BUTLER SNOW

October 4, 2013

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T.R.A. DOCKET ROOM

VIA HAND DELIVERY

Hon. James M. Allison, Chairman
c/o Sharla Dillon
Tennessee Regulatory Authority
460 James Robertson Parkway
Nashville, TN 37243

RE: Petition of Tennessee-American Water Company for Approval of a Qualified Infrastructure Investment Program, an Economic Development Investment Rider, a Safety and Environmental Compliance Rider, and Pass-Throughs for Purchased Power, Chemicals, Purchased Water, Wheeling Water Costs, Waste Disposal, and TRA Inspection Fee, TRA Docket No. _____

Dear Chairman Allison:

Pursuant to Tenn. Code Ann. § 65-5-103, *et seq.*, enclosed please find an electronic version of the *Petition of Tennessee-American Water Company for Approval of a Qualified Infrastructure Investment Program, an Economic Development Investment Rider, a Safety and Environmental Compliance Rider, and Pass-Throughs for Purchased Power, Chemicals, Purchased Water, Wheeling Water Costs, Waste Disposal, and TRA Inspection Fee* (the "*Petition*"), along with sworn testimony and exhibits.[1] Accompanying the electronic version are an original and four (4) hard copies of the *Petition* and supporting documentation.

We have also enclosed a check in the amount of $25.00 for the required filing fee. An extra copy of this cover letter is also enclosed to be file-stamped for our records. Should you have any questions concerning this filing, or require additional information, please do not hesitate to let me know.

Very truly yours,

BUTLER, SNOW, O'MARA, STEVENS & CANNADA, PLLC

Melvin J. Malone

clw
Enclosures
cc: Deron Allen, President, Tennessee-American Water Company
Cynthia Kinser, Deputy Attorney General, Consumer Advocate and Protection Division (Courtesy Copy)

[1] For administrative convenience, two (2) CDs of the *Petition*, and supporting documentation, are enclosed.

The Pinnacle at Symphony Place
150 3rd Avenue South, Suite 1600
Nashville, TN 37201

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STATE OF Kentucky)
)
COUNTY OF Fayette)

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared Brent E. O'Neill, being by me first duly sworn deposed and said that:

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

Brent E. O'Neill

Sworn to and subscribed before me
this 2nd day of October, 2013.

Notary Public

My Commission Expires: 10/3/2016

STATE OF TENNESSEE)
)
COUNTY OF HAMILTON)

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

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

Deron Allen

Sworn to and subscribed before me
this 2nd day of October, 2013.

Virginia B. Scealf
Notary Public

My Commission Expires: Sept. 10, 2016

VIRGINIA B. SCEALF
STATE OF TENNESSEE NOTARY PUBLIC
HAMILTON COUNTY, TN

STATE OF TENNESSEE)
)
COUNTY OF HAMILTON)

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

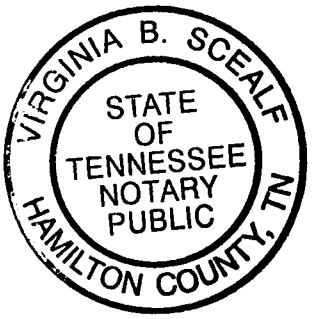
He is appearing as a witness on behalf of Tennessee-American Water Company before the Tennessee Regulatory Authority, and if present before the Authority and duly sworn, his testimony would set forth in the annexed transcript.

Gary M. VerDouw

Sworn to and subscribed before me
this 2nd day of October, 2013.

Virginia B. Scealf
Notary Public

My Commission Expires: Sept. 10, 2016



TENNESSEE-AMERICAN WATER COMPANY

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BEFORE THE TENNESSEE REGULATORY AUTHORITY
NASHVILLE, TENNESSEE

PETITION OF TENNESSEE-AMERICAN WATER COMPANY FOR APPROVAL OF A QUALIFIED INFRASTRUCTURE INVESTMENT PROGRAM, AN ECONOMIC DEVELOPMENT INVESTMENT RIDER, A SAFETY AND ENVIRONMENTAL COMPLIANCE RIDER, AND PASS-THROUGHS FOR PURCHASED POWER, CHEMICALS, PURCHASED WATER, WHEELING WATER COSTS, WASTE DISPOSAL, AND TRA INSPECTION FEE	)	**DOCKET NO. _____**

PETITION

Pursuant to Tennessee Code Annotated § 65-5-103 and Tennessee Regulatory Authority ("Authority" or "TRA") Rule 1220-4-1-.04, Tennessee-American Water Company ("Tennessee American" or "Company"), a Tennessee corporation authorized to conduct a public utility business in the State of Tennessee, hereby files with the Authority this Petition and accompanying tariffs and requests approval of the same, as permitted by TRA Rule 1220-4-1-.04, as soon as is practicable, but in any event within one hundred and twenty (120) days from the date of the filing of this Petition. In support of this Petition, Tennessee American states as follows:

Description of Tennessee American

1. Tennessee American is a public utility as defined in Tenn. Code Ann. § 65-4-101 and provides residential, commercial, industrial and municipal water service, including public and private fire protection service, to Chattanooga and surrounding areas, including approximately 75,840 customers, that are subject to the jurisdiction of the Authority pursuant to Chapter 4 and Chapter 5 of Title 65 of the T.C.A. Tennessee American also serves customers in

North Georgia. The rates for those customers are not regulated by the Public Service Commission of the State of Georgia, but are instead regulated by this Authority.

2. Tennessee American is a wholly-owned subsidiary of American Water Works Company, Inc., which is the largest water holding company in the United States, providing water and wastewater services to sixteen (16) million people in thirty-five (35) states and two (2) Canadian Provinces.

3. Tennessee American's principal place of business is located at 1101 Broad Street, Chattanooga, Tennessee 37402.

4. All correspondence and communication with respect to this Petition should be sent to the following:

Gary M. VerDouw
Director of Rates, Central Division
American Water Company
727 Craig Road
Saint Louis, MO 63141
Gary.VerDouw@amwater.com
(314) 996-2398 (office)
(314) 966-2250 (fax)

Melvin J. Malone
Junaid Odubeko
Butler, Snow, O'Mara, Stevens & Cannada, PLLC
The Pinnacle at Symphony Place
150 3rd Avenue South, Suite 1600
Nashville, TN 37201
melvin.malone@butlersnow.com
junaid.odubeko@butlersnow.com
(615) 651-6700 (office)
(615) 651-6701 (fax)

Request for and Description of a Qualified Infrastructure Investment Program

5. Tennessee Governor Bill Haslam signed House Bill 191, now Tenn. Code Ann. § 65-5-103, into law on April 19, 2013. Among other things, this legislation authorized the TRA

to implement alternative regulatory methods to allow public utility rate reviews and cost recovery in lieu of a general rate case proceeding before the TRA. More specifically, under Tenn. Code Ann. § 65-5-103(d)(5), a public utility may request and the TRA may authorize a mechanism to recover the operational expenses, capital costs or both related to programs that are in the public interest.[1]

6. As will be demonstrated by the supporting testimony accompanying this Petition, Tennessee American's proposed Qualified Infrastructure Investment Program ("QIIP") clearly falls within the alternative regulatory methods now permitted pursuant to Tenn. Code Ann. § 65-5-103. Tennessee American has an obligation to provide safe, adequate and reliable service, and the quality of the service it provides is dependent, in part, upon the ongoing improvement and replacement of the Company's aging infrastructure. As the agency well-knows, the cost of infrastructure maintenance and replacement is substantial. In light of the aging infrastructure, if Tennessee American must continue to advance the cost of the investment and bear the burden of the associated carrying costs until the conclusion of the next Base Rate case filing to recover these necessary costs, it will not have the opportunity to achieve the rate of return set by the TRA.

7. Consistent with Tenn. Code Ann. § 65-5-103, Tennessee American is proposing the QIIP to mitigate the above-outlined problem, which will aid the Company's goal of accelerating the timeframe of essential infrastructure upgrades and replacements. As proposed, the QIIP will produce a safer and more reliable water distribution and production system for ratepayers. Additionally, the QIIP mechanism has many other customer benefits and protections

[1] Moreover, Tenn. Code Ann. § 65-5-103(d)(7) provides that the Authority is empowered to adopt policies or procedures, that would permit a more timely review and revisions of the rates, tolls, fares, charges, schedules, classifications or rate structures of public utilities, and that would further streamline the regulatory process and reduce the cost and time associated with the ratemaking processes of §§ 65-5-101 and 65-5-109.

that will be addressed in the supporting testimony, including the lessening of the occurrence of "rate shock" associated with Base Rate increases. Finally, the QIIP acknowledges and embraces the oversight and safeguards set forth in Tenn. Code Ann. § 65-5-103.

