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February 19, 2019

VIA ELECTRONIC FILING

Hon. David Jones, Chairman
c/o Tory Lawless
Tennessee Public Utility Commission
502 Deaderick Street, 4th Floor
Nashville, TN 37243

RE: Petition of Tennessee-American Water Company Regarding the 2019 Investment and Related Expenses Under the Qualified Infrastructure Investment Program Rider, the Economic Development Investment Rider and the Safety and Environmental Compliance Rider, TPUC Docket No. 18-00120

Dear Chairman Jones:

Attached for filing please find the *Direct Testimony of Elaine K. Chambers Adopting Testimony of Melissa Schwarzell* in the above-captioned matter.

As required, an original of this filing, along with four (4) hard copies, will follow. Should you have any questions concerning this filing, or require additional information, please do not hesitate to contact me.

Very truly yours,

BUTLER SNOW LLP

Melvin J. Malone

clw
Attachment
cc: Elaine K. Chambers, Tennessee-American Water Company
Vance Broemel, Assistant Attorney General, Consumer Protection and Advocate Division
Daniel Whitaker, Assistant Attorney General, Consumer Protection and Advocate Division

BEFORE THE TENNESSEE PUBLIC UTILITY COMMISSION
NASHVILLE, TENNESSEE

PETITION OF TENNESSEE-AMERICAN WATER COMPANY REGARDING THE 2019 INVESTMENT AND RELATED EXPENSES UNDER THE QUALIFIED INFRASTRUCTURE INVESTMENT PROGRAM RIDER, THE ECONOMIC DEVELOPMENT INVESTMENT RIDER AND THE SAFETY AND ENVIRONMENTAL COMPLIANCE RIDER	))))))))))	**DOCKET NO. 18-00120**

DIRECT TESTIMONY OF ELAINE K. CHAMBERS
ADOPTING TESTIMONY OF MELISSA SCHWARZELL

Q. **PLEASE STATE YOUR NAME AND PLACE OF RESIDENCE.**

A. My name is Elaine K. Chambers, and my business address is 2300 Richmond Road, Lexington, Kentucky 40502. I am employed by American Water Works Service Company, Inc. ("Service Company"). Service Company is a wholly owned subsidiary of American Water Works Company, Inc. ("American Water") that provides services to Tennessee-American Water Company ("TAWC" or "Company") and its affiliates. My current role is Director of Rates and Regulation for Tennessee and Kentucky.

Q. **WHAT IS THE PURPOSE OF YOUR TESTIMONY TODAY?**

A. The purpose of my testimony is to adopt the testimony previously filed in this matter by Melissa Schwarzell supporting the Petition filed by TAWC regarding the 2019 Investment and Related Expenses Under the Qualified Infrastructure Investment Program Rider, the Economic Development Investment Rider and the Safety and Environmental Compliance Rider. A copy of Melissa Schwarzell's testimony is attached as <u>Exhibit 1</u>.

Q. **ARE YOU FAMILIAR WITH THE TESTIMONY OF MELISSA SCHWARZELL?**

A. Yes, I have reviewed the testimony of Melissa Schwarzell, including the exhibits, and I am familiar with its contents.

Q. **IF ASKED THE SAME QUESTIONS AS ARE IN THE DIRECT TESTIMONY OF MELISSA SCHWARZELL, WOULD YOU ANSWER EACH QUESTION THE SAME?**

A. Yes.

Q. **DO YOU WISH TO ADOPT THE TESTIMONY OF MELISSA SCHWARZELL WITHOUT CHANGES?**

A. Yes.

No further questions.

STATE OF Kentucky)
)
COUNTY OF Fayette)

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared Elaine K. Chambers, 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.

Elaine K Chambers
Elaine K. Chambers

Sworn to and subscribed before me
this 18th day of ~~November,~~ February 2019.

Sharon Miller
Notary Public

My Commission Expires: 7/25/2020

EXHIBIT 1

<u>PETITIONER'S EXHIBIT MLS-1</u>

TENNESSEE-AMERICAN WATER COMPANY, INC.

DOCKET NO. 18-00120

DIRECT TESTIMONY

OF

MELISSA L. SCHWARZELL

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:

<u>PETITIONER'S EXHIBIT SUMMARY – MLS</u>
<u>PETITIONER'S EXHIBIT – AVG IMPACT – MLS</u>
<u>PETITIONER'S EXHIBIT – QIIP 1 – MLS</u>
<u>PETITIONER'S EXHIBIT – QIIP 2 – MLS</u>
<u>PETITIONER'S EXHIBIT – EDI 1 – MLS</u>
<u>PETITIONER'S EXHIBIT – EDI 2 – MLS</u>
<u>PETITIONER'S EXHIBIT – SEC 1 – MLS</u>
<u>PETITIONER'S EXHIBIT – SEC 2 – MLS</u>
<u>PETITIONER'S EXHIBIT – ANNUAL APPROVED TARIFFS -- MLS</u>
<u>PETITIONER'S EXHIBIT – CURRENT TARIFF SHEET NO. 12 – CAPITAL RIDERS -- MLS</u>
<u>PETITIONER'S EXHIBIT – CURRENT TARIFF SHEET NO. 12 – RIDERS – MLS</u>
<u>PETITIONER'S EXHIBIT – PROPOSED TARIFF SHEET NO. 12 – RIDERS - MLS</u>

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Melissa L. Schwarzell, and my business address is 1 Water Street, Camden, NJ, 08102.

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

A. I am employed by American Water Works Service Company, Inc. ("Service Company"). Service Company is a wholly owned subsidiary of American Water Works Company, Inc. ("American Water") that provides services to Tennessee-American Water Company ("TAWC" of "Company") and its affiliates. My current role is Senior Director of Regulatory Services.

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

A. Yes. I have provided both oral and written testimony before the Kentucky Public Service Commission. I have also sponsored testimony before the Public Utilities Commission of Ohio and the Tennessee Public Utility Commission ("TPUC" or "Commission") in Docket No. 12-00049.

Q. PLEASE STATE YOUR EDUCATIONAL AND PROFESSIONAL BACKGROUND.

A. I earned a Bachelor of Science degree from Ohio State University. I am enrolled in Temple University's Master of Business Administration program. I have completed NARUC Utility Rate School and the IPU Advanced Regulatory Program.

I have been employed by Service Company since 2009. Prior to my current role, I served as Director of Investor Relations from February 2016 to January 2017. In this role, I supported American Water's relationship with its shareholders, by developing public disclosures and communicating with institutional investors and equity analysts. From December 2014 to February 2016, I served as Manager of Regulatory Policy, providing research, communication, and business support on key water service issues and policy solutions. From February 2011 to December 2014, I held increasing levels of responsibility for rates and regulatory service to American Water's subsidiaries as a Financial Analyst Rates I, Financial Analyst Rates II, and Rates and Regulatory Analyst III. Prior to this, I began my career at American Water working as Executive Assistant to the Eastern Division Vice President of Finance. In this role, I provided labor budgeting, as well as analysis of labor costs, Service Company, revenues, and the general ledger.

Prior to joining American Water, I worked for the Bluegrass Area Agency on Aging, supporting social services programs for senior citizens in Central Kentucky. From 2001 to 2003, I worked as a Financial and Administrative Assistant, providing bookkeeping, as well as website and database development. In 2004 I was promoted to Program Specialist.

Q. WHAT ARE YOUR DUTIES AS SENIOR DIRECTOR OF REGULATORY SERVICES?

A. My duties in this position consist of reviewing, preparing and assisting in regulatory filings and related activities for the regulated subsidiaries of American Water. My responsibilities and my team's responsibilities include the preparation of written testimony, exhibits and work papers in support of rate applications and other regulatory filings as well as responses to data requests for Tennessee-American and its regulated utility affiliates.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to support the calculation of the 2019 Capital Recovery Riders described in TAWC's Petition. On April 14, 2014, the 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 were capital program recovery riders, commonly referred to as the "Capital Recovery Riders," and one was 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 2019. Additionally, TAWC has included the corrections made to the Capital Recovery Riders calculations in Docket No. 15-00111, Docket No. 16-00022 and Docket No. 17-00020.[1]

Q. ARE YOU SPONSORING ANY EXHIBITS?

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

Petitioner's Exhibit -- Summary – MLS
Petitioner's Exhibit – Average Impact – MLS
Petitioner's Exhibit – QIIP 1 – MLS
Petitioner's Exhibit – QIIP 2 – MLS
Petitioner's Exhibit – EDI 1 – MLS
Petitioner's Exhibit – EDI 2 – MLS
Petitioner's Exhibit – SEC 1 – MLS
Petitioner's Exhibit – SEC 2 – MLS

[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 and Order Approving Petition, TPUC Docket No. 17-00124 (June 29, 2018).

