

PETITIONER'S EXHIBIT EKC-1

TENNESSEE-AMERICAN WATER COMPANY, INC.

DOCKET NO. 20- 00028

DIRECT TESTIMONY

OF

ELAINE K. CHAMBERS

ON

**CHANGES TO THE QUALIFIED INFRASTRUCTURE INVESTMENT PROGRAM
RIDER, THE ECONOMIC DEVELOPMENT INVESTMENT RIDER, AND THE
SAFETY AND ENVIRONMENTAL COMPLIANCE RIDER AND IN SUPPORT OF
THE CALCULATION OF THE 2020 CAPITAL RECOVERY RIDERS
RECONCILIATION (RECONCILIATION FOR CALENDAR YEAR 2019)**

SPONSORING PETITIONER'S EXHIBITS:

PETITIONER'S EXHIBIT – CAPITAL RIDERS RECONCILIATION – EKC
PETITIONER'S EXHIBIT – CAPITAL RIDER CHARGES SUMMARY – EKC
PETITIONER'S EXHIBIT – WORK ORDER DETAIL SUMMARY – EKC
PETITIONER'S EXHIBIT – EARNINGS TEST – EKC
PETITIONER'S EXHIBIT – CURRENT TARIFF SHEET NO. 12 – CAPITAL RIDERS –
EKC
PETITIONER'S EXHIBIT – CURRENT TARIFF SHEET NO. 12 – RIDERS – EKC
PETITIONER'S EXHIBIT – PROPOSED TARIFF SHEET NO. 12 – RIDERS – EKC
PETITIONER'S EXHIBIT – ANNUAL APPROVED TARIFFS – EKC

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. My name is Elaine K. Chambers and my business address is 2300 Richmond Road,
3 Lexington, Kentucky 40502.

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

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

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

9 A. Yes. I submitted an affidavit in support of Federal Energy Regulatory Commission
10 proceeding EL05-55-001, while employed by MISO. I have submitted testimony for
11 Indianapolis Power and Light Company's case in chief in the following Cause Nos.: 44576,
12 44893, and 45029 while employed there. I have also submitted testimony for various
13 TPUC Dockets.

14 **Q. PLEASE STATE YOUR EDUCATIONAL AND PROFESSIONAL**
15 **BACKGROUND.**

16 A. I have a Bachelor of Science degree from the University of Indianapolis in Accounting. I
17 also have a Master's of Business Administration from the University of Indianapolis, and
18 I am a Certified Public Accountant in the State of Indiana.

19 I have twenty-one years of experience at Indianapolis Power and Light Company,
20 twelve of which have been in the Rates area. I also have experience in energy consulting
21 with Andersen and Black & Veatch. I also managed the transmission and market
22 settlement functions for the Midwest Independent System Operator, now known as

1 Midcontinent Independent System Operator ("MISO"). I have now been with AWW
2 approximately 13 months.

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

4 A. My primary responsibilities encompass the coordination of regulatory issues in Tennessee
5 and Kentucky. This includes coordinating all reports and filings, working with regulatory
6 staff to make sure that all information produced addresses the requirements or requests,
7 and overseeing the preparation and filing of rate cases and tariff changes. I work with the
8 senior management in both states on planning. I am also responsible for keeping abreast
9 of changes in regulation, or trends in regulatory oversight across the United States that may
10 impact our local operations. I report to the Presidents of Tennessee-American Water
11 ("Tennessee-American," "TAWC" or "Company") and Kentucky-American Water,
12 "KAWC" dually. I am located in Kentucky, but work closely with the TAWC staff in
13 Tennessee as well.

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

15 A. The purpose of my testimony is to support the calculation of the 2020 Capital Recovery
16 Riders Reconciliation described in TAWC's Petition, for the period of January 1, 2019
17 through December 31, 2019. On April 14, 2014, the TPUC approved four new alternative
18 rate mechanisms for TAWC, effective April 15, 2014, in TPUC Docket No. 13-00130.
19 Three of these alternative rate mechanisms were capital program recovery riders,
20 commonly referred to as the "Capital Recovery Riders," and one was for a rider for
21 Production Costs and Other Pass-throughs ("PCOP"). The three Capital Recovery Riders
22 are the only items included in this current Petition.

1 On June 29, 2015, the TPUC approved an adjustment to the three Capital Recovery Riders
2 for 2015 in Docket No. 14-00121, with some modifications to one of the Capital Recovery
3 Riders. Those modifications, set forth in the TPUC's February 1, 2016, *Order Granting,*
4 *In Part, Denying, In Part, Petition*, have been incorporated into the current Petition for an
5 adjustment for 2020. Additionally, TAWC has included the corrections made to the Capital
6 Recovery Riders calculations in related dockets, including Docket Nos. 15-00111, 16-
7 00022¹, 17-00020, 18-00022 and 19-00031.

8 The purpose of TAWC's Petition, which this testimony accompanies (the
9 "Petition"), is to provide the required information for the reconciliation of the 2019 review
10 period to comply with the previously approved Capital Recover Riders tariffs, which as
11 noted above were approved in TPUC Docket No. 13-000130. The information provided
12 in my testimony is consistent with Tenn. Code Ann. § 65-5-103 *et seq.* and the TPUC's
13 April 14, 2014, approval of the Capital Recovery Riders.

14 **Q. ARE YOU SPONSORING ANY EXHIBITS?**

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

16 **Petitioner's Exhibit – Capital Riders Reconciliation – EKC**

17 **Petitioner's Exhibit – Capital Rider Charges Summary – EKC**

18 **Petitioner's Exhibit – Work Order Detail Summary – EKC**

19 **Petitioner's Exhibit – Earnings Test – EKC**

20 **Petitioner's Exhibit – Current Tariff Sheet No. 12 – Capital Riders – EKC**

21 **Petitioner's Exhibit – Current Tariff Sheet No. 12 – Riders – EKC**

22 **Petitioner's Exhibit – Proposed Tariff Sheet No. 12 – Riders – EKC**

23 **Petitioner's Exhibit – Annual Approved Tariffs – EKC**

24
25 I will discuss these exhibits in further detail in my testimony below.

¹ See *Order Approving Petition As Amended*, TRA Docket No. 15-00111 (May 16, 2016); *Pre-filed Testimony of TAWC Witness Linda C. Bridwell*, TRA Docket No. 16-00022; and *Order Granting Petition*, TRA Docket No. 16-00022 (Dec. 29, 2016).

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

3 A. Yes.

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

6 A. The data used to prepare the exhibits was acquired from the books of account and business
7 records of Tennessee-American, and other internal sources which I examined in the course
8 of my investigation of the matters addressed in this testimony. The Company's filings in
9 this TPUC Docket are complete and accurate to the best of my knowledge and belief; the
10 filing is compliant with TAWC's Capital Recovery Riders tariffs and all TPUC orders and
11 directives related to TAWC's Capital Recovery Riders tariffs; any changes in the Petition
12 from previously approved Capital Recovery Riders' methodologies or calculations are
13 identified in the Petition and supporting documentation; the accounting data set forth in
14 this filing is reflected in the Company's General Ledger, or have been reconciled from the
15 Company's General Ledger to the filing in the workpapers provided with the filing. There
16 is one additional file that was used to provide support information for the 2019
17 reconciliation. This file is the final version of the calculations in Docket No. 19-00031.
18 The file has been provided only in excel format and not in paper copy because the
19 information links directly to the current filing.

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

23 A. Yes.

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

4 A. Yes, they do.

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

7 A. Pursuant to Tennessee Code Annotated Section 65-5-103 et seq., the three Capital
8 Recovery Riders authorized in Docket No. 13-00130 are based on certain categories of
9 capital expenditures to cover the investment period of calendar year 2014. The first Capital
10 Recovery Rider is the Qualified Infrastructure Investment Program ("QIIP") Rider. This
11 rider is designed to recover the costs associated with the capital investment made in non-
12 revenue producing plant made between rate cases. "Non-revenue plant" is not constructed
13 or installed for the purpose of serving a new customer, e.g. replacing aging infrastructure.
14 "Revenue producing" plant is plant constructed or installed for serving a new customer.
15 Examples of revenue producing plant are main extensions specifically for a new
16 development, or new services or meters for new customers. As outlined in Docket No. 13-
17 00130, aging water and wastewater infrastructure is a growing problem across the United
18 States, including Tennessee, that will require significant investments over the next few
19 decades to continue to provide clean and reliable water service. This rider helps TAWC
20 address the replacement of this critical, aging infrastructure. The QIIP Rider includes
21 replacement of existing infrastructure in the areas of mains, meters, services, hydrants,
22 water treatment equipment, pumping equipment, and tank painting.

1 The second Capital Recovery Rider is the Economic Development Investment
2 (“EDI”) Rider. This rider is primarily for the recovery of investment made in infrastructure
3 to assist in economic development in the communities and areas served by TAWC.
4 Communities across the country are competing for economic development opportunities
5 to provide growth in jobs, taxes, and overall quality of life for residents. This rider provides
6 an opportunity for TAWC to partner with the communities it serves to assist in economic
7 development. Additionally, unlike the QIIP Rider, the EDI Rider may include operating
8 expenses related specifically to economic development.

9 The third Capital Recovery Rider is the Safety and Environmental Compliance
10 (“SEC”) Rider. This rider is for the recovery of investment made to comply with safety
11 and environmental regulations since the previous rate case. TAWC, like other utilities, is
12 faced with increasing capital investment requirements to comply with safety and
13 environmental regulations. This rider assists TAWC in addressing those requirements.
14 Like the EDI Rider, the SEC Rider may include operating expenses that can be identified
15 as specifically for the new infrastructure under this rider.

16 The table below summarizes the history of the three Capital Recovery riders to date:

TPUC Docket No.	Description	Status
13-00130	Initial Authorization of Capital Recovery Riders for 2014	Authorized
14-00121	Adjustment for investment period of calendar year 2015	Authorized
15-00029	2015 Reconciliation for calendar year 2014	Authorized
15-00111	Adjustment for investment period of calendar year 2016	Authorized
16-00022	2016 Reconciliation for calendar year 2015	Authorized
16-00126	Adjustment for investment period of calendar year 2017	Authorized
17-00020	2017 Reconciliation for calendar year 2016	Authorized
17-00124	Adjustment for investment period of calendar year 2018	Authorized
18-00022	2018 Reconciliation for calendar year 2017	Authorized
18-00120	Adjustment for investment period of calendar year 2019	Authorized
19-00031	2019 Reconciliation for calendar year 2018	Authorized
19-00105	Adjustment for investment period of calendar year 2020	Pending

1 The purpose of the current Petition is to comply with the tariffs approved in TPUC Docket
2 No. 13-00130 and provide the required information and supporting documentation in each
3 of the Capital Recovery Riders for the reconciliation of the investment period of calendar
4 year 2019, authorized in the fifth adjustment shown in the table above.

5 Attached to my testimony is **Petitioner's Exhibit Current Tariff Sheet No. 12—Capital**
6 **Riders – EKC**, which is a copy of all three Capital Recovery Riders tariff sheets as
7 approved in TPUC Docket No. 13-00130, and as modified in TPUC Docket No. 14-00121
8 and as further clarified in TPUC Docket Nos. 15-00029, 15-00111, 16-00022, 16-00126,
9 17-00020, 17-00124, 18-00022, 18-00120 and 19-00031.

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

13 A. As far as the projects and the investment into those projects are concerned, there isn't any
14 difference. The difference between the new riders and the future test year regulatory
15 approach that has been used by TAWC in rate cases is largely in the method and procedure
16 of filing, the deferral of fully litigated rate cases and the lessening of rate shock, and the
17 multiple benefits of the streamlined alternative mechanisms. If it were not for the new
18 alternative regulatory methods available to the Commission and the regulated community,
19 TAWC would likely have had to file a rate case in 2019 or earlier. These new methods have
20 deferred the need to file a full rate case, at least in the short term. These petitions make the
21 regulatory process much more streamlined and less burdensome, without reducing effective
22 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 the alternative fuel vehicles. These changes were recognized in Docket No. 15-00111 and are reflected fully in this Petition. TAWC removed those items from the EDI for 2014, 2015, 2016, 2017, 2018 and 2019.

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 Nos. 13-00130 and 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 worksheets that demonstrate the total additions, removals and retirements, and Contributions in the Aid of Construction ("CIAC") for 2019. This is consistent with previous dockets including 15-00029, 15-00111, 16-00022, 16-00126, 17-00020, 17-00124, 18-00022, 18-00120 and 19-00031.