Request for and Description of an Economic Development Investment Rider

8. Tenn. Code Ann. § 65-5-103(d)(3)(A) also provide that a public utility may request and the TRA may authorize a mechanism to recover the operational expenses, capital costs or both related to the expansion of infrastructure for the purpose of economic development, if such expenses or costs are found by the TRA to be in the public interest. Further, Tenn. Code Ann. § 65-5-103(d)(4) provides that a public utility may request and the TRA may authorize a mechanism to recover expenses associated with efforts to promote economic development in such utility's service territory, if such expenses or costs are found by the TRA to be in the public interest.

9. As will be demonstrated by the supporting testimony accompanying this Petition, Tennessee American's proposed Economic Development Investment Rider clearly falls within the alternative regulatory methods now permitted pursuant to Tenn. Code Ann. § 65-5-103. It promotes the public interest for the territory served by Tennessee American to be capable of serving both growing and new businesses and to be permitted to prudently promote economic development, growth and expansion. Growing, new and relocating businesses consider a number of significant factors in deciding whether to expand in, or relocate to, Tennessee American's service territory, including the presence of sound utility infrastructure. Given the nature of maintaining and improving such infrastructure, a prudent community should not provide attention to these items only during certain "active" recruiting periods. Retaining existing jobs and attracting new jobs is the lifeblood of any community. This new, proactive and forward-

thinking public policy serves the public interest by aiding and supporting economic and community development. Finally, like the QIIP, the Economic Development Investment Rider acknowledges and embraces the oversight and safeguards set forth in Tenn. Code Ann. § 65-5-103.

Request for and Description of a Safety and Environmental Compliance Rider

10. Tenn. Code Ann. § 65-5-103(d)(2) provides that a public utility may request and the TRA may authorize a mechanism to recover the operational expenses, capital costs or both related to safety requirements imposed by the state or federal government and to necessary measures to ensure the reliability of the public utility plant in service, if such expenses or costs are found by the TRA to be in the public interest.

11. As will be demonstrated by the supporting testimony accompanying this Petition, Tennessee American's proposed Safety and Environmental Compliance Rider clearly falls within the alternative regulatory methods now permitted pursuant to Tenn. Code Ann. § 65-5-103, as environmental compliance investments are specifically related to the safety of the drinking water and in the public interest. As explained in detail in Mr. VerDouw's testimony, the current regulatory environment, coupled with the aging infrastructure, will require a larger investment in this area, which is not recognized in Tennessee American's current rates. Again, one of the benefits with this mechanism is avoiding rate shock. Finally, like the Economic Development Investment Rider, the Safety and Environmental Compliance Rider acknowledges and embraces the oversight and safeguards set forth in Tenn. Code Ann. § 65-5-103.

Request for and Description of a Pass-Throughs for Purchased Power, Chemicals, Purchased Water, Wheeling Water Costs, Waste Disposal, and TRA Inspection Fee

12. Tenn. Code Ann. § 65-5-103(d)(5)(B) also provides that a public utility may request and the TRA may authorize a mechanism to allow for and permit a more timely

adjustment of rates resulting from changes in essential, non-discretionary expenses, upon a finding that such programs are in the public interest.

13. As will be demonstrated by the supporting testimony accompanying this Petition, Tennessee American's proposed Pass-Throughs for Purchased Power, Chemicals, Purchased Water, Wheeling Water Costs, Waste Disposal and TRA Inspection Fee clearly fall within the alternative regulatory methods now permitted pursuant to Tenn. Code Ann. § 65-5-103. As explained in detail in Mr. VerDouw's testimony, the combined cost of purchased power expense, purchased chemical expense, purchased water expense, wheeling charge expense, waste disposal expense and TRA inspection fee assessments is the largest non-labor related component of the Company's operations and maintenance expenses. These expenditures are essential and non-discretionary. Any increase in such costs in between Base Rate cases are outside the control of the Company's management. Furthermore, these costs can be volatile in nature, as evidenced by the recent legislative changes to the TRA inspection fee assessment. Generally, when such increases occur in between Base Rate cases, the Company does not have the opportunity to recover (or credit in the event of a cost decrease) changes in these significant and potentially volatile costs. The timely recovery of prudently incurred, essential and non-discretionary costs is reasonable from a ratemaking perspective, in that a basic tenet of regulation is that the utility should have a reasonable opportunity to recover its prudently-incurred costs of providing service to its customers.

14. Finally, the proposed Pass-Throughs acknowledge and embrace the oversight and safeguards set forth in Tenn. Code Ann. § 65-5-103.

15. In further support of its Petition, Tennessee American has simultaneously filed the following direct testimony, which is incorporated herein by reference:

(a) **Direct Testimony of Deron Allen,** which provides an overview of, and the need for, each the requested alternative regulatory methods for rate relief;

(b) **Direct Testimony of Gary VerDouw,** which provides a more detailed explanation of the support for each of the requested alternative regulatory methods, a more detailed explanation of how each of the requested alternative regulatory methods would work; and sponsors certain Tennessee American's Exhibits; and

(c) **Direct Testimony of Brent O'Neill,** which addresses the strategy for preparing and implementing capital expenditures and describes the items that are a part of the Company's 2014 Strategic Capital Expenditures plan for the Qualified Infrastructure Investment Program, Economic Development Investment Rider and the Safety and Environmental Compliance Rider.

16. Tennessee American has filed simultaneously with this Petition the necessary tariffs.

17. Tennessee American submits that the proposed alternative regulatory mechanisms set forth herein, and supported by the attached testimony, are consistent with Tenn. Code Ann. § 65-5-103 and serve the public interest. Therefore, Tennessee American's tariffs should be approved.

WHEREFORE, Tennessee American respectfully requests:

1. That the Authority approve this Petition and issue an order pursuant to Tenn. Code Ann. § 65-5-103 *et. seq.*;

2. That the Authority approve the proposed Qualified Infrastructure Investment Program as submitted herein;

3. That the Authority approve the proposed Economic Development Investment Rider as submitted herein;

4. That the Authority approve the proposed Safety and Environmental Compliance Rider as submitted herein;

5. That the Authority approve the proposed Pass-Throughs for Fuel, Purchased Power, Chemicals, Purchased Water, Wheeling Water Costs, Waste Disposal and TRA Inspection Fee as submitted herein;

6. That the Authority approve Tennessee American's tariffs, as submitted herein, implementing each of the alternative regulatory methods as soon as is practicable, as permitted in TRA Rule 1220-4-1-.04, but in any event within one hundred and twenty (120) days of the date of the filing of this Petition; and

7. That the Authority grant such other and/or further relief as may be warranted.

This the 4th day of October, 2013.

Respectfully submitted:

By: _____

Melvin J. Malone
Junaid Odubeko
Butler, Snow, O'Mara, Stevens & Cannada, PLLC
The Pinnacle at Symphony Place
150 3rd Avenue South, Suite 1600
Nashville, TN 37201

Attorneys for Tennessee-American Water Company

ButlerSnow 17790343v1

CLASSIFICATION OF SERVICE

QUALIFIED INFRASTRUCTURE IMPROVEMENT PROGRAM – RIDER

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 of 0.81% 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.

General Description:

To recover the operational expenses, capital costs, or both related to qualified infrastructure investment projects. The initial annual prospective QIIP year will be January 1, 2014 through December 31, 2014. Annual prospective QIIP years are anticipated to be approximately January 1 of one year through December 31 of the succeeding year.

QIIP Eligible Utility Plant:

Distribution Infrastructure – replacement distribution and transmission systems 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; Un-reimbursed funds related to capital projects to relocate facilities required by a 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, reinforcement or otherwise insuring reliability of existing facilities.

CLASSIFICATION OF SERVICE

QUALIFIED INFRASTRUCTURE IMPROVEMENT PROGRAM – RIDER
(Continued)

Determination of the Annual Qualified Infrastructure Improvement Program Percentage:

(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 annual prospective basis.

QIIP percentage formula:

$$QIIP\ \% = \frac{[\{(NetPlant \times PTR) + NetDep + PFT\} \ / \ 1 - RT] + R}{PAR}$$

Where:

QIIP % = QIIP percentage

NetPlant = Average forecasted cost of QIIP qualified plant additions (computed by use of average of 12 end-of-month balances).

