovery Riders Surcharge mechanism. Since the three-year period of the outstanding balance of deferred Base Rates Tax Savings accrued will commence on August 31, 2022, an update to the TCJA savings offset will be necessary to reflect only the amount of Base Rates Tax Savings ($2,035,031).

Q. WHAT IS THE IMPACT OF TAWC'S PROPOSAL TO THE AVERAGE CUSTOMER BILL?

A. For a typical residential customer living in the City of Chattanooga, and using an average of 4,154 gallons per month, the current increase in the proposed Capital Recovery Riders would represent an increase in their bill of $1.30 per month, or $15.60 per year. The cumulative impact on customer's bills are summarized in Table 1:

Table 1
Cumulative Impact of Capital Recovery Riders
Tennessee American Water Company

TPUC Docket No.	Effective Date	Annual Percentage Increase in Capital Recovery Riders	Capital Recovery Riders Cumulative Total	Total Increase to Chattanooga Average Monthly Bill	Average Chattanooga Monthly Bill*	Monthly Increase in Total Bill	Increase from Previous Bill
12-00049	11/1/2012				$ 21.56		
13-00130	4/15/2014	**1.080%**	**1.080%**	$ 0.23	$ 21.79	$ 0.23	1.080%
14-00121	6/30/2015	**4.640%**	**5.720%**	$ 1.23	$ 22.79	$ 1.00	4.590%
15-00111	3/15/2016	**4.660%**	**10.380%**	$ 2.24	$ 23.79	$ 1.00	4.408%
16-00126	3/14/2017	**3.570%**	**13.950%**	$ 3.01	$ 24.56	$ 0.77	3.234%
17-00124	4/10/2018	**2.480%**	**16.430%**	$ 3.54	$ 25.10	$ 0.53	2.18%
18-00120	9/1/2019	**2.750%**	**19.180%**	$ 4.13	$ 25.69	$ 0.59	2.36%
TCJA Offset	9/1/2019	**-6.620%**	**12.560%**	$ 2.71	$ 24.26	$ (1.43)	-5.69%
19-00105	1/1/2020	**5.030%**	**24.210%**	$ 5.22	$ 26.78	$ 1.09	4.49%
TCJA Offset	1/1/2020	**-6.620%**	**17.590%**	$ 3.79	$ 25.35	$ 1.09	4.48%
20-00128	1/1/2021	**5.880%**	**30.090%**	$ 6.48	$ 28.04	$ 1.26	4.97%
TCJA Offset	1/1/2021	**-11.160%**	**18.930%**	$ 4.08	$ 25.64	$ 0.29	1.14%
22-00XXX	8/1/2022	**6.010%**	**36.100%**	$ 7.78	$ 29.34	$ 1.30	5.07%
TCJA Offset	1/1/2021	**-11.160%**	**24.940%**	$ 5.37	$ 26.93	$ 1.29	5.03%

* The purpose of this table is to aid in the the overall view of the impact of the Capital Recovery Riders and does not include reconciliaitions and the PCOP.

I am also providing a table reflecting the detailed changes for each Capital Recovery Rider, including the reconciliations. This is attached to my testimony as **<u>Petitioner's Exhibit – Annual Approved Tariffs – TNS</u>**. A summary of the impact for the average residential customer for each of Tennessee American's water rates is attached to my testimony as **<u>Petitioner's Exhibit Average Impact – TNS</u>**.

Q. ANNUAL CAPITAL RECOVERY RIDER FILINGS ARE USUALLY SUBMITTED ON OR BEFORE DECEMBER 1 OF THE PRECEDING YEAR. IF THE COMMISSION ACCEPTS THIS FILING, WHAT WILL BE THE IMPACT UPON TAWC CUSTOMERS? PLEASE EXPLAIN YOUR ANSWER.

A. TAWC customers will see a 6.01% increase on their bills beginning on August 8, 2022 if the Commission accepts this filing. Had TAWC filed the Capital Recovery Riders on or before December 1, 2021, customers would have seen an increase on their bills beginning on January 1, 2022. Since TAWC is not requesting retroactive treatment to the proposed QIIP, EDI and SEC rates in this filing, customers will see less of an increase in 2022 than they normally would have, had rates become effective January 1, 2022.

Q. ARE THE QIIP RIDER, THE EDI RIDER AND THE SEC RIDER STILL IN THE PUBLIC INTEREST?

A. Yes. As I noted at the outset herein, and as outlined by TAWC in much detail and with supporting documentation TPUC Docket No. 13-00130, the QIIP, the EDI and the SEC Riders are mutually beneficial to the ratepayers, the public, and TAWC. Among other things, the Capital Recovery Riders reduce the need for general rate cases, lessen the occurrence of consumer "rate shock," support the maintenance and improvement of essential infrastructure, support opportunities for successful economic development, growth and job creation, ensure safety and reliability, and allow for more efficient, streamlined regulation. The ratepayers and the public benefit from the safety and reliability components and from the more seamless and timely capital investment in infrastructure, coupled with the related support to economic development, growth and job creation. The Company benefits from a more efficient, streamlined regulatory process that presents

TAWC with the opportunity to timely recover its expenses and earn a fair rate of return on its investments. Without the approved alternative rate mechanisms pursuant to Tenn. Code Ann. Section 65-5-103 *et. seq*., and specifically without the Capital Recovery Riders, TAWC would be preparing another general rate case. TAWC understands that the purpose of the alternative regulatory methods legislation ─ Tenn. Code Ann. § 65-5-103 *et. seq*., ─ was, in part, to encourage an increase in certain types of infrastructure investment and recovery by utilities, while reducing the costs to consumers and utilities for regulatory review and implementation, and promoting rate gradualism for consumers. TAWC believes the approved Capital Recovery Riders are achieving that goal.

As reflected in the evidentiary record in TPUC Docket No. 13-00130, the US Environmental Protection Agency and the American Society of Civil Engineers have published reports regarding the significant capital needs for water and wastewater infrastructure in the United States, including here in Tennessee. Grady Stout also provides a current update on water and wastewater infrastructure capital needs in his testimony. A substantial portion of TAWC's distribution infrastructure is between 50 and 100 years old, and TAWC needs to continue to invest in replacing its infrastructure in order to meet its obligation to provide safe, reliable drinking water to its customers. The QIIP Rider is assisting TAWC in responsibly and strategically addressing the systems' infrastructure replacement needs, while helping to increase the time between rate cases and reducing the cost of rate cases to its Customers. As testified to by Company Witness Grady Stout, TAWC has strategically focused its efforts on mains with the highest maintenance concerns.

As reflected in the evidentiary record in TPUC Docket No. 14-00121, the presence of the new Coca Cola facility in Chattanooga, along with the accompanying jobs and other associated community and public benefits, shows that the EDI Rider is working as intended by the Tennessee General Assembly. Grady Stout also addresses other significant and more recent EDI projects under the Capital Riders in his testimony. Moreover, the Company's cooperative and coordinated efforts with the City of Chattanooga to timely address crucial safety, health and reliability issues, including those identified in the US Environmental Protection Agency's April 2013 Consent Decree issued to the City of Chattanooga requiring improvements to the City's sanitary sewer system, demonstrates that the SEC Rider is serving our Customers and the public interest as anticipated.

As it pledged to do when it first submitted the Capital Recovery Riders for review and consideration by the agency in TPUC Docket No. 13-00130, TAWC has been able to partner with the community to promote economic development, which we believe to be consistent with Tenn. Code Ann. § 65-5-103 *et. seq*., consistent with the approved QIIP Rider, EDI Rider, and SEC Rider, and in the public interest. Under the Commission's oversight and within the safeguards set forth in the approved tariffs, TAWC has been able to increase infrastructure replacement and meet environmental compliance needs on a timely basis, which we believe to be in the public interest.

Q. ARE YOU AWARE OF ANY CHANGES IN MARKET CONDITION OR OTHER FACTORS THAT MAY AFFECT WHETHER THESE RIDERS ARE STILL IN THE PUBLIC INTEREST?

A. No, I am not.

Q. WHAT DO YOU RECOMMEND WITH REGARD TO THIS PETITION?

A. I recommend that the Petition be approved for the increase in the QIIP, EDI and SEC Riders, effective August 8, 2022.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes. I reserve the ability to submit further testimony as is appropriate.

Tennessee American Water Company
Qualified Infrastructure Improvement Program (QIIP)
Economic Development Investment Rider (EDI)
Safety and Environmental Compliance Rider (SEC)
Summary Page

Line Number	Rate Mechanism	Proposed Revenue Requirement*	Percentage Applied to Bill*	Revenue Requirement as Authorized - 2021 (1)	Percentage Applied to Bill as Authorized (1)	Impact of Proposed Adjustments on Revenue Requirement	Impact of Proposed Adjustments on Bill Percentage
1							
2	QIIP	$11,399,082	24.22%	$9,010,519	19.14%	$2,388,563	5.08%
3							
4	EDI	900,637	1.91%	587,183	1.25%	313,454	0.66%
5							
6	SEC	4,692,865	9.97%	4,564,309	9.70%	128,556	0.27%
7							
8	**Total**	**$16,992,584**	**36.10%**	**$14,162,011**	**30.09%**	**$2,830,573**	**6.01%**
9							
10							

*Includes Def. Tax, Accum. Depreciation, Forfeited Discount Gross Up

(1) From prior docket #20-00128 order that approved the capital rider surcharges

Tennessee American Water Company
Qualified Infrastructure Improvement Program (QIIP)
Economic Development Rider (EDI)
Safety and Environmental Compliance Rider (SEC)
Average Residential Bill Impact
5/8" Meter and Usage of 5.55 CCF (or 41.54 100 Gallons)

Line Number	Area	Service Charge - 5/8" Meter	Volumetric Charge	Bill Before Surcharges	2021 Authorized Capital Surcharges at 30.09%	2020 PCOP at .20%	Total 2021 Authorized Surcharges	2022 QIIP Surcharge at 5.08%	2022 EDI Surcharge at 0.66%	2022 SEC Surcharge at 0.27%	2022 Proposed Capital Rider Adjustments	Total Proposed Surcharges	2022 TCJA Credit at -6.62%	2022 TCJA EADIT Credit at -4.54%	Total of Proposed Surcharges & TCJA Credit
1															
2	Chattanooga	$13.96	$7.60	$21.56	$6.49	$0.04	$6.53	$1.10	$0.14	$0.06	$1.30	$7.83	($1.43)	($0.98)	$5.42
3															
4	Lookout Mountain	$15.66	$12.39	$28.05	$8.44	$0.06	$8.50	$1.43	$0.19	$0.08	$1.70	$10.20	($1.86)	($1.27)	$7.07
5															
6	Lakeview	$15.66	$9.16	$24.82	$7.47	$0.05	$7.52	$1.26	$0.16	$0.07	$1.49	$9.01	($1.64)	($1.13)	$6.24
7															
8	Suck Creek	$30.60	$16.12	$46.72	$14.06	$0.09	$14.15	$2.37	$0.31	$0.13	$2.81	$16.96	($3.09)	($2.12)	$11.75
9															
10	Whitwell - Inside	$20.45	$10.30	$30.75	$9.25	$0.06	$9.31	$1.56	$0.20	$0.08	$1.84	$11.15		($1.40)	$9.76
11															
12	Whitwell - Outside	$23.37	$12.56	$35.93	$10.81	$0.07	$10.88	$1.83	$0.24	$0.10	$2.17	$13.05		($1.63)	$11.42
13															

Tennessee American Water
Qualified Infrastructure Improvement Program (QIIP)
Calculation of QIIP Revenue Requirement

Line Number	Description	2022 QIIP Company Totals
1	Additions Subject to QIIP:	$91,349,637
2	Plus: Cost of Removal less Salvage	18,054,675
3	Less: Contributions in Aid to Construction (CIAC)	2,313,483
4	Less: Deferred Income Taxes	9,897,666
5	Less: Accumulated Depreciation	7,829,695
6	Net Investment Supplied QIIP Additions:	$89,363,468
7		
8	Pre-Tax Rate of Return:	8.45145%
9	Pre-Tax Return on Additions:	$7,552,511
10		
11	Depreciation Expense on QIIP Additions:	2,374,148
12		
13	Operational Expenses Related to QIIP	0
14		
15	Property and Franchise Taxes Associated with QIIP:	1,134,479
16		
17	QIIP Revenues:	$11,061,139
18		
19	Revenue Taxes	3.191%
20	QIIP Revenues with Revenue Taxes	$11,425,734
21		
22	QIIP APP Revenue Reduction	(26,652)
23		
24	Total QIIP Revenues with Revenue Taxes & APP Reduction	$11,399,082
25		
26	Service Charge and Volumetric Revenues as Per Docket No. 12-00049	$47,073,724
27		
28	QIIP Percentage to Apply to Bill:	24.22%
29		

Tennessee American Water Company
Qualified Infrastructure Improvement Program (QIIP)
Investment Worksheet

			1	2	3	4	5	B	C
		QIIP				=Col 1 + Col 2			
Line #	**Investment by Plant Account**	**Account Description**	**Additions**	**Retirements**	**CIAC**	**Net Investments (for Property Tax Calculation)**	**Cost of Removal Net of Salvage**	**Accumulated Deferred Income Taxes**	**Accumulated Depreciation**
1	**304300**	**Struct & Imp-Treatment**							
2	Recurring Projects		$0	($94,900)	$0	($94,900)	$0	$0	$28,958
3	Investment Projects		15,953,223	(5,074)	0	15,948,149	3,014,685	(1,728,518)	(2,116,622)
4	Total QIIP		$15,953,223	($99,974)	$0	$15,853,249	$3,014,685	($1,728,518)	($2,087,664)
5									
6	**304301**	**Struct & Imp-Treatment-Dpr Paint**							
7	Recurring Projects		$1,250,689	($170,157)	$0	$1,080,532	$661,770	($135,509)	($842,578)
8	Investment Projects		0	0	0	0	0	0	0
9	Total QIIP		$1,250,689	($170,157)	$0	$1,080,532	$661,770	($135,509)	($842,578)
10									
11	**309000**	**Supply Mains**							
12	Recurring Projects		$0	$0	$0	$0	$0	$0	$0
13	Investment Projects		1,349,045	0	0	1,349,045	3,733	(146,169)	(68,272)
14	Total QIIP		$1,349,045	$0	$0	$1,349,045	$3,733	($146,169)	($68,272)
15									
16	**311500**	**Pumping Equipment SOS**							
17	Recurring Projects		$0	$0	$0	$0	$0	$0	$0
18	Investment Projects		2,706,196	0	0	2,706,196	1,288	(293,218)	(34,412)
19	Total QIIP		$2,706,196	$0	$0	$2,706,196	$1,288	($293,218)	($34,412)
20									
21	**311520**	**Pumping Equipment SOS**							
22	Recurring Projects		$0	$0	$0	$0	$0	$0	$0
23	Investment Projects		0	0	0	0	0	0	0
24	Total QIIP		$0	$0	$0	$0	$0	$0	$0
25									
26	**320100**	**WT Equip Non-Media**							
27	Recurring Projects		$259,932	($123,785)	$0	$136,147	$89,500	($28,159)	($47,514)
28	Investment Projects		2,108,885	(737,620)	0	1,371,265	4,049,303	(228,498)	(126,639)
29	Total QIIP		$2,368,817	($861,405)	$0	$1,507,412	$4,138,803	($256,657)	($174,153)
30									
31	**320200**	**Water Trmt Equip Filter Media**							
32	Recurring Projects		$52,740	($36,378)	$0	$16,362	$206,460	($5,711)	($34,982)
33	Investment Projects		0	0	0	0	0	0	0
34	Total QIIP		$52,740	($36,378)	$0	$16,362	$206,460	($5,711)	($34,982)
35									
36	**330000**	**Dist Reservoirs & Standpipes**							
37	Recurring Projects		$1,993,991	($4,007)	$0	$1,989,984	$1,468,904	($216,046)	($71,640)
38	Investment Projects		0	0	0	0	0	0	0
39	Total QIIP		$1,993,991	($4,007)	$0	$1,989,984	$1,468,904	($216,046)	($71,640)
40									
41	**330003**	**Tank Repainting**							
42	Recurring Projects		$1,143,293	($109,594)	$0	$1,033,699	$240,963	($123,879)	($464,031)
43	Investment Projects		0	0	0	0	0	0	0
44	Total QIIP		$1,143,293	($109,594)	$0	$1,033,699	$240,963	($123,879)	($464,031)
45									
46	**330100**	**Elevated Tanks & Standpipes**							
47	Recurring Projects		$90,599	$0	$0	$90,599	$0	($9,818)	($14,417)
48	Investment Projects		0	0	0	0	0	0	0
49	Total QIIP		$90,599	$0	$0	$90,599	$0	($9,818)	($14,417)
50									