1 **Q. ARE THERE OTHER CHANGES TO THE EXCEL WORKBOOK OR**
2 **CALCULATIONS FROM THE FILES FROM DOCKET NO. 19-00031?**

3 A. Yes. In addition to any corrections and changes that were carried forward from previous
4 dockets, Tennessee-American has made the additional calculation adjustments below.
5 They are as follows:

- 6 1) All prior year's cumulative data is being supported through the last years' final
7 approved schedules for calendar year 2018 in Docket 19-00031, as stated above.
- 8 2) TAWC has updated the workbook for the 2019 actual numbers and updated all
9 formulas referencing these amounts.
- 10 3) The repairs percentages for tax year 2018 has been updated from last year's filing to
11 47.27% for T&D plant and 25.03% for non-T&D.
- 12 4) The repairs percentages for tax year 2019 has been input as 49.67% for T&D plant and
13 25.03% for non-T&D.
- 14 5) The net operating loss carryforward ("NOLC") has been updated for 2018 & 2019 to
15 be \$4,718,123.
- 16 6) The 2019 capitalized incentive amount was included as a reduction to the revenue
17 requirement.

18 **Q. IN DOCKET NO. 17-00020, TENNESSEE-AMERICAN MADE AN ADJUSTMENT**
19 **TO THE RECONCILIATION OF THE CAPITAL RECOVERY RIDERS TO**
20 **REMOVE A PORTION OF REVENUE REQUIREMENT FOR ANNUAL**
21 **PERFORMANCE COMPENSATION IN 2014, 2015 AND 2016. HAS AN**

1 **ADJUSTMENT FOR ANNUAL PERFORMANCE COMPENSATION BEEN**
2 **MADE IN THIS CASE?**

3 A. Yes. Tennessee-American adjusted the proposed 2019 Capital Recovery Riders in Docket
4 No. 18-00120 to remove the carrying costs for that capitalized Annual Performance
5 Compensation for 2019. These amounts are included for the 2019 reconciliation on line
6 20 of the Petitioner's Exhibit -- Capital Riders Reconciliation – EKC reducing the
7 actual revenue requirement the Company should have collected. This is reflected as a
8 change above.

9 **Q. HOW HAS THE APPLICATION OF THE EDI RIDER BEEN DIFFERENT FROM**
10 **THE PREVIOUS INVESTMENT REGULATORY METHODS UTILIZED BY**
11 **TAWC PRIOR TO THE APPROVAL OF THE RIDERS IN TPUC DOCKET NO.**
12 **13-00130?**

13 A. Without the EDI Rider, the projects included in that Capital Recovery Rider may not have
14 been as successful or potentially would not have developed at all. Under its previous
15 investment methods for development, TAWC would have required the developers to pay
16 for the relocation and replacement of assets, thus increasing the upfront costs to them.
17 Given the amount of the investment, coupled with the growth, jobs, and other positive
18 attributes attached to these projects, losing one or more of the projects would have been a
19 disappointment to the communities. These projects demonstrate that the EDI Rider is an
20 extremely valuable tool that can enhance a community's ability to attract future economic
21 development opportunities. Successes such as these will help the area gain an upper hand
22 in the rigid competition among competing communities, which ultimately benefits all of
23 TAWC's customers. For instance, additional water sales have the potential to offset the

1 ongoing declining use that TAWC has experienced, maintaining a water sales level close
2 to authorized and thus contribute to cover a portion of the Company's fixed expenses. This
3 helps maintain lower rates to all of our customers.

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

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

12 **Q. DO THE CAPITAL RECOVERY RIDERS BENEFIT THE CUSTOMERS?**

13 A. Yes. The QIIP, the EDI and the SEC Riders are mutually beneficial to the ratepayers, the
14 public, and TAWC. The Qualified Infrastructure Program Rider, the Economic
15 Development Investment Rider, and the Safety and Environmental Compliance Rider, in
16 part, reduce the need for general rate cases, lessen the occurrence of consumer "rate shock,"
17 support the maintenance and improvement of essential infrastructure, support opportunities
18 for successful economic development, growth and job creation, ensure safety and
19 reliability, and allow for more efficient, streamlined regulation. The ratepayers and the
20 public benefit from the safety and reliability components and from the more seamless and
21 timely capital investment in infrastructure, coupled with the related support to economic
22 development, growth and job creation. The Company benefits from a more efficient,

1 streamlined regulatory process that presents TAWC with the opportunity to timely recover
2 its expenses and earn a fair rate of return on its investments.

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

8 A. Certainly. The Capital Recovery Riders permit TAWC to recover the cost of capital
9 investment between rate cases in an efficient, streamlined regulatory process. As outlined
10 in my testimony here, each year Tennessee-American estimates or forecasts the amount of
11 qualified capital investment (QIIP), infrastructure investment and eligible expenses (EDI)
12 and safety and environmental compliance investment and eligible expense (SEC) that it
13 expects to spend for the upcoming calendar year. The Company will then calculate what
14 it costs to recover the expenditures associated with such forecasted capital investment and
15 expenses. For example, if the Company were to invest \$1 million dollars on a QIIP project
16 in the forecast year, the Company would not recover that entire \$1 million that year.
17 Rather, it will only recover a return on that investment (which includes a weighted return
18 on equity and interest on debt as authorized in the most recent rate case), as well as
19 depreciation expense and taxes. After it calculates what it costs to recover the expenditures
20 associated with the forecasted capital investment and expenses, Tennessee-American then
21 determines – through a second calculation – the percentage of the costs to recover those
22 expenditures as an amount of the overall revenue authorized in the last rate case. This is
23 the surcharge amount. The surcharge then represents recovery for the costs to support the

1 capital investments. So, under the Capital Recovery Rider tariffs as approved, the monthly
2 surcharge over 12 months in the forecasted year would represent the annual recovery of
3 the cost to support the capital investment.

4 The Reconciliation of the Capital Recovery Riders protect both the customers and
5 Tennessee-American in that it reviews the construction efforts to ensure projects are being
6 completed as forecasted and determines if revenues are being collected as forecasted. It
7 essentially allows for a true-up at the end of the 12-month period.

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

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

15 **Q. IS THERE A DRAWBACK TO RATE CASES?**

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

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

3 A. Yes. As set forth in the approved tariffs, all three Capital Recovery Riders are established
4 on an annual prospective basis utilizing average end-of-month balances and should reflect
5 only those qualified plant additions installed after the conclusion of the initial rate year in
6 Docket No. 12-00049. Consistent with the tariffs, the qualified plant additions are reduced
7 by the projected retirements associated with the Capital Recovery Riders additions in the
8 calculation of applicable depreciation and property tax expense. As discussed earlier in my
9 testimony, the EDI and SEC Riders can be increased by the appropriate operating expenses.
10 However, TAWC has not included any operating expenses for the EDI or SEC riders in
11 this Petition. In this case, Tennessee-American is proposing to reconcile the review period
12 for each of the Capital Recovery Riders beginning on January 1, 2019 and ending on
13 December 31, 2019.

14 This annual review period was established originally in the tariffs submitted on
15 March 25, 2014 and approved in Docket No. 13-00130 on April 14, 2014. The tariffs
16 establish a reconciliation period for each of the Capital Recovery Riders, which will occur
17 60 days after the close of the attrition period. The attrition period in Docket No. 13-00130
18 was for January 1, 2014 through December 31, 2014, and the first reconciliation occurred
19 in Docket No. 15-00029. The attrition periods were to occur in subsequent 12-month
20 periods after Docket No. 13-00130. As this is the sixth reconciliation filing, this Petition
21 addresses only the sixth review period of January 1, 2019 through December 31, 2019.
22 The 2020 Capital Recovery Riders rates are the subject of Docket. 19-00105 and not
23 included in this Petition.

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

6 **Q. ARE THE RECONCILIATION PORTIONS OF THE SURCHARGE AMOUNT**
7 **ALSO CUMULATIVE?**

8 A. No. In the filing in Docket No. 18-00120, Tennessee-American utilized the actual 2014,
9 2015, 2016, and 2017 amounts of plant additions. The reconciliation period is only for
10 2019, and includes six components: 1) the comparison of actual 2019 plant additions to the
11 amount forecasted; 2) the comparison of revenues authorized in 2019 with the revenues
12 actually collected from customers; 3) the 2018 reconciliation amount as authorized in
13 Docket No. 19-00031, 4) an earnings adjustment based on a comparison of 2019 earnings
14 with the authorized earnings from Docket No. 12-00049; 5) the capitalized APP reduction
15 for the year of 2019, and 6) interest on the difference.

16 **Q. CAN YOU DISCUSS DETAILED SPECIFICS TO THE OPERATION OF THE**
17 **CAPITAL RECOVERY RIDERS NOT ADDRESSED ABOVE?**

18 A. Yes. TAWC utilizes an annual prospective approach to the utility plant additions that
19 qualify for recovery through the Capital Recovery Riders. The Capital Recovery Riders
20 provide for the recovery of revenue sufficient to cover the capital cost, depreciation and
21 tax expense related to the projected investment in qualified utility plant. These costs
22 consider the effects of associated retirements ("Net Plant"), CIAC, and Cost of Removal
23 Spending net of Salvage value for the attrition period. To determine the rate of return

1 recovery, an average of the month-end balances of new utility plant in service is averaged
2 calculated, less $\frac{1}{2}$ of the anticipated annual associated CIAC, plus $\frac{1}{2}$ of the anticipated
3 annual associated cost of removal net of salvage spending, to derive the "Net Plant"
4 amount. As discussed in Docket No. 16-00022, in the first year TAWC used a 12-month
5 average to calculate the Capital Recovery Riders, representing all of the activity within the
6 12 months of the attrition period. Beginning in the second year, TAWC used a 13-month
7 average from the end of the previous year through the end of the attrition period. The
8 current approved pre-tax rate of return ("PTR") is applied to this net amount to determine
9 the revenue requirement of the rate base portion. The PTR is calculated from the weighted
10 common equity and preferred equity, grossed up to include state and federal taxes, plus the
11 weighted cost of long-term debt and the weighted cost of short-term debt. Next, the annual
12 depreciation expense of the additional Net Plant is calculated ("NetDep"), utilizing the
13 current TPUC approved depreciation rates by account and then added. From there,
14 incremental new property and Franchise taxes ("PFT") is added. For the EDI Rider and
15 SEC Rider, additional operating expenses would be added as appropriate. The sum of these
16 components are grossed up to include the recovery of the associated additional Gross
17 Receipts taxes, Uncollectible expense, and forfeited discounts ("RT") to derive the final
18 revenue requirement. Then, any over or under Capital Recovery Riders collection of prior
19 periods would be added or subtracted as applicable ("R"). The purpose of this Petition
20 specifically is to address the over or under Capital Recovery Riders collection for the
21 review period of 2019. This total is then divided by the authorized annual level of general
22 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. 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 reconciliation percentage individually and in total. The calculation of the reconciliation percentage for each rider is attached to my testimony as **Petitioner's Exhibit – Capital Riders Reconciliation – EKC**. The detailed calculations are attached to the Petition in the workpapers. The calculations are consistent with the calculations that were made in the approved tariffs in Docket Nos. 13-00130, 14-00121, 15-00111, 16-00126, 17-00124, 18-00120 and 19-00105, as well as the reconciliations of Docket Nos. 15-00029, 16-00022, 17-00020, 18-00022 and 19-00031. 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 tariffs in Docket Nos. 13-00130, 14-00121, 15-00111, 16-00126, 17-00124, 18-00120 and again in 19-00105. The workpapers are also consistent with the calculations made to support the reconciliations in TPUC Docket No. 15-00029, 16-00022, 17-00020, 18-00022 and 19-00031.

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

4 A. Yes. Company Witness Kurt Stafford will discuss the details regarding capital
5 expenditures included in the QIIP, EDI and SEC Riders for 2019.

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

7 A. The QIIP, EDI and SEC Riders are expressed as a percentage. The current tariff Sixteenth
8 Revised Sheet No. 12 – Riders – 1 is attached to my testimony as Petitioner’s Exhibit –
9 Current Tariff Sheet No. 12 – Riders – EKC, and the proposed tariff sheet Eighteenth
10 Revised Sheet No. 12 – Riders – 1 is attached to my testimony as Petitioner’s Exhibit –
11 Proposed Sheet No. 12 – Riders – EKC. They are each applied to the total amount billed
12 to each customer under the otherwise applicable rates and charges for basic service,
13 metered usage charges, and private fire charges, and are applied prior to the inclusion of
14 any other taxes, charges, or surcharges. All three Capital Recovery Riders are combined
15 into one line item on the bill of each customer along with the reconciliation amounts.

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

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

20
21 **Q. WHAT WILL HAPPEN TO THE CAPITAL RECOVERY RIDERS UPON**
22 **APPROVAL OF NEW RATES IN A RATE CASE PROCEEDING?**

23 A. The QIIP, EDI, and SEC Riders will all be reset to zero as of the effective date of the new
24 Base Rates, which Base Rates then provide for the recovery of the annual costs that had

1 theretofore been recovered through the Capital Recovery Riders. Thereafter, and
2 consistent with the tariffs, only the new QIIP, EDI, and SEC Rider qualified plant additions
3 and expenses not previously included in rate base and Base Rates will be reflected in the
4 future filings subject to TPUC Approval.