PTR = Current pre-tax rate of return as calculated from authorized weighted cost of equity, grossed up for taxes, added to the authorized weighted cost of debt from most recent Base Rate case Order.

CLASSIFICATION OF SERVICE

QUALIFIED INFRASTRUCTURE IMPROVEMENT PROGRAM – RIDER
(Continued)

Where:

NetDep = Net annual depreciation expense related to the average forecasted QIIP additions, net of retirements and CIAC, per application of current TRA approved depreciation rates by account.

PFT = Property and Franchise Taxes

R = Reconciliation component related to over/under recovery of QIIP costs during the prior QIIP year.

RT = Sum of revenue taxes % (Gross Receipts Tax and TRA Utility Fees) and uncollectible expense %, expressed as a decimal

PAR = Authorized annual base revenue subject to QIIP

CLASSIFICATION OF SERVICE

QUALIFIED INFRASTRUCTURE IMPROVEMENT PROGRAM – RIDER
(Continued)

The QIIP Rider shall be subject to an annual reconciliation.

Annual Reconciliation:

On or before March 1 of each QIIP year, if the Company had a QIIP in effect for all or part of the immediately preceding QIIP year, it shall submit to the Commission an annual reconciliation regarding the results for the previous QIIP year. The annual reconciliation shall be verified by an officer of the Company. The annual reconciliation shall include a calculation of the R formula component necessary to adjust revenue collected under the QIIP Rider in effect for prior QIIP year to an amount equivalent to the actual level of prudently-incurred QIIP cost for the prior QIIP year. Any over or under recovery will be included in the calculation of the next adjustment to the QIIP.

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 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.

CLASSIFICATION OF SERVICE

ECONOMIC DEVELOPMENT INVESTMENT PROGRAM – RIDER

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, an Economic Development Investment ("EDI") Rider of 0.18% 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.

General Description:

To recover the operational expenses, capital costs, or both related to the expansion of infrastructure for the purpose of economic development. The initial annual prospective EDI year will be January 1, 2014 through December 31, 2014. Annual prospective EDI years are anticipated to be approximately January 1 of one year through December 31 of the succeeding year.

EDI Eligible Utility Plant:

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

EDI Eligible Expenses:

Operational expenses similar to other expenses authorized in previous rate cases that are specifically for economic development or to support economic development utility plant.

CLASSIFICATION OF SERVICE

ECONOMIC DEVELOPMENT INVESTMENT PROGRAM – RIDER
(Continued)

Determination of the Annual Economic Development Investment Program Percentage:

(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 annual prospective basis.

EDI percentage formula:

$$EDI\ \% = \frac{[\{(NetPlant \times PTR) + NetDep + PFT + EDIEx\} \ / \ 1 - RT] + R}{PAR}$$

Where:

EDI % = EDI percentage

NetPlant = Average forecasted cost of EDI qualified plant additions (computed by averaging the 12 end-of-month plant balances).

PTR = Current pre-tax rate of return as calculated from authorized weighted cost of equity, grossed up for taxes, added to the authorized weighted cost of debt from most recent Base Rate case Order.

CLASSIFICATION OF SERVICE

ECONOMIC DEVELOPMENT INVESTMENT PROGRAM – RIDER
(Continued)

Where:

NetDep = Net annual depreciation expense related to the average forecasted EDI additions, net of retirements and CIAC, per application of current TRA approved depreciation rates by account.

PFT = Property and Franchise Taxes

R = Reconciliation component related to over/under recovery of EDI costs during the prior EDI year.

EDIEx = Operational expense items related directly to economic development

RT = Sum of revenue taxes % (Gross Receipts Tax and TRA Utility Fees) and uncollectible expense %, expressed as a decimal

PAR = Authorized annual base revenue subject to EDI

CLASSIFICATION OF SERVICE

ECONOMIC DEVELOPMENT INVESTMENT PROGRAM – RIDER
(Continued)

The EDI Rider shall be subject to an annual reconciliation.

Annual Reconciliation:

On or before March 1 of each EDI year, if the Company had a EDI in effect for all or part of the immediately preceding EDI year, it shall submit to the Commission an annual reconciliation regarding the results for the previous EDI year. The annual reconciliation shall be verified by an officer of the Company. The annual reconciliation shall include a calculation of the R formula component necessary to adjust revenue collected under the EDI Rider in effect for prior EDI year to an amount equivalent to the actual level of prudently-incurred EDI cost for the prior EDI year. Any over or under recovery will be included in the calculation of the next adjustment to the EDI.

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 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.

CLASSIFICATION OF SERVICE

SAFETY AND ENVIRONMENTAL COMPLIANCE – RIDER

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, an Safety and Environmental Compliance ("SEC") Rider of 0.12% 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.

General Description:

To recover the operational expenses, capital costs, or both related to Safety and Environmental Compliance. The initial annual prospective SEC year will be January 1, 2014 through December 31, 2014. Annual prospective SEC years are anticipated to be approximately January 1 of one year through December 31 of the succeeding year.

SEC Eligible Utility Plant:

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

SEC Eligible Expenses:

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.

CLASSIFICATION OF SERVICE

SAFETY AND ENVIRONMENTAL COMPLIANCE PROGRAM – RIDER
(Continued)

Determination of the Annual Safety and Environmental Compliance Program Percentage:

(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 annual prospective basis.

SEC percentage formula:

$$SEC\ \% = \frac{[\{(NetPlant \times PTR) + NetDep + PFT + SECEx\} \ / \ 1 - RT] + R}{PAR}$$

Where:

SEC % = SEC percentage

NetPlant = Average forecasted cost of SEC Rider qualified plant additions (computed by averaging the 12 end-of-month balances).

PTR = Current pre-tax rate of return as calculated from authorized weighted cost of equity, grossed up for taxes, added to the authorized weighted cost of debt from most recent Base Rate case Order.

CLASSIFICATION OF SERVICE

SAFETY AND ENVIRONMENTAL COMPLIANCE PROGRAM – RIDER
(Continued)

Where:

NetDep = Net annual depreciation expense related to the average forecasted SEC Rider additions, net of retirements and CIAC, per application of current TRA approved depreciation rates by account.

PFT = Property and Franchise Taxes

R = Reconciliation component related to over/under recovery of SEC Rider costs during the prior SEC Rider year.

SECEx = Operational expenses for safety and environmental compliance

RT = Sum of revenue taxes % (Gross Receipts Tax and TRA Inspection Fees) and uncollectible expense %, expressed as a decimal

PAR = Authorized annual base revenue subject to SEC Rider

CLASSIFICATION OF SERVICE

SAFETY AND ENVIRONMENTAL COMPLIANCE PROGRAM – RIDER
(Continued)

The SEC Rider shall be subject to an annual reconciliation.

Annual Reconciliation:

On or before March 1 of each SEC year, if the Company had a SEC in effect for all or part of the immediately preceding SEC year, it shall submit to the Commission an annual reconciliation regarding the results for the previous SEC year. The annual reconciliation shall be verified by an officer of the Company. The annual reconciliation shall include a calculation of the R formula component necessary to adjust revenue collected under the SEC Rider in effect for prior SEC year to an amount equivalent to the actual level of prudently-incurred SEC cost for the prior SEC year. Any over or under recovery will be included in the calculation of the next adjustment to the SEC.

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 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.

CLASSIFICATION OF SERVICE

PRODUCTION COSTS AND OTHER PASS-THROUGHS ("PCOP") RIDER

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 PCOP charge or credit of x.xx% will apply.

The above PCOP % will be recomputed annually.

General Description:

Provides for recovery or crediting of incremental increases in the cost of purchased power, chemicals, waste disposal costs at the treatment plant, purchased water from other utilities, wheeling of water by other utilities and TRA inspection fee between base rate cases.

BASE RATE COST OF PRODUCTION COSTS AND OTHER PASS-THROUGHS

The Base Rate Cost of Purchased Power, Chemicals, Waste Disposal, Purchased Water, Wheeling Water and TRA Inspection Fee per 100 Gallons of Water Sales determined and authorized in the Base Rate proceeding in Docket No. 12-00049 is as set forth below:

Base Rate Cost per 100 Gallons $ 0.04038

STATE OF TENNESSEE)
)
COUNTY OF HAMILTON)

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

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

Deron Allen

Sworn to and subscribed before me
this 2nd day of October, 2013.