<u>**Petitioner's Exhibit – Annual Approved Tariffs -- MLS**</u>
<u>**Petitioner's Exhibit – Current Tariff Sheet No. 12 – Capital Riders -- MLS**</u>
<u>**Petitioner's Exhibit – Current Tariff Sheet No. 12 – Riders – MLS**</u>
<u>**Petitioner's Exhibit – Proposed Tariff Sheet No. 12 – Riders - MLS**</u>

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 Tennessee American, the officers and associates of Tennessee American with knowledge of the facts based on their job responsibilities and activities, 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 ("QIIP") Rider. This rider is designed to recover the costs associated with the capital investment made between rate cases to replace aging infrastructure that is non-revenue producing. This means infrastructure that does not produce additional revenues. Examples of infrastructure that produces additional revenues are main extensions specifically for a new development, or new services or meters for new customers. As outlined in Docket No. 13-00130, 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 ("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, taxes, 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. Additionally, unlike the QIIP Rider, the EDI Rider may include operating expenses related specifically to economic development.

The third Capital Recovery Rider is the Safety and Environmental Compliance ("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. Like the EDI Rider, the SEC Rider may include operating expenses that can be identified as specifically for the new infrastructure under this rider.

An adjustment to those three Capital Recovery Riders was authorized by the Commission in Docket No. 14-00121 to cover the investment period of the calendar year 2015. A second adjustment to the three Capital Recovery Riders was authorized in Docket No. 15-00111 to cover the investment period of the calendar year 2016. A third adjustment to the three Capital Recovery Riders was authorized in Docket No. 16-00126 to cover the investment period of the calendar year 2017. A fourth adjustment to the three Capital Recovery Riders was authorized in Docket No. 17-00124 to cover the investment period of the calendar year 2018. 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 projected investment period of 2019.

Attached to my testimony is Petitioner's Exhibit Current Tariff Sheet No. 12—Capital Riders – MLS, 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 No. 15-00029, Docket No. 15-00111, Docket No. 16-00022, Docket No. 17-00020, and Docket No. 17-00124.

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 difference between the new riders and the future test year regulatory approach that has been used by TAWC in rate cases is largely 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 new alternative regulatory methods available to the Commission and the regulated community, TAWC would likely have had to file a rate case in 2018 or earlier. These new methods have deferred the need to file a full rate case, at least in the short term. These petitions should 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 but 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 2019, 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, and 2018.

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 four reconciliation worksheets that demonstrate the total additions, removals and retirements and a total reconciliation for 2014, 2015, 2016, 2017, and 2018. Consistent with the directive, this will provide a clear audit trail of the calculations.

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, Tennessee American made three changes to the excel workbook to make it more user-friendly. They are as follows:

1) Tennessee American updated the workbook for the 2019 forecasted numbers, actual 2017 capital expenditures from TPUC Docket No. 18-00022, and updated all formulas.

2) In TPUC Docket No. 17-00124, TAWC revised the filing to include the federal tax expense reduction that resulted from the 2017 Tax Cuts and Jobs Act. TAWC also revised the filing to apply to the lower federal tax rate to Accumulated Deferred Income Taxes forecasted in the Capital Recovery Riders. The revised federal income tax rates have been utilized again in this filing for both the income tax expense generated and the forecasted Accumulated Deferred Income Taxes.

3) Tennessee American forecasted retirement and cost of removal amounts by NARUC account based on the average actual retirements and cost of removal by account in 2015 – 2017. In Docket No. 17-00124, TAWC proposed a revised methodology to utilize the actual retirements and cost of removal by account, using the most recent three year actual average. This eliminated an estimate of those amount. This was applied to the 2019 forecast

Although these three changes may not translate well in verbal testimony, they will aid any review of the Petition and the underlying supporting documentation.

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, Tennessee American made some organizational changes to improve the review process of the workpapers and exhibits. First, Tennessee American 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, Tennessee American 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 2019 calculations in the left-most position of the "Workpapers" section, with 2018, 2017, 2016, 2015 and 2014 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, Tennessee American 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, Brent O'Neill 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 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, the EDI and the 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 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 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 Tennessee American estimates or forecasts the amount of qualified capital investment (QIIP), infrastructure investment and eligible expenses (EDI) and safety and environmental compliance investment and eligible expense (SEC) that it expects to spend for the upcoming calendar year, in this Petition for 2019. The Company will then calculate what it costs to recover the expenditures associated with such forecasted capital investment and expenses. 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, Tennessee American 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?

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. As discussed earlier in my testimony, the EDI and SEC Riders can be increased by the appropriate operating expenses. However, TAWC has not included any operating expenses for the EDI or SEC riders in this Petition. In this case, Tennessee American has proposed to begin the attrition period for each of the Capital Recovery Riders on January 1, 2019, ending December 31, 2019. 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 attrition period in Docket No. 13-00130 was for January 1, 2014 through December 31, 2014. The reconciliation for that filing was made in Docket 15-00029 on March 1, 2015. The attrition period in Docket No. 14-00121 is for January 1, 2015 through December 31, 2015, and the reconciliations were filed on March 1, 2016 in Docket No. 16-00022. The attrition period in Docket No. 15-00111 was for January 1, 2016 through December 31, 2016 and the reconciliations were filed on March 1, 2017 in Docket No. 17-00020. The attrition period in Docket No. 16-00126 was for January 1, 2017 through December 31, 2017 and the reconciliation was filed by March 1, 2018 in Docket No. 18-00022. The attrition period in Docket No. 17-00124 was for January 1, 2018 through December 31, 2018 and the reconciliation will be filed by March 1, 2019. 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 pending in Docket No. 18-00022 and 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 MENTION 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 first reconciliation adjustment was authorized on October 19, 2015 to be effective November 1 through December 31, 2015 in Docket No. 15-00029. The second reconciliation adjustment was authorized on October 10, 2016 in Docket No. 16-00022 to be effective October 11, 2016 through December 31, 2016. The third reconciliation adjustment was authorized on August 15, 2017 in Docket No. 17-00020 to be effective August 16, 2017 through December 31, 2017. The fourth reconciliation adjustment was filed in Docket No. 18-00022 and is pending before the TPUC. This petition is intended to adjust the Capital Recovery Riders for investment in 2019. The calculation includes the cumulative investment for rider for 2014, 2015, 2016, 2017, and 2018. In this petition, TAWC has included the actual investment for each rider in 2014, 2015, 2016 and 2017. The reconciliation to be filed by March 1, 2019 will apply as a true-up for the actual 2018 calendar year investment and revenues, including any over/under collection of the reconciliation approved in 18-00022. 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 - MLS**. The detailed calculations are attached in six exhibits to my testimony as **Petitioner's Exhibit QIIP 1 – MLS**, **Petitioner's Exhibit QIIP 2 – MLS**, **Petitioner's Exhibit EDI 1 – MLS**, **Petitioner's Exhibit EDI 2 – MLS**, **Petitioner's Exhibit SEC 1 – MLS**, and **Petitioner's Exhibit SEC 2 – MLS.** 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 and Docket No. 17-00124. 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, and again in Docket No. 17-00124. The workpapers are also consistent with the calculations made to support the reconciliations in TPUC Docket No. 15-00029, TPUC Docket No. 16-00022, TPUC Docket No. 17-00020 and TPUC Docket No. 18-00022.

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

A. Yes. Company Witness Brent O'Neill and Kurt Stafford will discuss the details regarding the proposed capital expenditures included in the QIIP, EDI and SEC Riders for 2019.

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 Ninth Revised Sheet No. 12 – Riders – 1 is attached to my testimony as **Petitioner's Exhibit Current Tariff Sheet No. 12 – Riders – MLS**, and the proposed tariff sheet Tenth Revised Sheet No. 12 – Riders - 1 is attached to my testimony as **Petitioner's Exhibit Proposed Sheet No. 12 – Riders – MLS**. 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.

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 – MLS**.

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 and 18-00022.

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 and 18-00022.

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 and 18-00022.

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?

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, 2018, will be submitted on March 1, 2019.

Q. HOW DOES THE RECONCILIATION WORK?

A. Consistent with the approved tariffs, Tennessee American will file a reconciliation for all three Capital Recovery Riders no later than March 1, 2019. 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, 2019, as contemplated in the tariffs, will be applied to customer bills for 9 months in 2019.

Finally, there is also a consumer safeguard in the reconciliation process that reviews the earnings for Tennessee American during the attrition period. If it is determined that Tennessee American 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 first review period for the approved PCOP analyzed the amount of production expenses in the attrition year from the previous rate case, which was December 1, 2012 to November 30, 2013 compared to the actual amount of production expenses that occurred between December 1, 2012 and November 30, 2013. The expenses in the attrition period were actually less than authorized in the case, so under the approved PCOP, TAWC applied a credit adjustment to customers.