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

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

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

12 A. The depreciation rates last approved by the TPUC in Docket 12-00049 for the respective
13 plant accounts in which the specific items of qualified infrastructure under each rider are
14 recorded are the depreciation rates used to determine the depreciation expense. New
15 depreciation rates would be used only after depreciation rates are changed during a general
16 rate proceeding. These are the rates that were used in Docket Nos. 13-00130, 14-00121,
17 15-00029, 15-00111, 16-00022, 16-00126, 17-00020, 17-00124, 18-00022, 18-00120, 19-
18 00031 and 19-00105.

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

22 A. The property tax rate is based on the proportion of property taxes authorized in Docket No.
23 12-00049 to the utility plant in service, multiplied by the additional utility plant less

1 retirements. This is the same rate used in Docket Nos. 13-00130, 14-00121, 15-00029, 15-
2 00111, 16-00022, 16-00126, 17-00020, 17-00124, 18-00022, 18-00120, 19-00031 and 19-
3 00105.

4 **Q. HOW ARE ANNUAL REVENUES DETERMINED FOR THE QIIP, EDI AND SEC**
5 **RIDERS?**

6 A. The projected annual revenues will be the authorized water services revenues from the last
7 case, Docket No. 12-00049, including all service charges and volumetric charges for all
8 classes that are subject to the Capital Recovery Riders. These are the same annual revenues
9 used in Docket Nos. 13-00130, 14-00121, 15-00029, 15-00111, 16-00022, 16-00126, 17-
10 00020, 17-00124, 18-00022, 18-00120, 19-00031 and 19-00105.

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

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

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

4 A. No.

5 **Q. DID THE AMOUNT OF INVESTMENT RIDER REVENUES COLLECTED**
6 **FROM TENNESSEE-AMERICAN'S CUSTOMERS VARY FROM THE ACTUAL**
7 **AMOUNT OF REVENUE NEEDED TO COVER A RETURN OF AND A RETURN**
8 **ON THE COMPANY'S QIIP, EDI AND SEC INFRASTRUCTURE INVESTMENT**
9 **AND TAXES?**

10 A. Yes. There were three things that varied during 2019. First, there was a difference between
11 the actual and the allowed water operating revenues upon which the Capital Recovery
12 Riders are based. Second, the 13-month average plant additions for 2019 were actually
13 less than projected. Third, the 2019 Capital Recovery Riders' surcharge percentage and
14 the 2019 Reconciliation of the Capital Recovery Riders' surcharge percentage, as
15 authorized, were applied over a shorter duration than originally proposed in the tariffs.

16 **Q. CAN YOU EXPLAIN THE DIFFERENCE BETWEEN THE ACTUAL AND**
17 **ALLOWED WATER OPERATING REVENUES UPON WHICH THE CAPITAL**
18 **RECOVERY RIDERS ARE BASED?**

19 A. Yes. The projected annual revenues were calculated based on the authorized amount of
20 sales in Docket No. 12-00049. The overall sales in 2019 were less than the amount
21 authorized in Docket No. 12-00049. Therefore, the Capital Recovery Riders, which are a
22 percentage of water charges, were less than authorized. What this means in practical terms

1 is that there were less water sales to apply the percentage to, resulting in less actual
2 revenues billed for the Capital Recovery Riders than were authorized.

3 **Q. WHY WERE THE AVERAGE CAPITAL EXPENDITURES FOR 2019 LESS**
4 **THAN PROJECTED?**

5 A. Mr. Stafford discusses the management of the 2019 Capital Expenditures Plan in detail.
6 There was no single project that created the variance, but a series of projects that were all
7 appropriately approved and modified throughout 2019 and prior.

8 **Q. CAN YOU EXPLAIN HOW THE 2019 CAPITAL RECOVERY RIDERS AND THE**
9 **2019 RECONCILIATION OF THE CAPITAL RECOVERY RIDERS OVER A**
10 **SHORTER DURATION IMPACTED THE REVENUES COLLECTED?**

11 A. Yes. The authorized surcharge amount was proposed based on revenues collected over
12 2019. For the 2019 Capital Recovery Riders, this was proposed assuming the entire
13 calendar year, but the 2019 Capital Recovery Riders had an effective date of August 12,
14 2019. The surcharge amount did not change, but was simply applied for a shorter duration
15 than originally proposed. This reduced the overall amount of revenues collected. What
16 this means in practical terms is that there were less actual water revenues to apply the
17 Capital Recovery Riders to than originally proposed.

18 Additionally, the 2019 Capital Recovery Riders Reconciliation in Docket No. 19-
19 00031 assumed a refund from April 1, 2019 through December 31, 2019. The effective
20 dates of the 2019 Capital Recovery Riders Reconciliation, for calendar year 2018, was
21 December 9, 2019 through December 31, 2019. This refund, which started later than
22 anticipated, still represents an amount that must be returned to customers.

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

6 A. Yes. As discussed earlier, the QIIP, EDI and SEC Riders are all subject to an annual
7 reconciliation or true-up in which the revenue received under each of the Capital Recovery
8 Riders for the reconciliation period will be compared to the revenue necessary for the
9 Company to recover its return of and return on investment plus taxes, for that QIIP, EDI
10 and SEC Rider year. As I stated earlier, this Petition is only for the reconciliation to the
11 2019 QIIP, EDI and SEC. The 2020 proposed QIIP, EDI and SEC riders are included as
12 Docket No. 19-00105 and are not included in this Petition.

13 **Q. HOW DOES THE RECONCILIATION WORK?**

14 A. Consistent with the approved tariffs, Tennessee-American has filed a reconciliation for all
15 three Capital Recovery Riders no later by March 1, 2020. There are actually two steps to
16 the reconciliation. The first is an adjustment for budget to actual investment. This is a
17 regulatory oversight and public interest component of the mechanism that results in a true-
18 up if the investment does not occur (up or down) as forecasted. The second is an adjustment
19 for the over or under recovery of revenues as projected, including interest. This is another
20 regulatory oversight and public interest component of the mechanism. In this way, the
21 consumers are protected from paying too much if sales exceed the amount authorized in
22 the previous rate case proceeding. This could occur if there is a significant amount of
23 customer growth, or if dry and hot conditions occur in any given year. This second

1 adjustment also allows TAWC to adjust if sales are less than the amount authorized in the
2 last case, as could occur with declining usage that TAWC has experienced in recent years.
3 The reconciliation percentage, pending approval by April 1, 2020, as contemplated in the
4 tariffs, will be applied to customer bills for 9 months in 2020.

5 Finally, there is also a consumer safeguard in the reconciliation process that reviews
6 the earnings for Tennessee-American during the attrition period. If it is determined that
7 Tennessee-American earned a rate of return above the authorized amount from the previous
8 rate case during the attrition period, the amount above the authorized is applied as an
9 adjustment to the customers, with interest. This could occur if sales exceed the amount
10 authorized in the previous rate case due to significantly hot and dry conditions, as were
11 experienced in 2016.

12 **Q. WHAT ARE THE RESULTS FOR THE FIFTH ADJUSTMENT OF THE ACTUAL**
13 **COMPARED TO THE BUDGET?**

14 A. The amount of average actual in-service capital investment was lower than the projected
15 levels in Docket No. 18-00120. This is shown on the Petitioner's Exhibit -- Capital
16 Riders Reconciliation -- EKC attached to my testimony at Line 1. This is due primarily
17 to the timing of when eligible TAWC projects were placed in-service. Actual capital
18 spending was less in 2019 as discussed in Mr. Stafford's testimony. As demonstrated in
19 the exhibit, TAWC had an average balance of plant additions of \$77,259,098 in service
20 under the capital recovery riders, compared to \$79,902,541 budgeted. Overall, the amount
21 of the revenue requirement for the calendar year 2019 was less than originally projected in
22 the riders. As shown on Line 22 of the same exhibit, the actual revenues required was
23 \$8,949,225 while the projected amount was \$9,026,095.

1 Q. DID TENNESSEE-AMERICAN COLLECT ALL OF THE REVENUES
2 AUTHORIZED FOR THE CAPITAL RECOVERY RIDERS SURCHARGES IN
3 2019 FROM DOCKET NO. 18-00120?

4 A. No, it did not. That revenue difference is also included in this Petition filing and is shown
5 on the Petitioner's Exhibit -- Capital Riders Reconciliation – EKC attached to my
6 testimony at Line 27.

7 Q. WAS TENNESSEE-AMERICAN ABLE TO RETURN ALL OF THE REVENUES
8 AUTHORIZED FOR THE CAPITAL RECOVERY RIDERS RECONCILIATION
9 COMPONENT IN 2019 FROM DOCKET NO. 19-00031?

10 A. No.. That difference is also included in this Petition filing and is shown on the Petitioner's
11 Exhibit -- Capital Riders Reconciliation – EKC attached to my testimony at Line 29.

12 Q. BASED ON THE SHORTER PERIOD FOR COLLECTIONS, AND THE LOWER
13 THAN EXPECTED WATER SALES, WHAT ARE THE RESULTS FOR THE
14 FIFTH ADJUSTMENT FOR OVER/UNDER REVENUE BILLINGS?

15 A. The revenues billed were \$8,120,029, or \$906,066 less than the authorized amount. This
16 is primarily for two reasons. First, the Capital Recovery Riders were only in place
17 approximately four and a half months and not a full year as proposed in the calculation of
18 the amount of the Capital Recovery Riders in Docket No. 18-00120. This was compounded
19 in that the water sales and revenues were less than the base amount authorized in Docket
20 No. 12-00049. Additionally, Tennessee-American has lost two Sales for Resale customers
21 since Docket No. 12-00049.

1 **Q. WHAT PURPOSE DOES THE EARNINGS TEST ADJUSTMENT SERVE AS**
2 **PART OF THE TARIFF?**

3 A. As developed by the parties in TPUC Docket No. 13-00130, and as approved by the
4 Commission, the tariffs include a number of inherent safeguards and protections. For
5 instance, the oversight and safeguards set forth within the tariffs guard against the
6 occurrence of a rise of net operating income for TAWC as revenue requirements would
7 increase annually without a general rate case to review all revenues, expenses and
8 investment. This might occur, for instance, if there were an operational improvement that
9 reduced expenses or created additional income, drought conditions that result in
10 significantly higher water sales, or significant growth that leads to much higher water sales
11 and revenues. In order to provide for sufficient oversight, the Capital Recovery Riders
12 tariffs include an earnings test adjustment. The Earnings Test determines if the Company's
13 attained earnings for the review period exceed the earnings allowed for the Annual Review
14 Period by applying the overall rate of return authorized in the last rate case. If the earnings
15 attained exceed that amount, then the revenues will be reduced by that same amount, with
16 interest, referred to as the Earnings Test Adjustment.

17
18 **Q. DID TENNESSEE-AMERICAN EARNINGS EXCEED THE AUTHORIZED**
19 **AMOUNT FROM DOCKET NO. 12-00049?**

20 A. Yes. Tennessee-American earned a higher rate of return than the authorized 7.23% from
21 Docket No. 12-00049. Therefore, Tennessee-American, consistent with the tariffs,
22 appropriately has included an earnings test adjustment in the filing.

1 Q. CAN YOU EXPLAIN HOW TENNESSEE-AMERICAN CALCULATED THE
2 EARNINGS TEST ADJUSTMENT?

3 A. Yes, I can. Tennessee-American used a straightforward approach. Each month, Tennessee-
4 American files with the TPUC a monthly report regarding its monthly earnings, and 12-
5 month earnings. Tennessee-American utilized the information provided in each monthly
6 report as discussed above, and calculated a rate of return using a 13-month average of the
7 rate base calculation, as was utilized in Docket No. 17-00020. As of the end of December
8 2019, the 13-month earnings were 7.72%, which is above the authorized 7.23% from Docket
9 No. 12-00049. This is reflected on Line 30 of Petitioner's Exhibit – Capital Riders
10 Reconciliation – EKC. The Earnings Test Adjustment results in an adjustment of
11 (\$1,261,764) to the reconciliation revenues, which includes the gross up for income taxes.

12 Q. YOU ALSO INDICATED THAT TAWC HAS NOT FILED ANYTHING IN THIS
13 PETITION TO INCLUDE THE RECONCILIATION OF THE PRODUCTION
14 COSTS AND OTHER PASS-THROUGHS RIDER. WHY IS TAWC NOT
15 INCLUDING THE PCOP RECONCILIATION IN THIS PETITION?