Tennessee American Water Company
Qualified Infrastructure Improvement Program (QIIP)
Investment Worksheet

			1	2	3	4	5	B	C
		QIIP				=Col 1 + Col 2			
Line #	Investment by Plant Account	Account Description	Additions	Retirements	CIAC	Net Investments (for Property Tax Calculation)	Cost of Removal Net of Salvage	Accumulated Deferred Income Taxes	Accumulated Depreciation
51	**330200**	**Ground Level Tanks**							
52	Recurring Projects		$2,250,209	($446)	$0	$2,249,763	$1,091,957	($243,809)	($166,470)
53	Investment Projects		0	0	0	0	0	0	0
54	Total QIIP		$2,250,209	($446)	$0	$2,249,763	$1,091,957	($243,809)	($166,470)
55									
56	**331001**	**Transmission & Distribution Mains**							
57	Recurring Projects		$32,136,527	($2,235,835)	($2,144,824)	$29,900,692	$3,053,216	($3,481,959)	($1,279,487)
58	Investment Projects		4,671,606	0	0	4,671,606	0	(506,167)	(165,275)
59	Total QIIP		$36,808,132	($2,235,835)	($2,144,824)	$34,572,297	$3,053,216	($3,988,126)	($1,444,762)
60									
61	**333000**	**Services**							
62	Recurring Projects		$3,143,411	($212,336)	($29,877)	$2,931,075	$779,727	($340,589)	($181,809)
63	Investment Projects		0	0	0	0	0	0	0
64	Total QIIP		$3,143,411	($212,336)	($29,877)	$2,931,075	$779,727	($340,589)	($181,809)
65									
66	**334100**	**Meters**							
67	Recurring Projects		$10,056,915	($2,793,563)	$0	$7,263,352	$1,410,346	($1,089,664)	($1,088,778)
68	Investment Projects		0	0	0	0	0	0	0
69	Total QIIP		$10,056,915	($2,793,563)	$0	$7,263,352	$1,410,346	($1,089,664)	($1,088,778)
70									
71	**334200**	**Meter Installations**							
72	Recurring Projects		$8,440,745	($520,610)	$0	$7,920,135	$1,477,008	($914,544)	($927,996)
73	Investment Projects		0	0	0	0	0	0	0
74	Total QIIP		$8,440,745	($520,610)	$0	$7,920,135	$1,477,008	($914,544)	($927,996)
75									
76	**334300**	**Meter Vaults**							
77	Recurring Projects		$53,486	($30,881)	$0	$22,605	$15,177	($5,800)	($2,470)
78	Investment Projects		0	0	0	0	0	0	0
79	Total QIIP		$53,486	($30,881)	$0	$22,605	$15,177	($5,800)	($2,470)
80									
81	**335000**	**Hydrants**							
82	Recurring Projects		$3,480,809	($305,597)	($138,782)	$3,175,212	$490,638	($377,141)	($181,943)
83	Investment Projects		0	0	0	0	0	0	0
84	Total QIIP		$3,480,809	($305,597)	($138,782)	$3,175,212	$490,638	($377,141)	($181,943)
85									
86	**340200**	**Computer & Peripheral Equipment**							
87	Recurring Projects		$0	$0	$0	$0	$0	$0	$0
88	Investment Projects		0	0	0	0	0	0	0
89	Total QIIP		$0	$0	$0	$0	$0	$0	$0
90									
91	**346190**	**Remote Control & Instrument**							
92	Recurring Projects		$0	$0	$0	$0	$0	$0	$0
93	Investment Projects		207,335	0	0	207,335	0	(22,468)	(43,318)
94	Total QIIP		$207,335	$0	$0	$207,335	$0	($22,468)	($43,318)
95									
96	**Expense:**								
97			$0	$0	$0	$0	$0	$0	$0
98			0	0	0	0	0	0	0
99			0	0	0	0	0	0	0
100	Total		$0	$0	$0	$0	$0	$0	$0
101									
102	**Total**		**$91,349,637**	**($7,380,783)**	**($2,313,483)**	**$83,968,854**	**$18,054,675**	**($9,897,666)**	**($7,829,695)**

Tennessee American Water Company
Qualified Infrastructure Improvement Program (QIIP)
Investment Worksheet

			6	7	8	9	10	11	12
		QIIP	=Cols 1 + 3 + 5 + B + C	=Col 6 x 8.451452%	=(Col 1+2+3)x Depreciation Rate	= (Col 4 x Prop Tax Rate) + (Col 4 x Franchise Rate)		=Cols 7 + 8 + 9 + 10	= Col 11 / (1 - 3.191%)
Line #	**Investment by Plant Account**	**Account Description**	**Earnings Basis Net Investment (Rate Base)**	**Earnings Basis x Pre-Tax Return (PTR)**	**Depreciation Expense**	**Property Tax & Franchise Fees**	**Operational Expenses**	**Total Before Revenue Tax**	**Total With Revenue Tax**
1	**304300**	**Struct & Imp-Treatment**							
2	Recurring Projects		$28,958	$2,447	($3,900)	($1,282)	$0	($2,735)	($2,825)
3	Investment Projects		15,122,768	1,278,094	655,469	215,471	0	2,149,033	2,219,869
4	Total QIIP		$15,151,726	$1,280,541	$651,569	$214,189	$0	$2,146,298	$2,217,044
5									
6	**304301**	**Struct & Imp-Treatment-Dpr Paint**							
7	Recurring Projects		$934,372	$78,968	$130,312	$14,599	$0	$223,879	$231,258
8	Investment Projects		0	0	0	0	0	0	0
9	Total QIIP		$934,372	$78,968	$130,312	$14,599	$0	$223,879	$231,258
10									
11	**309000**	**Supply Mains**							
12	Recurring Projects		$0	$0	$0	$0	$0	$0	$0
13	Investment Projects		1,138,337	96,206	25,227	18,227	0	139,660	144,263
14	Total QIIP		$1,138,337	$96,206	$25,227	$18,227	$0	$139,660	$144,263
15									
16	**311500**	**Pumping Equipment SOS**							
17	Recurring Projects		$0	$0	$0	$0	$0	$0	$0
18	Investment Projects		2,379,854	201,132	49,523	36,563	0	287,218	296,685
19	Total QIIP		$2,379,854	$201,132	$49,523	$36,563	$0	$287,218	$296,685
20									
21	**311520**	**Pumping Equipment SOS**							
22	Recurring Projects		$0	$0	$0	$0	$0	$0	$0
23	Investment Projects		0	0	0	0	0	0	0
24	Total QIIP		$0	$0	$0	$0	$0	$0	$0
25									
26	**320100**	**WT Equip Non-Media**							
27	Recurring Projects		$273,759	$23,137	$1,484	$1,839	$0	$26,460	$27,332
28	Investment Projects		5,803,051	490,442	14,947	18,527	0	523,916	541,185
29	Total QIIP		$6,076,810	$513,579	$16,431	$20,366	$0	$550,376	$568,517
30									
31	**320200**	**Water Trmt Equip Filter Media**							
32	Recurring Projects		$218,507	$18,467	$5,512	$221	$0	$24,200	$24,998
33	Investment Projects		0	0	0	0	0	0	0
34	Total QIIP		$218,507	$18,467	$5,512	$221	$0	$24,200	$24,998
35									
36	**330000**	**Dist Reservoirs & Standpipes**							
37	Recurring Projects		$3,175,209	$268,351	$41,392	$26,886	$0	$336,629	$347,725
38	Investment Projects		0	0	0	0	0	0	0
39	Total QIIP		$3,175,209	$268,351	$41,392	$26,886	$0	$336,629	$347,725
40									
41	**330003**	**Tank Repainting**							
42	Recurring Projects		$796,346	$67,303	$114,534	$13,966	$0	$195,803	$202,257
43	Investment Projects		0	0	0	0	0	0	0
44	Total QIIP		$796,346	$67,303	$114,534	$13,966	$0	$195,803	$202,257
45									
46	**330100**	**Elevated Tanks & Standpipes**							
47	Recurring Projects		$66,364	$5,609	$2,482	$1,224	$0	$9,315	$9,622
48	Investment Projects		0	0	0	0	0	0	0
49	Total QIIP		$66,364	$5,609	$2,482	$1,224	$0	$9,315	$9,622
50									

Tennessee American Water Company
Qualified Infrastructure Improvement Program (QIIP)
Investment Worksheet

Line #	Investment by Plant Account	Account Description	6	7	8	9	10	11	12
		QIIP	=Cols 1 + 3 + 5 + B + C	=Col 6 x 8.451452%	=(Col 1+2+3)x Depreciation Rate	= (Col 4 x Prop Tax Rate) + (Col 4 x Franchise Rate)		=Cols 7 + 8 + 9 + 10	= Col 11 / (1 - 3.191%)
			Earnings Basis Net Investment (Rate Base)	**Earnings Basis x Pre-Tax Return (PTR)**	**Depreciation Expense**	**Property Tax & Franchise Fees**	**Operational Expenses**	**Total Before Revenue Tax**	**Total With Revenue Tax**
51	**330200**	**Ground Level Tanks**							
52	Recurring Projects		$2,931,887	$247,787	$61,644	$30,396	$0	$339,826	$351,028
53	Investment Projects		0	0	0	0	0	0	0
54	Total QIIP		$2,931,887	$247,787	$61,644	$30,396	$0	$339,826	$351,028
55									
56	**331001**	**Transmission & Distribution Mains**							
57	Recurring Projects		$28,283,473	$2,390,364	$346,948	$403,980	$0	$3,141,292	$3,244,835
58	Investment Projects		4,000,164	338,072	58,395	63,117	0	459,584	474,732
59	Total QIIP		$32,283,636	$2,728,436	$405,343	$467,097	$0	$3,600,876	$3,719,568
60									
61	**333000**	**Services**							
62	Recurring Projects		$3,370,863	$284,887	$32,203	$39,601	$0	$356,691	$368,448
63	Investment Projects		0	0	0	0	0	0	0
64	Total QIIP		$3,370,863	$284,887	$32,203	$39,601	$0	$356,691	$368,448
65									
66	**334100**	**Meters**							
67	Recurring Projects		$9,288,819	$785,040	$542,572	$98,133	$0	$1,425,746	$1,472,741
68	Investment Projects		0	0	0	0	0	0	0
69	Total QIIP		$9,288,819	$785,040	$542,572	$98,133	$0	$1,425,746	$1,472,741
70									
71	**334200**	**Meter Installations**							
72	Recurring Projects		$8,075,213	$682,473	$216,220	$107,007	$0	$1,005,699	$1,038,849
73	Investment Projects		0	0	0	0	0	0	0
74	Total QIIP		$8,075,213	$682,473	$216,220	$107,007	$0	$1,005,699	$1,038,849
75									
76	**334300**	**Meter Vaults**							
77	Recurring Projects		$60,393	$5,104	$617	$305	$0	$6,027	$6,225
78	Investment Projects		0	0	0	0	0	0	0
79	Total QIIP		$60,393	$5,104	$617	$305	$0	$6,027	$6,225
80									
81	**335000**	**Hydrants**							
82	Recurring Projects		$3,273,581	$276,665	$69,838	$42,899	$0	$389,402	$402,238
83	Investment Projects		0	0	0	0	0	0	0
84	Total QIIP		$3,273,581	$276,665	$69,838	$42,899	$0	$389,402	$402,238
85									
86	**340200**	**Computer & Peripheral Equipment**							
87	Recurring Projects		$0	$0	$0	$0	$0	$0	$0
88	Investment Projects		0	0	0	0	0	0	0
89	Total QIIP		$0	$0	$0	$0	$0	$0	$0
90									
91	**346190**	**Remote Control & Instrument**							
92	Recurring Projects		$0	$0	$0	$0	$0	$0	$0
93	Investment Projects		141,549	11,963	8,729	2,801	0	23,493	24,267
94	Total QIIP		$141,549	$11,963	$8,729	$2,801	$0	$23,493	$24,267
95									
96	**Expense:**								
97			$0	$0	$0	$0	$0	$0	$0
98			0	0	0	0	0	0	0
99			0	0	0	0	0	0	0
100	Total		$0	$0	$0	$0	$0	$0	$0
101									
102	**Total**		**$89,363,468**	**$7,552,511**	**$2,374,148**	**$1,134,479**	**$0**	**$11,061,139**	**$11,425,734**

Tennessee American Water
Economic Development Investment (EDI)
Calculation of EDI Revenue Requirement

Line Number	Description	2022 EDI Company Totals
1	Additions Subject to EDI:	$8,787,882
2	Plus: Cost of Removal less Salvage	2,159
3	Less: Contributions in Aid to Construction (CIAC)	243,483
4	Less: Deferred Income Taxes	837,834
5	Less: Accumulated Depreciation	290,580
6	Net Investment Supplied EDI Additions:	$7,418,144
7		
8	Pre-Tax Rate of Return:	8.45145%
9	Pre-Tax Return on Additions:	$626,941
10		
11	Depreciation Expense on EDI Additions:	128,352
12		
13	Operational Expenses Related to EDI	0
14		
15	Property and Franchise Taxes Associated with EDI:	118,717
16		
17	EDI Revenues:	$874,010
18		
19	Revenue Taxes	3.191%
20	EDI Revenues with Revenue Taxes	$902,819
21		
22	EDI APP Revenue Reduction	(2,182)
23		
24	Total EDI Revenues with Revenue Taxes & APP Reduction	$900,637
25		
26	Service Charge and Volumetric Revenues as Per Docket No. 12-00049	$47,073,724
27		
28	EDI Percentage to Apply to Bill:	1.91%
29		

Tennessee American Water Company
Economic Development Investment (EDI)
Investment Worksheet