The subsequent period approved for review in the tariff is defined as the twelve months subsequent to the attrition period, and every twelve-month period after that. Docket No. 15-00001 looked at the review period for the PCOP from December 1, 2013 through November 30, 2014. Docket No. 15-00131 looked at the review period for the PCOP from December 1, 2014 through November 30, 2015. Docket No. 16-00148 looked at the review period for the PCOP from December 1, 2015 through November 30, 2016. Docket No. 18-00009 looked at the review period for the PCOP from December 1, 2016 through November 30, 2017. The next review period for the PCOP will be December 1, 2017 through November 30, 2018. 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 DOES TAWC ANTICIPATE FILING THE PCOP RECONCILIATION?

A. TAWC anticipates filing the reconciliation on the PCOP Rider by January 15, 2018. As set forth in the tariffs, new PCOP rates are anticipated to be effective by February 14, 2019. TAWC recently 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 $6,024,341 for the 2019 calendar year or a surcharge of 12.80%. 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

$1,293,703 and an increase in the total QIIP Rider surcharge from the previous year of 2.75%.

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

A. Yes. A new tariff Thirteenth 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 - MLS**.

Q. WHAT IS THE PROPOSED EDI RIDER?

A. TAWC is proposing an EDI Rider that would result in an annualized revenue recovery of $320,794 for the 2019 calendar year or a surcharge of 0.68%. 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 $126,249 and an increase in the total EDI Riders surcharge over the previous year of 0.27%. Again, this is shown on the new tariff Thirteenth 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 - MLS**.

Q. WHAT IS PROPOSED SEC RIDER?

TAWC is proposing a SEC Rider that would result in an annualized revenue recovery of $3,537,646 for the 2019 calendar year or a surcharge of 7.52%. 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 $728,261 and an increase in the total SEC Rider surcharge over the previous year of 1.55%. Again, this is shown on the new tariff Thirteenth 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 - MLS**. The sum of the three riders is an increase of 4.57% on the current base bill.

Q. IN DOCKET NO. 18-00039, TAWC WAS ORDERED TO "TRACK AND ACCUMULATE MONTHLY IN A DEFERRED ACCOUNT THE PORTION OF ITS REVENUE REPRESENTING THE DIFFERENCE BETWEEN THE COST OF SERVICE APPROVED BY THE COMMISSION IN ITS MOST RECENT RATE CASE AND THE COST OF SERVICE THAT WOULD HAVE RESULTED HAD THE PROVISION FOR FEDERAL INCOME TAXES BEEN BASED ON 21% RATHER THAN 35%." DID TAWC COMPLY WITH THE ORDER?

A. Yes, the Company has been tracking and accumulating monthly, in a deferred account, the revenue authorized in its most recent rate case that was associated with a 35%, rather than a 21% federal income tax rate. I'll refer to this as "TCJA Deferred Revenue"

Q. IN DOCKET 18-00039, TAWC RECOMMENDED UTILIZING THE TCJA DEFERRED REVENUE AS AN OFFSET TO INCREASES IN THE CAPITAL RECOVERY RIDERS. DOES TAWC STILL RECOMMEND THAT?

A. Yes we do.

Q. WHAT IS THE CURRENT BALANCE OF TCJA DEFERRED REVENUE?

A. As of October 31, 2018 the balance was $1,599,454.

Q. WHAT DOES TAWC PROJECT THE BALANCE TO BE FOR A FULL YEAR OF TCJA DEFERRED REVENUE?

A. TAWC is deferring 4.32% of billed base rate revenue, so the total amount to be deferred each year will vary depending upon billed base rate revenue. However, if billed base rate revenue were consistent with those authorized in Docket No. 12-0049, the total annual deferral would be just over $2 million

Q. DOES TAWC PROPOSE TO REVIEW THE METHODOLOGY FOR THE CALCULATIONS OF THE DEFERRED AMOUNT IN THIS PROCEEDING?

A. No, it does not. There is a separate Docket No. 18-00039 that has been established to review and investigate the impact of lowering the corporate tax rate from 35% to 21%. TAWC recommends that the methodology for calculating the amount of tax savings continue in that Docket. TAWC is simply proposing at this time a method for allowing customers to begin to realize the benefit of those savings.

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

A. TAWC still recommends that excess ADIT normalization, once reliably calculated, be used as an offset to Capital Recovery Rider increases or reconciliations. However, at this time, the TCJA Deferred Revenue is estimated to be adequate to offset the $2.1 million 2019 Capital Recovery Rider increase, and thus the excess ADIT can continue to be deferred for the customers' benefit.

Q. WHY DID TAWC MAKE A RECOMMENDATION TO USE TCJA DEFERRED REVENUE TO OFFSET THE CAPITAL RECOVERY RIDERS?

A. As discussed in TAWC's testimony in Docket No. 18-00039, TAWC identifies three primary benefits to this plan (in addition to the Capital Recovery Rider tax expense savings already provided in 2018). First, customers can enjoy more than $19 million of Rider eligible infrastructure improvements without any bill increase in 2019, a savings of $2.1 million for our customers. Second, by allowing TCJA Revenue Deferral throughout 2018 for base rate tax expense savings, the Commission has enabled TAWC to maintain cash flows and financial stability, thus preserving lower cost capital for customers and protecting TAWC's ability to make essential infrastructure improvements. And third, TAWC's customers have not been subject to a whipsaw effect, by having rates lowered only to be raised again in short order.

Q. HOW WOULD THE TCJA OFFSET PROCESS WORK?

As noted above, TAWC has been deferring revenue since January 1, 2018. TAWC would continue to defer revenue monthly. However, in order to start flowing back the benefits of this deferral, TAWC would simply offset the amount that would have been billed to customers for the 2019 Capital Recovery Riders increase through a surcharge credit. The surcharge credit would not need to be a separate line item on the bill, but rather could simply roll up to the Capital Recovery Riders line. Therefore, customers would not see a change in their bill. However, by creating a separate surcharge credit, the accounting for the foregone Capital Recovery Rider revenue could be tracked, and a corresponding amount of TCJA Deferred Revenue could be amortized.

If approved, TAWC will run a notice on the bill that informs customers that the Capital Recovery Riders for 2019 are being offset by savings from the 2017 TCJA.

Q. WHAT IS THE IMPACT TO THE AVERAGE CUSTOMER BILL?

If the TPUC authorized the proposed offset, the impact to the average customer bill from the Capital Recovery Riders proposed in this docket will be zero. 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 $0.99 per month, or $11.88 per year. The TCJA offset would decrease the bill by the same amounts, so no net increase would be charged. While the overall sum of the three riders, before offset, is 4.57% as noted above, this is a total increase of 3.93% over the current monthly average bill that includes the previously approved Capital Recovery Riders. This is because the overall sum of the three riders of 4.57% continues to be calculated on the revenues authorized in 2012. 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 Annual Bill	Average Chattanooga Annual Bill*	Annual Increase in Total Bill	Annual 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%
Proposed	1/1/2019	**4.570%**	**21.000%**	$ 4.53	$ 26.08	$ 0.99	3.93%
TCJA Offset	1/1/2019	**-4.570%**	**16.430%**	$ 3.54	$ 25.10	$ -	0.00%

* 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 **Petitioner's Exhibit – Annual Approved Tariffs – MLS**. A summary of the impact for the average residential customer for each of Tennessee American's water rates is attached to my testimony as **Petitioner's Exhibit Average Impact – MLS**.

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. Tennessee American understands that the purpose of the new 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. 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 Brent O'Neill, 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. 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 January 1, 2019.

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*	a Percentage Applied to Bill*	Revenue Requirement as Authorized - 2018 (1)	Percentage Applied to Bill as Authorized (1)	Impact of Proposed Adjustments on Revenue Requirement	b Impact of Proposed Adjustments on Bill Percentage	c 2019 TCJA Credit at -4.57%	d = b+c Total Impact of Proposed Adjustments and TCJA Credit on Bill	e = a+c Total Percentage Applied to Bill After TCJA Credit
1										
2	QIIP	$ 6,024,341	12.80%	$ 4,730,639	10.05%	$ 1,293,703	2.75%	-2.75%	0.00%	10.05%
3										
4	EDI	320,794	0.68%	194,545	0.41%	126,249	0.27%	-0.27%	0.00%	0.41%
5										
6	SEC	3,537,646	7.52%	2,809,385	5.97%	728,261	1.55%	-1.55%	0.00%	5.97%
7										
8	**Total**	**$ 9,882,782**	**21.00%**	**$ 7,734,569**	**16.43%**	**$ 2,148,212**	**4.57%**	**-4.57%**	**0.00%**	**16.43%**
9										
10										