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

Docket	Review Period	Status
	December 1, 2012 – November 30, 2013	Authorized
15-00001	December 1, 2013 – November 30, 2014	Authorized
15-00131	December 1, 2014 – November 30, 2015	Authorized
16-00148	December 1, 2015 – November 30, 2016	Authorized
18-00009	December 1, 2016 – November 30, 2017	Authorized
19-00010	December 1, 2017 – November 30, 2018	Authorized

20-00008	December 1, 2018 – November 30, 2019	Pending
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Q. DOES 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. WHAT IS THE STATUS OF THE PCOP RECONCILIATION?

A. TAWC filed the reconciliation on the PCOP Rider on January 15, 2020. New PCOP rates are pending in Docket No. 20-00008.

Q. WHAT IS THE PROPOSED ADJUSTED QIIP RIDER?

A. TAWC is proposing a QIIP Rider that results in a total revenue refund of (\$732,529) for nine months of 2020 year or a surcharge of -2.07%.

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

A. Yes. A new tariff Eighteenth 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 - EKC.**

Q. WHAT IS THE PROPOSED EDI RIDER?

A. TAWC is proposing an EDI Rider that results in a total revenue recovery of (\$175,919) for nine months of 2020 year or a surcharge of -0.50%. Again, this is shown on the new tariff Eighteenth 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 - EKC.**

1 **Q. WHAT IS PROPOSED SEC RIDER?**

2 A. TAWC is proposing an SEC Rider that results in a total revenue recovery of (\$394,676)
3 for nine months of 2020 year or a surcharge of -1.12%. Again, this is shown on the new
4 tariff Eighteenth Revised Sheet No. 12 – Riders – 1 which reflects all three Capital
5 Recovery Riders and is attached to my testimony as **Petitioner’s Exhibit -- Proposed**
6 **Sheet No. 12- Riders - EKC**. The sum of the three riders is a decrease of -3.69% on the
7 current base bill.

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

9 A. The typical residential customer living in the City of Chattanooga, and using an average of
10 4,154 gallons per month will see a decrease in their bill of \$0.80 per month, or \$7.16 in
11 2020. I am also providing a table reflecting the detailed changes for each Capital Recovery
12 Rider, including the reconciliations. This is attached to my testimony as **Petitioner’s**
13 **Exhibit – Annual Approved Tariffs – EKC**.

14 **Q. WHAT INFORMATION IS REQUIRED IN THE TARIFF TO BE INCLUDED IN**
15 **THE ANNUAL RECONCILIATION FILING?**

16 A. Each tariff states that the Company will include in its Annual Reconciliation Filing the
17 following information at a minimum: (a) a schedule of all journal entries made related to
18 this Rider for the Annual Review Period, including any related general ledger support, (b)
19 actual billing determinants by month as used in the computation of the Total Collected
20 from Customers for the Annual Review Period, (c) capitalization policy effective for the
21 Annual Review Period, (d) computation of the Annual Reconciliation Factor Percentage
22 Rate, including the detailed calculation of each component, (e) schedules of the Actual
23 Investment Amount and Actual Operational Expense, including related general ledger

1 support, (f) a schedule of any proposed prior period adjustments, (g) an affirmative
2 statement of whether the Company is aware of any changes in market conditions or other
3 factors that may affect whether the Rider is still in the public interest, including the
4 identification of such factors if they exist, and (h) the cumulative amount collected from
5 customers.

6 **Q. HAS TAWC PROVIDED THE INFORMATION IN THIS PETITION FILING**
7 **THAT IS REQUIRED FOR THE QHP, EDI AND SEC TARIFFS?**

8 A. Yes. In order to provide this information, (a) TAWC has provided in the workpapers all
9 of the general ledger transactions for all of the capital expenditures in the capital recovery
10 riders; (b) TAWC has provided the billing determinants by month from January 2019 to
11 December 2019 in the workpapers; (c) a copy of the capitalization policy effective for the
12 Annual Review Period was filed in Docket No. 15-00029 and has not been revised since
13 that filing and is referenced; (d) TAWC has provided a computation of the Annual
14 Reconciliation Factor Percentage Rate attached as **Petitioner's Exhibit – Capital Riders**
15 **Reconciliation – EKC** and has provided the detailed calculation of each component in the
16 workpapers along with an explanation of the workpaper calculation; (e) TAWC has
17 provided schedules of the Actual Investment Amount including the detailed general ledger
18 support for each of the riders in the workpapers however there were no Actual Operational
19 Expenses in 2019; (f) TAWC has not included any proposed prior period adjustments other
20 than removing items in 2019 for the EDI rider consistent with the Orders in Docket Nos.
21 14-00121 and 15-00029 as well as the Annual Performance Compensation adjustment
22 approved as part of Docket No. 17-00124; (g) I discuss whether the Company is aware of
23 any changes in market conditions or other factors that may affect whether the Rider is still

1 in the public interest, including the identification of such factors if they exist; and (h)
2 TAWC has provided the cumulative amount collected from customers on the **Petitioner's**
3 **Exhibit -- Capital Riders Reconciliation -- EKC** along with the detailed information of
4 the amount of revenues collected from customers for each of the capital recovery riders in
5 the workpapers.

6 **Q. HAS TENNESSEE-AMERICAN PROVIDED INVOICES FOR ALL OF THE**
7 **CAPITAL EXPENDITURES INCLUDED IN THE CAPITAL RECOVERY**
8 **RIDERS?**

9 A. No. TAWC has provided the detailed general ledger information for all transactions on all
10 projects in the workpapers, and summarized the type of expenses for each rider in
11 **Petitioner's Exhibit -- Capital Rider Charges Summary -- EKC**. Although individual
12 invoices are available for some contract services under some projects, TAWC uses a
13 purchase order system under blanket contracts that provides for billing for multiple projects
14 on one invoice. Further, TAWC uses purchase orders for materials, bringing materials in
15 and out of stock inventory on an average cost basis. Some material held in inventory may
16 have been purchased in previous years and tracing those items to specific invoices or
17 purchase order receipts will be extremely challenging. Finally, invoices for all projects
18 would result in an extremely large filing that may contain more information than is feasible
19 to review. TAWC has provided a summary of the work order detail of expenses in
20 **Petitioner's Exhibit -- Work Order Detail Summary -- EKC**. TAWC has filed this
21 similar to Docket Nos. 16-00022, 17-00020, 18-00022 and 19-00031, and fully anticipates
22 filing sample documentation during the discovery process. It is important to develop a
23 technique or process that provides adequate levels of assurance that TAWC continues to

1 implement its construction program in the most cost effective manner for its customers
2 while not developing a technique or process that becomes overwhelming or inefficient for
3 all parties involved in the reconciliation process.

4 **Q. IS THE COMPANY AWARE OF ANY CHANGES IN MARKET CONDITIONS**
5 **OR OTHER FACTORS THAT MAY AFFECT WHETHER THE QIIP RIDER,**
6 **THE EDI RIDER AND THE SEC RIDER ARE STILL IN THE PUBLIC**
7 **INTEREST?**

8 A. No, the Company is not aware of any changes in market conditions or other factors that
9 affect whether the QIIP Rider, the EDI Rider and the SEC Rider are still in the public
10 interest. Tennessee-American believes that the QIIP Rider, the EDI Rider and the SEC
11 Rider are all still in the public interest. Tennessee-American understands that the purpose
12 of the legislation was, in part, to encourage an increase in certain types of infrastructure
13 investment and recovery by utilities, while reducing the costs to consumers and utilities for
14 regulatory review and implementation, and promoting rate gradualism for consumers. The
15 market conditions are consistent with the conditions at the time that the Capital Recovery
16 Riders were approved, with a continued need to increase infrastructure replacement and
17 meet environmental compliance needs on a timely basis.

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

20 A. Yes. As I noted at the outset herein, and as outlined by TAWC in much detail and with
21 supporting documentation TPUC Docket No. 13-00130, the QIIP, the EDI and the SEC
22 Riders are mutually beneficial to the ratepayers, the public, and TAWC. Among other
23 things, the Capital Recovery Riders reduce the need for general rate cases, lessen the

1 occurrence of consumer “rate shock,” support the maintenance and improvement of
2 essential infrastructure, support opportunities for successful economic development,
3 growth and job creation, ensure safety and reliability, and allow for more efficient,
4 streamlined regulation. The ratepayers and the public benefit from the safety and reliability
5 components and from the more seamless and timely capital investment in infrastructure,
6 coupled with the related support to economic development, growth and job creation. The
7 Company benefits from a more efficient, streamlined regulatory process that presents
8 TAWC with the opportunity to timely recover its expenses and earn a fair rate of return on
9 its investments. Without the approved alternative rate mechanisms pursuant to Tenn. Code
10 Ann. Section 65-5-103 *et. seq.*, and specifically without the Capital Recovery Riders,
11 TAWC would be preparing another general rate case. Tennessee-American understands
12 that the purpose of the new legislation — Tenn. Code Ann. § 65-5-103 *et. seq.*, — was, in
13 part, to encourage an increase in certain types of infrastructure investment and recovery by
14 utilities, while reducing the costs to consumers and utilities for regulatory review and
15 implementation, and promoting rate gradualism for consumers. TAWC believes the
16 approved Capital Recovery Riders are achieving that goals.

17 As reflected in the evidentiary record in TPUC Docket No. 13-00130 the US
18 Environmental Protection Agency and the American Society of Civil Engineers have
19 published reports regarding the significant capital needs for water and wastewater
20 infrastructure in the United States, including here in Tennessee. These and/or similar
21 reports were updated by TAWC in TPUC Docket No. 18-00120. Kurt Stafford also
22 provides a current update on water and wastewater infrastructure capital needs in his
23 testimony. A substantial portion of TAWC’s distribution infrastructure is between 50 and

1 100 years old, and TAWC needs to continue to invest in replacing its infrastructure in order
2 to meet its obligation to provide safe, reliable drinking water to its customers. The QIIP
3 Rider is assisting TAWC in responsibly and strategically addressing the systems'
4 infrastructure replacement needs, while helping to increase the time between rate cases and
5 reducing the cost of rate cases to its Customers. As testified to by Kurt Stafford, TAWC
6 has strategically focused its efforts on mains with the highest maintenance concerns.

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

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

1 to increase infrastructure replacement and meet environmental compliance needs on a
2 timely basis, which we believe to be in the public interest.

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

4 A. I recommend that the Petition be approved for the decrease in the QIIP, EDI and SEC
5 Riders, effective April 1, 2020 through December 31, 2020.

6 **Q. WHY IS THE COMPANY RECOMMENDING THAT THE REVISED**
7 **TARIFFS SUBMITTED WITH THIS PETITION BECOME EFFECTIVE ON**
8 **APRIL 1?**

9 A. TAWC would like to start returning these funds to our customers in a timely and efficient
10 manner as soon as possible

11 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

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

Tennessee American Water Company
 Qualified Infrastructure Improvement Program Rider (QIIP)
 Economic Development Investment Rider (EDI)
 Safety and Environmental Compliance Rider (SEC)
 Reconciliation of the Calculation of Revenue Requirement
 As of 12/31/2019