			1	2	3	4	5	B	C
		EDI				=Col 1 + Col 2			
Line #	**Investment by Plant Account**	**Account Description**	**Additions**	**Retirements**	**CIAC**	**Net Investments (for Property Tax Calculation)**	**Cost of Removal Net of Salvage**	**Accumulated Deferred Income Taxes**	**Accumulated Depreciation**
1	**304400**	**Structures & Improvement-T&D**							
2	Recurring Projects		$106,638	$0	$0	$106,638	$0	($10,167)	($8,098)
3	Investment Projects		0	0	0	0	0	0	0
4	Total EDI		$106,638	$0	$0	$106,638	$0	($10,167)	($8,098)
5									
6	**311500**	**Pump Eqp Electric**							
7	Recurring Projects		$0	$0	$0	$0	$0	$0	$0
8	Investment Projects		1,781,591	0	(104,000)	1,781,591	0	(169,857)	(46,541)
9	Total EDI		$1,781,591	$0	($104,000)	$1,781,591	$0	($169,857)	($46,541)
10									
11	**330200**	**Ground Level Tanks**							
12	Recurring Projects		$0	$0	$0	$0	$0	$0	$0
13	Investment Projects		235,601	0	0	235,601	0	(22,462)	(3,228)
14	Total EDI		$235,601	$0	$0	$235,601	$0	($22,462)	($3,228)
15									
16	**331001**	**Transmission & Distribution Mains**							
17	Recurring Projects		$2,313,900	$0	$0	$2,313,900	$0	($220,607)	($116,502)
18	Investment Projects		3,499,149	0	0	3,499,149	0	(333,608)	(73,845)
19	Total EDI		$5,813,049	$0	$0	$5,813,049	$0	($554,215)	($190,347)
20									
21	**333000**	**Services**							
22	Recurring Projects		$13,212	$0	$0	$13,212	$0	($1,259)	($641)
23	Investment Projects		0	0	0	0	0	0	0
24	Total EDI		$13,212	$0	$0	$13,212	$0	($1,259)	($641)
25									
26	**334300**	**Meter Vaults**							
27	Recurring Projects		$18,184	$0	$0	$18,184	$0	($1,733)	($3,150)
28	Investment Projects		0	0	0	0	0	0	0
29	Total EDI		$18,184	$0	$0	$18,184	$0	($1,733)	($3,150)
30									
31	**335000**	**Hydrants**							
32	Recurring Projects		$819,608	($1,021)	($139,483)	$818,587	$2,159	($78,141)	($38,575)
33	Investment Projects		0	0	0	0	0	0	0
34	Total EDI		$819,608	($1,021)	($139,483)	$818,587	$2,159	($78,141)	($38,575)
35									
36	**Expense:**								
37			$0	$0	$0	$0	$0	$0	$0
38			0	0	0	0	0	0	0
39			0	0	0	0	0	0	0
40	Total		$0	$0	$0	$0	$0	$0	$0
41									
42	**Total**		**$8,787,882**	**($1,021)**	**($243,483)**	**$8,786,861**	**$2,159**	**($837,834)**	**($290,580)**

Tennessee American Water Company
Economic Development Investment (EDI)
Investment Worksheet

Line #	Investment by Plant Account	Account Description	Earnings Basis Net Investment (Rate Base)	Earnings Basis x Pre-Tax Return (PTR)	Depreciation Expense	Property Tax & Franchise Fees	Operational Expenses	Total Before Revenue Tax	Total With Revenue Tax
			6	**7**	**8**	**9**	**10**	**11**	**12**
		EDI	=Cols 1 + 3 + 5 + B + C	=Col 6 x 8.451452%	=(Col 1+2+3)x Depreciation Rate	= (Col 4 x Prop Tax Rate) + (Col 4 x Franchise Rate)		=Cols 7 + 8 + 9 + 10	= Col 11 / (1 - 3.191%)
1	**304400**	**Structures & Improvement-T&D**							
2	Recurring Projects		$88,373	$7,469	$2,271	$1,441	$0	$11,181	$11,550
3	Investment Projects		0	0	0	0	0	0	0
4	Total EDI		$88,373	$7,469	$2,271	$1,441	$0	$11,181	$11,550
5									
6	**311500**	**Pump Eqp Electric**							
7	Recurring Projects		$0	$0	$0	$0	$0	$0	$0
8	Investment Projects		1,461,193	123,492	30,700	24,071	0	178,263	184,138
9	Total EDI		$1,461,193	$123,492	$30,700	$24,071	$0	$178,263	$184,138
10									
11	**330200**	**Ground Level Tanks**							
12	Recurring Projects		$0	$0	$0	$0	$0	$0	$0
13	Investment Projects		209,911	17,741	6,455	3,183	0	27,379	28,282
14	Total EDI		$209,911	$17,741	$6,455	$3,183	$0	$27,379	$28,282
15									
16	**331001**	**Transmission & Distribution Mains**							
17	Recurring Projects		$1,976,791	$167,068	$28,924	$31,262	$0	$227,254	$234,744
18	Investment Projects		3,091,696	261,293	43,739	47,276	0	352,309	363,921
19	Total EDI		$5,068,487	$428,361	$72,663	$78,538	$0	$579,562	$598,666
20									
21	**333000**	**Services**							
22	Recurring Projects		$11,312	$956	$147	$178	$0	$1,281	$1,323
23	Investment Projects		0	0	0	0	0	0	0
24	Total EDI		$11,312	$956	$147	$178	$0	$1,281	$1,323
25									
26	**334300**	**Meter Vaults**							
27	Recurring Projects		$13,301	$1,124	$496	$246	$0	$1,866	$1,928
28	Investment Projects		0	0	0	0	0	0	0
29	Total EDI		$13,301	$1,124	$496	$246	$0	$1,866	$1,928
30									
31	**335000**	**Hydrants**							
32	Recurring Projects		$565,568	$47,799	$15,619	$11,060	$0	$74,478	$76,933
33	Investment Projects		0	0	0	0	0	0	0
34	Total EDI		$565,568	$47,799	$15,619	$11,060	$0	$74,478	$76,933
35									
36	**Expense:**								
37			$0	$0	$0	$0	$0	$0	$0
38			0	0	0	0	0	0	0
39			0	0	0	0	0	0	0
40	Total		$0	$0	$0	$0	$0	$0	$0
41									
42	**Total**		**$7,418,144**	**$626,941**	**$128,352**	**$118,717**	**$0**	**$874,010**	**$902,819**

Tennessee American Water
Safety and Environmental Compliance (SEC)
Calculation of SEC Revenue Requirement

Line Number	Description	2022 SEC Company Totals
1	Additions Subject to SEC:	$40,196,378
2	Plus: Cost of Removal less Salvage	4,339,593
3	Less: Contributions in Aid to Construction (CIAC)	0
4	Less: Deferred Income Taxes	5,048,961
5	Less: Accumulated Depreciation	5,268,757
6	Net Investment Supplied SEC Additions:	$34,218,253
7		
8	Pre-Tax Rate of Return:	8.45145%
9	Pre-Tax Return on Additions:	$2,891,939
10		
11	Depreciation Expense on SEC Additions:	1,155,274
12		
13	Operational Expenses Related to SEC	0
14		
15	Property and Franchise Taxes Associated with SEC:	507,916
16		
17	SEC Revenues:	$4,555,129
18		
19	Revenue Taxes	3.191%
20	SEC Revenues with Revenue Taxes	$4,705,275
21		
22	SEC APP Revenue Reduction	(12,410)
23		
24	SEC Revenues with Revenue Taxes & APP Reduction	$4,692,865
25		
26	Service Charge and Volumetric Revenues as Per Docket No. 12-00049	$47,073,724
27		
28	SEC Percentage to Apply to Bill:	9.97%
29		

Tennessee American Water Company
Safety and Environmental Compliance (SEC)
Investment Worksheet

			1	2	3	4	5	B	C
		SEC				=Col 1 + Col 2			
Line #	Investment by Plant Account	Account Description	Additions	Retirements	CIAC	Net Investments (for Property Tax Calculation)	Cost of Removal Net of Salvage	Accumulated Deferred Income Taxes	Accumulated Depreciation
1	304100	Structures & Improvement-Supply							
2	Recurring Projects		$308,221	($694)	$0	$307,527	$3,716	($38,715)	($40,928)
3	Investment Projects		0	0	0	0	0	0	0
4	Total SEC		$308,221	($694)	$0	$307,527	$3,716	($38,715)	($40,928)
5									
6	304200	Structures & Improvement-Pump							
7	Recurring Projects		$1,988,113	($135,559)	$0	$1,852,554	$80,285	($249,722)	($113,286)
8	Investment Projects		0	(91,093)	0	(91,093)	335,832	0	8,179
9	Total SEC		$1,988,113	($226,652)	$0	$1,761,461	$416,117	($249,722)	($105,107)
10									
11	304300	Structures & Improvement-WT							
12	Recurring Projects		$999,412	($183,380)	$0	$816,032	$86,179	($125,532)	($163,767)
13	Investment Projects		8,556,792	(55,114)	0	8,501,678	1,733,596	(1,074,798)	(1,383,635)
14	Total SEC		$9,556,203	($238,494)	$0	$9,317,709	$1,819,775	($1,200,330)	($1,547,402)
15									
16	304400	Structures & Improvement-T&D							
17	Recurring Projects		$150,938	($26,647)	$0	$124,291	$8,499	($18,959)	($14,020)
18	Investment Projects		83,856	0	0	83,856	26,108	(10,532)	(7,170)
19	Total SEC		$234,793	($26,647)	$0	$208,146	$34,607	($29,491)	($21,190)
20									
21	304500	Structures & Improvement - General							
22	Recurring Projects		$578,260	($19,160)	$0	$559,100	$16,986	($72,634)	($12,371)
23	Investment Projects		1,062,411	0	0	1,062,411	0	(133,449)	(204,227)
24	Total SEC		$1,640,670	($19,160)	$0	$1,621,510	$16,986	($206,083)	($216,598)
25									
26	304600	Struc &Imp-Offices							
27	Recurring Projects		$7,517	$0	$0	$7,517	$0	($944)	($441)
28	Investment Projects		0	0	0	0	0	0	0
29	Total SEC		$7,517	$0	$0	$7,517	$0	($944)	($441)
30									
31	304700	Struct & Imp-Store,Shop,Garage							
32	Recurring Projects		$0	($7,869)	$0	($7,869)	$1	$0	$407
33	Investment Projects		0	0	0	0	0	0	0
34	Total SEC		$0	($7,869)	$0	($7,869)	$1	$0	$407
35									
36	304800	Struct & Imp-Misc							
37	Recurring Projects		$62,469	$0	$0	$62,469	$5,380	($7,846)	($173)
38	Investment Projects		0	0	0	0	0	0	0
39	Total SEC		$62,469	$0	$0	$62,469	$5,380	($7,846)	($173)
40									
41	306000	Lake, River & Other Intakes							
42	Recurring Projects		$169,120	($49,616)	$0	$119,504	$8,366	($21,241)	($4,578)
43	Investment Projects		738,957	(16,520)	0	722,437	5,351	(92,820)	(7,083)
44	Total SEC		$908,077	($66,136)	$0	$841,941	$13,717	($114,061)	($11,661)
45									
46	309000	Supply Mains							
47	Recurring Projects		$9,862	$0	$0	$9,862	$0	($1,237)	($1,460)
48	Investment Projects		0	0	0	0	0	0	0
49	Total SEC		$9,862	$0	$0	$9,862	$0	($1,237)	($1,460)
50									
51	310000	Power Generation Equip							
52	Recurring Projects		$189,153	($3,562)	$0	$185,591	$2,086	($23,760)	($55,619)
53	Investment Projects		0	0	0	0	0	0	0
54	Total SEC		$189,153	($3,562)	$0	$185,591	$2,086	($23,760)	($55,619)
55									

Tennessee American Water Company
Safety and Environmental Compliance (SEC)
Investment Worksheet

Line #	Investment by Plant Account	Account Description	1	2	3	4	5	B	C
		SEC				=Col 1 + Col 2			
	Investment by Plant Account	Account Description	Additions	Retirements	CIAC	Net Investments (for Property Tax Calculation)	Cost of Removal Net of Salvage	Accumulated Deferred Income Taxes	Accumulated Depreciation
56	**311200**	**Pump Eqp Electric**							
57	Recurring Projects		$598,181	($216,775)	$0	$381,406	$102,983	($75,134)	($9,217)
58	Investment Projects		0	0	0	0	0	0	0
59	Total SEC		$598,181	($216,775)	$0	$381,406	$102,983	($75,134)	($9,217)
60									
61	**311500**	**Pumping Equipment Other**							
62	Recurring Projects		$1,242,965	($63,815)	$0	$1,179,150	$213,326	($156,124)	($21,799)
63	Investment Projects		0	0	0	0	0	0	0
64	Total SEC		$1,242,965	($63,815)	$0	$1,179,150	$213,326	($156,124)	($21,799)
65									
66	**311520**	**Pumping Equipment SOS**							
67	Recurring Projects		$2,027,972	($79,508)	$0	$1,948,464	$58,644	($254,730)	($194,221)
68	Investment Projects		0	0	0	0	0	0	0
69	Total SEC		$2,027,972	($79,508)	$0	$1,948,464	$58,644	($254,730)	($194,221)
70									
71	**320100**	**WT Equip Non-Media**							
72	Recurring Projects		$4,711,392	($820,358)	$0	$3,891,034	$958,345	($591,784)	($220,326)
73	Investment Projects		12,399,833	(305)	0	12,399,528	577	(1,557,515)	(738,702)
74	Total SEC		$17,111,226	($820,663)	$0	$16,290,563	$958,922	($2,149,299)	($959,028)
75									
76	**320200**	**Water Trmt Equip Filter Media**							
77	Recurring Projects		$1,442,378	($437,925)	$0	$1,004,453	$507,946	($181,172)	($1,712,256)
78	Investment Projects		0	0	0	0	0	0	0
79	Total SEC		$1,442,378	($437,925)	$0	$1,004,453	$507,946	($181,172)	($1,712,256)
80									
81	**330000**	**Dist Reservoirs & Standpipes**							
82	Recurring Projects		$325,193	$0	$0	$325,193	$28,595	($40,846)	($10,002)
83	Investment Projects		0	0	0	0	0	0	0
84	Total SEC		$325,193	$0	$0	$325,193	$28,595	($40,846)	($10,002)
85									
86	**330200**	**Ground Level Tanks**							
87	Recurring Projects		$0	$0	$0	$0	$0	$0	$0
88	Investment Projects		234,540	0	0	234,540	0	(29,461)	(28,585)
89	Total SEC		$234,540	$0	$0	$234,540	$0	($29,461)	($28,585)
90									
91	**331001**	**Transmission & Distribution Mains**							
92	Recurring Projects		$0	($2,261)	$0	($2,261)	$441	$0	$111
93	Investment Projects		0	0	0	0	0	0	0
94	Total SEC		$0	($2,261)	$0	($2,261)	$441	$0	$111
95									
96	**334100**	**Meters**							
97	Recurring Projects		$0	$0	$0	$0	$0	$0	$0
98	Investment Projects		0	0	0	0	0	0	0
99	Total SEC		$0	$0	$0	$0	$0	$0	$0
100									
101	**340200**	**Computer & Peripheral Equipment**							
102	Recurring Projects		$387,940	($9,001)	$0	$378,939	$45,373	($48,728)	($21,254)
103	Investment Projects		0	0	0	0	0	0	0
104	Total SEC		$387,940	($9,001)	$0	$378,939	$45,373	($48,728)	($21,254)
105									
106	**340230**	**Computer & Peripheral Equipment**							
107	Recurring Projects		$2,246	$0	$0	$2,246	$0	($283)	($93)
108	Investment Projects		0	0	0	0	0	0	0
109	Total SEC		$2,246	$0	$0	$2,246	$0	($283)	($93)
110									