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

(1) From prior docket #17-00124 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	2018 Authorized Capital Surcharges at 16.43%	2017 PCOP at -1.25%	Total 2018 Authorized Surcharges	2019 QIIP Surcharge at 2.75%	2019 EDI Surcharge at 0.27%	2019 SEC Surcharge at 1.55%	2019 Proposed Capital Rider Adjustments	Total Proposed Surcharges
1												
2	Chattanooga	$ 13.96	$ 7.60	$ 21.56	$ 3.54	$ (0.27)	$ 3.27	$ 0.59	$ 0.06	$ 0.33	$ 0.98	$ 4.25
3												
4	Lookout Mountain	$ 15.66	$ 12.39	$ 28.05	$ 4.61	$ (0.35)	$ 4.26	$ 0.77	$ 0.08	$ 0.43	$ 1.28	$ 5.54
5												
6	Lakeview	$ 15.66	$ 9.16	$ 24.82	$ 4.08	$ (0.31)	$ 3.77	$ 0.68	$ 0.07	$ 0.38	$ 1.13	$ 4.90
7												
8	Suck Creek	$ 30.60	$ 16.12	$ 46.72	$ 7.68	$ (0.58)	$ 7.09	$ 1.28	$ 0.13	$ 0.72	$ 2.13	$ 9.22
9												
10	Whitwell	$ 42.03	$ 35.68	$ 77.71	$ 12.77	$ (0.97)	$ 11.80	$ 2.14	$ 0.21	$ 1.20	$ 3.55	$ 15.35
11												
12												
13												

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

Line Number	Description	QIIP Company Totals
1	Additions Subject to QIIP:	$ 49,542,272
2	Plus: Cost of Removal less Salvage	6,795,685
3	Less: Contributions in Aid to Construction (CIAC)	2,284,346
4	Less: Deferred Income Taxes	565,451
5	Less: Accumulated Depreciation	2,575,012
6	Net Investment Supplied QIIP Additions:	$ 50,913,147
7		
8	Pre-Tax Rate of Return:	8.45145%
9	Pre-Tax Return on Additions:	$ 4,302,900
10		
11	Depreciation Expense on QIIP Additions:	959,335
12		
13	Operational Expenses Related to QIIP	-
14		
15	Property and Franchise Taxes Associated with QIIP:	574,282
16		
17	QIIP Revenues:	$ 5,836,517
18		
19	Revenue Taxes	3.191%
20	QIIP Revenues with Revenue Taxes	$ 6,028,900
21		
22	QIIP APP Revenue Reduction	(4,558)
23		
24	Total QIIP Revenues with Revenue Taxes & APP Reduction	$ 6,024,341
25		
26	Service Charge and Volumetric Revenues as Per Docket No. 12-00049	$ 47,073,724
27		
28	QIIP Percentage to Apply to Bill:	12.80%
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		$ -	$ (94,900)	$ -	$ (94,900)	$ -	$ (5,995)	$ 17,257
3	Investment Projects		6,263,393	(180,782)	-	6,082,611	1,373,729	96,056	(770,644)
4	Total QIP		$ 6,263,393	$ (275,681)	$ -	$ 5,987,711	$ 1,373,729	$ 90,061	$ (753,387)
5									
6	304301	Struct & Imp-Treatment-Dpr Paint							
7	Recurring Projects		$ 1,250,689	$ (170,157)	$ -	$ 1,080,532	$ 661,770	$ 120,130	$ (451,641)
8	Investment Projects		-	-	-	-	-	-	-
9	Total QIP		$ 1,250,689	$ (170,157)	$ -	$ 1,080,532	$ 661,770	$ 120,130	$ (451,641)
10									
11	320100	WT Equip Non-Media							
12	Recurring Projects		$ 259,932	$ (123,785)	$ -	$ 136,147	$ 89,500	$ (55,945)	$ (43,061)
13	Investment Projects		2,493,903	(366,075)	-	2,127,828	53,846	(66,650)	(68,572)
14	Total QIP		$ 2,753,835	$ (489,860)	$ -	$ 2,263,976	$ 143,346	$ (122,596)	$ (111,633)
15									
16	320200	Water Trmt Equip Filter Media							
17	Recurring Projects		$ 52,740	$ (36,378)	$ -	$ 16,362	$ 206,460	$ 4,084	$ (18,445)
18	Investment Projects		-	-	-	-	-	-	-
19	Total QIP		$ 52,740	$ (36,378)	$ -	$ 16,362	$ 206,460	$ 4,084	$ (18,445)
20									
21	330000	Dist Reservoirs & Standpipes							
22	Recurring Projects		$ 23,274	$ -	$ -	$ 23,274	$ 0	$ (5,888)	$ (10,917)
23	Investment Projects		-	-	-	-	-	-	-
24	Total QIP		$ 23,274	$ -	$ -	$ 23,274	$ 0	$ (5,888)	$ (10,917)
25									
26	330003	Tank Repainting							
27	Recurring Projects		$ 1,948,111	$ (222,583)	$ -	$ 1,725,527	$ 418,192	$ 37,752	$ (261,410)
28	Investment Projects		-	-	-	-	-	-	-
29	Total QIP		$ 1,948,111	$ (222,583)	$ -	$ 1,725,527	$ 418,192	$ 37,752	$ (261,410)
30									
31	330100	Elevated Tanks & Standpipes							
32	Recurring Projects		$ 187,700	$ -	$ -	$ 187,700	$ -	$ (1,555)	$ (9,080)
33	Investment Projects		-	-	-	-	-	-	-
34	Total QIP		$ 187,700	$ -	$ -	$ 187,700	$ -	$ (1,555)	$ (9,080)
35									
36	330200	Ground Level Tanks							
37	Recurring Projects		$ 1,004,940	$ (446)	$ -	$ 1,004,494	$ 977	$ (7,152)	$ (32,197)
38	Investment Projects		-	-	-	-	-	-	-
39	Total QIP		$ 1,004,940	$ (446)	$ -	$ 1,004,494	$ 977	$ (7,152)	$ (32,197)
40									

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**
41	**331001**	**Transmission & Distribution Mains**							
42	Recurring Projects		$ 19,453,797	$ (1,171,172)	$ (2,133,047)	$ 18,282,626	$ 1,228,731	$ (428,242)	$ (501,342)
43	Investment Projects		2,414,209	-	-	2,414,209	-	(20,688)	(17,410)
44	Total QIP		$ 21,868,006	$ (1,171,172)	$ (2,133,047)	$ 20,696,835	$ 1,228,731	$ (448,930)	$ (518,752)
45									
46	**333000**	**Services**							
47	Recurring Projects		$ 3,638,217	$ (122,451)	$ (29,876.59)	$ 3,515,766	$ 908,872	$ (81,262)	$ (93,389)
48	Investment Projects		-	-	-	-	-	-	-
49	Total QIP		$ 3,638,217	$ (122,451)	$ (29,877)	$ 3,515,766	$ 908,872	$ (81,262)	$ (93,389)
50									
51	**334100**	**Meters**							
52	Recurring Projects		$ 1,288,164	$ (3,421,270)	$ -	$ (2,133,106)	$ 410,752	$ (55,613)	$ 125,183
53	Investment Projects		-	-	-	-	-	-	-
54	Total QIP		$ 1,288,164	$ (3,421,270)	$ -	$ (2,133,106)	$ 410,752	$ (55,613)	$ 125,183
55									
56	**334200**	**Meter Installations**							
57	Recurring Projects		$ 7,629,951	$ (957,191)	$ -	$ 6,672,761	$ 1,392,981	$ (72,343)	$ (358,513)
58	Investment Projects		-	-	-	-	-	-	-
59	Total QIP		$ 7,629,951	$ (957,191)	$ -	$ 6,672,761	$ 1,392,981	$ (72,343)	$ (358,513)
60									
61	**335000**	**Hydrants**							
62	Recurring Projects		$ 1,425,916	$ (169,414)	$ (121,423)	$ 1,256,502	$ 49,875	$ (22,311)	$ (63,700)
63	Investment Projects		-	-	-	-	-	-	-
64	Total QIP		$ 1,425,916	$ (169,414)	$ (121,423)	$ 1,256,502	$ 49,875	$ (22,311)	$ (63,700)
65									
66	**346190**	**Hydrants**							
67	Recurring Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -
68	Investment Projects		207,335	-	-	207,335	-	171	(17,131)
69	Total QIP		$ 207,335	$ -	$ -	$ 207,335	$ -	$ 171	$ (17,131)
70									
71	**Expense:**								
72			$ -	$ -	$ -	$ -	$ -	$ -	$ -
73			-	-	-	-	-	-	-
74			-	-	-	-	-	-	-
75	Total		$ -	$ -	$ -	$ -	$ -	$ -	$ -
76									
77	**Total**		$ 49,542,272	$ (7,036,604)	$ (2,284,346)	$ 42,505,668	$ 6,795,685	$ (565,451)	$ (2,575,012)