Virginia B. Sealf
Notary Public

My Commission Expires: Sept. 10, 2016

VIRGINIA B. SCEALF
STATE OF TENNESSEE NOTARY PUBLIC
HAMILTON COUNTY, TN

WITNESS BACKGROUND

Q. Please state your name and business address.

A. My name is Deron E. Allen and my business address is 1101 Broad Street, Chattanooga, TN 37402.

Q. By whom are you employed and in what capacity?

A. I am employed by Tennessee-American Water Company ("Tennessee American", "TAWC" or "Company") as President.

Q. What is your educational background?

A. I graduated from Crowder College, Neosho, Missouri, in 1985 with a Water-Wastewater Treatment Certificate. I received an Associate in Applied Science Degree from Crowder College in 1987. I later graduated from Indiana State University with Bachelor of Science (1991) and Master of Arts (1994) degrees in Geology, specializing in Hydrogeology. I have also passed State Operator certifications in Nebraska, Kansas, Oklahoma, Arkansas, Missouri, and Indiana. I currently hold Water Treatment certifications for the State of Indiana.

Q. Please describe your business experience.

A. In 1983, I worked for TAWC as a Production Laborer. From 1984 to 1985 I worked as a student assistant performing water quality sampling at Crowder College and as a volunteer in the Volunteers in Parks Program for the Missouri Department of Natural Resources. Between 1985 and 1993, I was employed with the Indiana-American Wabash Valley Operation in several roles, including Plant Operator and Distribution Senior Utility worker. From 1993 to 1994, I was an Instructor for the Water/Wastewater Treatment School at Crowder College. From 1994 to 1995, I was the Department Supervisor for the Water/Wastewater Treatment School.

Q. What were your duties in your role as Department Supervisor at Crowder College?

A. In that role, I was responsible for all courses, including the water/wastewater short courses, offered throughout Missouri by the College. From 1996 to 2001, I was the Chairperson for the Environmental Health and Safety Division and Director of the Environmental Resource Center for the College. In this role, I was responsible for all grants, course work, and coordination of activities with the USEPA and the Missouri Department of Natural Resources to ensure the College was achieving the goals of the water/wastewater treatment programs within the state. I remained in this position until I returned to American Water in 2001.

Q. What were your roles once returning to American Water?

A. Between 2001 and 2004, I was the Operations Manager for the Indiana American Water Kokomo Operations. I was in charge of all budgeting, operations, and maintenance

activities for that operation. In 2004, I was promoted to Operations Manager for the Central Indiana Operations. I was later promoted to Director for the Western Indiana Operations of Indiana American Water. In 2010, I was promoted to the position of Vice President, Operations for Indiana American Water. In 2011, I was promoted to my current position as President of TAWC.

Q. What are your duties as President of TAWC?

A. As President of TAWC, I serve as the Chief Executive Officer for the Company in Tennessee. I am responsible for all aspects of TAWC's business, including financial, operations (production, distribution, customer service, engineering and capital investment planning), employee relations, environmental, and regulatory affairs. I am responsible for developing and carrying out the business strategy for TAWC and incorporating that strategy into its business plans. I ensure that all activities of the Company are carried out in compliance with all local, state and federal laws and regulations, and standards of good business practice. I report to the Senior Vice President of the Central Division of American Water.

Q. What is the general area served by TAWC?

A. TAWC supplies water service and public and private fire service to over 75,000 customers in Hamilton, Marion, and Sequatchie Counties in Tennessee, as well as several areas in North Georgia.

Q. Have you previously testified before the Tennessee Regulatory Authority?

A. Yes. I have testified several times at the Tennessee Regulatory Authority ("TRA" or "Authority") on various items involving TAWC.

PURPOSE OF TESTIMONY

Q. What is the purpose of your testimony?

A. I will generally describe the petition that Tennessee American has filed in support of the proposed alternative rate making methods. I will also introduce the witnesses that will testify on behalf of TAWC's petition. Additionally, I will present, in general terms, what TAWC is requesting in this docket and how the Company's requests benefit consumers, TAWC, communities served by TAWC and the public interest. In doing so, I will generally highlight House Bill No. 191, which was signed into law by Tennessee Governor Bill Haslam on April 19, 2013.

PETITION AND INTRODUCTION OF WITNESSES

Q. What is TAWC requesting in its petition in this docket?

A. As mentioned earlier, Governor Haslam signed HB No. 191 into law on April 19, 2013. This statute provides the TRA with the authority to approve, establish or develop mechanisms that would allow regulated utilities, including private water and wastewater utilities, to operate pursuant to various methods of alternative rate adjustments. The intent of this law is, in large measure, to reduce the need for general rate cases, lessen the impact of rate adjustments, ensure safe and reliable water and provide mechanisms for utilities to support and aid economic development through investment. In establishing this new public policy this statute lessens regulatory burdens while simultaneously allowing for continued oversight and safeguards to protect the public interests.

Q. Do the alternative rate making mechanisms proposed here by TAWC have anything in common?

A. Yes, in fact they do. Not coincidentally, each of the proposed mechanisms — the Qualified Infrastructure Investment Program, the Economic Development Investment Rider, the Safety and Environmental Compliance Rider and the pass-throughs — reduce the need for general rate cases, lessen the occurrence of consumer "rate shock," support the maintenance and improvement of essential infrastructure, ensure safety and reliability and allow for more efficient, streamlined regulation. So, there is a kind of common theme here I suppose.

Q. How would you sum up the Company's petition here?

A. Well, the aim of the new legislation appears to be to support economic development, to encourage capital investment, to promote public safety and to streamline utility regulation. So, I think the thrust of our petition is completely consistent with the new legislation. In essence, though counterintuitive, this new public policy may be summarized with the phrase "less is more."

Q. What do you mean by "less is more"?

A. With more efficient, streamlined regulation, there will be more robust capital investment and more opportunity for successful economic development, growth and job creation. With a more timely recovery of capital investment, the Safety and Environmental Compliance Rider and the pass-throughs, there will be less full-blown rate cases and less "rate shock."

Q. Why is this newly established public policy of the State of Tennessee important for TAWC's customers and the communities that it serves?

A. As is the case with water infrastructure across the country, TAWC's infrastructure is in need of substantial repair and replacement. The Company's water system in Chattanooga is over 100 years old. The costs of such repair and replacement are significant. This new

public policy in the State of Tennessee will greatly assist the Company in its ongoing efforts to support the City of Chattanooga and surrounding communities by properly and appropriately maintaining and growing its infrastructure.

Q. How will this new legislation assist the Company in repairing and replacing its infrastructure?

A. In general, the way a full-blown Base Rate case works is that the Company is permitted to recover its capital investment in infrastructure during certain periods covered by the most recent Base Rate case. If the Company repairs or replaces infrastructure outside of those certain, regulatorily defined periods, then it must wait until the next Base Rate case to recover its investment.

Q. In such instances as outlined directly above, how is the capital investment treated in between Base Rate cases?

A. Basically, the Company is not recovering on the capital investment it has made in between rate cases. This is known as "regulatory lag," or a delay in the recovery of the Company's investment. The delay in recovery of that investment erodes the Company's opportunity to earn its authorized return on equity. This erosion in the opportunity to earn its authorized return on equity eventually forces the Company to either a) cut back on its investment in its infrastructure, or b) file a full-blown rate case to earn a return on the investment made.

Q. Does this delay, often referred to as "regulatory lag," encourage investment in infrastructure?

A. Well, as a Company, we deploy infrastructure to serve our customers and to maintain our system. The burden of having to advance the cost of the capital investment without any recovery until the completion of the next Base Rate case, however, is not an incentive to utilities to invest in necessary and essential repairs and replacement of infrastructure. TAWC is permitted by the TRA to earn a return on its investment. When TAWC prudently invests in necessary infrastructure that is not included into our Base Rate, this negatively impacts the Company, as the Company cannot earn a return on such investment until it is included in its Base Rate.

Q. How will this legislation reduce the need for general Base Rate cases?

A. When TAWC invests in its infrastructure, but isn't allowed to recover its investment in a timely manner, it is not permitted the opportunity to earn a return on its investment. In turn, this may negatively impact the Company's ability to achieve the overall rate of return established by the TRA. When this happens, the state established procedure for the Company to be ensured of at least the opportunity to earn its authorized rate of return is for the Company to file a Base Rate case. This new legislation provides a mechanism for TAWC to recover its capital investment in a more timely way and therefore reduces regulatory lag. When regulatory lag is reduced, the Company has a better opportunity to earn its authorized rate of return. When the Company has a fair opportunity to earn its authorized rate of return, this generally lessens the necessity of the filing of a full-blown Base Rate case.