Tennessee American Water Company
Safety and Environmental Compliance (SEC)
Investment Worksheet

			1	2	3	4	5	B	C
		SEC				=Col 1 + Col 2			
Line #	**Investment by Plant Account**	**Account Description**	**Additions**	**Retirements**	**CIAC**	**Net Investments (for Property Tax Calculation)**	**Cost of Removal Net of Salvage**	**Accumulated Deferred Income Taxes**	**Accumulated Depreciation**
111	**340300**	**Computer Software**							
112	Recurring Projects		$148,000	($2,217)	$0	$145,783	$2,227	($18,590)	($10,647)
113	Investment Projects		0	0	0	0	0	0	0
114	Total SEC		$148,000	($2,217)	$0	$145,783	$2,227	($18,590)	($10,647)
115									
116	**340330**	**Computer Software Other**							
117	Recurring Projects		$1,083	$0	$0	$1,083	$0	($136)	($100)
118	Investment Projects		0	0	0	0	0	0	0
119	Total SEC		$1,083	$0	$0	$1,083	$0	($136)	($100)
120									
121	**343000**	**Tools, Shop, Garage Equipment**							
122	Recurring Projects		$3,294	($2,705)	$0	$589	$0	($414)	($255)
123	Investment Projects		0	0	0	0	0	0	0
124	Total SEC		$3,294	($2,705)	$0	$589	$0	($414)	($255)
125									
126	**344000**	**Laboratory Equipment**							
127	Recurring Projects		$19,124	($160,363)	$0	($141,239)	$1,888	($2,403)	$11,133
128	Investment Projects		0	0	0	0	0	0	0
129	Total SEC		$19,124	($160,363)	$0	($141,239)	$1,888	($2,403)	$11,133
130									
131	**345000**	**Power Operated Equipment**							
132	Recurring Projects		$163,757	($25,428)	$0	$138,329	$4,311	($20,569)	($33,044)
133	Investment Projects		0	0	0	0	0	0	0
134	Total SEC		$163,757	($25,428)	$0	$138,329	$4,311	($20,569)	($33,044)
135									
136	**346100**	**Comm Equip Non-Telephone**							
137	Recurring Projects		$289,975	$0	$0	$289,975	$5,601	($36,423)	($24,283)
138	Investment Projects		0	0	0	0	0	0	0
139	Total SEC		$289,975	$0	$0	$289,975	$5,601	($36,423)	($24,283)
140									
141	**346200**	**Comm Equip Telephone**							
142	Recurring Projects		$2,060	$0	$0	$2,060	$216	($257)	($57)
143	Investment Projects		0	0	0	0	0	0	0
144	Total SEC		$2,060	$0	$0	$2,060	$216	($257)	($57)
145									
146	**346190**	**Remote Control & Instrument**							
147	Recurring Projects		$1,015,168	($157,181)	$0	$857,987	$73,461	($127,512)	($205,873)
148	Investment Projects		22,311	(9,494)	0	12,817	5,279	(2,802)	(10,683)
149	Total SEC		$1,037,479	($166,675)	$0	$870,804	$78,740	($130,314)	($216,556)
150									
151	**347000**	**Misc Equipment**							
152	Recurring Projects		$229,449	($26,285)	$0	$203,164	$11,615	($28,819)	($32,677)
153	Investment Projects		5,946	0	0	5,946	0	(747)	(3,607)
154	Total SEC		$235,395	($26,285)	$0	$209,110	$11,615	($29,566)	($36,284)
155									
156	**348000**	**Other Tangible Plant**							
157	Recurring Projects		$18,492	$0	$0	$18,492	$6,380	($2,323)	($2,148)
158	Investment Projects		0	0	0	0	0	0	0
159	Total SEC		$18,492	$0	$0	$18,492	$6,380	($2,323)	($2,148)
160									
161	**Expense:**								
162	Chemical Expense for WasteWater handling:		$0	$0	$0	$0	$0	$0	$0
163	Electric Power Expense for Wasterwater handling:		0	0	0	0	0	0	0
164	Hauling Expense for Wasterwater handling:		0	0	0	0	0	0	0
165	Total		$0	$0	$0	$0	$0	$0	$0
166									
167	**Total**		**$40,196,378**	**($2,602,835)**	**$0**	**$37,593,543**	**$4,339,593**	**($5,048,961)**	**($5,268,757)**

Tennessee American Water Company
Safety and Environmental Compliance (SEC)
Investment Worksheet

			6	7	8	9	10	11	12
		SEC	=Cols 1 + 3 + 5 + B + C	=Col 6 x 8.451452%	=(Col 1+2+3)x Depreciation Rate	= (Col 4 x Prop Tax Rate) + (Col 4 x Franchise Rate)		=Cols 7 + 8 + 9 + 10	= Col 11 / (1 - 3.191%)
Line #	**Investment by Plant Account**	**Account Description**	**Earnings Basis Net Investment (Rate Base)**	**Earnings Basis x Pre-Tax Return (PTR)**	**Depreciation Expense**	**Property Tax & Franchise Fees**	**Operational Expenses**	**Total Before Revenue Tax**	**Total With Revenue Tax**
1	**304100**	**Structures & Improvement-Supply**							
2	Recurring Projects		$232,294	$19,632	$6,089	$4,155	$0	$29,876	$30,861
3	Investment Projects		0	0	0	0	0	0	0
4	Total SEC		$232,294	$19,632	$6,089	$4,155	$0	$29,876	$30,861
5									
6	**304200**	**Structures & Improvement-Pump**							
7	Recurring Projects		$1,705,390	$144,130	$36,681	$25,029	$0	$205,840	$212,625
8	Investment Projects		344,011	29,074	(1,804)	(1,231)	0	26,040	26,898
9	Total SEC		$2,049,401	$173,204	$34,877	$23,799	$0	$231,880	$239,523
10									
11	**304300**	**Structures & Improvement-WT**							
12	Recurring Projects		$796,292	$67,298	$33,539	$11,025	$0	$111,862	$115,549
13	Investment Projects		7,831,955	661,914	349,419	114,864	0	1,126,197	1,163,318
14	Total SEC		$8,628,246	$729,212	$382,958	$125,889	$0	$1,238,059	$1,278,868
15									
16	**304400**	**Structures & Improvement-T&D**							
17	Recurring Projects		$126,458	$10,688	$2,647	$1,679	$0	$15,014	$15,509
18	Investment Projects		92,262	7,797	1,786	1,133	0	10,717	11,070
19	Total SEC		$218,719	$18,485	$4,434	$2,812	$0	$25,731	$26,579
20									
21	**304500**	**Structures & Improvement - General**							
22	Recurring Projects		$510,241	$43,123	$6,318	$7,554	$0	$56,994	$58,873
23	Investment Projects		724,735	61,251	12,005	14,354	0	87,610	90,498
24	Total SEC		$1,234,975	$104,373	$18,323	$21,908	$0	$144,604	$149,371
25									
26	**304600**	**Struc &Imp-Offices**							
27	Recurring Projects		$6,132	$518	$85	$102	$0	$705	$728
28	Investment Projects		0	0	0	0	0	0	0
29	Total SEC		$6,132	$518	$85	$102	$0	$705	$728
30									
31	**304700**	**Struct & Imp-Store,Shop,Garage**							
32	Recurring Projects		$408	$34	($57)	($106)	$0	($129)	($134)
33	Investment Projects		0	0	0	0	0	0	0
34	Total SEC		$408	$34	($57)	($106)	$0	($129)	($134)
35									
36	**304800**	**Struct & Imp-Misc**							
37	Recurring Projects		$59,830	$5,057	$306	$844	$0	$6,207	$6,411
38	Investment Projects		0	0	0	0	0	0	0
39	Total SEC		$59,830	$5,057	$306	$844	$0	$6,207	$6,411
40									
41	**306000**	**Lake, River & Other Intakes**							
42	Recurring Projects		$151,667	$12,818	$992	$1,615	$0	$15,425	$15,933
43	Investment Projects		644,405	54,462	5,996	9,761	0	70,218	72,533
44	Total SEC		$796,072	$67,280	$6,988	$11,375	$0	$85,643	$88,466
45									
46	**309000**	**Supply Mains**							
47	Recurring Projects		$7,165	$606	$184	$133	$0	$923	$954
48	Investment Projects		0	0	0	0		0	0
49	Total SEC		$7,165	$606	$184	$133	$0	$923	$954
50									
51	**310000**	**Power Generation Equip**							
52	Recurring Projects		$111,860	$9,454	$22,883	$2,507	$0	$34,845	$35,993
53	Investment Projects		0	0	0	0	0	0	0
54	Total SEC		$111,860	$9,454	$22,883	$2,507	$0	$34,845	$35,993
55									

Tennessee American Water Company
Safety and Environmental Compliance (SEC)
Investment Worksheet

			6	7	8	9	10	11	12
		SEC	=Cols 1 + 3 + 5 + B + C	=Col 6 x 8.451452%	=(Col 1+2+3)x Depreciation Rate	= (Col 4 x Prop Tax Rate) + (Col 4 x Franchise Rate)		=Cols 7 + 8 + 9 + 10	= Col 11 / (1 - 3.191%)
Line #	**Investment by Plant Account**	**Account Description**	**Earnings Basis Net Investment (Rate Base)**	**Earnings Basis x Pre-Tax Return (PTR)**	**Depreciation Expense**	**Property Tax & Franchise Fees**	**Operational Expenses**	**Total Before Revenue Tax**	**Total With Revenue Tax**
56	**311200**	**Pump Eqp Electric**							
57	Recurring Projects		$616,813	$52,130	$9,344	$5,153	$0	$66,627	$68,823
58	Investment Projects		0	0	0	0	0	0	0
59	Total SEC		$616,813	$52,130	$9,344	$5,153	$0	$66,627	$68,823
60									
61	**311500**	**Pumping Equipment Other**							
62	Recurring Projects		$1,278,368	$108,041	$21,578	$15,931	$0	$145,550	$150,348
63	Investment Projects		0	0	0	0	0	0	0
64	Total SEC		$1,278,368	$108,041	$21,578	$15,931	$0	$145,550	$150,348
65									
66	**311520**	**Pumping Equipment SOS**							
67	Recurring Projects		$1,637,665	$138,407	$35,657	$26,325	$0	$200,389	$206,994
68	Investment Projects		0	0	0	0	0	0	0
69	Total SEC		$1,637,665	$138,407	$35,657	$26,325	$0	$200,389	$206,994
70									
71	**320100**	**WT Equip Non-Media**							
72	Recurring Projects		$4,857,627	$410,540	$42,412	$52,571	$0	$505,523	$522,186
73	Investment Projects		10,104,193	853,951	135,155	167,527	0	1,156,632	1,194,757
74	Total SEC		$14,961,821	$1,264,491	$177,567	$220,097	$0	$1,662,155	$1,716,943
75									
76	**320200**	**Water Trmt Equip Filter Media**							
77	Recurring Projects		$56,896	$4,809	$338,400	$13,571	$0	$356,780	$368,540
78	Investment Projects		0	0	0	0	0	0	0
79	Total SEC		$56,896	$4,809	$338,400	$13,571	$0	$356,780	$368,540
80									
81	**330000**	**Dist Reservoirs & Standpipes**							
82	Recurring Projects		$302,940	$25,603	$6,764	$4,394	$0	$36,760	$37,972
83	Investment Projects		0	0	0	0	0	0	0
84	Total SEC		$302,940	$25,603	$6,764	$4,394	$0	$36,760	$37,972
85									
86	**330200**	**Ground Level Tanks**							
87	Recurring Projects		$0	$0	$0	$0	$0	$0	$0
88	Investment Projects		176,494	14,916	6,426	3,169	0	24,512	25,319
89	Total SEC		$176,494	$14,916	$6,426	$3,169	$0	$24,512	$25,319
90									
91	**331001**	**Transmission & Distribution Mains**							
92	Recurring Projects		$552	$47	($28)	($31)	$0	($12)	($13)
93	Investment Projects		0	0	0	0	0	0	0
94	Total SEC		$552	$47	($28)	($31)	$0	($12)	($13)
95									
96	**334100**	**Meters**							
97	Recurring Projects		$0	$0	$0	$0	$0	$0	$0
98	Investment Projects		0	0	0	0	0	0	0
99	Total SEC		$0	$0	$0	$0	$0	$0	$0
100									
101	**340200**	**Computer & Peripheral Equipment**							
102	Recurring Projects		$363,331	$30,707	$8,299	$5,120	$0	$44,125	$45,580
103	Investment Projects		0	0	0	0	0	0	0
104	Total SEC		$363,331	$30,707	$8,299	$5,120	$0	$44,125	$45,580
105									
106	**340230**	**Computer & Peripheral Equipment**							
107	Recurring Projects		$1,870	$158	$49	$30	$0	$238	$245
108	Investment Projects		0	0	0	0	0	0	0
109	Total SEC		$1,870	$158	$49	$30	$0	$238	$245
110									

Tennessee American Water Company
Safety and Environmental Compliance (SEC)
Investment Worksheet