Line Number	Description	Qualified Infrastructure Investment Program QIIP Average YTD 12/31/2019			Economic Development Investment EDI Average YTD 12/31/2019			Safety and Environmental Compliance SEC Average YTD 12/31/2019			Total Average YTD 12/31/2019		
		Actual	Budget	Variance	Actual	Budget	Variance	Actual	Budget	Variance	Actual	Budget	Variance
1	Additions Subject to Rider:	\$47,530,740	\$49,542,272	(\$2,011,532)	\$1,982,068	\$2,893,001	(\$910,933)	\$27,746,290	\$27,467,267	\$279,023	\$77,259,098	\$79,902,541	(\$2,643,443)
2	Plus: Cost of Removal less Salvage	6,591,993	6,795,685	(203,692)	1,686	1,904	(218)	3,405,514	2,974,425	431,089	9,999,193	9,772,014	227,179
3	Less: Contributions in Aid to Construction (CIAC)	2,303,204	2,284,346	18,858	75,665	22,345	53,321	0	0	0	2,378,870	2,306,691	72,178
4	Less: Deferred Income Taxes	6,649,350	6,767,381	(118,031)	190,654	207,305	(16,652)	4,164,527	4,042,525	122,002	11,004,530	11,017,211	(12,681)
5	Less: Accumulated Depreciation	2,601,908	2,575,012	26,896	59,983	72,280	(12,297)	2,153,017	2,095,219	57,798	4,814,908	4,742,511	72,397
6	Net Investment Supplied Additions:	\$42,568,270	\$44,711,217	(\$2,142,946)	\$1,657,452	\$2,592,975	(\$935,524)	\$24,834,261	\$24,303,949	\$530,312	\$69,059,983	\$71,608,141	(\$2,548,158)
7													
8	Pre-Tax Authorized Rate of Return:	8.45%	8.45%		8.45%	8.45%		8.45%	8.45%		8.45%	8.45%	
9	Pre-Tax Return on Additions:	\$3,597,637	\$3,778,747	(\$181,110)	\$140,079	\$219,144	(\$79,065)	\$2,098,856	\$2,054,037	\$44,819	\$5,836,572	\$6,051,928	(\$215,356)
10													
11	Depreciation Expense on Additions:	1,075,715	959,335	116,380	27,079	38,723	(11,644)	791,792	736,617	55,175	1,894,586	1,734,675	159,911
12													
13	Property and Franchise Taxes Associated:	569,341	574,282	(4,941)	26,780	39,062	(12,282)	345,502	347,250	(1,748)	941,623	960,594	(18,971)
14													
15	Revenues:	5,242,694	5,312,364	(69,670)	193,937	296,929	(102,992)	3,236,150	3,137,904	98,246	8,672,781	8,747,197	(74,416)
16													
17	Revenue Taxes	3.19%	3.19%		3.19%	3.19%		3.19%	3.19%		3.19%	3.19%	
18	Capital Riders Revenues with Revenue Taxes	5,415,502	5,487,469	(71,967)	200,330	306,716	(106,387)	3,342,819	3,241,335	101,484	8,958,651	9,035,521	(76,869)
19													
20	APP Revenue Reduction	(4,558)	(4,558)		(168)	(168)		(4,700)	(4,700)		(9,426)	(9,426)	
21													
22	Total Capital Riders Revenues with Revenue Taxes & APP	\$5,410,944	\$5,482,911	(\$71,967)	\$200,162	\$306,548	(\$106,387)	\$3,338,120	\$3,236,635	\$101,484	\$8,949,225	\$9,026,095	(\$76,869)
23													
24													
25	Actual Capital Riders Revenues Billed		\$4,953,694			\$224,334			\$2,942,001			\$8,120,029	
26													
27	(Over)/Under Capital Riders Revenue Billings		529,217			82,214			294,635			906,066	
28	Budget to Actual Adjustment		(71,967)			(106,387)			101,484			(76,869)	
29	2018 Reconciliation Amount		(403,036)			(112,806)			(324,484)			(840,326)	
30	Earnings Test Adjustment		(769,750)			(34,859)			(457,155)			(1,261,764)	
31	Interest (Prime - 4.75%)		(16,994)			(4,081)			(9,156)			(30,231)	
32													
33	Reconciliation Amount		(\$732,529)			(\$175,919)			(\$394,676)			(\$1,303,124)	
34													
35	Authorized Capital Riders Revenues (9/12th)		\$35,305,293			\$35,305,293			\$35,305,293			\$35,305,293	
36													
37	Current Reconciliation Factor Percentage		-2.07%			-0.50%			-1.12%			-3.69%	
38													

Explanation:

Tennessee American Water has been authorized 3 capital riders based on a 13-month average of in-service capital projects in the forecasted period. The revenue requirement for each rider is calculated similar to how total rate base is calculated by the Tennessee Public Utility Commission in a rate case. This table shows a comparison of the actual average over the reporting period to the proposed amount of each rider, and the total of the three.

*Taxes - From Docket #18-00120 which was approved on 8/12/2019.
 Earnings Test - Calculation methodology from Earnings Test workpaper

Tennessee American Water Company
For 12 Months Ended December 31, 2019
2019 Capital Riders Reconciliation - Charge Detail Summary by Rider

Line	Rider	Charge Type	Additions	Removals	CIAC	Total
1	QIIP	Labor	\$1,131,956	\$189,056	\$0	\$1,321,012
2		Labor Overhead	429,017	74,507	0	503,524
3		Licenses, Permits & Misc Fees	93,218	13,690	0	106,908
4		Materials & Supplies	1,668,643	214,651	0	1,883,294
5		Contracted Services	6,372,122	1,987,484	0	8,359,606
6		Other - Paving	0	0	0	0
7		Other	4,188,155	842,541	0	5,030,696
8		Overhead	1,412,369	656,268	0	2,068,636
9		Salvage Cash	0	(48,756)	0	(48,756)
10		Service Company Charges	0	0	0	0
11		CWIP Accrual	1,008,664	(176,531)	0	832,133
12		CIAC Taxable	0	0	(3,231)	(3,231)
13		CIAC Non-Taxable	0	0	(3,491)	(3,491)
14		Tax Gross Up	0	0	(1,769)	(1,769)
15		AFUDC Debt	134,200	0	0	134,200
16		AFUDC Equity	121,557	0	0	121,557
17						
18	QIIP Total		\$16,559,900	\$3,752,910	(\$8,491)	\$20,304,319
19						
20	EDI	Labor	\$43,885	\$0	\$0	\$43,885
21		Labor Overhead	16,009	0	0	16,009
22		Licenses, Permits & Misc Fees	11,725	0	0	11,725
23		Materials & Supplies	111,709	995	0	112,704
24		Contracted Services	390,874	0	0	390,874
25		Other - Paving	0	0	0	0
26		Other	175,967	0	0	175,967
27		Overhead	73,986	92	0	74,079
28		Salvage Cash	0	0	0	0
29		Service Company Charges	0	0	0	0
30		CWIP Accrual	(78,394)	0	0	(78,394)
31		CIAC Taxable	0	0	(45,900)	(45,900)
32		CIAC Non-Taxable	0	0	9,514	9,514
33		Tax Gross Up	0	0	(16,797)	(16,797)
34		AFUDC Debt	4,241	0	0	4,241
35		AFUDC Equity	3,842	0	0	3,842
36						
37	EDI Total		\$753,845	\$1,087	(\$53,183)	\$701,749
38						
39	SEC	Labor	\$87,602	\$3,642	\$0	\$91,244
40		Labor Overhead	33,229	1,443	0	34,672
41		Licenses, Permits & Misc Fees	15,907	5	0	15,912
42		Materials & Supplies	484,012	41,591	0	525,603
43		Contracted Services	6,204,580	495,942	0	6,700,522
44		Other - Paving	0	0	0	0
45		Other	123,628	6,847	0	130,475
46		Overhead	620,685	47,648	0	668,334
47		Salvage Cash	0	0	0	0
48		Service Company Charges	0	0	0	0
49		CWIP Accrual	27,840	11	0	27,850
50		CIAC Taxable	0	0	0	0
51		CIAC Non-Taxable	0	0	0	0
52		Tax Gross Up	0	0	0	0
53		AFUDC Debt	115,958	0	0	115,958
54		AFUDC Equity	105,033	0	0	105,033
55						
56	SEC Total		\$7,818,475	\$597,127	\$0	\$8,415,603
57						
58			\$25,132,220	\$4,351,125	(\$61,674)	\$29,421,671

Tennessee American Water Company
For 12 Months Ended December 31, 2019
2019 Capital Rider Reconciliation - Charge Detail Summary by Work Order

Line	Rider	Work Order #	Work Order Description	Additions	Removals	CIAC	Total
1	QIIP	I26-020034-01	Tennessee River Crossing	\$4,345,679	\$0	\$0	\$4,345,679
2		I26-020045-01	Remove Filter Bldg 3 Citico	151	0	0	151
3		I26-020045-02	Remove Filter Bldg 3 Citico	0	1,003,136	0	1,003,136
4		I26-020059-01	Citico Yard Piping Modifications	1,404,598	3,709	0	1,408,308
5		R26-02B1.16-P-0006	Semi Circle Area Main Replacement	0	2,623	0	2,623
6		R26-02B1.17-P-0004	Cain Ave btw 42nd & 47th	3,567	38,868	0	42,435
7		R26-02B1.17-P-0013	Mission View & Gardner Project	0	8,685	0	8,685
8		R26-02B1.17-P-0015	Edgmon Forest Main Repl	0	1,504	0	1,504
9		R26-02B1.17-P-0016	Paden Ln Main Repl	0	2,486	0	2,486
10		R26-02B1.18-P-0002	Hanover 1300 blk	(116)	1,482	0	1,366
11		R26-02B1.18-P-0008	Carnation St Main Repl	67,144	3,532	0	70,677
12		R26-02B1.18-P-0011	Hixson Pike 750 LF of 12" Replaceme	180,996	190,071	0	371,067
13		R26-02B1.18-P-0012	Lynda Drive and Circle 6" Main Repl	132,281	10,707	0	142,988
14		R26-02B1.18-P-0013	Ramona Avenue Main Extension	27,424	1,368	0	28,792
15		R26-02B1.19-P-0002	Vero Beach Street- 1220' of 6" main	139,999	7,351	0	147,350
16		R26-02B1.19-P-0003	Hollywood Drive- 1350' of 6", one F	162,937	8,345	0	171,282
17		R26-02B1.19-P-0004	Palm Beach Avenue- 1350' of 4" and	78,699	78,213	0	156,912
18		R26-02B1.19-P-0005	Peak Street	80,550	4,204	0	84,753
19		R26-02B1.19-P-0006	Paulmar Drive Main Replacement	334,394	11,066	0	345,460
20		R26-02B1.19-P-0007	S. Highland Park Main Replacement	261,994	13,652	0	275,646
21		R26-02B1.19-P-0008	Oak Street Main Replacement	114,485	6,018	0	120,503
22		R26-02C1.16-P-0001	Blanket	4,390	849	0	5,239
23		R26-02C1.16-P-0002	24" HDPE for River Crossing	1,694	78	0	1,771
24		R26-02C1.17-P-0001	Blanket	234	0	0	234
25		R26-02C1.18-P-0001	Chattanooga Main Replacement	440,138	204,370	0	644,509
26		R26-02C1.18-P-0002	Cummings Highway	(44,835)	5,939	0	(38,896)
27		R26-02C1.18-P-0003	Relocation of Main 1701 Broad	1,210	180	0	1,390
28		R26-02C1.18-P-0003-CN	Relocation of Main 1701 Broad	0	0	(3,491)	(3,491)
29		R26-02C1.19-P-0001	Mains Replaced	1,285,225	66,599	0	1,351,824
30		R26-02D1.17-P-0006	Fulton St 540'-8"	157	3,042	0	3,199
31		R26-02D1.17-P-0007	East Brainerd TDOT Project	0	17,854	0	17,854
32		R26-02D1.17-P-0007-CN	East Brainerd TDOT Project	0	0	0	0
33		R26-02D1.17-P-0007-CO	East Brainerd TDOT Project	0	0	0	0
34		R26-02D1.17-P-0008	Camp Jordan Relocation	(63)	2,932	0	2,869
35		R26-02D1.17-P-0009	MLK btw Market/GA	2,151	5,050	0	7,201
36		R26-02D1.17-P-0010	Midland Pike Offset	992	334	0	1,326
37		R26-02D1.18-P-0004	Somerville Av Main Reloc	(6,281)	1,874	0	(4,407)
38		R26-02D1.18-P-0005	Swan Road Offset	939	1,799	0	2,738
39		R26-02D1.18-P-0007	Cut & Cap Chestnut 2018 - New WBS	0	2,132	0	2,132
40		R26-02D1.19-P-0002	Citico Creek Sewer Relocation	7,311	87	0	7,398
41		R26-02D1.19-P-0003	Appling Street Main Relocation	116,636	5,640	0	122,275
42		R26-02D1.19-P-0004	Howard High School Main Relocation	56,383	2,730	0	59,113
43		R26-02D1.19-P-0005	TDOT I-24 Relocation at Sydney Stre	30,505	2,846	0	33,351
44		R26-02D1.19-P-0006	Carnell Court Main Relocation	7,789	783	0	8,571
45		R26-02F1.15-P-0002	Winterview Pressure Reducing Valve	34,037	6,659	0	40,695
46		R26-02F1.17-P-0006	Relocate Fire Hydrant 2601 8th Ave	0	0	0	0
47		R26-02F1.17-P-0007	Relocate Fire Hyd 2601 8th Ave - Ne	0	1,381	0	1,381
48		R26-02F1.17-P-0007-CO	Relocate Fire Hyd 2601 8th Ave - Ne	0	0	0	0
49		R26-02F1.18-P-0001	Replaced Hydrants and Valves	(3,893)	6,373	0	2,480
50		R26-02F1.18-P-0004	Wiehl Street Hydrant	2,762	465	0	3,227
51		R26-02F1.19-P-0001	Hydrants and Valves Replaced	432,466	106,495	0	538,960
52		R26-02F1.19-P-0002	538 Cherokee Blvd	967	214	0	1,182
53		R26-02F1.19-P-0002-CO	538 Cherokee Blvd	0	0	(5,000)	(5,000)
54		R26-02F1.19-P-0003	1701 Broad Street Hydrant Relocate	4,276	918	0	5,194
55		R26-02H1.16-P-0001	Blanket	4,161	1,064	0	5,225
56		R26-02H1.18-P-0001	MTR Box, RSV, STR, Svc Renewed	126,423	36,709	0	163,132
57		R26-02H1.19-P-0001	Services and Laterals Replaced	669,681	23,471	0	693,151
58		R26-02H1.19-P-0002	1033 Scenic Hwy LKMTN GA	20,167	4,625	0	24,793
59		R26-02J1.16-P-0001	Blanket	0	(4,782)	0	(4,782)
60		R26-02J1.18-P-0001	Meters Replaced	457,540	0	0	457,540
61		R26-02J1.18-P-0002	Meter Change backlog	300,948	14,850	0	315,797
62		R26-02J1.19-P-0001	Meters Replaced	3,556,187	627,066	0	4,183,253
63		R26-02J1.19-P-0002	Contractor meter changes	814,120	80,929	0	895,050
64		R26-02J1.19-P-0003	Contractor Meter Changes - GA	0	0	0	0
65		R26-02R1.15-P-0003	Mission Ridge Standpipe #2 Rehab	(135,620)	279,816	0	144,195
66		R26-02R1.17-P-0002	South End Ground Tank	(45,540)	449,033	0	403,492
67		R26-02R1.18-P-0002	Elder Mtn Receiving Tank	6,963	35,056	0	42,019
68		R26-02R1.18-P-0003	Aldrich Unit #6	856,637	310,500	0	1,167,137
69		R26-02R1.18-P-0004	South End Tank Followup Charges	18,438	5,576	0	24,015
70		R26-03F1.19-P-0001	Blanket	536	1	0	537
71		R26-03H1.18-P-0001	Blanket	(453)	0	0	(453)
72		R26-03H1.19-P-0001	Blanket	5,111	242	0	5,353
73		R26-05B1.16-P-0003	Sunset Dr Main Replacement	18,192	2,392	0	20,584
74		R26-05C1.18-P-0001	Blanket	(190)	67	0	(123)
75		R26-05C1.19-P-0001	WBS Level 1 Planning	56,812	8,448	0	65,259
76		R26-05F1.15-P-0001	Blanket	0	0	0	0
77		R26-05F1.18-P-0001	Blanket	223	543	0	766
78		R26-05F1.19-P-0001	Blanket	11,652	2,102	0	13,753
79		R26-05H1.18-P-0001	Blanket	4,214	10,322	0	14,537
80		R26-05H1.19-P-0001	Blanket	74,592	11,276	0	85,868
81		R26-05J1.18-P-0001	Blanket	222	3,005	0	3,227
82		R26-05J1.19-P-0001	Blanket	28,914	5,954	0	34,868
83							
84		QIIP Total		16,559,900	3,752,910	(8,491)	20,304,319