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		$ 11,261	$ 952	$ (3,900)	$ (1,282)	$ -	$ (4,231)	$ (4,370)
3	Investment Projects		6,962,533	588,435	249,995	82,180	-	920,611	950,956
4	Total QIP		$ 6,973,794	$ 589,387	$ 246,095	$ 80,898	$ -	$ 916,380	$ 946,586
5									
6	**304301**	**Struct & Imp-Treatment-Dpr Paint**							
7	Recurring Projects		$ 1,580,948	$ 133,613	$ 130,312	$ 14,599	$ -	$ 278,524	$ 287,705
8	Investment Projects		-	-	-	-	-	-	-
9	Total QIP		$ 1,580,948	$ 133,613	$ 130,312	$ 14,599	$ -	$ 278,524	$ 287,705
10									
11	**320100**	**WT Equip Non-Media**							
12	Recurring Projects		$ 250,425	$ 21,165	$ 1,484	$ 1,839	$ -	$ 24,488	$ 25,295
13	Investment Projects		2,412,527	203,894	23,193	28,748	-	255,835	264,268
14	Total QIP		$ 2,662,952	$ 225,058	$ 24,677	$ 30,588	$ -	$ 280,323	$ 289,563
15									
16	**320200**	**Water Trmt Equip Filter Media**							
17	Recurring Projects		$ 244,839	$ 20,692	$ 5,512	$ 221	$ -	$ 26,426	$ 27,297
18	Investment Projects		-	-	-	-	-	-	-
19	Total QIP		$ 244,839	$ 20,692	$ 5,512	$ 221	$ -	$ 26,426	$ 27,297
20									
21	**330000**	**Dist Reservoirs & Standpipes**							
22	Recurring Projects		$ 6,470	$ 547	$ 484	$ 314	$ -	$ 1,345	$ 1,390
23	Investment Projects		-	-	-	-	-	-	-
24	Total QIP		$ 6,470	$ 547	$ 484	$ 314	$ -	$ 1,345	$ 1,390
25									
26	**330003**	**Tank Repainting**							
27	Recurring Projects		$ 2,142,645	$ 181,085	$ 191,188	$ 23,313	$ -	$ 395,586	$ 408,625
28	Investment Projects		-	-	-	-	-	-	-
29	Total QIP		$ 2,142,645	$ 181,085	$ 191,188	$ 23,313	$ -	$ 395,586	$ 408,625
30									
31	**330100**	**Elevated Tanks & Standpipes**							
32	Recurring Projects		$ 177,065	$ 14,965	$ 5,143	$ 2,536	$ -	$ 22,643	$ 23,390
33	Investment Projects		-	-	-	-	-	-	-
34	Total QIP		$ 177,065	$ 14,965	$ 5,143	$ 2,536	$ -	$ 22,643	$ 23,390
35									
36	**330200**	**Ground Level Tanks**							
37	Recurring Projects		$ 966,568	$ 81,689	$ 27,523	$ 13,571	$ -	$ 122,784	$ 126,831
38	Investment Projects		-	-	-	-	-	-	-
39	Total QIP		$ 966,568	$ 81,689	$ 27,523	$ 13,571	$ -	$ 122,784	$ 126,831
40									

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

		QIIP	6	7	8	9	10	11	12
			=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**
41	**331001**	**Transmission & Distribution Mains**							
42	Recurring Projects		$ 17,619,898	$ 1,489,137	$ 201,870	$ 247,011	$ -	$ 1,938,018	$ 2,001,899
43	Investment Projects		2,376,111	200,816	30,178	32,618	-	263,611	272,300
44	Total QIP		$ 19,996,009	$ 1,689,953	$ 232,047	$ 279,629	$ -	$ 2,201,630	$ 2,274,199
45									
46	**333000**	**Services**							
47	Recurring Projects		$ 4,342,563	$ 367,010	$ 38,693	$ 47,501	$ -	$ 453,204	$ 468,142
48	Investment Projects		-	-	-	-	-	-	-
49	Total QIP		$ 4,342,563	$ 367,010	$ 38,693	$ 47,501	$ -	$ 453,204	$ 468,142
50									
51	**334100**	**Meters**							
52	Recurring Projects		$ 1,768,486	$ 149,463	$ (159,343)	$ (28,820)	$ -	$ (38,700)	$ (39,976)
53	Investment Projects		-	-	-	-	-	-	-
54	Total QIP		$ 1,768,486	$ 149,463	$ (159,343)	$ (28,820)	$ -	$ (38,700)	$ (39,976)
55									
56	**334200**	**Meter Installations**							
57	Recurring Projects		$ 8,592,076	$ 726,155	$ 182,166	$ 90,154	$ -	$ 998,475	$ 1,031,387
58	Investment Projects		-	-	-	-	-	-	-
59	Total QIP		$ 8,592,076	$ 726,155	$ 182,166	$ 90,154	$ -	$ 998,475	$ 1,031,387
60									
61	**335000**	**Hydrants**							
62	Recurring Projects		$ 1,268,357	$ 107,195	$ 26,107	$ 16,976	$ -	$ 150,278	$ 155,231
63	Investment Projects		-	-	-	-	-	-	-
64	Total QIP		$ 1,268,357	$ 107,195	$ 26,107	$ 16,976	$ -	$ 150,278	$ 155,231
65									
66	**346190**	**Hydrants**							
67	Recurring Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -
68	Investment Projects		190,375	16,089	8,729	2,801	-	27,620	28,530
69	Total QIP		$ 190,375	$ 16,089	$ 8,729	$ 2,801	$ -	$ 27,620	$ 28,530
70									
71	**Expense:**								
72			$ -	$ -	$ -	$ -	$ -	$ -	$ -
73			-	-	-	-	-	-	-
74			-	-	-	-	-	-	-
75	Total		$ -	$ -	$ -	$ -	$ -	$ -	$ -
76									
77	**Total**		**$ 50,913,147**	**$ 4,302,900**	**$ 959,335**	**$ 574,282**	**$ -**	**$ 5,836,517**	**$ 6,028,900**

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

Line Number	Description		EDI Company Totals
1	Additions Subject to EDI:	$	2,893,001
2	Plus: Cost of Removal less Salvage		1,904
3	Less: Contributions in Aid to Construction (CIAC)		22,345
4	Less: Deferred Income Taxes		44,119
5	Less: Accumulated Depreciation		72,280
6	Net Investment Supplied EDI Additions:	$	2,756,162
7			
8	Pre-Tax Rate of Return:		8.45145%
9	Pre-Tax Return on Additions:	$	232,936
10			
11	Depreciation Expense on EDI Additions:		38,723
12			
13	Operational Expenses Related to EDI		-
14			
15	Property and Franchise Taxes Associated with EDI:		39,062
16			
17	EDI Revenues:	$	310,721
18			
19	Revenue Taxes		3.191%
20	EDI Revenues with Revenue Taxes	$	320,963
21			
22	EDI APP Revenue Reduction		(168)
23			
24	Total EDI Revenues with Revenue Taxes & APP Reduction	$	320,794
25			
26	Service Charge and Volumetric Revenues as Per Docket No. 12-00049	$	47,073,724
27			
28	EDI Percentage to Apply to Bill:		0.68%
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	331001	Transmission & Distribution Mains							
2	Recurring Projects		$ 2,593,798	$ -	$ -	$ 2,593,798	$ -	$ (41,246)	$ (59,032)
3	Investment Projects		-	-	-	-	-	-	-
4	Total QIP		$ 2,593,798	$ -	$ -	$ 2,593,798	$ -	$ (41,246)	$ (59,032)
5									
6	333000	Services							
7	Recurring Projects		$ 18,398	$ -	$ -	$ 18,398	$ -	$ (295)	$ (373)
8	Investment Projects		-	-	-	-	-	-	-
9	Total QIP		$ 18,398	$ -	$ -	$ 18,398	$ -	$ (295)	$ (373)
10									
11	334300	Meter Vaults							
12	Recurring Projects		$ 44,848	$ -	$ -	$ 44,848	$ -	$ (237)	$ (2,257)
13	Investment Projects		-	-	-	-	-	-	-
14	Total QIP		$ 44,848	$ -	$ -	$ 44,848	$ -	$ (237)	$ (2,257)
15									
16	335000	Hydrants							
17	Recurring Projects		$ 235,957	$ (1,799)	$ (22,345)	$ 234,158	$ 1,904	$ (2,341)	$ (10,618)
18	Investment Projects		-	-	-	-	-	-	-
19	Total QIP		$ 235,957	$ (1,799)	$ (22,345)	$ 234,158	$ 1,904	$ (2,341)	$ (10,618)
20									
21	Expense:								
22			$ -	$ -	$ -	$ -	$ -	$ -	$ -
23			-	-	-	-	-	-	-
24			-	-	-	-	-	-	-
25	Total		$ -	$ -	$ -	$ -	$ -	$ -	$ -
26									
27	**Total**		**$ 2,893,001**	**$ (1,799)**	**$ (22,345)**	**$ 2,891,202**	**$ 1,904**	**$ (44,119)**	**$ (72,280)**
28									
29									