			6	7	8	9	10	11	12
		SEC	=Cols 1 + 3 + 5 + B + C	=Col 6 x 8.451452%	=(Col 1+2+3)x Depreciation Rate	= (Col 4 x Prop Tax Rate) + (Col 4 x Franchise Rate)		=Cols 7 + 8 + 9 + 10	= Col 11 / (1 - 3.191%)
Line #	**Investment by Plant Account**	**Account Description**	**Earnings Basis Net Investment (Rate Base)**	**Earnings Basis x Pre-Tax Return (PTR)**	**Depreciation Expense**	**Property Tax & Franchise Fees**	**Operational Expenses**	**Total Before Revenue Tax**	**Total With Revenue Tax**
111	**340300**	**Computer Software**							
112	Recurring Projects		$120,990	$10,225	$2,668	$1,970	$0	$14,863	$15,353
113	Investment Projects		0	0	0	0	0	0	0
114	Total SEC		$120,990	$10,225	$2,668	$1,970	$0	$14,863	$15,353
115									
116	**340330**	**Computer Software Other**							
117	Recurring Projects		$847	$72	$20	$15	$0	$106	$110
118	Investment Projects		0	0	0	0	0	0	0
119	Total SEC		$847	$72	$20	$15	$0	$106	$110
120									
121	**343000**	**Tools, Shop, Garage Equipment**							
122	Recurring Projects		$2,625	$222	$41	$8	$0	$270	$279
123	Investment Projects		0	0	0	0	0	0	0
124	Total SEC		$2,625	$222	$41	$8	$0	$270	$279
125									
126	**344000**	**Laboratory Equipment**							
127	Recurring Projects		$29,742	$2,514	($1,427)	($1,908)	$0	($821)	($848)
128	Investment Projects		0	0	0	0	0	0	0
129	Total SEC		$29,742	$2,514	($1,427)	($1,908)	$0	($821)	($848)
130									
131	**345000**	**Power Operated Equipment**							
132	Recurring Projects		$114,455	$9,673	$9,725	$1,869	$0	$21,267	$21,967
133	Investment Projects		0	0	0	0	0	0	0
134	Total SEC		$114,455	$9,673	$9,725	$1,869	$0	$21,267	$21,967
135									
136	**346100**	**Comm Equip Non-Telephone**							
137	Recurring Projects		$234,870	$19,850	$12,208	$3,918	$0	$35,976	$37,161
138	Investment Projects		0	0	0	0	0	0	0
139	Total SEC		$234,870	$19,850	$12,208	$3,918	$0	$35,976	$37,161
140									
141	**346200**	**Comm Equip Telephone**							
142	Recurring Projects		$1,962	$166	$72	$28	$0	$266	$275
143	Investment Projects		0	0	0	0	0	0	0
144	Total SEC		$1,962	$166	$72	$28	$0	$266	$275
145									
146	**346190**	**Remote Control & Instrument**							
147	Recurring Projects		$755,244	$63,829	$36,121	$11,592	$0	$111,542	$115,219
148	Investment Projects		14,105	1,192	540	173	0	1,905	1,968
149	Total SEC		$769,349	$65,021	$36,661	$11,765	$0	$113,447	$117,187
150									
151	**347000**	**Misc Equipment**							
152	Recurring Projects		$179,568	$15,176	$12,860	$2,745	$0	$30,781	$31,796
153	Investment Projects		1,592	135	376	80	0	591	611
154	Total SEC		$181,160	$15,311	$13,237	$2,825	$0	$31,373	$32,407
155									
156	**348000**	**Other Tangible Plant**							
157	Recurring Projects		$20,401	$1,724	$943	$250	$0	$2,917	$3,013
158	Investment Projects		0	0	0	0	0	0	0
159	Total SEC		$20,401	$1,724	$943	$250	$0	$2,917	$3,013
160									
161	**Expense:**								
162	Chemical Expense for WasteWater handling:		$0	$0	$0	$0	$0	$0	$0
163	Electric Power Expense for Wasterwater handling:		0	0	0	0	0	0	0
164	Hauling Expense for Wasterwater handling:		0	0	0	0	0	0	0
165	Total		$0	$0	$0	$0	$0	$0	$0
166									
167	**Total**		**$34,218,253**	**$2,891,939**	**$1,155,274**	**$507,916**	**$0**	**$4,555,129**	**$4,705,275**

**Authorization of Tennessee American Water Capital Recovery Riders
Since Last Rate Case (Docket No. 12-00049)**

TPUC Docket No.	Effective Date	Rider	Authorized Annual Change	Total Cumulative Rider	Reconciliation Authorized	Individual Authorized Rider Total	Capital Riders Cumulative Total	TCJA Offset	Impact to Bill
13-00130	4/15/2014	QIIP	0.790%	0.790%	0.000%	0.790%			
		EDI	0.180%	0.180%	0.000%	0.180%			
		SEC	0.110%	0.110%	0.000%	0.110%			
		Total	1.080%		0.000%		**1.080%**	**0.00%**	**1.080%**
14-00121	6/30/2015	QIIP	1.340%	2.130%	0.000%	2.130%			
		EDI	-0.130%	0.050%	0.000%	0.050%			
		SEC	3.430%	3.540%	0.000%	3.540%			
		Total	4.640%		0.000%		**5.720%**	**0.00%**	**5.720%**
15-00029*	11/1/2015	QIIP	0.000%	2.130%	0.254%	2.384%			
		EDI	0.000%	0.050%	-0.150%	-0.100%			
		SEC	0.000%	3.540%	0.064%	3.604%			
		Total	0.000%	5.720%	0.168%		**5.888%**	**0.00%**	**5.888%**
15-00111	3/15/2016	QIIP	2.430%	4.560%	0.000%	4.560%			
		EDI	0.050%	0.100%	0.000%	0.100%			
		SEC	2.180%	5.720%	0.000%	5.720%			
		Total	4.660%		0.000%		**10.380%**	**0.00%**	**10.380%**
16-00022*	10/11/2016	QIIP	0.000%	4.560%	1.166%	5.726%			
		EDI	0.000%	0.100%	-0.178%	-0.078%			
		SEC	0.000%	5.720%	-0.118%	5.602%			
		Total	0.000%		0.870%		**11.250%**	**0.00%**	**11.250%**
16-00126	3/14/2017	QIIP	2.960%	7.520%	0.000%	7.520%			
		EDI	0.240%	0.340%	0.000%	0.340%			
		SEC	0.370%	6.090%	0.000%	6.090%			
		Total	3.570%		0.000%		**13.950%**	**0.00%**	**13.950%**
17-00020*	8/16/2017	QIIP	0.000%	7.520%	1.763%	9.283%			
		EDI	0.000%	0.340%	-0.031%	0.309%			
		SEC	0.000%	6.090%	-0.826%	5.264%			
		Total	0.000%		0.906%		**14.856%**	**0.00%**	**14.856%**
17-00124	4/10/2018	QIIP	2.530%	10.050%	0.000%	10.050%			
		EDI	0.070%	0.410%	0.000%	0.410%			
		SEC	-0.120%	5.970%	0.000%	5.970%			
		Total	2.480%		0.000%		**16.430%**	**0.00%**	**16.430%**
18-00022*	12/17/2018	QIIP	0.000%	10.050%	1.542%	11.592%			
		EDI	0.000%	0.410%	-0.081%	0.329%			
		SEC	0.000%	5.970%	-0.628%	5.342%			
		Total	0.000%		0.833%		**17.263%**	**0.00%**	**17.263%**
18-00120	9/1/2019	QIIP	1.600%	11.650%	0.000%	11.650%			
		EDI	0.240%	0.650%	0.000%	0.650%			
		SEC	0.910%	6.880%	0.000%	6.880%			
		Total	2.750%		0.000%		**19.180%**	**-6.62%**	**12.560%**
19-00031*	12/9/2019	QIIP	0.000%	11.650%	-1.140%	10.510%			
		EDI	0.000%	0.650%	-0.320%	0.330%			
		SEC	0.000%	6.880%	-0.920%	5.960%			
		Total	0.000%		-2.380%		**16.800%**	**-6.62%**	**10.180%**
19-00105	1/1/2020	QIIP	2.630%	14.280%	0.000%	14.280%			
		EDI	0.490%	1.140%	0.000%	1.140%			
		SEC	1.910%	8.790%	0.000%	8.790%			
		Total	5.030%		0.000%		**24.210%**	**-6.62%**	**17.590%**
20-00028*	4/1/2020	QIIP	0.000%	14.280%	-2.310%	11.970%			
		EDI	0.000%	1.140%	-0.510%	0.630%			
		SEC	0.000%	8.790%	-1.260%	7.530%			
		Total	0.000%		-4.080%		**20.130%**	**-6.62%**	**13.510%**
20-00128	1/1/2021	QIIP	4.860%	19.140%	0.000%	19.140%			
		EDI	0.110%	1.250%	0.000%	1.250%			
		SEC	0.910%	9.700%	0.000%	9.700%			
		Total	5.880%		0.000%		**30.090%**	**-11.16%**	**18.930%**
22-00XXX	8/1/2022	QIIP	5.080%	24.220%	0.000%	24.220%			
		EDI	0.660%	1.910%	0.000%	1.910%			
		SEC	0.270%	9.970%	0.000%	9.970%			
		Total	6.010%		0.000%		**36.100%**	**-11.16%**	**24.940%**

* Reconciliations are only effective until December 31 of the year authorized by the TPUC.

CLASSIFICATION OF SERVICE

ECONOMIC DEVELOPMENT INVESTMENT PROGRAM – RIDER

1. Applicability

In addition to the other charges provided for in this Tariff under Service Classifications Residential, Commercial, Industrial, Other Public Authority, Sales for Resale, and Private Fire, a Economic Development Investment Program ("EDI") Rider will apply to customers in all service areas.

The above rider will be recomputed annually and be adjusted periodically to incorporate the Annual Reconciliation Factor.

2. Definitions

For the purposes of this Rider:

"Actual EDI Investment Amount" means the amount of actual capital investment and associated operating expenses of the Company for the Economic Development Investment Program and not otherwise included in current base rates. At the time of the Company's next general rate case proceeding, all prudently incurred Actual EDI Investment Amounts associated with this Rider shall be included in base rates.

"Annual Reconciliation Factor" means an adjustment factor to true-up rates from forecasted costs to the actual costs incurred through application of 1) the Budget-to-Actual Adjustment and 2) the Over-Under Collection Adjustment, and the 3) Earnings Test Adjustment, as adjusted for Interest.

"Annual Review Period" means the twelve-month period between the annual adjustments of the EDI Percentage Rate. For the first year beyond the attrition year of the base rate case, this review period may be shorter or longer than a twelve-month period to cover expenditures between the attrition year and the start of the subsequent calendar year.

"Commission" means the Tennessee Public Utility Commission.

"Budget-to-Actual Adjustment" means the adjustment to EDI for the applicable coming annual period due to the difference between the Forecasted EDI Investment and Expense Amount and the Actual EDI Investment and Expense Amount.

(T) Denotes Change in text

"Consumer Advocate" means the Consumer Advocate and Protection Division of the Office of the Tennessee Attorney General.

"Forecasted EDI Investment Amount" means the amount of forecasted capital investment of the Company for the Economic Development Investment Program and not otherwise included in current base rates.

"Over-Under Collection Adjustment" means the adjustment to EDI for the applicable coming annual period due to the net amount of over or under collections. This will include (T) over-under collections from the annual review period EDI and any remaining balance of the over-under collection from the prior reconciliation of the EDI.

"Relevant Rate Order" means the final order of the Commission in the most recent rate case of the Company fixing the rates of the Company or the most recent final order of the Commission specifically prescribing or fixing the factors and procedures to be used in the application of this Rider.

3. **General Description**

EDI allows the Company to recover outside of a rate case its qualifying incremental non-revenue producing plant infrastructure investment and expenses. For purposes of this Rider, qualifying EDI investment includes the following:

Distribution, Production, and Other Infrastructure – Distribution, production, and other infrastructure that may be identified as being for the purpose of economic development.

Economic Development Expenses – Operational expenses that are specifically to support economic development and economic development investment utility plant.

EDI Investment is to be identifiable on the Company's books and segregated into the following general accounts:

Account 331 – Transmission & Distribution Mains;
Account 333 – Services;
Account 334 – Meters & Meter Installations;
Account 335 – Hydrants;
Account 320 – Water Treatment Equipment, Non-Media;
Account 311 – Pumping Equipment;
Account 303 – Land and Land Rights;
Account 304 – Structures and Improvements;

(T) Denotes Change in text

Account 306 – Lake, River and Other Intakes;
Account 307 – Wells and Springs;
Account 309 – Supply Mains;
Account 310 – Power Generation Equipment;
Account 330 – Distribution Reservoirs and Standpipes; and
Account 330003 – Capitalized Tank Painting.

4. Determination of the Economic Development Investment Program Percentage Rate

(A) The EDI percentage shall be expressed as a percentage carried to two (2) decimal places. The EDI percentage shall be applied to the total amount billed to each Customer based on the Company's otherwise applicable rates and charges.

(B) The EDI percentage shall be calculated on an annual prospective basis as follows:

FORECASTED EDI Investment Amount
Less EDI Plant Retirements (Net of Cost of Removal & Salvage)
Less Contributions in Aid of Construction
Less Accumulated Depreciation
Less Accumulated Deferred Income Taxes
Net Forecasted EDI Qualifying Investment

Multiplied by the Pre-Tax ROR set forth in the Relevant Rate Order

Allowed Forecasted EDI Pre-Tax Return
Plus Depreciation Expense
Plus Property Taxes
Plus Franchise Taxes
Plus Economic Development Operational Expenses
Subtotal Forecasted EDI Revenue Requirement Before Revenue Tax

Divided by 1 minus the following:
Forfeited Discounts Rate
Plus Uncollectible Expense Rate
Plus Gross Receipts Tax Rate
Total Forecasted EDI Revenue Requirement

(T) Denotes Change in text

Divided by Relevant Rate Order Volumetric & Metered Revenue

EDI Percentage Rate

Where:

Accumulated Depreciation = Accumulated depreciation calculated by debiting for Forecasted EDI plant removed from service, and crediting for new accumulations using rates approved in the Relevant Rate Order on new investments, less retirements and CIAC.

Accumulated Deferred Income Taxes = An average of the forecasted accumulated deferred income taxes related to qualified forecasted EDI investment at the beginning and end of the year.

Contributions in Aid of Construction = Non-investor supplied funds used in the construction of forecasted EDI infrastructure.

Depreciation Expense = Forecasted cumulative qualified EDI investment net of retirements and CIAC, multiplied by depreciation rates approved in the Relevant Rate Order.

Forfeited Discount Rate = Forecasted EDI Revenue Requirement before gross receipts taxes, uncollectible expense and forfeited discounts multiplied by composite forfeited discount factor approved in the Relevant Rate Order.

Franchise Taxes = Forecasted cumulative qualified EDI investment multiplied by composite franchise tax rate approved in the Relevant Rate Order.

Gross Receipts Tax Rate = Forecasted EDI Revenue Requirement before gross receipts taxes, uncollectible expense and forfeited discounts multiplied by composite gross receipts tax rate approved in the Relevant Rate Order.

Property Taxes = Forecasted cumulative qualified EDI investment multiplied by composite property tax rate approved in the Relevant Rate Order.

EDI Plant Retirements = Forecasted EDI plant removed from service net of any associated cost of removal and salvage.

(T) Denotes Change in text

Forecasted EDI Investment Amount = Average forecasted EDI additions to plant infrastructure as described in Section 3, computed by use of average of 12 end-of-month balances.

Economic Development Expenses = the incremental operational expenses that are specifically to support economic development or economic development utility plant.

Uncollectible Expense = Forecasted EDI Revenue Requirement before gross receipts taxes, uncollectible expense and forfeited discounts multiplied by composite uncollectible factor approved in the Relevant Rate Order.

Volumetric & Metered Revenue = the revenues authorized in the Relevant Rate Order for volumetric water sales, meter charges, and private fire service charges.

(C) The total amount to be recovered through the EDI is the EDI Percentage Rate as adjusted for the Annual Reconciliation Factor Percentage Rate.

5. Determination of the Annual Reconciliation Factor Percentage Rate

(A) The Annual Reconciliation Factor Percentage shall be expressed as a percentage carried to two (2) decimal places. The Annual Reconciliation Factor Percentage shall be applied to the total amount billed to each Customer based on the Company's otherwise applicable rates and charges.

(B) The Annual Reconciliation Factor Percentage Rate will be computed as follows:

Budget-to-Actual Adjustment
Plus Over-Under Collection Adjustment
Plus Earnings Test Adjustment
Plus Interest
Annual Reconciliation Amount

Divided by 9/12 of the Relevant Rate Order Volumetric & Metered Revenue

Annual Reconciliation Factor Percentage Rate

(C) Computation of the Budget-to-Actual Adjustment.