Tennessee American Water Company
For 12 Months Ended December 31, 2019
2019 Capital Rider Reconciliation - Charge Detail Summary by Work Order

Line	Rider	Work Order #	Work Order Description	Additions	Removals	CIAC	Total
85							
86	EDI	R26-02A1.15-P-0004	Hamilton Ave/Pine Breeze Main Insta	(21,233)	0	0	(21,233)
87		R26-02A1.19-P-0002	Reneau Way Extension	20,117	0	0	20,117
88		R26-02E1.18-P-0001	New Hydrants and Valves	9,778	0	0	9,778
89		R26-02E1.18-P-0003	6255 Lee Highway	(1,720)	0	0	(1,720)
90		R26-02E1.18-P-0004	Inserta Valve 8th & Broad Street	0	1,087	0	1,087
91		R26-02E1.18-P-0005	6541 Lee Hwy	(664)	0	0	(664)
92		R26-02E1.18-P-0010	6255 Lee Hwy - New WBS	1,720	0	0	1,720
93		R26-02E1.18-P-0011	6541 Lee Hwy - New WBS	664	0	0	664
94		R26-02E1.18-P-0012	17th Street Hydrant - New WBS	684	0	0	684
95		R26-02E1.18-P-0015	1420 Crawford Street-Cancel	(4,604)	0	0	(4,604)
96		R26-02E1.18-P-0015-CN	1420 Crawford Street	0	0	5,514	5,514
97		R26-02E1.18-P-0016	6 Riverside Lane-cancel	(4,403)	0	0	(4,403)
98		R26-02E1.18-P-0016-CN	6 Riverside Lane	0	0	4,000	4,000
99		R26-02E1.18-P-0018	1420 Crawford Street-New WBS	4,927	0	0	4,927
100		R26-02E1.18-P-0018-CO	1420 Crawford Street-New WBS	0	0	(5,514)	(5,514)
101		R26-02E1.18-P-0019	6 Riverside Lane-New WBS	4,403	0	0	4,403
102		R26-02E1.18-P-0019-CO	6 Riverside Lane-New WBS	0	0	(4,000)	(4,000)
103		R26-02E1.18-P-0020	5338 Roosevelt Rd	2,486	0	0	2,486
104		R26-02E1.18-P-0020-CO	5338 Roosevelt Rd	0	0	(3,665)	(3,665)
105		R26-02E1.19-P-0001	New Hydrants and Valves	77,016	0	0	77,016
106		R26-02E1.19-P-0002	2330 Center Street Hydrant	10,988	0	0	10,988
107		R26-02E1.19-P-0002-CO	2330 Center Street Hydrant	0	0	(7,558)	(7,558)
108		R26-02E1.19-P-0003	Hydrant install 7468 Noah Reid Rd	6,413	0	0	6,413
109		R26-02E1.19-P-0003-CO	Hydrant install 7468 Noah Reid Rd	0	0	(4,000)	(4,000)
110		R26-02E1.19-P-0004	422 Moccasin Bend 8" Inserta Valve	18,234	0	0	18,234
111		R26-02E1.19-P-0005	2110 Test Drive	4,043	0	0	4,043
112		R26-02E1.19-P-0006	2628 Rossville Blvd	8,498	0	0	8,498
113		R26-02E1.19-P-0006-CO	2628 Rossville Blvd	0	0	(5,000)	(5,000)
114		R26-02E1.19-P-0007	Hamilton Place 12" Valve Installati	11,004	0	0	11,004
115		R26-02E1.19-P-0007-CO	Hamilton Place 12" Valve Installati	0	0	(8,242)	(8,242)
116		R26-02E1.19-P-0008	700 Vine Street	7,692	0	0	7,692
117		R26-02E1.19-P-0008-CO	700 Vine Street	0	0	(5,000)	(5,000)
118		R26-02E1.19-P-0009	Pine Needles Trail @ Igou Gap Hydra	4,395	0	0	4,395
119		R26-02E1.19-P-0009-CO	Pine Needles Trail @ Igou Gap Hydra	0	0	(2,776)	(2,776)
120		R26-02E1.19-P-0010	1813 Pine Needles Trail Hydrant Ins	6,335	0	0	6,335
121		R26-02E1.19-P-0010-CO	1813 Pine Needles Trail Hydrant Ins	0	0	(6,036)	(6,036)
122		R26-02E1.19-P-0011	1769 Pine Needles Trail Hydrant Ins	4,133	0	0	4,133
123		R26-02E1.19-P-0011-CO	1769 Pine Needles Trail Hydrant Ins	0	0	(2,251)	(2,251)
124		R26-02E1.19-P-0012	Igou Gap @ Richmond Lane	3,762	0	0	3,762
125		R26-02E1.19-P-0012-CO	Igou Gap @ Richmond Lane	0	0	(3,655)	(3,655)
126		R26-02E1.19-P-0018	4031 S Access Rd New Hydrant Instal	8,882	0	0	8,882
127		R26-02E1.19-P-0018-CO	4031 S Access Rd New Hydrant Instal	0	0	(5,000)	(5,000)
128		R26-03E1.18-P-0001	Blanket	(543)	0	0	(543)
129		R26-05A1.18-P-0002	Hwy 283 Main Ext.	559,752	0	0	559,752
130		R26-05E1.19-P-0001	Blanket	11,085	0	0	11,085
131							
132	EDI Total			753,845	1,087	(53,183)	701,749

Tennessee American Water Company
 For 12 Months Ended December 31, 2019
 2019 Capital Rider Reconciliation - Charge Detail Summary by Work Order

Line	Rider	Work Order #	Work Order Description	Additions	Removals	CIAC	Total
133							
134	SEC	I26-020040-01	Citico Chlorine Gas Conversion	5,774,794	195,459	0	5,970,253
135		I26-050004-01	Replace 0.1 MG Storage Tank at Whit	0	26,108	0	26,108
136		R26-02L1.19-P-0002	Upgrade Controller at Fort O. Tank	0	379	0	379
137		R26-02L1.19-P-0003	Upgrade Controller at Jenkins Rd Ta	19,448	438	0	19,886
138		R26-02L1.19-P-0004	Upgrade Controller at Lookout Valle	14,286	313	0	14,599
139		R26-02L1.19-P-0005	Upgrade Controller at Lookout Mtn T	13,805	302	0	14,107
140		R26-02L1.19-P-0006	Upgrade Controller at S. Mission Rd	14,473	317	0	14,789
141		R26-02L1.19-P-0007	Upgrade Raw Water Control Bldg	15,691	340	0	16,031
142		R26-02L1.19-P-0008	Install Controller @Scruggs Rd Mete	13,503	0	0	13,503
143		R26-02L1.19-P-0009	Historian Work Station	3,896	0	0	3,896
144		R26-02M1.17-P-0001	Blanket	518	0	0	518
145		R26-02M1.18-P-8002	TN - TV Tuners	389	200	0	590
146		R26-02M1.18-P-8003	CITICO Cameras	(104)	1,027	0	923
147		R26-02M1.18-P-8004	CITICO Analog to IP	1,339	563	0	1,901
148		R26-02M1.18-P-8005	AXIS Decoder	(65)	163	0	98
149		R26-02M1.18-P-8006	CITICO Cabling	(1,575)	1,831	0	256
150		R26-02M1.18-P-8007	CITICO-Amincola Intercom	(186)	416	0	230
151		R26-02M1.18-P-8008	CITICO-Amincola Door Work	2,750	6,252	0	9,001
152		R26-02M1.19-P-9001	Whiel Street Office, Supply and Inst	84,090	4,274	0	88,364
153		R26-02M1.19-P-9002	TN Splash TV Changes	4,159	17	0	4,176
154		R26-02M1.19-P-9004	Citico WTP, Door	8,245	0	0	8,245
155		R26-02M1.19-P-9005	Citico, BP50	12,666	0	0	12,666
156		R26-02Q1.17-P-0011	Aldrich Unit 6 Rehab	1	45,650	0	45,652
157		R26-02Q1.18-P-0002	Repl. Rotating Element #12 Low Serv	0	5,682	0	5,682
158		R26-02Q1.18-P-0004	Repl. Fluoride Bulk Tank	0	9,454	0	9,454
159		R26-02Q1.18-P-0006	Repl. #2 Pump New York Booster	0	5,377	0	5,377
160		R26-02Q1.18-P-0007	Repl. Valve EM9 at Elder Mtn. Boost	0	3,713	0	3,713
161		R26-02Q1.18-P-0008	Repl. Filter Underdrain- Filter#17	205,908	62,183	0	268,091
162		R26-02Q1.18-P-0009	Repl. Filter Underdrain- Filter#18	203,949	67,233	0	271,182
163		R26-02Q1.18-P-0010	Repl. Filter Underdrain- Filter#19	206,296	61,369	0	267,665
164		R26-02Q1.18-P-0011	Repl. Filter Underdrain- Filter#20	203,435	67,062	0	270,497
165		R26-02Q1.18-P-0012	Repl. Battery Backup UPS Chem Bldg.	0	303	0	303
166		R26-02Q1.18-P-0013	New VFD for NY #2 Pump	82,696	0	0	82,696
167		R26-02Q1.18-P-0014	Repl. 24" Vive Actuator SE Tank	(1,772)	124	0	(1,648)
168		R26-02Q1.19-P-0002	Repl #4 Pump & Motor Red Bank	15,177	2,338	0	17,515
169		R26-02Q1.19-P-0003	Replace Multilin Relay #22 Low Serv	13,859	367	0	14,226
170		R26-02Q1.19-P-0005	Install VFD #1 Pump @Rolling Acres	8,042	0	0	8,042
171		R26-02Q1.19-P-0006	Repl #2 Pump Motor Rolling Acres Bo	2,326	397	0	2,724
172		R26-02Q1.19-P-0007	Install VFD #2 Pump Rolling Acres	1,841	548	0	2,389
173		R26-02Q1.19-P-0008	Repl. Mechanical Seal #12 Low Serv.	9,796	2,445	0	12,241
174		R26-02Q1.19-P-0010	Replace Starter at #3 New York Ave	22,635	305	0	22,940
175		R26-02Q1.19-P-0011	Replace Discharge & Suction #9 Valv	17,320	538	0	17,858
176		R26-02Q1.19-P-0012	Replace 100' 4" Sewer Line at Citic	11,159	781	0	11,940
177		R26-02Q1.19-P-0013	Replace Electrical Service at South	5,698	1,380	0	7,078
178		R26-02Q1.19-P-0014	Replace Exhaust Fan Ducts at Hill C	3,627	512	0	4,139
179		R26-02Q1.19-P-0015	Replace Eyewash Stations at Filter	79,979	(19)	0	79,959
180		R26-02Q1.19-P-0016	HVAC Replacement at Panorama Booste	12,416	1,248	0	13,664
181		R26-02Q1.19-P-0017	Install Pumping Unit & Starter @ Hi	42,231	0	0	42,231
182		R26-02Q1.19-P-0018	Replace Low Service Citico Air Sump	4,531	448	0	4,978
183		R26-02Q1.19-P-0019	Replace Low Svc Electric Sump Pump	909	98	0	1,007
184		R26-02Q1.19-P-0020	Install Injection Quill Sample Pump	3,233	0	0	3,233
185		R26-02Q1.19-P-0021	Install New Roof & Trim @Hill Pt Bo	5,465	0	0	5,465
186		R26-02Q1.19-P-0022	Replace Lab Equipment	2,972	292	0	3,264
187		R26-02Q1.19-P-0023	Install New Generator Dock @Hill Po	31,722	0	0	31,722
188		R26-02Q1.19-P-0024	Install New Handrailing @Citico Pum	5,962	0	0	5,962
189		R26-02Q1.19-P-0025	Replace Autoclave Lab Equipment @ C	51,864	388	0	52,251
190		R26-02Q1.19-P-0026	Replace Eyewash Station at Citico	12,858	4,000	0	16,858
191		R26-02Q2.17-P-0003	Crestview Booster Station Replaceme	375,454	7,544	0	382,998
192		R26-03Q1.19-P-0002	Well #2 Piping	2,417	584	0	3,002
193		R26-03Q1.19-P-0003	Repl. Eyewash Station @Suck Creek	14,674	675	0	15,349
194		R26-05L1.18-P-0003	Install Hardware/Integrate Instr Pa	5,312	0	0	5,312
195		R26-05M1.18-P-8001	Whitwell WTP - ExacQ	2,963	145	0	3,108
196		R26-05Q1.18-P-0003	Incline pump #2 impeller and piping	0	573	0	573
197		R26-05Q1.18-P-0004	Surface Wash Pump	(66)	1,800	0	1,735
198		R26-05Q1.18-P-0005	Air release valve low service pumps	0	204	0	204
199		R26-05Q1.18-P-0006	Replaced #2 low service pump	21,041	994	0	22,034
200		R26-05Q1.18-P-0007	Red Hill booster VFD and Check Valv	4,664	244	0	4,909
201		R26-05Q1.19-P-0002	VFD on flocculator	5,283	264	0	5,548
202		R26-05Q1.19-P-0004	Incline #1 pump	4,492	225	0	4,716
203		R26-05Q1.19-P-0005	Drag motor	10,372	530	0	10,902
204		R26-05Q1.19-P-0006	Ketner Cove Booster pump #1	5,108	269	0	5,377
205		R26-05Q1.19-P-0008	Red Hill Booster Pump #1	5,152	271	0	5,423
206		R26-05Q1.19-P-0010	New Main Plant Generator Dock	92,762	0	0	92,762
207		R26-05Q1.19-P-0011	Hardees #2 booster motor	3,937	191	0	4,129
208		R26-05Q1.19-P-0012	Install Eyewash Station @Whitwell	16,650	0	0	16,650
209							
210	SEC Total			7,818,475	597,127	0	8,415,603
211							
212	Grand Total			\$25,132,220	\$4,351,125	(\$61,674)	\$29,421,671