Q. How does a reduction in the need for general Base Rate cases benefit consumers?

A. Though very necessary for regulated utilities, Base Rate cases usually mean that the utility has determined that it is not earning a fair return on its investment, and that an increase in rates is warranted under the circumstances presented. Because there is usually some amount of time in between rate cases, the rate increase either requested or granted may reflect the passage of time in between rate cases and thus result in what is viewed as a sizeable, material increase. If this new public policy adopted by the State of Tennessee enhances the likelihood of less Base Rate cases, then this is a good result for ratepayers.

Q. Will this legislation eliminate the need for the filing of Base Rate cases?

A. No, it will not. And, that was not the intent of the legislation. But, this legislation will certainly provide the possibility of less frequent Base Rate case submissions.

Q. How will this legislation lessen the impact of rate adjustments?

A. Generally speaking, this legislation will allow capital investment in infrastructure to be recovered annually by the Company, via a monthly line item on the customers' statements. Since the recovery timeframe will be more closely aligned with the investment timeframe, a build-up, or back-log if you will, of capital investment for the next Base Rate case would no longer occur. So, while the monthly line item will result in an increase in the amount due from the customer every month, this monthly rate adjustment is much less than the rate adjustment would be by waiting until the next Base Rate case to capture the capital investment.

Q. How will this legislation ensure safe and reliable water?

A. Well, as history would evidence, the Company would continue providing safe and reliable water even without this new public policy. That said, the alternative rate making mechanisms established in the legislation will better align capital investment and investment recovery thereby paving the way for more timely and robust infrastructure improvements, which will help the Company to continue providing safe and reliable water. Moreover, the new law provides that the Authority may authorize a mechanism to recover the operational expenses and capital costs related to safety requirements imposed by the state or federal government.

Q. What new rate making mechanisms is TAWC requesting at this time?

A. TAWC is proposing the use of a Qualified Infrastructure Investment Program ("QIIP"), an Economic Development Investment Rider ("EDI"), a Safety and Environmental Compliance rider, and a pass-through expense mechanism.

Q. What would the QIIP work?

A. The QIIP would be an investment recovery program, similar to the Distribution System Investment Charge ("DSIC") programs in place in other jurisdictions around the country, such as, but not limited to, Indiana and Pennsylvania The QIIP would allow the Company to prudently invest in necessary infrastructure repair and improvement projects

absent the burden of bearing or carrying the investment in full without an opportunity to earn a fair rate of return on such investment until the next Base Rate case. For example, and certainly oversimplified for illustrative purposes only, the way it will work is that the Company will strategically determine to make a necessary capital investment in infrastructure for say the year 2014, the Company will begin to recover that investment in 2014 through a monthly line item on the customers' statements, and the Company will deploy the infrastructure in 2014. In early 2015, there would be a reconciliation or true-up process overseen by the Authority to ensure that the amount actually invested by the Company and the amount actually recovered through the monthly line item on the customers' statements match. Generally speaking, the reconciliation process will reveal one of three outcomes: (1) an actual to actual match of investment and recovery: (2) an under-recovery to the Company (the actual amount recovered via the monthly line item is less than the Company's actual investment deployed); or (3) an over-recovery to the Company (the actual amount recovered via the monthly line item exceeds the Company's actual investment deployed). In the event of either outcome two and three, a true-up, overseen by the Authority, would occur. So, this annual review set forth in the new legislation provides a checks-and-balances, or verification, process to protect the ratepayers. Company Witness Gary VerDouw will be discussing this item in more detail in his testimony in this case, while Company Witness Brent O'Neill will be providing additional detail on the capital investments included with the QIIP.

Q. Can you explain the Economic Development Investment Rider?

A. Yes. When appropriate circumstances serve the public interests, the EDI would allow TAWC to work alongside the communities served by TAWC, such as the City of Chattanooga. TAWC can make the investment in (sometimes at the request of local communities, counties, or economic development agencies), either replacement of existing or placement of new, infrastructure. TAWC would install or replace the infrastructure so that the community could utilize the existence of the improvement for economic development purposes. For instance, the City of Chattanooga might request additions and replacements of infrastructure (water and/or wastewater) related to an economic development project. One area that this could be of great use is in areas of "Brown Field" redevelopment. Another area would be in new Industrial Parks or other business centered areas. In addition, other projects that would promote economic development and job creation, and expenses related to EDI, would be eligible as well.

Q. How would this benefit the customer?

A. The EDI Rider would benefit the customer, and the community, as an essential component of economic development, economic growth and job creation. During location/re-location and potential investment evaluations, entities analyze and weigh a host of important considerations, including infrastructure, both current and future. This is one of the reasons the City of Chattanooga made a significant investment in technological infrastructure several years ago. But, technology alone is simply not enough. In addition to schools and other traditional areas of review, such as cultural exposure, taxes, home prices and crime rates, today's companies also review current and future road plans, health care options and utilities. All areas of a community's offerings, including water and wastewater support, have become critical in the brisk competition for

economic and community development. Cooperatively engaging in this type of proactive and sustained investment will allow the community to more effectively promote itself to companies looking at locating in an area with excellent overall infrastructure and support, including water and wastewater. In today's environment, the promotion of jobs within communities is essential, and utilities and related infrastructure can be one of the key factors in the decision of a company on whether or not to locate in a community, or State, for that matter. Utilities and other community players cannot sit idly by while its communities attempt to secure new and expanding economic development. Rather, utilities and similar vested entities must be a part of the overall solution in exploring and capturing new and expanding investment for the future good of the communities in which they provide services. To do otherwise, would risk subjecting consumers and ratepayers to a stagnant or declining economic environment in future years, which certainly would not serve the public interest. The latter approach would eventually result in a declining community and customer base, which almost always leads to higher rate.

Q. How else is TAWC requesting to use the EDI Rider?

A. TAWC is also requesting that the EDI Rider permit the Company to recover expenses associated with efforts to promote economic development in its service territory. This would allow TAWC to better support economic development in its communities. To have use of the investment mechanism for economic development without the expense component, would unintentionally hamper TAWC's ability to aid and support the public interest in the economic development, economic growth and job creation areas. Generally, when a community is seriously positioning for an economic development opportunity, the community's governmental leadership requests "all hands on deck" from the business community. The business community responds to viable economic expansion opportunities because a growing economic base is beneficial to everyone, including ratepayers. Different support activities could include educational efforts, job re-training and economic development programs. Again, the purpose of this support would be to assist the community with prudent economic development opportunities. This support would aid the community in a number of different ways, including promoting itself, attracting new business, and accompanying jobs, and retaining existing businesses, and the jobs associated with them.

Q. How would this benefit the customer?

A. It would provide for more economic development of the community and enhance the opportunity for creating new jobs, and retaining existing jobs, and other associated benefits of a growing and thriving business base. Additionally, keeping existing businesses (customers) and attracting new businesses (customers) would help in supporting the water and or wastewater utilities and thus play a significant and ongoing role in keeping rates affordable.

Q. Is there anything else on the EDI Rider?

A. Yes. We are requesting that there be an option for specially negotiated rates for economic development. Under the new legislation, efforts to promote economic

development may include foregone revenues. Therefore, it is appropriate to include specially negotiated rates in the Company's EDI Rider.

Q. How would this work?

A. When appropriate circumstances are presented, this would be used to negotiate special rates for new businesses locating to the service territory. Additionally, it would be utilized for the consideration of special contracts with bulk or sale for resale customers under appropriate circumstances, such as a threat to bypass TAWC's system.

Company Witness Gary VerDouw will be discussing this item in more detail in his testimony in this case, while Company Witness Brent O'Neill will be providing additional detail on the capital investments included with the EDI Rider.

Q. How would the Safety and Environmental Compliance Rider work?

A. Consistent with the public interest, House Bill 191 also provides that the Authority may authorize a mechanism to recover the operational expenses and capital costs related to safety requirements, including environmental compliance. The return on these assets and the recovery of any associated expenses would be included in the Safety and Environmental Compliance Rider. Company Witness Gary VerDouw will be discussing this item in more detail in his testimony in this case, while Company Witness Brent O'Neill will be providing additional detail on the capital investments included with the Safety and Environmental Compliance Rider.

Q. What pass-throughs are TAWC requesting at this time?

A. As permitted in the new legislation, TAWC is requesting pass-through recovery on purchased power, chemicals, purchased water, wheeling cost, waste disposal, and regulatory expense related items.