(T) Denotes Change in text

The Budget-to-Actual Adjustment will be computed as follows:

ACTUAL EDI Investment Amount for the Annual Review Period
Less EDI Plant Retirements (Net of Cost of Removal & Salvage)
Less Contributions in Aid of Construction
Less Accumulated Depreciation
Less Accumulated Deferred Income Taxes
Net Actual EDI Qualifying Investment

Multiplied by the Pre-Tax ROR set forth in the Relevant Rate Order

Allowed Actual EDI Pre-Tax Return
Plus Depreciation Expense
Plus Property Taxes
Plus Franchise Taxes
Plus Economic Development Operational Expenses
Subtotal Actual EDI Revenue Requirement Before Revenue Tax

Divided by 1 minus the following:

Forfeited Discounts Rate
Plus Uncollectible Expense Rate
Plus Gross Receipts Tax Rate
Total Actual EDI Revenue Requirement

Less Total Forecasted EDI Revenue Requirement

Budget-to-Actual Adjustment

Where:

Accumulated Depreciation = Accumulated depreciation calculated by debiting for Forecasted EDI plant removed from service, and crediting for new accumulations using rates approved in the Relevant Rate Order on new investments, less retirements and CIAC

Accumulated Deferred Income Taxes = An average of the actual accumulated deferred income taxes related to actual EDI investment at the beginning and end of the year.

(T) Denotes Change in text

Contributions in Aid of Construction = Non-investor supplied funds used in the construction of actual EDI infrastructure.

Depreciation Expense = Actual cumulative qualified EDI investment net of retirements and CIAC multiplied by depreciation rates approved in the Relevant Rate Order.

Forfeited Discount Rate = Actual EDI Revenue Requirement before gross receipts taxes, uncollectible expense and forfeited discounts multiplied by composite forfeited discount factor approved in the Relevant Rate Order.

Franchise Taxes = Actual cumulative qualified EDI investment multiplied by composite franchise tax rate approved in the Relevant Rate Order.

Gross Receipts Tax Rate = Actual EDI Revenue Requirement before gross receipts taxes, uncollectible expense and forfeited discounts multiplied by composite gross receipts tax rate approved in the Relevant Rate Order.

Property Taxes = Actual cumulative qualified EDI investment multiplied by composite property tax rate approved in the Relevant Rate Order.

EDI Plant Retirements = Actual EDI plant removed from service net of any associated cost of removal and salvage.

Actual EDI Investment Amount = Average actual EDI additions to plant infrastructure as described in Section 3, computed by use of average of 12 end-of-month balances.

Economic Development Expenses = the incremental operational expenses that are specifically to support economic development or economic development utility plant.

Uncollectible Expense = Actual EDI Revenue Requirement before gross receipts taxes, uncollectible expense and forfeited discounts multiplied by composite uncollectible factor approved in the Relevant Rate Order.

Volumetric & Metered Revenue = the revenues authorized in the Relevant Rate Order for volumetric water sales, meter charges, and private fire service charges.

(T) Denotes Change in text

(D) Computation of the Over-Under Collection Adjustment.

The Company will identify and record the total amount of the EDI Collected from Customers for the Annual Review Period. The difference between the Total EDI Collected from Customers and the Total Budgeted EDI Revenue Requirement shall constitute the Over-
(T) Under Collection Adjustment. This adjustment shall include any remaining Over-Under
(T) amount from the prior period reconciliation during the Annual Review Period in addition to
(T) the Over-Under collection amount for the EDI during the Annual Review Period.

(E) Computation of the Earnings Test Adjustment.

If the earnings attained by the Company for the Annual Review Period exceed the earnings allowed for the Annual Review Period by applying the overall rate of return authorized in the Relevant Rate Order, then any such earnings difference shall constitute the Earnings Test Adjustment. If the earnings attained by the Company for the Annual Review Period are less than the earnings allowed for the Annual Review Period by applying the overall rate of return authorized in the Relevant Rate Order, then no Earnings Test Adjustment shall be recognized.

Any Earnings Test Adjustment shall be allocated among the Qualified Infrastructure Improvement Program Rider, the Economic Development Investment Rider, and the Safety and Environmental Compliance Rider based on the pro-rata revenues collected under these riders for the Annual Review Period for purposes of computing new rate adjustments.

(F) Computation of Interest.

Interest will be computed as follows:

Budget-to-Actual Adjustment
Plus Over-Under Collection Adjustment
Plus Earnings Test Adjustment

Total Amount Subject to Interest
Interest Rate Multiplied by 50%

Total Interest

Where "Interest Rate" equals the prime rate value published in the "Federal Reserve Bulletin" or in the Federal Reserve's "Selected Interest Rates" for the most recent preceding month.

(T) Denotes Change in text

ISSUED: **October 3, 2017** **EFFECTIVE: November 2, 2017**

BY:

Valoria V. Armstrong
PRESIDENT

109 Wiehl Street
Chattanooga, Tennessee 37403

6. New Base Rates

The EDI rider will be reset at zero upon the establishment of new base rates to customer billings that provide for the prospective recovery of the annual costs that had theretofore been recovered under the EDI. Thereafter, only the costs of new EDI eligible plant additions that have not previously been reflected in the Company's rate base, would be reflected in new annual prospective EDI filings.

7. Annual EDI Percentage Rate Filing

On or before December 1 of each year, the Company shall submit to the Commission a calculation of the EDI Percentage Rate for the following calendar year. The Annual EDI Percentage Rate Filing shall be verified by an officer of the Company. The Annual EDI Percentage Rate Filing shall include a calculation to adjust revenue to recover costs related to the Forecasted EDI Investment Amount, with such revenue adjustment applied through the EDI Percentage Rate. The EDI Percentage Rate shall become effective on January 1 of each year and be applied as an adjustment to Customers' bills for the remainder of the calendar year.

The Company will include in its Annual EDI Percentage Rate Filing the following information at a minimum: (a) computation of the EDI Percentage Rate, including the detailed calculation of each component, (b) a budget of the Forecasted EDI Investment Amount and Forecasted Economic Development Operational Expenses adopted by the Company's Board of Directors, (c) any related Strategic Capital Expenditures Plans, (d) statements demonstrating how each projected capital investment comprising the Forecasted EDI Investment Amount and each projected operational expense comprising the Forecasted Economic Development Operational Expenses meet the requirements for recovery under this Rider set forth in Section 3, and (e) such other information as the Commission may direct.

The Company will simultaneously copy the Consumer Advocate on its Annual EDI Percentage Rate Filing.

8. Annual Reconciliation Filing with the Commission

On or before March 1 of each year, the Company shall submit to the Commission a reconciliation of the results of the operation of the EDI for the previous Annual Review Period. The Annual Reconciliation Filing shall be verified by an officer of the Company. The annual reconciliation shall include a calculation to adjust revenue collected under this EDI Rider in effect for the prior Annual Review Period to an amount equivalent to the actual level of prudently-incurred EDI cost for the prior Annual Review Period, with such revenue adjustment applied through the Annual Reconciliation Factor Percentage Rate. The Annual Reconciliation Factor Percentage Rate shall become effective on

(T) Denotes Change in text

April 1 of each year and be applied as an adjustment to Customers' bills for the remainder of the calendar year.

The Company will include in its Annual Reconciliation Filing the following information at a minimum: (a) a schedule of all journal entries made related to this Rider for the Annual Review Period, including any related general ledger support, (b) actual billing determinants by month as used in the computation of the Total EDI Collected from Customers for the Annual Review Period, (c) capitalization policy effective for the Annual Review Period, (d) computation of the Annual Reconciliation Factor Percentage Rate, including the detailed calculation of each component, (e) schedules of the Actual EDI Investment Amount and Actual Economic Development Operational Expenses, including related general ledger support, (f) a schedule of any proposed prior period adjustments, (g) an affirmative statement of whether the Company is aware of any changes in market conditions or other factors that may affect whether the Rider is still in the public interest, including the identification of such factors if they exist, (h) the cumulative amount of EDI collected from customers under this Rider, and (i) such other information as the Commission may direct.

The Company will simultaneously copy the Consumer Advocate on its Annual Reconciliation Filing.

9. Notice Requirements

The Company will file revised tariffs for Commission approval upon 30 days' notice to implement a decrement or an increment each January 1 and April 1. Along with the tariff filing, the Company will include a copy of the computation of the new rate adjustment. The Company will simultaneously copy the Consumer Advocate on this filing.

10. Public Interest Review

Nothing herein shall be construed to eliminate or otherwise restrict the opportunity of the Consumer Advocate or any other interested party from seeking a review of this Rider, as permitted by law and the rules and regulations of the Commission, for a reconsideration of whether it remains in the public interest.

(T) Denotes Change in text

CLASSIFICATION OF SERVICE

QUALIFIED INFRASTRUCTURE IMPROVEMENT PROGRAM – RIDER

1. Applicability

In addition to the other charges provided for in this Tariff under Service Classifications Residential, Commercial, Industrial, Other Public Authority, Sales for Resale, and Private Fire, a Qualified Infrastructure Improvement Program ("QIIP") Rider will apply to customers in all service areas.

The above rider will be recomputed annually and be adjusted periodically to incorporate the Annual Reconciliation Factor.

2. Definitions

For the purposes of this Rider:

"Actual QIIP Investment Amount" means the amount of actual capital investment of the Company for the Qualified Infrastructure Improvement Program and not otherwise included in current base rates. At the time of the Company's next general rate case proceeding, all prudently incurred Actual QIIP Investment Amounts associated with this Rider shall be included in base rates.

"Annual Reconciliation Factor" means an adjustment factor to true-up rates from forecasted costs to the actual costs incurred through application of 1) the Budget-to-Actual Adjustment and 2) the Over-Under Collection Adjustment, and the 3) Earnings Test Adjustment, as adjusted for Interest.

"Annual Review Period" means the twelve-month period between the annual adjustments of the QIIP Percentage Rate.

"Commission" means the Tennessee Public Utility Commission.

"Budget-to-Actual Adjustment" means the adjustment to QIIP for the applicable coming annual period due to the difference between the Forecasted QIIP Investment Amount and the Actual QIIP Investment Amount.

(T) Denotes change in text

"Consumer Advocate" means the Consumer Advocate and Protection Division of the Office of the Tennessee Attorney General.

"Forecasted QIIP Investment Amount" means the amount of forecasted capital investment of the Company for the Qualified Infrastructure and Investment Program and not otherwise included in current base rates.

"Over-Under Collection Adjustment" means the adjustment to QIIP for the applicable
(T) coming annual period due to the net amount of over or under collections. This will include
(T) over-under collections from the annual review period EDI and any remaining balance of the
(T) over-under collection from the prior reconciliation of the EDI.

"Relevant Rate Order" means the final order of the Commission in the most recent rate case of the Company fixing the rates of the Company or the most recent final order of the Commission specifically prescribing or fixing the factors and procedures to be used in the application of this Rider.

3. General Description

QIIP allows the Company to recover outside of a rate case its qualifying incremental non-revenue producing plant infrastructure investment. For purposes of this Rider, qualifying QIIP investment includes the following:

Distribution Infrastructure – Replacement distribution and transmission mains and valves installed as replacements for existing facilities, reinforcement of existing facilities or otherwise insuring reliability of existing facilities; Hydrants, Services, Meters and Meter Installations – installed as in-kind replacements, reinforcements or insuring reliability of existing facilities; Unreimbursed funds related to capital projects to relocate facilities required by governmental highway projects; Capitalized tank repairs and maintenance that serve to replace, reinforce, or otherwise insure reliability of existing facilities.

Production and Pumping Infrastructure – Replacement of water treatment facilities and equipment installed as replacements for existing facilities, reinforcement of existing facilities or otherwise insuring reliability of existing facilities; Raw Water and Finished Water pumping equipment and structures installed as replacements, reinforcements or otherwise insuring reliability of existing facilities.

Other Infrastructure – Infrastructure designed to utilize alternative fuels.

(T) Denotes change in text

QIIP Investment is to be identifiable on the Company's books and segregated into the following general accounts:

Account 331 – Transmission & Distribution Mains;
Account 333 – Services;
Account 334 – Meters & Meter Installations;
Account 335 – Hydrants;
Account 320 – Water Treatment Equipment, Non-Media;
Account 311 – Pumping Equipment;
Account 303 – Land and Land Rights;
Account 304 – Structures and Improvements;
Account 306 – Lake, River and Other Intakes;
Account 307 – Wells and Springs;
Account 309 – Supply Mains;
Account 310 – Power Generation Equipment
Account 330 – Distribution Reservoirs and Standpipes;
Account 341 – Transportation Equipment; and
Account 330003 – Capitalized Tank Painting.

4. Determination of the Qualified Infrastructure Improvement Program Percentage Rate

(A) The QIIP percentage shall be expressed as a percentage carried to two (2) decimal places. The QIIP percentage shall be applied to the total amount billed to each Customer based on the Company's otherwise applicable rates and charges.

(B) The QIIP percentage shall be calculated on an annual prospective basis as follows:

FORECASTED QIIP Investment Amount
Less QIIP Plant Retirements (Net of Cost of Removal & Salvage)
Less Contributions in Aid of Construction
Less Accumulated Depreciation
Less Accumulated Deferred Income Taxes
Net Forecasted QIIP Qualifying Investment

Multiplied by the Pre-Tax ROR set forth in the Relevant Rate Order

Allowed Forecasted QIIP Pre-Tax Return
Plus Depreciation Expense

(T) Denotes change in text

Plus Property Taxes
Plus Franchise Taxes
Subtotal Forecasted QIIP Revenue Requirement Before Revenue Tax

Divided by 1 minus the following:
Forfeited Discounts Rate
Plus Uncollectible Expense Rate
Plus Gross Receipts Tax Rate
Total Forecasted QIIP Revenue Requirement

Divided by Relevant Rate Order Volumetric & Metered Revenue

QIIP Percentage Rate

Where:

Accumulated Depreciation = Accumulated depreciation calculated by debiting for Forecasted QIIP plant removed from service, and crediting for new accumulations using rates approved in the Relevant Rate Order on new investments, less retirements and CIAC.

Accumulated Deferred Income Taxes = An average of the forecasted accumulated deferred income taxes related to qualified forecasted QIIP investment at the beginning and end of the year.

Contributions in Aid of Construction = Non-investor supplied funds used in the construction of forecasted QIIP infrastructure.

Depreciation Expense = Forecasted cumulative qualified QIIP investment net of retirements and CIAC, multiplied by depreciation rates approved in the Relevant Rate Order.

Forfeited Discount Rate = Forecasted QIIP Revenue Requirement before gross receipts taxes, uncollectible expense and forfeited discounts multiplied by composite forfeited discount factor approved in the Relevant Rate Order.

Franchise Taxes = Forecasted cumulative qualified QIIP investment multiplied by composite franchise tax rate approved in the Relevant Rate Order.

Gross Receipts Tax Rate = Forecasted QIIP Revenue Requirement before gross receipts taxes, uncollectible expense and forfeited discounts multiplied by composite gross receipts tax rate approved in the Relevant Rate Order.

Property Taxes = Forecasted cumulative qualified QIIP investment multiplied by composite property tax rate approved in the Relevant Rate Order.

QIIP Plant Retirements = Forecasted QIIP plant removed from service net of any associated cost of removal and salvage.