Tennessee American Water Company
2019 Reconciliation of Capital Riders
Earnings Test

Line #	Notes / Changes from Monthly Reports	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019
1	Additions:							
2	Plant in Service	\$323,576,583	\$323,385,404	\$325,001,157	\$327,762,703	\$330,250,564	\$331,704,028	\$331,906,532
3	Plant Under Construction	11,539,185	12,964,163	13,016,075	13,721,459	12,485,692	12,935,242	14,439,058
4	Property Held For Future Use	0	0	0	0	0	0	0
5	Materials and Supplies	893,746	882,154	874,820	908,948	854,108	769,601	753,618
6	Other Additions:							
7	Leased Utility Plant	0	0	0	0	0	0	0
8	Unamortized Painting - net	0	0	0	0	0	0	0
9	Working Capital C/	3,409,884	3,409,884	3,409,884	3,409,884	3,409,884	3,409,884	3,409,884
10								
11	Total Additions	\$339,419,398	\$340,641,605	\$342,301,936	\$345,802,994	\$347,000,248	\$348,818,755	\$350,509,092
12								
13								
14	Deductions:							
15	Accumulated Depreciaton and Amortization	\$88,650,720	\$88,512,533	\$89,005,154	\$89,005,250	\$89,791,110	\$90,269,642	\$89,957,251
16	Accumulated Deferred Income Taxes	47,199,183	47,227,591	47,242,130	47,260,374	47,310,842	47,335,026	47,836,755
17	Unamortized Investment Credit - Pre 1971	3,679	3,421	3,163	2,905	2,647	2,389	2,131
18	Customer Deposits	0	0	0	0	0	0	0
19	Other Deductions:							
20	Contributions in Aid of Construction	17,797,628	17,779,209	17,757,232	17,731,255	17,800,987	17,817,968	17,949,801
21	Customer Advances for Construction	3,769,777	3,743,568	3,731,217	3,714,572	3,718,519	3,582,598	3,759,521
22	All Other A/	417,800	(1,347,522)	(1,336,304)	(338,404)	(2,066,820)	(992,015)	(1,170,877)
23								
24								
25								
26	Total Deductions	\$157,838,787	\$155,918,800	\$156,402,592	\$157,375,952	\$156,557,286	\$158,015,608	\$158,334,582
27								
28	Rate Base	\$181,580,611	\$184,722,805	\$185,899,344	\$188,427,042	\$190,442,962	\$190,803,147	\$192,174,510
29								
30	Net Operating Income		\$780,273	\$822,424	\$689,222	\$1,025,025	\$1,242,577	\$1,256,464
31	Adjustments to NOI		0	0	0	0	0	0
32	Allowance for funds used during construction		35,241	37,007	39,397	36,482	38,862	61,526
33	Adjustment to reflect effective federal		0	0	0	0	0	0
34	Income tax rate (debt assigned to parent)		23,736	23,888	24,212	24,471	24,518	24,694
35	Interest on customer deposits		0	0	0	0	0	0
36	Incentive Compensation		27,972	27,886	75,406	27,534	27,534	88,119
37	Lobbying Expenses							
38								
39	Adjusted Net Operating Income		\$867,222	\$911,205	\$828,237	\$1,113,512	\$1,333,491	\$1,430,803
40								
41								
42	Rate of return B/		5.63%	5.88%	5.27%	7.02%	8.39%	8.93%

Tennessee American Water Company
2019 Reconciliation of Capital Riders
Earnings Test

Line #	Notes / Changes from Monthly Reports	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019
A/ All Other								
	Acquisition adjustment	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Accounts payable applicable to CWIP	October Updated 1,376,183	(386,287)	(399,819)	635,494	(1,037,895)	(1,214)	(82,067)
	Unpaid for materials and supplies	October Updated (2,428)	(6,616)	16,798	16,084	(8,672)	33,948	(17,381)
	Taxes on CIAC-DEF. FIT & SIT	(955,954)	(954,619)	(953,283)	(989,982)	(1,020,253)	(1,024,749)	(1,071,429)
		<u>\$417,800</u>	<u>(\$1,347,522)</u>	<u>(\$1,336,304)</u>	<u>(\$338,404)</u>	<u>(\$2,066,820)</u>	<u>(\$992,015)</u>	<u>(\$1,170,877)</u>
C/ Per order								
	Cash working capital Lead Lag Study	\$591,674	\$591,674	\$591,674	\$591,674	\$591,674	\$591,674	\$591,674
	Incidental collection	(116,192)	(116,192)	(116,192)	(116,192)	(116,192)	(116,192)	(116,192)
	Average cash	0	0	0	0	0	0	0
	Other components	<u>2,934,402</u>	<u>2,934,402</u>	<u>2,934,402</u>	<u>2,934,402</u>	<u>2,934,402</u>	<u>2,934,402</u>	<u>2,934,402</u>
	Working Capital	\$3,409,884	\$3,409,884	\$3,409,884	\$3,409,884	\$3,409,884	\$3,409,884	\$3,409,884
	Rate of Return - 2019	7.72%						
	Authorized Rate of Return	7.23%	(Schedule 1 Exhibit to Settlement Agreement Docket No. 12-00049)					
	Authorized Adjusted Net Operating Income	\$13,858,464						
	Actual 2019 Adjusted Net Operating Income	\$14,790,466						
	Above or (Below) Earnings	\$932,002						
	Gross-up Income Tax Rate	1.3538212						
	Revenue Requirement	\$1,261,764						

Tennessee American Water Company
2019 Reconciliation of Capital Riders
Earnings Test

Line #		Jul 2019	Aug 2019	Sep 2019	Oct 2019	Nov 2019	Dec 2019	13Mth Average
1	Additions:							
2	Plant in Service	\$337,289,140	\$338,715,127	\$340,638,230	\$342,786,124	\$343,971,154	\$354,113,607	\$334,700,027
3	Plant Under Construction	11,455,504	12,120,384	11,978,571	12,315,732	13,066,414	4,461,363	12,038,372
4	Property Held For Future Use	0	0	0	0	0	0	0
5	Materials and Supplies	783,604	833,733	802,498	882,099	903,398	894,617	848,996
6	Other Additions:							
7	Leased Utility Plant	0	0	0	0	0	0	0
8	Unamortized Painting - net	0	0	0	0	0	0	0
9	Working Capital C/	3,409,884	3,409,884	3,409,884	3,409,884	3,409,884	3,409,884	3,409,884
10								
11	Total Additions	\$352,938,132	\$355,079,128	\$356,829,183	\$359,393,839	\$361,350,850	\$362,879,471	\$350,997,279
12								
13								
14	Deductions:							
15	Accumulated Depreciaton and Amortization	\$90,679,830	\$91,339,021	\$91,459,447	\$91,915,483	\$92,530,680	\$92,898,032	90,462,627
16	Accumulated Deferred Income Taxes	47,973,336	48,225,950	49,120,306	49,580,517	50,030,174	50,390,967	48,210,242
17	Unamortized Investment Credit - Pre 1971	1,873	1,615	1,357	1,099	841	583	2,131
18	Customer Deposits	0	0	0	0	0	0	0
19	Other Deductions:							
20	Contributions in Aid of Construction	17,904,877	17,930,669	17,920,734	17,905,393	17,881,967	17,870,292	17,849,847
21	Customer Advances for Construction	3,802,900	3,938,572	4,043,980	4,272,314	4,210,890	4,185,427	3,882,604
22	All Other A/	(1,442,033)	(1,346,897)	(773,067)	(899,602)	(848,271)	(2,028,247)	(1,090,174)
23								
24								
25								
26	Total Deductions	\$158,920,783	\$160,088,930	\$161,772,757	\$162,775,204	\$163,806,281	\$163,317,054	\$159,317,278
27								
28	Rate Base	\$194,017,349	\$194,990,198	\$195,056,426	\$196,618,635	\$197,544,569	\$199,562,417	\$191,680,001
29								
30	Net Operating Income	\$1,382,452	\$1,433,275	\$1,494,024	\$1,434,595	\$993,956	\$734,141	\$13,288,428
31	Adjustments to NOI	0	0	0	0	0	0	0
32	Allowance for funds used during construction	41,903	38,708	61,561	42,621	43,117	50,782	527,207
33	Adjustment to reflect effective federal	0	0	0	0	0	0	0
34	Income tax rate (debt assigned to parent)	24,931	25,056	25,064	25,256	25,384	25,643	296,853
35	Interest on customer deposits	0	0	0	0	0	0	0
36	Incentive Compensation	29,023	28,715	79,996	29,169	35,716	114,988	592,058
37	Lobbying Expenses						85,920	85,920
38								
39	Adjusted Net Operating Income	\$1,478,309	\$1,525,754	\$1,660,645	\$1,531,641	\$1,098,173	\$1,011,474	\$14,790,466
40								
41								
42	Rate of return B/	9.14%	9.39%	10.22%	9.35%	6.67%	6.08%	7.72%

13Mth Average Rate Base

12Mths Net Operating Income

Tennessee American Water Company
2019 Reconciliation of Capital Riders
Earnings Test

<u>Line #</u>	<u>Jul 2019</u>	<u>Aug 2019</u>	<u>Sep 2019</u>	<u>Oct 2019</u>	<u>Nov 2019</u>	<u>Dec 2019</u>	<u>13Mth Average</u>
A/ All Other							
Acquisition adjustment	\$0	\$0	\$0	\$0	\$0	\$0	
Accounts payable applicable to CWIP	(369,520)	(166,601)	310,943	355,663	507,630	(675,579)	
Unpaid for materials and supplies	132	(4,859)	85,094	(29,152)	(21,083)	17,014	
Taxes on CIAC-DEF. FIT & SIT	(1,072,645)	(1,175,437)	(1,169,104)	(1,226,113)	(1,334,818)	(1,369,682)	
	<u>(\$1,442,033)</u>	<u>(\$1,346,897)</u>	<u>(\$773,067)</u>	<u>(\$899,602)</u>	<u>(\$848,271)</u>	<u>(\$2,028,247)</u>	
C/ Per order							
Cash working capital Lead Lag Study	\$591,674	\$591,674	\$591,674	\$591,674	\$591,674	\$591,674	
Incidental collection	(116,192)	(116,192)	(116,192)	(116,192)	(116,192)	(116,192)	
Average cash	0	0	0	0	0	0	
Other components	<u>2,934,402</u>	<u>2,934,402</u>	<u>2,934,402</u>	<u>2,934,402</u>	<u>2,934,402</u>	<u>2,934,402</u>	
Working Capital	\$3,409,884	\$3,409,884	\$3,409,884	\$3,409,884	\$3,409,884	\$3,409,884	
Rate of Return - 2019							
Authorized Rate of Return							
Authorized Adjusted Net Operating Income							
Actual 2019 Adjusted Net Operating Income							
Above or (Below) Earnings							
Gross-up Income Tax Rate							
Revenue Requirement							

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.