Q. Generally, why are the pass-throughs necessary?

A. There are certain essential expenses that the Company incurs during its regular operations, the cost of which are outside of the Company's control. For instance, TAWC has no control over its electricity bill. Before the new legislation, when TAWC's electricity increased in between Base Rate cases, TAWC could not recover for such increases until the submission of its next full-blown Base Rate case. This period of non-recovery for the increase in such necessary, and prudently incurred costs, like purchased power, chemicals, purchased water and wheeling, waste disposal and TRA inspection fees negatively impacts our opportunity to earn the rate of return set by the TRA, as the Company cannot recover such increases in expenses until they are included in its next Base Rate case. When such increases in expenses are included in the next Base Rate case, they are recovered on a going forward basis and not recovered retroactively.

Q. How would the pass-throughs work?

A. The pass-throughs here would work a little differently than the above-described alternative regulatory mechanisms, as the pass-throughs would "look back" as compared

to the forward-looking QIIP, EDI, and Safety and Environmental Compliance Rider. For example, and certainly oversimplified for illustrative purposes only, the way it will work is that the Company will track and monitor the expense for purchased power, chemicals, purchased water, wheeling cost, waste disposal expense, and TRA Inspection Fees for the twelve month period (and proceeding twelve month periods thereafter) representing the future look test year included in the Company's most recent rate case. In this first instance, that period for TAWC would be the twelve months ending November 30, 2013. In the event such expenses are over or under the authorized levels included in that test year, TAWC would pass such increases or decreases along to its customers via a monthly line item on its customer statements. This effort would then be repeated twelve months later and the pass-through would again be increased or decreased based on actual expense levels for that twelve month period.

Company Witness Gary VerDouw will be discussing the pass-through mechanisms in more detail in his testimony in this case.

Q. What happens if there is a decrease in these particular expenses, as opposed to an increase?

A. If there is a decrease in these particular expenses in between Base Rate cases, then the Company will pass-through such decrease to its customers via a monthly line item.

Q. TAWC is introducing a number of alternative rate mechanisms in this filing. How will these alternative rate mechanisms benefit the consumers of Tennessee American Water, and the communities served by TAWC?

A. All of the alternative rate mechanisms included in this filing are allowed and encouraged under House Bill 191. One of the purposes of the legislation is to allow utilities, such as TAWC, to operate pursuant to alternative rate making mechanisms instead of often cumbersome, slow and expensive full-blown rate cases to recover its costs and to permit the opportunity for a return on new investments. Importantly, the alternative rate mechanisms presented here will allow for a gradual increase in rates rather than larger increases that are usually associated with the filing of general rate increases. In our experience, the small increase included with the filing of these alternative rate mechanisms (approximately a 1% increase in rates) will be much preferred by consumers than a much larger percentage increase typically included in a general rate increase filing. In addition, the filing of these alternative rate mechanisms is much less costly to the consumers of TAWC, as compared to the expense of filing a general rate increase. Thus, this alternative approach results in material savings to the consumers of TAWC on their bill. The communities served by TAWC also benefit from these alternative mechanisms, as the EDI Rider is designed to aid in the further development and re-development of areas served by the Company, including the creation of additional jobs to benefit the economy of the area and TAWC's customers.

Q. How would you summarize the Company's petition?

A. As concerning the ratepayers, the public and TAWC, the petition benefits everyone. This may sound a little self-serving, but it is true. Each of the proposed mechanisms – the

Qualified Infrastructure Investment Program, the Economic Development Investment Rider, the Safety and Environmental Compliance Rider and the pass-throughs – are mutually beneficial to the ratepayers, the public and TAWC. Among other things, the ratepayers benefit from the reduced need for general rate cases and from the lessening of the occurrence of "rate shock." The ratepayers and the public benefit from the safety and reliability components and from the more seamless and timely capital investment in infrastructure, coupled with the related support to economic development, growth and job creation. The Company benefits from a more efficient, streamlined regulatory process that presents TAWC with the opportunity to timely recover its expenses and earn a fair rate of return on its investments.

Q. Does this conclude your testimony?

A. Yes, it does.

STATE OF TENNESSEE)
)
COUNTY OF HAMILTON)

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

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

Gary M. VerDouw

Sworn to and subscribed before me
this 2nd day of October, 2013.

Virginia B. Scealf
Notary Public

My Commission Expires: Sept. 10, 2016

VIRGINIA B. SCEALF
STATE OF TENNESSEE NOTARY PUBLIC
HAMILTON COUNTY, TN

PETITIONER'S EXHIBIT GMV-1

TENNESSEE-AMERICAN WATER COMPANY, INC.

CASE NO. _____

DIRECT TESTIMONY

OF

GARY M. VERDOUW

ON

APPLICATION FOR A QUALIFIED INFRASTRUCTURE INVESTMENT PROGRAM, ECONOMIC DEVELOPMENT INVESTMENT RIDER, SAFETY AND ENVIRONMENTAL COMPLIANCE RIDER, AND PASS THROUGHS FOR PURCHASED POWER, CHEMICALS, PURCHASED WATER, WHEELING WATER COSTS, WASTE DISPOSAL, AND TENNESSEE REGULATORY AUTHORITY INSPECTION FEE

SPONSORING PETITIONER'S EXHIBITS
SUMMARY – GMV, AVG IMPACT – GMV, QIIP1 – GMV, QIIP2 – GMV, EDI1 – GMV, EDI2 – GMV, SEC1 – GMV, SEC2 – GMV, PCOP – GMV, PCOP SAMPLE CALCULATION - GMV, TARIFF – 12 – QIIP - GMV, TARIFF – 12 – EDI - GMV, TARIFF – 12 – SEC - GMV AND TARIFF – 12 – PCOP - GMV

DIRECT TESTIMONY
OF
GARY M. VERDOUW

CASE NO. _____

BACKGROUND

Q. Please state your name and business address.

A. My name is Gary M. VerDouw and my business address is 727 Craig Road, Saint Louis, Missouri 63141.

Q. By whom are you employed and in what capacity?

A. I am employed by American Water Works Service Company ("Service Company") as the Director of Rates for American Water's seven-state Central Division, which includes Tennessee-American Water Company ("Tennessee American" or the "Company"). The Service Company is a subsidiary of American Water Works Company, Inc. ("American Water") that provides support services to American's subsidiaries, including Tennessee American.

Q. Please summarize your educational and professional qualifications.

A. I graduated from the University of Mary in Bismarck, North Dakota in 1981 with a Bachelor of Science degree in Business Administration. I returned to the University of Mary and completed a second major in Accounting in May of 1988. I have attended the Utility Rate Seminar sponsored by the National Association of Regulatory Utility Commissioners ("NARUC") Water Committee and have participated in various continuing education programs sponsored by my former employers and by the Service Company. I am a member of the American Water Works Association ("AWWA") and I

am also a member of the University of Missouri Financial Research Institute ("FRI") Advisory Committee.

Q. Please outline your business experience.

A. I began my employment in February of 1981 when I was hired as Reconciliation and Funds Administrator for the North Dakota State Treasurer's Office. In December of 1981, I was hired as a Field Accountant for ANG Coal Gasification Company, which was constructing North America's first commercial scale coal gasification project near Beulah, North Dakota. While employed with ANG, I was hired as the project's first permanent hire for its 80 person Accounting team and promoted to Accounts Payable Supervisor in 1982. I was again promoted to Cash Manager in 1984, where I oversaw daily cash management of over $1.5 billion in secured debt and over $400 million in daily cash balances. In January, 1988, I was hired as Business Manager for Capital Electric Cooperative, Inc. of Bismarck, North Dakota. My responsibilities there included the supervision and oversight of all accounting, finance, billing, budget, insurance, human resources, cash management, rate studies, and other functions for a growing electric distribution cooperative that currently serves over 17,000 consumers. I was employed at Capital Electric until October of 2004, at which time I moved to the Saint Louis area. In February, 2005, I accepted the position of Senior Financial Analyst – Rates and Regulations with the Service Company. I was promoted to Manager of Rates and Regulation in April of 2008, where I was responsible for all rate and regulatory issues for American Water operations in the states of Indiana, Ohio, and Michigan. I was promoted to Director of Rates – Eastern Division in January 2011, where I was responsible for rates and rate issues for the nine regulated subsidiaries that comprised the

Eastern Division of American Water, including Tennessee American. In November of 2011, American Water restructured its divisional alignment, and I was named Director of Rates for the newly created Central Division, where I am responsible for rates and rate issues for the seven regulated subsidiaries that comprise the Central Division of American Water, including Tennessee American.

Q. Have you testified before any regulatory agencies with respect to regulatory matters?

A. Yes. I have testified in numerous regulatory proceedings before the Tennessee Regulatory Authority ("TRA" or "Authority"), the Kentucky Public Service Commission, the Indiana Utility Regulatory Commission, the Iowa Utilities Board, the Public Utilities Commission of Ohio, and the Illinois Commerce Commission.