Forecasted QIIP Investment Amount = Average forecasted QIIP additions to plant infrastructure as described in Section 3, computed by use of average of 12 end-of-month balances.

Uncollectible Expense = Forecasted QIIP Revenue Requirement before gross receipts taxes, uncollectible expense and forfeited discounts multiplied by composite uncollectible factor approved in the Relevant Rate Order.

Volumetric & Metered Revenue = the revenues authorized in the Relevant Rate Order for volumetric water sales, meter charges, and private fire service charges.

(C) The total amount to be recovered through the QIIP is the QIIP Percentage Rate as adjusted for the Annual Reconciliation Factor Percentage Rate.

5. Determination of the Annual Reconciliation Factor Percentage Rate

(A) The Annual Reconciliation Factor Percentage shall be expressed as a percentage carried to two (2) decimal places. The Annual Reconciliation Factor Percentage shall be applied to the total amount billed to each Customer based on the Company's otherwise applicable rates and charges.

(B) The Annual Reconciliation Factor Percentage Rate will be computed as follows:

Budget-to-Actual Adjustment
Plus Over-Under Collection Adjustment

(T) Denotes change in text

Plus Earnings Test Adjustment
Plus Interest
Annual Reconciliation Amount

Divided by 9/12 of the Relevant Rate Order Volumetric & Metered Revenue

Annual Reconciliation Factor Percentage Rate

(C) Computation of the Budget-to-Actual Adjustment.

The Budget-to-Actual Adjustment will be computed as follows:

ACTUAL QIIP Investment Amount for the Annual Review Period
Less QIIP Plant Retirements (Net of Cost of Removal & Salvage)
Less Contributions in Aid of Construction
Less Accumulated Depreciation
Less Accumulated Deferred Income Taxes
Net Actual QIIP Qualifying Investment

Multiplied by the Pre-Tax ROR set forth in the Relevant Rate Order

Allowed Actual QIIP Pre-Tax Return
Plus Depreciation Expense
Plus Property Taxes
Plus Franchise Taxes
Subtotal Actual QIIP Revenue Requirement Before Revenue Tax

Divided by 1 minus the following:

Forfeited Discounts Rate
Plus Uncollectible Expense Rate
Plus Gross Receipts Tax Rate
Total Actual QIIP Revenue Requirement

Less Total Forecasted QIIP Revenue Requirement

Budget-to-Actual Adjustment

Where:

(T) Denotes change in text

Accumulated Depreciation = Accumulated depreciation calculated by debiting for Forecasted QIIP plant removed from service, and crediting for new accumulations using rates approved in the Relevant Rate Order on new investments, less retirements and CIAC

Accumulated Deferred Income Taxes = An average of the actual accumulated deferred income taxes related to actual QIIP investment at the beginning and end of the year.

Contributions in Aid of Construction = Non-investor supplied funds used in the construction of actual QIIP infrastructure.

Depreciation Expense = Actual cumulative qualified QIIP investment net of retirements and CIAC multiplied by depreciation rates approved in the Relevant Rate Order.

Forfeited Discount Rate = Actual QIIP Revenue Requirement before gross receipts taxes, uncollectible expense and forfeited discounts multiplied by composite forfeited discount factor approved in the Relevant Rate Order.

Franchise Taxes = Actual cumulative qualified QIIP investment multiplied by composite franchise tax rate approved in the Relevant Rate Order.

Gross Receipts Tax Rate = Actual QIIP Revenue Requirement before gross receipts taxes, uncollectible expense and forfeited discounts multiplied by composite gross receipts tax rate approved in the Relevant Rate Order.

Property Taxes = Actual cumulative qualified QIIP investment multiplied by composite property tax rate approved in the Relevant Rate Order.

QIIP Plant Retirements = Actual QIIP plant removed from service net of any associated cost of removal and salvage.

Actual QIIP Investment Amount = Average actual QIIP additions to plant infrastructure as described in Section 3, computed by use of average of 12 end-of-month balances.

Uncollectible Expense = Actual QIIP Revenue Requirement before gross receipts taxes, uncollectible expense and forfeited discounts multiplied by composite uncollectible factor approved in the Relevant Rate Order.

(T) Denotes change in text

Volumetric & Metered Revenue = the revenues authorized in the Relevant Rate Order for volumetric water sales, meter charges, and private fire service charges.

(D) Computation of the Over-Under Collection Adjustment.

The Company will identify and record the total amount of the QIIP Collected from Customers for the Annual Review Period. The difference between the Total QIIP Collected from Customers and the Total Budgeted QIIP Revenue Requirement shall constitute the
(T) Over-Under Collection Adjustment. . This adjustment shall include any remaining Over-
(T) Under amount from the prior period reconciliation during the Annual Review Period in
(T) addition to the Over-Under collection amount for the EDI during the Annual Review Period.

(E) Computation of the Earnings Test Adjustment.

If the earnings attained by the Company for the Annual Review Period exceed the earnings allowed for the Annual Review Period by applying the overall rate of return authorized in the Relevant Rate Order, then any such earnings difference shall constitute the Earnings Test Adjustment. If the earnings attained by the Company for the Annual Review Period are less than the earnings allowed for the Annual Review Period by applying the overall rate of return authorized in the Relevant Rate Order, then no Earnings Test Adjustment shall be recognized.

Any Earnings Test Adjustment shall be allocated among the Qualified Infrastructure Improvement Program Rider, the Economic Development Investment Rider, and the Safety and Environmental Compliance Rider based on the pro-rata revenues collected under these riders for the Annual Review Period for purposes of computing new rate adjustments.

(F) Computation of Interest.

Interest will be computed as follows:

Budget-to-Actual Adjustment
Plus Over-Under Collection Adjustment
Plus Earnings Test Adjustment

Total Amount Subject to Interest
Interest Rate Multiplied by 50%

Total Interest

(T) Denotes change in text

ISSUED: **October 3, 2017** **EFFECTIVE: November 2, 2017**

BY:

Valoria V. Armstrong
PRESIDENT

109 Wiehl Street
Chattanooga, Tennessee 37403

Where "Interest Rate" equals the prime rate value published in the "Federal Reserve Bulletin" or in the Federal Reserve's "Selected Interest Rates" for the most recent preceding month.

6. New Base Rates

The QIIP rider will be reset at zero upon the establishment of new base rates to customer billings that provide for the prospective recovery of the annual costs that had theretofore been recovered under the QIIP. Thereafter, only the costs of new QIIP eligible plant additions that have not previously been reflected in the Company's rate base, would be reflected in new annual prospective QIIP filings.

7. Annual QIIP Percentage Rate Filing

On or before December 1 of each year, the Company shall submit to the Commission a calculation of the QIIP Percentage Rate for the following calendar year. The Annual QIIP Percentage Rate Filing shall be verified by an officer of the Company. The Annual QIIP Percentage Rate Filing shall include a calculation to adjust revenue to recover costs related to the Forecasted QIIP Investment Amount, with such revenue adjustment applied through the QIIP Percentage Rate. The QIIP Percentage Rate shall become effective on January 1 of each year and be applied as an adjustment to Customers' bills for the remainder of the calendar year.

The Company will include in its Annual QIIP Percentage Rate Filing the following information at a minimum: (a) computation of the QIIP Percentage Rate, including the detailed calculation of each component, (b) a budget of the Forecasted QIIP Investment Amount adopted by the Company's Board of Directors, (c) any related Strategic Capital Expenditures Plans, (d) a statement demonstrating how each projected capital investment comprising the Forecasted QIIP Investment Amount meets the requirements for recovery under this Rider set forth in Section 3, and (e) such other information as the Commission may direct.

The Company will simultaneously copy the Consumer Advocate on its Annual QIIP Percentage Rate Filing.

8. Annual Reconciliation Filing with the Commission

On or before March 1 of each year, the Company shall submit to the Commission a reconciliation of the results of the operation of the QIIP for the previous Annual Review Period. The Annual Reconciliation Filing shall be verified by an officer of the Company. The annual reconciliation shall include a calculation to adjust revenue collected under this QIIP Rider in effect for the prior Annual Review Period to an amount equivalent to the actual level of prudently-incurred QIIP cost for the prior Annual Review Period, with such revenue adjustment applied through the Annual Reconciliation Factor Percentage Rate. The Annual Reconciliation Factor Percentage Rate shall become effective on

(T) Denotes change in text

April 1 of each year and be applied as an adjustment to Customers' bills for the remainder of the calendar year.

The Company will include in its Annual Reconciliation Filing the following information at a minimum: (a) a schedule of all journal entries made related to this Rider for the Annual Review Period, including any related general ledger support, (b) actual billing determinants by month as used in the computation of the Total QIIP Collected from Customers for the Annual Review Period, (c) capitalization policy effective for the Annual Review Period, (d) computation of the Annual Reconciliation Factor Percentage Rate, including the detailed calculation of each component, (e) a schedule of any proposed prior period adjustments, (f) an affirmative statement of whether the Company is aware of any changes in market conditions or other factors that may affect whether the Rider is still in the public interest, including the identification of such factors if they exist, (g) the cumulative amount of QIIP collected from customers under this Rider, and (h) such other information as the Commission may direct.

The Company will simultaneously copy the Consumer Advocate on its Annual Reconciliation Filing.

9. Notice Requirements

The Company will file revised tariffs for Commission approval upon 30 days' notice to implement a decrement or an increment each January 1 and April 1. Along with the tariff filing, the Company will include a copy of the computation of the new rate adjustment. The Company will simultaneously copy the Consumer Advocate on this filing.

10. Public Interest Review

Nothing herein shall be construed to eliminate or otherwise restrict the opportunity of the Consumer Advocate or any other interested party from seeking a review of this Rider, as permitted by law and the rules and regulations of the Commission, for a reconsideration of whether it remains in the public interest.

(T) Denotes change in text

CLASSIFICATION OF SERVICE

SAFETY AND ENVIRONMENTAL COMPLIANCE – RIDER

1. Applicability

In addition to the other charges provided for in this Tariff under Service Classifications Residential, Commercial, Industrial, Other Public Authority, Sales for Resale, and Private Fire, a Safety and Environmental Compliance Program ("SEC") Rider will apply to customers in all service areas.

The above rider will be recomputed annually and be adjusted periodically to incorporate the Annual Reconciliation Factor.

2. Definitions

For the purposes of this Rider:

"Actual SEC Investment Amount" means the amount of actual capital investment and associated operating expenses of the Company for the Safety and Environmental Compliance Program and not otherwise included in current base rates. At the time of the Company's next general rate case proceeding, all prudently incurred Actual SEC Investment Amounts associated with this Rider shall be included in base rates.

"Annual Reconciliation Factor" means an adjustment factor to true-up rates from forecasted costs to the actual costs incurred through application of 1) the Budget-to-Actual Adjustment and 2) the Over-Under Collection Adjustment, and the 3) Earnings Test Adjustment, as adjusted for Interest.

"Annual Review Period" means the twelve-month period between the annual adjustments of the SEC Percentage Rate. For the first year beyond the attrition year of the base rate case, this review period may be shorter or longer than a twelve-month period to cover expenditures between the attrition year and the start of the subsequent calendar year.

"Commission" means the Tennessee Public Utility Commission.

(T) Denotes Change in Text

"Budget-to-Actual Adjustment" means the adjustment to SEC for the applicable coming annual period due to the difference between the Forecasted SEC Investment and Expense Amount and the Actual SEC Investment and Expense Amount.

"Consumer Advocate" means the Consumer Advocate and Protection Division of the Office of the Tennessee Attorney General.

"Forecasted SEC Investment Amount" means the amount of forecasted capital investment of the Company for the Safety and Environmental Compliance Program and not otherwise included in current base rates.

"Over-Under Collection Adjustment" means the adjustment to SEC for the applicable
(T) coming annual period due to the net amount of over or under collections. . This will include
(T) over-under collections from the annual review period EDI and any remaining balance of the
(T) over-under collection from the prior reconciliation of the EDI.

"Relevant Rate Order" means the final order of the Commission in the most recent rate case of the Company fixing the rates of the Company or the most recent final order of the Commission specifically prescribing or fixing the factors and procedures to be used in the application of this Rider.

3. General Description

SEC allows the Company to recover outside of a rate case its qualifying incremental non-revenue producing plant infrastructure investment and expenses. For purposes of this Rider, qualifying SEC investment includes the following:

Distribution and Production Infrastructure – Distribution, production, and other infrastructure that may be identified as being for the purpose of safety and environmental compliance.

Safety and Environmental Expenses – Operational expenses similar to other expenses authorized in previous rate cases that are specifically new expenses for safety and environmental compliance or to support safety and environmental compliance utility plant.

SEC Investment is to be identifiable on the Company's books and segregated into the following general accounts:

Account 331 – Transmission & Distribution Mains;
Account 333 – Services;
Account 334 – Meters & Meter Installations;

(T) Denotes Change in Text

Account 335 – Hydrants;
Account 320 – Water Treatment Equipment, Non-Media;
Account 311 – Pumping Equipment;
Account 303 – Land and Land Rights;
Account 304 – Structures and Improvements;
Account 306 – Lake, River and Other Intakes;
Account 307 – Wells and Springs;
Account 309 – Supply Mains;
Account 310 – Power Generation Equipment
Account 330 – Distribution Reservoirs and Standpipes; and
Account 330003 – Capitalized Tank Painting.

4. **Determination of the Safety and Environmental Compliance Program Percentage Rate**

(A) The SEC percentage shall be expressed as a percentage carried to two (2) decimal places. The SEC percentage shall be applied to the total amount billed to each Customer based on the Company's otherwise applicable rates and charges.

(B) The SEC percentage shall be calculated on an annual prospective basis as follows:

FORECASTED SEC Investment Amount
Less SEC Plant Retirements (Net of Cost of Removal & Salvage)
Less Contributions in Aid of Construction
Less Accumulated Depreciation
Less Accumulated Deferred Income Taxes
Net Forecasted SEC Qualifying Investment

Multiplied by the Pre-Tax ROR set forth in the Relevant Rate Order

Allowed Forecasted SEC Pre-Tax Return
Plus Depreciation Expense
Plus Property Taxes
Plus Franchise Taxes
Plus Safety and Environmental Compliance Operational Expenses
Subtotal Forecasted SEC Revenue Requirement Before Revenue Tax

Divided by 1 minus the following:

(T) Denotes Change in Text

Forfeited Discounts Rate
Plus Uncollectible Expense Rate
Plus Gross Receipts Tax Rate
Total Forecasted SEC Revenue Requirement

Divided by Relevant Rate Order Volumetric & Metered Revenue

SEC Percentage Rate

Where:

Accumulated Depreciation = Accumulated depreciation calculated by debiting for Forecasted SEC plant removed from service, and crediting for new accumulations using rates approved in the Relevant Rate Order on new investments, less retirements and CIAC.

Accumulated Deferred Income Taxes = An average of the forecasted accumulated deferred income taxes related to qualified forecasted SEC investment at the beginning and end of the year.

Contributions in Aid of Construction = Non-investor supplied funds used in the construction of forecasted SEC infrastructure.

Depreciation Expense = Forecasted cumulative qualified SEC investment net of retirements and CIAC, multiplied by depreciation rates approved in the Relevant Rate Order.

Forfeited Discount Rate = Forecasted SEC Revenue Requirement before gross receipts taxes, uncollectible expense and forfeited discounts multiplied by composite forfeited discount factor approved in the Relevant Rate Order.