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

		EDI	6	7	8	9	10	11	12
			=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	**331001**	**Transmission & Distribution Mains**							
2	Recurring Projects		$ 2,493,520	$ 210,739	$ 32,422	$ 35,044	$ -	$ 278,205	$ 287,375
3	Investment Projects		-	-	-	-	-	-	-
4	Total QIP		$ 2,493,520	$ 210,739	$ 32,422	$ 35,044	$ -	$ 278,205	$ 287,375
5									
6	**333000**	**Services**							
7	Recurring Projects		$ 17,730	$ 1,498	$ 204	$ 249	$ -	$ 1,951	$ 2,016
8	Investment Projects		-	-	-	-	-	-	-
9	Total QIP		$ 17,730	$ 1,498	$ 204	$ 249	$ -	$ 1,951	$ 2,016
10									
11	**334300**	**Meter Vaults**							
12	Recurring Projects		$ 42,354	$ 3,579	$ 1,224	$ 606	$ -	$ 5,410	$ 5,588
13	Investment Projects		-	-	-	-	-	-	-
14	Total QIP		$ 42,354	$ 3,579	$ 1,224	$ 606	$ -	$ 5,410	$ 5,588
15									
16	**335000**	**Hydrants**							
17	Recurring Projects		$ 202,558	$ 17,119	$ 4,872	$ 3,164	$ -	$ 25,154	$ 25,984
18	Investment Projects		-	-	-	-	-	-	-
19	Total QIP		$ 202,558	$ 17,119	$ 4,872	$ 3,164	$ -	$ 25,154	$ 25,984
20									
21	**Expense:**								
22			$ -	$ -	$ -	$ -	$ -	$ -	$ -
23			-	-	-	-	-	-	-
24			-	-	-	-	-	-	-
25	Total		$ -	$ -	$ -	$ -	$ -	$ -	$ -
26									
27	**Total**		**$ 2,756,162**	**$ 232,936**	**$ 38,723**	**$ 39,062**	**$ -**	**$ 310,721**	**$ 320,963**
28									
29									

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

Line Number	Description	SEC Company Totals
1	Additions Subject to SEC:	$ 27,467,267
2	Plus: Cost of Removal less Salvage	2,974,425
3	Less: Contributions in Aid to Construction (CIAC)	-
4	Less: Deferred Income Taxes	594,534
5	Less: Accumulated Depreciation	2,095,219
6	Net Investment Supplied SEC Additions:	$ 27,751,939
7		
8	Pre-Tax Rate of Return:	8.45145%
9	Pre-Tax Return on Additions:	$ 2,345,442
10		
11	Depreciation Expense on SEC Additions:	736,617
12		
13	Operational Expenses Related to SEC	-
14		
15	Property and Franchise Taxes Associated with SEC:	347,250
16		
17	SEC Revenues:	$ 3,429,309
18		
19	Revenue Taxes	3.191%
20	SEC Revenues with Revenue Taxes	$ 3,542,345
21		
22	SEC APP Revenue Reduction	(4,700)
23		
24	SEC Revenues with Revenue Taxes & APP Reduction	$ 3,537,646
25		
26	Service Charge and Volumetric Revenues as Per Docket No. 12-00049	$ 47,073,724
27		
28	SEC Percentage to Apply to Bill:	7.52%
29		

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

		SEC	1	2	3	4	5	B	C
						=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		$ 890,561	$ -	$ -	$ 890,561	$ 874	$ (5,161)	$ (35,573)
3	Investment Projects		-	-	-	-	-	-	-
4	Total QIP		$ 890,561	$ -	$ -	$ 890,561	$ 874	$ (5,161)	$ (35,573)
5									
6	304200	Structures & Improvement-Pump							
7	Recurring Projects		$ 1,044,136	$ (38,642)	$ -	$ 1,005,494	$ 40,720	$ (6,128)	$ (37,919)
8	Investment Projects		-	(14,622)	-	(14,622)	243,354	(330)	613
9	Total QIP		$ 1,044,136	$ (53,264)	$ -	$ 990,872	$ 284,074	$ (6,458)	$ (37,306)
10									
11	304300	Structures & Improvement-WT							
12	Recurring Projects		$ 687,978	$ (27,649)	$ -	$ 660,329	$ 18,410	$ 4,264	$ (52,479)
13	Investment Projects		4,141,710	(54,346)	-	4,087,363	1,535,662	62,919	(413,844)
14	Total QIP		$ 4,829,688	$ (81,996)	$ -	$ 4,747,693	$ 1,554,072	$ 67,183	$ (466,323)
15									
16	304400	Structures & Improvement-T&D							
17	Recurring Projects		$ 109,284	$ -	$ -	$ 109,284	$ -	$ (637)	$ (5,165)
18	Investment Projects		-	-	-	-	-	-	-
19	Total QIP		$ 109,284	$ -	$ -	$ 109,284	$ -	$ (637)	$ (5,165)
20									
21	304500	Structures & Improvement - General							
22	Recurring Projects		$ 82,913	$ -	$ -	$ 82,913	$ 277	$ (943)	$ (2,639)
23	Investment Projects		1,062,411	-	-	1,062,411	-	(138,237)	(168,211)
24	Total QIP		$ 1,145,324	$ -	$ -	$ 1,145,324	$ 277	$ (139,179)	$ (170,850)
25									
26	304600	Struc &Imp-Offices							
27	Recurring Projects		$ 9,417	$ -	$ -	$ 9,417	$ -	$ -	$ -
28	Investment Projects		-	-	-	-	-	-	-
29	Total QIP		$ 9,417	$ -	$ -	$ 9,417	$ -	$ -	$ -
30									
31	304700	Struct & Imp-Store,Shop,Garage							
32	Recurring Projects		$ -	$ (7,869)	$ -	$ (7,869)	$ 1	$ (81)	$ 235
33	Investment Projects		-	-	-	-	-	-	-
34	Total QIP		$ -	$ (7,869)	$ -	$ (7,869)	$ 1	$ (81)	$ 235
35									
36	306000	Lake, River & Other Intakes							
37	Recurring Projects		$ 30,376	$ -	$ -	$ 30,376	$ 313	$ (778)	$ (681)
38	Investment Projects		-	-	-	-	-	-	-
39	Total QIP		$ 30,376	$ -	$ -	$ 30,376	$ 313	$ (778)	$ (681)
40									
41	309000	Supply Mains							
42	Recurring Projects		$ 9,862	$ -	$ -	$ 9,862	$ -	$ (299)	$ (907)
43	Investment Projects		-	-	-	-	-	-	-
44	Total QIP		$ 9,862	$ -	$ -	$ 9,862	$ -	$ (299)	$ (907)
45									

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

		SEC	1	2	3	4	5	B	C
						=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
46	310000	Power Generation Equip							
47	Recurring Projects		$ 43,178	$ -	$ -	$ 43,178	$ 115	$ 3,779	$ (20,509)
48	Investment Projects		-	-	-	-	-	-	-
49	Total QIP		$ 43,178	$ -	$ -	$ 43,178	$ 115	$ 3,779	$ (20,509)
50									
51	311200	Pump Eqp Electric							
52	Recurring Projects		$ 51,831	$ (165,004)	$ -	$ (113,173)	$ 49,517	$ (3,565)	$ 6,110
53	Investment Projects		-	-	-	-	-	-	-
54	Total QIP		$ 51,831	$ (165,004)	$ -	$ (113,173)	$ 49,517	$ (3,565)	$ 6,110
55									
56	311520	Pumping Equipment SOS							
57	Recurring Projects		$ 2,145,484	$ (74,947)	$ -	$ 2,070,537	$ 41,384	$ (37,893)	$ (89,482)
58	Investment Projects		-	-	-	-	-	-	-
59	Total QIP		$ 2,145,484	$ (74,947)	$ -	$ 2,070,537	$ 41,384	$ (37,893)	$ (89,482)
60									
61	320100	WT Equip Non-Media							
62	Recurring Projects		$ 3,485,150	$ (616,837)	$ -	$ 2,868,313	$ 395,663	$ (110,827)	$ (103,474)
63	Investment Projects		10,675,325	(31,111)	-	10,644,214	34,423	(323,362)	(342,818)
64	Total QIP		$ 14,160,475	$ (647,948)	$ -	$ 13,512,527	$ 430,086	$ (434,189)	$ (446,291)
65									
66	320200	Water Trmt Equip Filter Media							
67	Recurring Projects		$ 1,156,745	$ (449,717)	$ -	$ 707,028	$ 489,873	$ 177,931	$ (677,142)
68	Investment Projects		-	-	-	-	-	-	-
69	Total QIP		$ 1,156,745	$ (449,717)	$ -	$ 707,028	$ 489,873	$ 177,931	$ (677,142)
70									
76	330200	Ground Level Tanks							
77	Recurring Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -
78	Investment Projects		254,153	(1,500)	-	252,653	50,000	(851)	(11,579)
79	Total QIP		$ 254,153	$ (1,500)	$ -	$ 252,653	$ 50,000	$ (851)	$ (11,579)
80									
91	340200	Computer & Peripheral Equipment							
92	Recurring Projects		$ 78,567	$ (0)	$ -	$ 78,567	$ 2,554	$ (14,113)	$ (3,541)
93	Investment Projects		-	-	-	-	-	-	-
94	Total QIP		$ 78,567	$ (0)	$ -	$ 78,567	$ 2,554	$ (14,113)	$ (3,541)
95									
96	340300	Computer Software							
97	Recurring Projects		$ 124,563	$ -	$ -	$ 124,563	$ -	$ -	$ -
98	Investment Projects		-	-	-	-	-	-	-
99	Total QIP		$ 124,563	$ -	$ -	$ 124,563	$ -	$ -	$ -
100									
101	340330	Computer Software Other							
102	Recurring Projects		$ 1,224	$ -	$ -	$ 1,224	$ -	$ -	$ -
103	Investment Projects		-	-	-	-	-	-	-
104	Total QIP		$ 1,224	$ -	$ -	$ 1,224	$ -	$ -	$ -
105									