SCOPE OF TESTIMONY

Q. What is the purpose of your testimony in this rate proceeding?

A. The purpose of my testimony in this proceeding is to address the following:

i. the Company's request in this proceeding to implement an infrastructure replacement recovery program, which will be referred to as a Qualified Infrastructure Investment Program, or "QIIP";

ii. the Company's request in this proceeding to implement an economic development investment rider, or "EDI";

iii. the Company's request in this proceeding to implement a safety and environmental compliance rider, or "SEC"; and

iv. the Company's request in this proceeding to implement pass through charges for future changes in purchased power expense, chemical expense, purchased water expense, wheeling charge, waste disposal expense, and

the TRA Inspection Fee, or "Production Cost and Other Pass-Through", or "PCOP".

I will discuss each of these items in further detail in my testimony below.

Q. Please identify the exhibits you are sponsoring and describing in your testimony.

A. I am sponsoring the following exhibits:

- Petitioner's Exhibit Summary - GMV
  Summary Page of QIIP, EDI and SEC Riders
- Petitioner's Exhibit Avg. Impact – GMV
  Average Impact to residential customers of QIIP, EDI and SEC Riders
- Petitioner's Exhibit QIIP1 - GMV
  Calculation of QIIP Rider
- Petitioner's Exhibit QIIP2 - GMV
  Investment worksheet for QIIP Rider
- Petitioner's Exhibit EDI 1 - GMV
  Calculation of EDI Rider
- Petitioner's Exhibit EDI 2 - GMV
  Investment worksheet for EDI Rider
- Petitioner's Exhibit SEC 1 - GMV
  Calculation of SEC Rider
- Petitioner's Exhibit SEC 2 - GMV
  Investment worksheet for SEC Rider
- Petitioner's Exhibit PCOP - GMV
  Current Authorized Levels for PCOP Expenses
- Petitioner's Exhibit PCOP Sample Calculation - GMV
  Sample Calculation of Purchased Power, Chemical, Purchased Water, Wheeling Charge, Waste Disposal, and TRA Inspection Fee Charge
- Petitioner's Exhibit Tariff – 12 - QIIP - GMV
  Proposed Tariff Sheet for QIIP Surcharge
- Petitioner's Exhibit Tariff – 12 - EDI - GMV
  Proposed Tariff Sheet for EDI Rider
- Petitioner's Exhibit Tariff – 12 - SEC - GMV
  Proposed Tariff Sheet for SEC Rider
- Petitioner's Exhibit Tariff – 12 - PCOP - GMV
  Proposed Tariff Sheet for PCOP Pass-Through

Q. Were each of Petitioner's Exhibits listed above prepared by you or under your direction and supervision?

A. Yes.

Q. What were the sources of the data used to prepare Petitioner's Exhibits listed above?

A. The data used to prepare these exhibits was acquired from the books of account and business records of Tennessee American, the officers and associates of Tennessee American with knowledge of the facts based on their job responsibilities and activities, and other internal sources which I examined in the course of my investigation of the matters addressed in this testimony.

Q. Do you consider this data to be reliable and of a type that is normally used and relied on in your business for such purposes?

A. Yes.

Q. Do Petitioner's Exhibits listed above accurately summarize such data and the results of analysis using such data?

A. Yes, they do.

BACKGROUND INFORMATION ON THIS FILING

Q. What was Tennessee American's impetus for filing for these tariffs?

A. On April 19, 2013, Tennessee Governor Bill Haslam signed into law House Bill 191, which amended Tennessee Code Annotated, Section 8-27-201; Title 65, Chapter 2; Section 65-4-303; Section 65-5-101; Section 65-5-103 and Section 65-1-102, relative to the TRA and the regulation of public utilities and carriers. The passage of this bill directs the TRA to consider various alternative regulatory mechanisms, including pass-throughs

for such items as the TRA inspection fees, purchased power expense and purchased chemical expense; surcharges for safety requirements imposed by the state or federal government, reliability of public utility plant in service, or weather related natural disasters; and recovery of operational expenses, capital costs, or both related to the expansion of infrastructure for the purpose of economic development. The development and allowance of these alternative regulatory mechanisms will allow a utility such as Tennessee American to continue to invest in Tennessee to ensure safe, reliable service for our approximately 73,000 customers, while being able to do so in a manner that will allow Tennessee American the ability to recover prudent expenses and infrastructure investments without incurring the expense of a full-blown rate case. These alternative regulatory mechanisms have safeguards and reconciliations set in place that will provide regulatory oversight and assurance that will protect the utility's customers.

Q. Why are these alternative mechanisms a benefit to customers?

A. The goal of the new legislation is to support economic development, to encourage capital investment, to promote public safety, and to streamline utility regulation. All of these would be a benefit to the utility customer, and our petition is in line with the new legislation. Regulated utilities cannot increase their rates in Tennessee without approval of the TRA, which prior to this new legislation required a full rate case filing. Simply put, rate cases are expensive. Appropriately, throughout the process, the TRA and other intervening parties scrutinize the details of the operations of the utility, expenditures and revenues. There are legal fees, consultant fees, and agency personnel and administrative resources for all of the parties involved. The process, in order to be thorough, is time

consuming and expensive for all of the stakeholders. Because there is usually some amount of time in between rate cases, the rate increase either requested or granted will reflect that passage of time in between rate cases and thus result in what is viewed as a sizeable, material increase. It is therefore, in everyone's interest, to time the rate cases in a manner that are not too frequent. However, the utility continues to invest money in utility plant and expenses generally tend to continue to increase. This "regulatory lag" lessens the opportunity for the utility to earn its authorized return on equity.

Q. Why is there a concern about having longer time periods between rate cases? Doesn't that simply mean customers save money?

A.. No, not at all. If a rate case is delayed too long, the utility may be either jeopardizing its financial stability and ability to attract cheaper funding for its capital, or it may not be investing in new and replacement plant at a rate that safeguards the reliability and safety of its service. Attracting cheaper capital is critical because utilities require more capital than other types of business. The more that a utility has to pay to finance its construction needs, the more the ratepayer has to pay for the exact same utility service. This is particularly important for water utilities which are even more capital intensive than other utilities. A 2008 study by AUS indicated that the ratio of dollars invested in utility plant per dollar of revenue for the water industry is slightly more than double that of the comparable ratio for the electric utility industry, nearly three times that of the gas distribution utility industry and more than ten times that of the S&P 500 companies. This often goes unacknowledged because much of the water industry infrastructure is out of the public view.

Q. So what happens?

A. In order to strike the right balance, TAWC has recently been filing rate cases every two to two and one-half years on average. Once the rate case concludes, there is one larger increase to customers. The primary driver of these cases has been critical capital expenditures that for the most part all of the parties agree are necessary to providing safe, reliable drinking water to Tennessee American's customers, while the scrutiny in the cases has been focused on other operating expenditures. These proposed mechanisms will help stretch out the time between full rate case filings, thus reducing rate case expenses for everyone, while allowing for a gradual increase in rates annually to recover prudently incurred and necessary capital expenditures and some expenses related to those expenditures, and certain expenses that are beyond the Company's control. This gradual process is easier on the ratepayers, and encourages Tennessee American to keep investing in capital construction at the necessary levels.

Q. Does this mean Tennessee American would never have to file a rate case again?

A. Absolutely not. This simply stretches the period between rate cases while saving the ratepayers, the Company, the TRA, and other intervening parties including, the Consumer Advocate Protection Division, costs for the cases. But other expenses, declining revenue through declining customer usage or changes in the utility operations will require that Tennessee American still periodically apply for rate increases through a rate case. Then the costs included in these mechanisms will fold into the regular rates for Tennessee American at that time.

QUALIFIED INFRASTRUCTURE INVESTMENT PROGRAM ("QIIP")

Q. Please explain why the Company is proposing the adoption of a Qualified Infrastructure Investment ("QIIP"), a tariff rate adjustment mechanism for the replacement of aging infrastructure.