Franchise Taxes = Forecasted cumulative qualified SEC investment multiplied by composite franchise tax rate approved in the Relevant Rate Order.

Gross Receipts Tax Rate = Forecasted SEC Revenue Requirement before gross receipts taxes, uncollectible expense and forfeited discounts multiplied by composite gross receipts tax rate approved in the Relevant Rate Order.

(T) Denotes Change in Text

Property Taxes = Forecasted cumulative qualified SEC investment multiplied by composite property tax rate approved in the Relevant Rate Order.

SEC Plant Retirements = Forecasted SEC plant removed from service net of any associated cost of removal and salvage.

Forecasted SEC Investment Amount = Average forecasted SEC additions to plant infrastructure as described in Section 3, computed by use of average of 12 end-of-month balances.

Safety and Environmental Compliance Expenses = the incremental operational expenses similar to other expenses authorized in previous rate cases that are specifically for safety and environmental compliance or to support safety and environmental compliance utility plant.

Uncollectible Expense = Forecasted SEC Revenue Requirement before gross receipts taxes, uncollectible expense and forfeited discounts multiplied by composite uncollectible factor approved in the Relevant Rate Order.

Volumetric & Metered Revenue = the revenues authorized in the Relevant Rate Order for volumetric water sales, meter charges, and private fire service charges.

(C) The total amount to be recovered through the SEC is the SEC Percentage Rate as adjusted for the Annual Reconciliation Factor Percentage Rate.

5. **Determination of the Annual Reconciliation Factor Percentage Rate**

(A) The Annual Reconciliation Factor Percentage shall be expressed as a percentage carried to two (2) decimal places. The Annual Reconciliation Factor Percentage shall be applied to the total amount billed to each Customer based on the Company's otherwise applicable rates and charges.

(B) The Annual Reconciliation Factor Percentage Rate will be computed as follows:

Budget-to-Actual Adjustment
Plus Over-Under Collection Adjustment

(T) Denotes Change in Text

Plus Earnings Test Adjustment
Plus Interest
Annual Reconciliation Amount

Divided by 9/12 of the Relevant Rate Order Volumetric & Metered Revenue

Annual Reconciliation Factor Percentage Rate

(C) Computation of the Budget-to-Actual Adjustment.

The Budget-to-Actual Adjustment will be computed as follows:

ACTUAL SEC Investment Amount for the Annual Review Period
Less SEC Plant Retirements (Net of Cost of Removal & Salvage)
Less Contributions in Aid of Construction
Less Accumulated Depreciation
Less Accumulated Deferred Income Taxes
Net Actual SEC Qualifying Investment

Multiplied by the Pre-Tax ROR set forth in the Relevant Rate Order

Allowed Actual SEC Pre-Tax Return
Plus Depreciation Expense
Plus Property Taxes
Plus Franchise Taxes
Plus Safety and Environmental Compliance Operational Expenses
Subtotal Actual SEC Revenue Requirement Before Revenue Tax

Divided by 1 minus the following:

Forfeited Discounts Rate
Plus Uncollectible Expense Rate
Plus Gross Receipts Tax Rate
Total Actual SEC Revenue Requirement

Less Total Forecasted SEC Revenue Requirement

Budget-to-Actual Adjustment

(T) Denotes Change in Text

Where:

Accumulated Depreciation = Accumulated depreciation calculated by debiting for Forecasted SEC plant removed from service, and crediting for new accumulations using rates approved in the Relevant Rate Order on new investments, less retirements and CIAC

Accumulated Deferred Income Taxes = An average of the actual accumulated deferred income taxes related to actual SEC investment at the beginning and end of the year.

Contributions in Aid of Construction = Non-investor supplied funds used in the construction of actual SEC infrastructure.

Depreciation Expense = Actual cumulative qualified SEC investment net of retirements and CIAC multiplied by depreciation rates approved in the Relevant Rate Order.

Forfeited Discount Rate = Actual SEC Revenue Requirement before gross receipts taxes, uncollectible expense and forfeited discounts multiplied by composite forfeited discount factor approved in the Relevant Rate Order.

Franchise Taxes = Actual cumulative qualified SEC investment multiplied by composite franchise tax rate approved in the Relevant Rate Order.

Gross Receipts Tax Rate = Actual SEC Revenue Requirement before gross receipts taxes, uncollectible expense and forfeited discounts multiplied by composite gross receipts tax rate approved in the Relevant Rate Order.

Property Taxes = Actual cumulative qualified SEC investment multiplied by composite property tax rate approved in the Relevant Rate Order.

SEC Plant Retirements = Actual SEC plant removed from service net of any associated cost of removal and salvage.

Actual SEC Investment Amount = Average actual SEC additions to plant infrastructure as described in Section 3, computed by use of average of 12 end-of-month balances.

(T) Denotes Change in Text

Safety and Environmental Compliance Expenses = the incremental operational expenses similar to other expenses authorized in previous rate cases that are specifically for safety and environmental compliance or to support safety and environmental compliance utility plant.

Uncollectible Expense = Actual SEC Revenue Requirement before gross receipts taxes, uncollectible expense and forfeited discounts multiplied by composite uncollectible factor approved in the Relevant Rate Order.

Volumetric & Metered Revenue = the revenues authorized in the Relevant Rate Order for volumetric water sales, meter charges, and private fire service charges.

(D) Computation of the Over-Under Collection Adjustment.

The Company will identify and record the total amount of the SEC Collected from Customers for the Annual Review Period. The difference between the Total SEC Collected from Customers and the Total Budgeted SEC Revenue Requirement shall constitute the Over-
(T) Under Collection Adjustment. This adjustment shall include any remaining Over-Under
(T) amount from the prior period reconciliation during the Annual Review Period in addition to
(T) the Over-Under collection amount for the EDI during the Annual Review Period.

(E) Computation of the Earnings Test Adjustment.

If the earnings attained by the Company for the Annual Review Period exceed the earnings allowed for the Annual Review Period by applying the overall rate of return authorized in the Relevant Rate Order, then any such earnings difference shall constitute the Earnings Test Adjustment. If the earnings attained by the Company for the Annual Review Period are less than the earnings allowed for the Annual Review Period by applying the overall rate of return authorized in the Relevant Rate Order, then no Earnings Test Adjustment shall be recognized.

Any Earnings Test Adjustment shall be allocated among the Qualified Infrastructure Improvement Program Rider, the Economic Development Investment Rider, and the Safety and Environmental Compliance Rider based on the pro-rata revenues collected under these riders for the Annual Review Period for purposes of computing new rate adjustments.

(F) Computation of Interest.

Interest will be computed as follows:

(T) Denotes Change in Text

Budget-to-Actual Adjustment
Plus Over-Under Collection Adjustment
Plus Earnings Test Adjustment

Total Amount Subject to Interest
Interest Rate Multiplied by 50%

Total Interest

Where "Interest Rate" equals the prime rate value published in the "Federal Reserve Bulletin" or in the Federal Reserve's "Selected Interest Rates" for the most recent preceding month.

6. New Base Rates

The SEC rider will be reset at zero upon the establishment of new base rates to customer billings that provide for the prospective recovery of the annual costs that had theretofore been recovered under the SEC. Thereafter, only the costs of new SEC eligible plant additions that have not previously been reflected in the Company's rate base, would be reflected in new annual prospective SEC filings.

7. Annual SEC Percentage Rate Filing

On or before December 1 of each year, the Company shall submit to the Commission a calculation of the SEC Percentage Rate for the following calendar year. The Annual SEC Percentage Rate Filing shall be verified by an officer of the Company. The Annual SEC Percentage Rate Filing shall include a calculation to adjust revenue to recover costs related to the Forecasted SEC Investment Amount, with such revenue adjustment applied through the SEC Percentage Rate. The SEC Percentage Rate shall become effective on January 1 of each year and be applied as an adjustment to Customers' bills for the remainder of the calendar year.

The Company will include in its Annual SEC Percentage Rate Filing the following information at a minimum: (a) computation of the SEC Percentage Rate, including the detailed calculation of each component, (b) a budget of the Forecasted SEC Investment Amount and Forecasted Safety and Environmental Compliance Operational Expenses adopted by the Company's Board of Directors, (c) any related Strategic Capital Expenditures Plans, (d) statements demonstrating how each projected capital investment comprising the Forecasted SEC Investment Amount and each projected operational expense comprising the Forecasted Safety and Environmental Compliance Operational Expenses meet the requirements for recovery under this Rider set forth in Section 3, and (e) such other information as the Commission may direct.

(T) Denotes Change in Text

The Company will simultaneously copy the Consumer Advocate on its Annual SEC Percentage Rate Filing.

8. <u>Annual Reconciliation Filing with the Commission</u>

On or before March 1 of each year, the Company shall submit to the Commission a reconciliation of the results of the operation of the SEC for the previous Annual Review Period. The Annual Reconciliation Filing shall be verified by an officer of the Company. The annual reconciliation shall include a calculation to adjust revenue collected under this SEC Rider in effect for the prior Annual Review Period to an amount equivalent to the actual level of prudently-incurred SEC cost for the prior Annual Review Period, with such revenue adjustment applied through the Annual Reconciliation Factor Percentage Rate. The Annual Reconciliation Factor Percentage Rate shall become effective on April 1 of each year and be applied as an adjustment to Customers' bills for the remainder of the calendar year.

The Company will include in its Annual Reconciliation Filing the following information at a minimum: (a) a schedule of all journal entries made related to this Rider for the Annual Review Period, including any related general ledger support, (b) actual billing determinants by month as used in the computation of the Total SEC Collected from Customers for the Annual Review Period, (c) capitalization policy effective for the Annual Review Period, (d) computation of the Annual Reconciliation Factor Percentage Rate, including the detailed calculation of each component, (e) schedules of the Actual SEC Investment Amount and Actual Safety and Environmental Compliance Operational Expenses, including related general ledger support, (f) a schedule of any proposed prior period adjustments, (g) an affirmative statement of whether the Company is aware of any changes in market conditions or other factors that may affect whether the Rider is still in the public interest, including the identification of such factors if they exist, (h) the cumulative amount of SEC collected from customers under this Rider, and (i) such other information as the Commission may direct.

The Company will simultaneously copy the Consumer Advocate on its Annual Reconciliation Filing.

9. <u>Notice Requirements</u>

The Company will file revised tariffs for Commission approval upon 30 days' notice to implement a decrement or an increment each January 1 and April 1. Along with the tariff filing, the Company will include a copy of the computation of the new rate adjustment. The Company will simultaneously copy the Consumer Advocate on this filing.

10. <u>Public Interest Review</u>

(T) Denotes Change in Text

Nothing herein shall be construed to eliminate or otherwise restrict the opportunity of the Consumer Advocate or any other interested party from seeking a review of this Rider, as permitted by law and the rules and regulations of the Commission, for a reconsideration of whether it remains in the public interest.

(T) Denotes Change in Text

CLASSIFICATION OF SERVICE

SUMMARY OF RIDERS

1. Applicability

In addition to the other charges provided for in this Tariff under Service Classifications Residential, Commercial, Industrial, Other Public Authority, Sales for Resale, and Private Fire, a Qualified Infrastructure Improvement Program ("QIIP") Rider, an Economic Development Investment Program Rider ("EDI"), a Safety and Environmental Compliance Program Rider ("SEC"), and Production Costs and Other Pass-Throughs Rider ("PCOP") will apply to customers in all service areas.

2. The Percentage of Riders and Reconciliations

For the Riders defined in the tariffs:

QIIP	19.14%
EDI	1.25%
SEC	9.70%
Subtotal of all Capital Recovery Riders	30.09%
QIIP Annual Reconciliation Percentage	-0.63% (D)
EDI Annual Reconciliation Percentage	0.55% (D)
SEC Annual Reconciliation Percentage	-1.45% (D)
Subtotal of all Capital Recovery Riders	-1.53% (D)
Total of Capital Recovery Riders and Reconciliation Percentages	28.56% (D)
Offset to Capital Recovery Riders for TCJA savings	-6.62%
Offset to Capital Recovery Riders for TCJA Excess ADIT	-4.54%
PCOP	0.20%

(I) Indicates Increase
(D) Indicates Decrease

ISSUED: **April 27, 2022** **EFFECTIVE:** **May 27, 2022**

BY: Grant A. Evitts

Grant A. Evitts
PRESIDENT

109 Wiehl Street
Chattanooga, Tennessee 37403

TENNESSEE-AMERICAN WATER COMPANY **TPUC NO. 19**
Twenty-Ninth Revised Sheet No. 12-Riders-1

CLASSIFICATION OF SERVICE

SUMMARY OF RIDERS

1. Applicability

In addition to the other charges provided for in this Tariff under Service Classifications Residential, Commercial, Industrial, Other Public Authority, Sales for Resale, and Private Fire, a Qualified Infrastructure Improvement Program ("QIIP") Rider, an Economic Development Investment Program Rider ("EDI"), a Safety and Environmental Compliance Program Rider ("SEC"), and Production Costs and Other Pass-Throughs Rider ("PCOP") will apply to customers in all service areas.

2. The Percentage of Riders and Reconciliations

For the Riders defined in the tariffs:

QIIP	24.22% (I)
EDI	1.91% (I)
SEC	9.97% (I)
Subtotal of all Capital Recovery Riders	36.10% (I)
QIIP Annual Reconciliation Percentage	-0.83%
EDI Annual Reconciliation Percentage	0.53%
SEC Annual Reconciliation Percentage	-1.53%
Subtotal of all Capital Recovery Riders	-1.83%
Total of Capital Recovery Riders and Reconciliation Percentages	34.27% (I)
Offset to Capital Recovery Riders for TCJA savings	-6.62%
Offset to Capital Recovery Riders for TCJA Excess ADIT	-4.54%
PCOP	0.20%

(I) Indicates Increase
(D) Indicates Decrease

ISSUED: **July 8, 2022** **EFFECTIVE:** **August 8, 2022**

BY: Grant A. Evitts

Grant A. Evitts
PRESIDENT

109 Wiehl Street
Chattanooga, Tennessee 37403

STATE OF ____Tennessee____)
)
COUNTY OF ____Hamilton____)

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

She is appearing as a witness on behalf of Tennessee-American Water Company before the Tennessee Public Utility Commission, and if present before the Commission and duly sworn, her testimony would be as set forth in her pre-filed testimony in this matter.

Tricia Sinopole
Tricia Sinopole

Sworn to and subscribed before me
this 8 day of July, 2022.

Kathryn Robinson
Notary Public

My Commission Expires: 10/20/2024

Kathryn Robinson
STATE OF TENNESSEE NOTARY PUBLIC
COUNTY OF HAMILTON

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing was served via U.S. Mail or electronic mail upon:

Vance L. Broemel, Esq.
Senior Assistant Attorney General
Office of the Tennessee Attorney General
Financial Division, Consumer Advocate Unit
P.O. Box 20207
Nashville, TN 37202-0207
Vance.Broemel@ag.tn.gov

Karen H. Stachowski, Esq.
Senior Assistant Attorney General
Office of the Tennessee Attorney General
Financial Division, Consumer Advocate Unit
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Karen.Stachowski@ag.tn.gov

This the 8th day of July 2022.

Melvin J. Malone