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
106	**343000**	**Tools, Shop, Garage Equipment**							
107	Recurring Projects		$ 4,127	$ (3,416)	$ -	$ 711	$ -	$ (90)	$ (140)
108	Investment Projects		-	-	-	-	-	-	-
109	Total QIP		$ 4,127	$ (3,416)	$ -	$ 711	$ -	$ (90)	$ (140)
110									
111	**344000**	**Laboratory Equipment**							
112	Recurring Projects		$ 6,138	$ (150,505)	$ -	$ (144,367)	$ 1,535	$ (2,421)	$ 6,775
113	Investment Projects		-	-	-	-	-	-	-
114	Total QIP		$ 6,138	$ (150,505)	$ -	$ (144,367)	$ 1,535	$ (2,421)	$ 6,775
115									
116	**345000**	**Power Operated Equipment**							
117	Recurring Projects		$ 51,973	$ (14,251)	$ -	$ 37,722	$ 2,117	$ 1,080	$ (9,977)
118	Investment Projects		-	-	-	-	-	-	-
119	Total QIP		$ 51,973	$ (14,251)	$ -	$ 37,722	$ 2,117	$ 1,080	$ (9,977)
120									
121	**346100**	**Comm Equip Non-Telephone**							
122	Recurring Projects		$ 35,018	$ -	$ -	$ 35,018	$ -	$ (8,601)	$ (8,556)
123	Investment Projects		-	-	-	-	-	-	-
124	Total QIP		$ 35,018	$ -	$ -	$ 35,018	$ -	$ (8,601)	$ (8,556)
125									
126	**346190**	**Remote Control & Instrument**							
127	Recurring Projects		$ 953,473	$ (109,284)	$ -	$ 844,189	$ 63,645	$ (190,507)	$ (99,979)
128	Investment Projects		286,295	-	-	286,295	-	236	(19,007)
129	Total		$ 1,239,768	$ (109,284)	$ -	$ 1,130,484	$ 63,645	$ (190,271)	$ (118,986)
130									
131	**347000**	**Misc Equipment**							
132	Recurring Projects		$ 9,763	$ (4,756)	$ -	$ 5,007	$ 3,990	$ 119	$ (1,578)
133	Investment Projects		5,946	-	-	5,946	-	174	(2,478)
134	Total		$ 15,709	$ (4,756)	$ -	$ 10,953	$ 3,990	$ 293	$ (4,057)
135									
136	**Expense:**								
137	Chemical Expense for WasteWater handling:		$ -	$ -	$ -	$ -	$ -	$ -	$ -
138	Electric Power Expense for Wasterwater handling:		-	-	-	-	-	-	-
139	Hauling Expense for Wasterwater handling:		-	-	-	-	-	-	-
140	Total		$ -	$ -	$ -	$ -	$ -	$ -	$ -
141									
142	**Total**		**$ 27,467,267**	**$ (1,765,469)**	**$ -**	**$ 25,701,798**	**$ 2,974,425**	**$ (594,534)**	**$ (2,095,219)**

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

		SEC	6	7	8	9	10	11	12
			=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		$ 850,701	$ 71,897	$ 17,633	$ 12,032	$ -	$ 101,562	$ 104,909
3	Investment Projects		-	-	-	-	-	-	-
4	Total QIP		$ 850,701	$ 71,897	$ 17,633	$ 12,032	$ -	$ 101,562	$ 104,909
5									
6	**304200**	**Structures & Improvement-Pump**							
7	Recurring Projects		$ 1,040,810	$ 87,964	$ 19,909	$ 13,585	$ -	$ 121,457	$ 125,461
8	Investment Projects		243,636	20,591	(290)	(198)	-	20,104	20,766
9	Total QIP		$ 1,284,446	$ 108,554	$ 19,619	$ 13,387	$ -	$ 141,561	$ 146,227
10									
11	**304300**	**Structures & Improvement-WT**							
12	Recurring Projects		$ 658,173	$ 55,625	$ 27,140	$ 8,922	$ -	$ 91,686	$ 94,708
13	Investment Projects		5,326,447	450,162	167,991	55,223	-	673,376	695,572
14	Total QIP		$ 5,984,620	$ 505,787	$ 195,130	$ 64,145	$ -	$ 765,062	$ 790,280
15									
16	**304400**	**Structures & Improvement-T&D**							
17	Recurring Projects		$ 103,482	$ 8,746	$ 2,328	$ 1,477	$ -	$ 12,550	$ 12,964
18	Investment Projects		-	-	-	-	-	-	-
19	Total QIP		$ 103,482	$ 8,746	$ 2,328	$ 1,477	$ -	$ 12,550	$ 12,964
20									
21	**304500**	**Structures & Improvement - General**							
22	Recurring Projects		$ 79,609	$ 6,728	$ 937	$ 1,120	$ -	$ 8,785	$ 9,075
23	Investment Projects		755,963	63,890	12,005	14,354	-	90,249	93,224
24	Total QIP		$ 835,572	$ 70,618	$ 12,942	$ 15,474	$ -	$ 99,034	$ 102,299
25									
26	**304600**	**Struc &Imp-Offices**							
27	Recurring Projects		$ 9,417	$ 796	$ 106	$ 127	$ -	$ 1,030	$ 1,063
28	Investment Projects		-	-	-	-	-	-	-
29	Total QIP		$ 9,417	$ 796	$ 106	$ 127	$ -	$ 1,030	$ 1,063
30									
31	**304700**	**Struct & Imp-Store,Shop,Garage**							
32	Recurring Projects		$ 155	$ 13	$ (57)	$ (106)	$ -	$ (151)	$ (156)
33	Investment Projects		-	-	-	-	-	-	-
34	Total QIP		$ 155	$ 13	$ (57)	$ (106)	$ -	$ (151)	$ (156)
35									
36	**306000**	**Lake, River & Other Intakes**							
37	Recurring Projects		$ 29,229	$ 2,470	$ 252	$ 410	$ -	$ 3,133	$ 3,236
38	Investment Projects		-	-	-	-	-	-	-
39	Total QIP		$ 29,229	$ 2,470	$ 252	$ 410	$ -	$ 3,133	$ 3,236
40									
41	**309000**	**Supply Mains**							
42	Recurring Projects		$ 8,656	$ 732	$ 184	$ 133	$ -	$ 1,049	$ 1,084
43	Investment Projects		-	-	-	-	-	-	-
44	Total QIP		$ 8,656	$ 732	$ 184	$ 133	$ -	$ 1,049	$ 1,084
45									