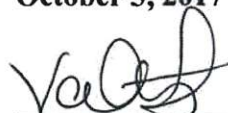
“**Budget-to-Actual Adjustment**” means the adjustment to EDI for the applicable coming annual period due to the difference between the Forecasted EDI Investment and Expense Amount and the Actual EDI Investment and Expense Amount.

(T) Denotes Change in text

ISSUED: **October 3, 2017**

EFFECTIVE: **November 2, 2017**

BY:



Valoria V. Armstrong
PRESIDENT

109 Wiehl Street
Chattanooga, Tennessee 37403

“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.

(T) **“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 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:

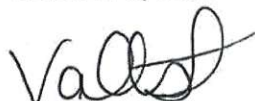
Account 331 – Transmission & Distribution Mains;
Account 333 – Services;
Account 334 – Meters & Meter Installations;
Account 335 – Hydrants;
Account 320 – Water Treatment Equipment, Non-Media;
Account 311 – Pumping Equipment;
Account 303 – Land and Land Rights;
Account 304 – Structures and Improvements;

(T) Denotes Change in text

ISSUED: October 3, 2017

EFFECTIVE: November 2, 2017

BY:



Valoria V. Armstrong
PRESIDENT

109 Wiehl Street
Chattanooga, Tennessee 37403

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

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BY:



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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.

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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

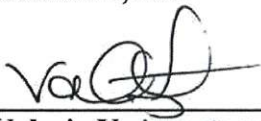
- (C) Computation of the Budget-to-Actual Adjustment.

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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.

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TENNESSEE-AMERICAN WATER COMPANY

TPUC NO. 19

Third Revised Sheet No. 12-EDI-7

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.

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

- (T) 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-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.

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TENNESSEE-AMERICAN WATER COMPANY**TPUC NO. 19****Third Revised Sheet No. 12-EDI-9****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

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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.

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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.

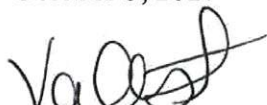
“**Budget-to-Actual Adjustment**” means the adjustment to QIIP for the applicable coming annual period due to the difference between the Forecasted QIIP Investment Amount and the Actual QIIP Investment Amount.

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“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.

(T) **“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.

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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

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TPUC NO. 19

Third Revised Sheet No. 12-QIIP-4

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.

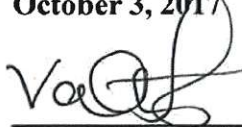
Franchise Taxes = Forecasted cumulative qualified QIIP investment multiplied by composite franchise tax rate approved in the Relevant Rate Order.

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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

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TENNESSEE-AMERICAN WATER COMPANY

Page 16 of 31
TPUC NO. 19

Third Revised Sheet No. 12-QIIP-6

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:

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TPUC NO. 19

Third Revised Sheet No. 12-QIIP-7

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.

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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.

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

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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

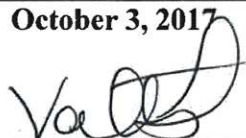
On or before March 1 of each year, the Company shall submit to the Commission a reconciliation of the results of the operation of the QIIP for the previous Annual Review Period. The Annual Reconciliation Filing shall be verified by an officer of the Company. The annual reconciliation shall include a 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

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BY:



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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.

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BY:


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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.

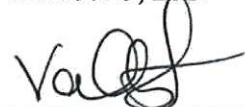
"Commission" means the Tennessee Public Utility Commission.

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BY:



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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.

(T) **“Over-Under Collection Adjustment”** means the adjustment to SEC 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
(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.

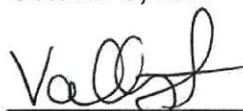
Gross Receipts Tax Rate = Forecasted SEC Revenue Requirement before gross receipts taxes, uncollectible expense and forfeited discounts multiplied by composite gross receipts tax rate approved in the Relevant Rate Order.

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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. 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

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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

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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.

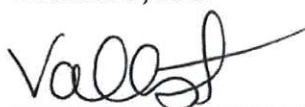
Actual SEC Investment Amount = Average actual SEC additions to plant infrastructure as described in Section 3, computed by use of average of 12 end-of-month balances.

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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.

(T) 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-Under Collection Adjustment. This adjustment shall include any remaining Over-Under amount from the prior period reconciliation during the Annual Review Period in 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.

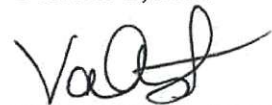
Interest will be computed as follows:

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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.

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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

ISSUED: **October 3, 2017**

EFFECTIVE: **November 2, 2017**

BY:



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TENNESSEE-AMERICAN WATER COMPANY

Page 31 of 31
TPUC NO. 19

Second Revised Sheet No. 12-SEC-11

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.

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ISSUED: October 3, 2017

EFFECTIVE: November 2, 2017

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TENNESSEE-AMERICAN WATER COMPANY

TPUC NO. 19

Sixteenth Revised Sheet No. 12-Riders-1

CLASSIFICATION OF SERVICE

SUMMARY OF RIDERS

1. Applicability

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

2. The Percentage of Riders and Reconciliations

For the Riders defined in the tariffs:

QIIP	14.28% (I)
EDI	1.14% (I)
SEC	8.79% (I)
Subtotal of all Capital Recovery Riders	24.21%
QIIP Annual Reconciliation Percentage	0.00%
EDI Annual Reconciliation Percentage	0.00%
SEC Annual Reconciliation Percentage	0.00%
Subtotal of all Capital Recovery Riders	0.00%
Total of Capital Recovery Riders and Reconciliation Percentages	24.21% (I)
Offset to Capital Recovery Riders for TCJA savings	-6.62%
PCOP	-1.10%

(I) Indicates Increase

ISSUED: November 15, 2019 EFFECTIVE: January 1, 2020

BY:



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TENNESSEE-AMERICAN WATER COMPANY

TPUC NO. 19
Eighteenth Revised Sheet No. 12-Riders-1

CLASSIFICATION OF SERVICE

SUMMARY OF RIDERS

1. Applicability

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

2. The Percentage of Riders and Reconciliations


For the Riders defined in the tariffs:

QIIP	14.28%
EDI	1.14%
<u>SEC</u>	<u>8.79%</u>
Subtotal of all Capital Recovery Riders	24.21%
QIIP Annual Reconciliation Percentage	-2.07% (D)
EDI Annual Reconciliation Percentage	-0.50% (D)
<u>SEC Annual Reconciliation Percentage</u>	<u>-1.12% (D)</u>
Subtotal of all Capital Recovery Riders	-3.69%
Total of Capital Recovery Riders and Reconciliation Percentages	20.52%
Offset to Capital Recovery Riders for TCJA savings	-6.62%
PCOP	-0.65%

(D) Indicates Decrease

ISSUED: February 28, 2020 EFFECTIVE: April 1, 2020

BY:


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

TPUC Docket No.	Effective Date	Rider	Authorized Annual Change	Total Cumulative Rider	Reconciliation Authorized	Individual Authorized Rider Total	Capital Riders Cumulative Total	TCJA Offset	Impact to Bill
13-00130	4/15/2014	QIIP	0.790%	0.790%	0.000%	0.790%			
		EDI	0.180%	0.180%	0.000%	0.180%			
		SEC	0.110%	0.110%	0.000%	0.110%			
		Total	1.080%		0.000%		1.080%	0.00%	1.080%
14-00121	6/30/2015	QIIP	1.340%	2.130%	0.000%	2.130%			
		EDI	-0.130%	0.050%	0.000%	0.050%			
		SEC	3.430%	3.540%	0.000%	3.540%			
		Total	4.640%		0.000%		5.720%	0.00%	5.720%
15-00029*	11/1/2015	QIIP	0.000%	2.130%	0.254%	2.384%			
		EDI	0.000%	0.050%	-0.150%	-0.100%			
		SEC	0.000%	3.540%	0.064%	3.604%			
		Total	0.000%	5.720%	0.168%		5.888%	0.00%	5.888%
15-00111	3/15/2016	QIIP	2.430%	4.560%	0.000%	4.560%			
		EDI	0.050%	0.100%	0.000%	0.100%			
		SEC	2.180%	5.720%	0.000%	5.720%			
		Total	4.660%		0.000%		10.380%	0.00%	10.380%
16-00022*	10/11/2016	QIIP	0.000%	4.560%	1.166%	5.726%			
		EDI	0.000%	0.100%	-0.178%	-0.078%			
		SEC	0.000%	5.720%	-0.118%	5.602%			
		Total	0.000%		0.870%		11.250%	0.00%	11.250%
16-00126	3/14/2017	QIIP	2.960%	7.520%	0.000%	7.520%			
		EDI	0.240%	0.340%	0.000%	0.340%			
		SEC	0.370%	6.090%	0.000%	6.090%			
		Total	3.570%		0.000%		13.950%	0.00%	13.950%
17-00020*	8/16/2017	QIIP	0.000%	7.520%	1.763%	9.283%			
		EDI	0.000%	0.340%	-0.031%	0.309%			
		SEC	0.000%	6.090%	-0.826%	5.264%			
		Total	0.000%		0.906%		14.856%	0.00%	14.856%
17-00124	4/10/2018	QIIP	2.530%	10.050%	0.000%	10.050%			
		EDI	0.070%	0.410%	0.000%	0.410%			
		SEC	-0.120%	5.970%	0.000%	5.970%			
		Total	2.480%		0.000%		16.430%	0.00%	16.430%
18-00022*	12/17/2018	QIIP	0.000%	10.050%	1.542%	11.592%			
		EDI	0.000%	0.410%	-0.081%	0.329%			
		SEC	0.000%	5.970%	-0.628%	5.342%			
		Total	0.000%		0.833%		17.263%	0.00%	17.263%
18-00120	9/1/2019	QIIP	1.600%	11.650%	0.000%	11.650%			
		EDI	0.240%	0.650%	0.000%	0.650%			
		SEC	0.910%	6.880%	0.000%	6.880%			
		Total	2.750%		0.000%		19.180%	-6.62%	12.560%
19-00031*	12/9/2019	QIIP	0.000%	11.650%	-1.140%	10.510%			
		EDI	0.000%	0.650%	-0.320%	0.330%			
		SEC	0.000%	6.880%	-0.920%	5.960%			
		Total	0.000%		-2.380%		16.800%	-6.62%	10.180%
19-00105	1/1/2020	QIIP	2.630%	14.280%	0.000%	14.280%			
		EDI	0.490%	1.140%	0.000%	1.140%			
		SEC	1.910%	8.790%	0.000%	8.790%			
		Total	5.030%		0.000%		24.210%	-6.62%	17.590%
20-000XX*	4/1/2020	QIIP	0.000%	14.280%	-2.070%	12.210%			
		EDI	0.000%	1.140%	-0.500%	0.640%			
		SEC	0.000%	8.790%	-1.120%	7.670%			
		Total	0.000%		-3.690%		20.520%	-6.62%	13.900%

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

STATE OF Kentucky)
)
COUNTY OF Layette)

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 28 day of February, 2020.

Christina Pelapio Jean
Notary Public

My Commission Expires: 8/6/2022