Tennessee American Water Company
Safety and Environmental Compliance (SEC)
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
		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%)
46	310000	Power Generation Equip							
47	Recurring Projects		$ 26,563	$ 2,245	$ 5,324	$ 583	$ -	$ 8,152	$ 8,421
48	Investment Projects		-	-	-	-	-	-	-
49	Total QIP		$ 26,563	$ 2,245	$ 5,324	$ 583	$ -	$ 8,152	$ 8,421
50									
51	311200	Pump Eqp Electric							
52	Recurring Projects		$ 103,893	$ 8,780	$ (2,773)	$ (1,529)	$ -	$ 4,479	$ 4,626
53	Investment Projects		-	-	-	-	-	-	-
54	Total QIP		$ 103,893	$ 8,780	$ (2,773)	$ (1,529)	$ -	$ 4,479	$ 4,626
55									
56	311520	Pumping Equipment SOS							
57	Recurring Projects		$ 2,059,493	$ 174,057	$ 37,891	$ 27,974	$ -	$ 239,922	$ 247,831
58	Investment Projects		-	-	-	-	-	-	-
59	Total QIP		$ 2,059,493	$ 174,057	$ 37,891	$ 27,974	$ -	$ 239,922	$ 247,831
60									
61	320100	WT Equip Non-Media							
62	Recurring Projects		$ 3,666,513	$ 309,874	$ 31,265	$ 38,753	$ -	$ 379,891	$ 392,413
63	Investment Projects		10,043,568	848,827	116,022	143,811	-	1,108,660	1,145,204
64	Total QIP		$ 13,710,081	$ 1,158,701	$ 147,287	$ 182,564	$ -	$ 1,488,551	$ 1,537,617
65									
66	320200	Water Trmt Equip Filter Media							
67	Recurring Projects		$ 1,147,408	$ 96,973	$ 238,198	$ 9,552	$ -	$ 344,723	$ 356,086
68	Investment Projects		-	-	-	-	-	-	-
69	Total QIP		$ 1,147,408	$ 96,973	$ 238,198	$ 9,552	$ -	$ 344,723	$ 356,086
70									
76	330200	Ground Level Tanks							
77	Recurring Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -
78	Investment Projects		291,723	24,655	6,923	3,414	-	34,991	36,144
79	Total QIP		$ 291,723	$ 24,655	$ 6,923	$ 3,414	$ -	$ 34,991	$ 36,144
80									
91	340200	Computer & Peripheral Equipment							
92	Recurring Projects		$ 63,467	$ 5,364	$ 1,721	$ 1,061	$ -	$ 8,146	$ 8,414
93	Investment Projects		-	-	-	-	-	-	-
94	Total QIP		$ 63,467	$ 5,364	$ 1,721	$ 1,061	$ -	$ 8,146	$ 8,414
95									
96	340300	Computer Software							
97	Recurring Projects		$ 124,563	$ 10,527	$ 2,279	$ 1,683	$ -	$ 14,490	$ 14,967
98	Investment Projects		-	-	-	-	-	-	-
99	Total QIP		$ 124,563	$ 10,527	$ 2,279	$ 1,683	$ -	$ 14,490	$ 14,967
100									
101	340330	Computer Software Other							
102	Recurring Projects		$ 1,224	$ 103	$ 22	$ 17	$ -	$ 142	$ 147
103	Investment Projects		-	-	-	-	-	-	-
104	Total QIP		$ 1,224	$ 103	$ 22	$ 17	$ -	$ 142	$ 147
105									

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**
106	**343000**	**Tools, Shop, Garage Equipment**							
107	Recurring Projects		$ 3,897	$ 329	$ 49	$ 10	$ -	$ 388	$ 401
108	Investment Projects		-	-	-	-	-	-	-
109	Total QIP		$ 3,897	$ 329	$ 49	$ 10	$ -	$ 388	$ 401
110									
111	**344000**	**Laboratory Equipment**							
112	Recurring Projects		$ 12,027	$ 1,016	$ (1,458)	$ (1,951)	$ -	$ (2,392)	$ (2,471)
113	Investment Projects		-	-	-	-	-	-	-
114	Total QIP		$ 12,027	$ 1,016	$ (1,458)	$ (1,951)	$ -	$ (2,392)	$ (2,471)
115									
116	**345000**	**Power Operated Equipment**							
117	Recurring Projects		$ 45,193	$ 3,819	$ 2,652	$ 510	$ -	$ 6,981	$ 7,211
118	Investment Projects		-	-	-	-	-	-	-
119	Total QIP		$ 45,193	$ 3,819	$ 2,652	$ 510	$ -	$ 6,981	$ 7,211
120									
121	**346100**	**Comm Equip Non-Telephone**							
122	Recurring Projects		$ 17,860	$ 1,509	$ 1,474	$ 473	$ -	$ 3,457	$ 3,571
123	Investment Projects		-	-	-	-	-	-	-
124	Total QIP		$ 17,860	$ 1,509	$ 1,474	$ 473	$ -	$ 3,457	$ 3,571
125									
126	**346190**	**Remote Control & Instrument**							
127	Recurring Projects		$ 726,632	$ 61,411	$ 35,540	$ 11,406	$ -	$ 108,357	$ 111,929
128	Investment Projects		267,524	22,610	12,053	3,868	-	38,531	39,801
129	Total		$ 994,156	$ 84,021	$ 47,593	$ 15,274	$ -	$ 146,888	$ 151,729
130									
131	**347000**	**Misc Equipment**							
132	Recurring Projects		$ 12,294	$ 1,039	$ 317	$ 68	$ -	$ 1,424	$ 1,470
133	Investment Projects		3,641	308	376	80	-	764	790
134	Total		$ 15,935	$ 1,347	$ 693	$ 148	$ -	$ 2,188	$ 2,260
135									
136	**Expense:**								
137	Chemical Expense for WasteWater handling:		$ -	$ -	$ -	$ -	$ -	$ -	$ -
138	Electric Power Expense for Wasterwater handling:		-	-	-	-	-	-	-
139	Hauling Expense for Wasterwater handling:		-	-	-	-	-	-	-
140	Total		$ -	$ -	$ -	$ -	$ -	$ -	$ -
141									
142	**Total**		**$ 27,751,939**	**$ 2,345,442**	**$ 736,617**	**$ 347,250**	**$ -**	**$ 3,429,309**	**$ 3,542,345**

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*	Pending	QIIP	0.000%	10.050%	2.718%	12.768%			
		EDI	0.000%	0.410%	-0.045%	0.365%			
		SEC	0.000%	5.970%	0.121%	6.091%			
		Total	0.000%		2.794%		**19.224%**	**0.00%**	**19.224%**
Proposed	1/1/2019	QIIP	2.750%	12.800%	0.000%	12.800%			
		EDI	0.270%	0.680%	0.000%	0.680%			
		SEC	1.550%	7.520%	0.000%	7.520%			
		Total	4.570%		0.000%		**21.000%**	**-4.57%**	**16.430%**

* 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.

(T) Denotes change in text

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

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

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

BY:

Valoria V. Armstrong
PRESIDENT

109 Wiehl Street
Chattanooga, Tennessee 37403

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.

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"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;

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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:

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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.

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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. <u>Determination of the Annual Reconciliation Factor Percentage Rate</u>

(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

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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:

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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. 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 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. 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

(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	10.05 %	
EDI	0.41 %	
SEC	5.97 %	
Subtotal of all Capital Recovery Riders	16.43 %	
QIIP Annual Reconciliation Percentage	0.000 %	
EDI Annual Reconciliation Percentage	0.000 %	
SEC Annual Reconciliation Percentage	0.000 %	
Subtotal of all Reconciliation Percentages	0.000 %	
Total of Capital Recovery Riders and Reconciliation Percentages	16.430%	
PCOP	-1.25 %	(I)

(D) Indicates Decrease
(I) Indicates Increase

ISSUED: **May 17, 2018** **EFFECTIVE: May 15, 2018**

BY:

Valoria Armstrong
PRESIDENT

109 Wiehl Street
Chattanooga, Tennessee 37403

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	12.79 %	(I)
	EDI	0.68 %	(I)
	SEC	7.50 %	(I)
	Subtotal of all Capital Recovery Riders	21.00 %	(I)
	QIIP Annual Reconciliation Percentage	0.000 %	(D)
	EDI Annual Reconciliation Percentage	0.000 %	(I)
	SEC Annual Reconciliation Percentage	0.000 %	(I)
	Subtotal of all Reconciliation Percentages	0.000 %	(D)
	Total of Capital Recovery Riders and Reconciliation Percentages	21.00%	(I)
(N)	Offset to Capital Recovery Riders for TCJA savings	-4.57 %	(N)
	PCOP	-1.25 %	

(D) Indicates Decrease
(I) Indicates Increase
(N) Indicates New

ISSUED: **November 16, 2018** **EFFECTIVE:** **January 1, 2019**

BY:

Valoria Armstrong
PRESIDENT

109 Wiehl Street
Chattanooga, Tennessee 37403

STATE OF New Jersey)
)
COUNTY OF Camden)

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared Melissa L. Schwarzell, 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.

Melissa L. Schwarzell

Sworn to and subscribed before me
this 16th day of November, 2018.

Notary Public

My Commission Expires: MARTHA B. MAZEIKA
NOTARY PUBLIC OF NEW JERSEY
Comm. # 2419220
My Commission Expires 3/30/2022

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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:

Daniel Whitaker III
Consumer Protection and Advocate Division
Office of the Tennessee Attorney General
P.O. Box 20207
Nashville, TN 37202-0207
Daniel.Whitaker@ag.tn.gov

This the 19th day of February, 2019.

Melvin J. Malone

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