A. As is true with many water service providers in Tennessee and nationwide, Tennessee American's infrastructure is in substantial part nearing the end of its life expectancy and must be replaced in order to insure the reliability of the public utility plant. Tennessee American has an obligation to provide safe, adequate and reliable service, and the quality of the service it provides is dependent, in part, upon the ongoing replacement of this aging infrastructure. However, the cost of infrastructure replacement is substantial, and if Tennessee American must not only advance the cost of the investment, which incrementally has increased significantly over the years, but also to bear the burden of the associated carrying costs of depreciation and interest while waiting for a Base Rate case filing and the completion of such case to be able to recover these necessary costs, it simply will not have the opportunity to achieve the rate of return set by the TRA. Tennessee American is thus proposing the QIIP, in accordance with amended Section 65-5-103 of the Tennessee Code Annotated, as a well-accepted, regulatory approach, to mitigate this problem, while providing the Company with a tool to help address the QIIP's primary objective of accelerating the pace of essential infrastructure upgrades and replacements. In addition, the QIIP mechanism has many other customer benefits and protections that will be addressed later in this testimony, one of which is to help mitigate

the potential "rate shock" associated with Base Rate increases which incorporate on-going plant investments into Rate Base on a lump sum basis rather than on a systematic annual basis as contained in the Company's QIIP proposal.

Q. Do you know of any assessments of the state of the infrastructure and costs of replacement?

A. Yes. In 2013, the American Society of Civil Engineers ("ASCE") published a report entitled, "2013 Report Card for America's Infrastructure," in which it graded the nation's water infrastructure at a 'D' level, or poor. In its report, the ASCE identifies a shortfall of $13 billion of investment each year to replace aging infrastructure and maintain reliable and safe drinking water systems. This is an improvement from the 2009 Report Card for American's Infrastructure, which graded the nation's water infrastructure at a 'D-' level but is obviously still woefully poor.[1]

Q. Are there other estimates of infrastructure replacement costs?

A. Yes. In its Fifth Report to Congress, published in April 2013 (the "2013 EPA Report"), United States Environmental Protection Agency ("USEPA") presented the results of its fourth Drinking Water Infrastructure Needs Survey and Assessment. In the 2013 EPA Report, the USEPA estimated that $384.2 billion (in 2011 dollars) would be needed nationwide to replace aging drinking water infrastructure and comply with regulatory

[1] The 2013 report can be found at: http:/infrastructurereportcard.org

requirements over the next 20 years.[2] This is an increase from a similar report in 2009, based on 2007 dollars, that estimated $334.8 billion would be required for these purposes over the next 20 years. This represented a 15 % increase in four years. A similar USEPA Report published in 2002, based on 1999 dollars, estimated that $150.9 billion ($182.6 billion adjusted to January 2007 dollars) would be required for these purposes over the next 20 years. In unadjusted dollars, therefore, infrastructure replacement needs have increased in excess of 100% (or about 80% on an adjusted basis) in eight years.[3]

Q. Do you know of estimates of infrastructure replacement needs for the State of Tennessee?

A. Yes. The 2013 EPA Report indicates that $2.7 billion of investment is needed for the State of Tennessee over the next 20 years for replacement of aging infrastructure and other regulatory costs. This is a decrease from the previous two reports, which could be the result of changes in the assessment guidelines as well as increases in infrastructure investment. This would still, however, represent over $134 million in water infrastructure needs alone in Tennessee for each of the next 20 years. See 2013 Report, p. 23, Ex. 2.5.

Q. Can you elaborate why is Tennessee American requesting a QIIP in this proceeding?

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[2] The 2013 Report can be found at:
http://water.epa.gov/grants_funding/dwsrf/upload/epa816r13006.pdf

[3] The 2009 Report can be found at:
http://water.epa.gov/infrastructure/drinkingwater/dwns/upload/2009_03_26_needssurvey_2007_report_needssurvey_2007.pdf
The 2002 Report can be found at:http://water.epa.gov/aboutow/ogwdw/upload/2005_02_03_gapreport.pdf

A. Yes. A substantial portion of Tennessee American's distribution infrastructure is between 50 and 100 years old and is nearing the end of its useful service life. The pace of infrastructure replacement is an increasing concern for Tennessee American. The anticipated level of distribution infrastructure improvement projects is increasing at a rapid pace, in part due to the advanced age of the Company's water facilities. A QIIP will more accurately reflect the ongoing investments and improvements that are made in the water distribution and production systems versus the less frequent but larger step increases that would result from base rate increases without a QIIP. The timely recovery of the fixed costs of infrastructure replacement through the QIIP provides an incentive for increased and continued levels of capital infusion. This results in a stronger and more reliable water distribution and production system for both current and future customers. The Company is focusing its replacement program on small diameter mains (4" in diameter and less), which are responsible for the majority of distribution system leaks and failures. The larger mains are also increasing in age and must be considered in our infrastructure replacement planning. The need to replace service lines, meters, hydrants, treatment structures, pumps and equipment is critical to maintain public safety, is continuous and cannot be delayed.

Q. Beyond the QIIP being a regulatory tool to help enable water utilities to accelerate the improvement of critical infrastructure on a continuing basis while mitigating the impact of large rate increases, are there other customer benefits?

A. Yes. Replacing aged infrastructure on an accelerated basis and on a proactive rather than reactive basis, will achieve direct customer benefits in the form of improved and

sustained water quality, increased pressure, improved fire protection, fewer service disruptions and lower operating and maintenance costs over time. Capital cost savings may also be achieved through increased coordination of distribution system projects and sharing of paving costs with the Tennessee Department of Transportation ("TDOT"), local government, and other utilities.

Q. Are there other benefits as well?

A. Yes. An effective QIIP will also benefit the State of Tennessee, City of Chattanooga, Hamilton, Marion, and Sequacthie Counties, and the surrounding communities through an increase in construction jobs brought about by the increased investment in infrastructure provided for by a QIIP program. An improved and more reliable water distribution and production system and the resulting customer benefits noted above can also attract new business to the area and support the economic development and growth.

Q. Are there other reasons the Company is proposing this QIIP?

A. Yes. In the Company's 2010 rate case (Docket No. 10-00189), former TRA Director Eddie Roberson opined that Tennessee American should establish a "tracker" to aid the timely and proper deployment of, and appropriate recovery for, capital additions. As outlined in summary form by him, his tracker would require the Company to first submit documentation of its capital additions, not to exceed the projected cost, including all associated depreciation and tax effects. In response to that opinion, in Docket No. 12-00049, Tennessee American proposed a Distribution System Improvement Charge ("DSIC") mechanism that was similar to the currently proposed QIIP. The DSIC tariff

proposal did not go forward with the settlement that was agreed to by all parties in that Docket, but Tennessee American believes strongly that the alternative mechanism is a benefit to all the stakeholders and that it is appropriate and consistent with the new statute. While Director Roberson's tracker did not mirror the QIIP that I am proposing on behalf of the Company step for step either in form or in anticipated application, his deliberations highlight the potential benefit of a regulatory mechanism designed to ensure the proper funding of, and timely recovery for, essential infrastructure improvements. Moreover, the proposed QIIP's annual reconciliation underscores Director Roberson's "'trust but verify'"[4] standard. In sum, our proposal is an attempt to be responsive to the concerns expressed by the TRA in previous rate cases and the public policy adopted by the State of Tennessee in the legislation contained in House Bill 191 and signed into law by Governor Haslam in April of 2013.

Q. Have any other states adopted tariff riders similar to Tennessee American's proposed QIIP?

A. Yes. The States of Pennsylvania, Indiana, Illinois, Missouri, Ohio, Delaware, Connecticut, New Hampshire, and New York have adopted similar programs. Recently, the State of New Jersey on May 2, 2012 approved a new rule creating a Distribution System Improvement Charge. And, in 2013, the State of Ohio not only extended their System Investment Improvement Charge ("SIIC"), but expanded it as well. In addition, it's my understanding that 2013 legislation in the Maine, North Carolina, and Nevada now provide for the establishment of QIIP type mechanisms. Although the mechanisms

[4] *See* Concurrence and Dissent of Director Roberson, p. 4, *In Re: Petition of Tennessee American Water Company for a General Rate Increase*, TRA Docket No. 10-00189 (April 27, 2012).

employed in these other states may go by a different name, (e.g. the New Jersey rider is referred to as Distribution system Improvement Charge ("DSIC") and the Missouri rider is referred to as Infrastructure System Replacement Surcharge ("ISRS"), they are all defined similarly and share the same objectives.

Q. In general, how would the QIIP Rider work?

A. The company will forecast the amount of capital expenditures that it will need to make that qualify as QIIP expenditures for the upcoming year. The Company will then calculate what it costs to recover the expenses associated with that capital investment. For example, if the Company were to invest $1 million dollars on a project, the Company is not going to recover that entire $1 million in the upcoming year. Rather, it will only recover a return on that investment (which includes a weighted return on equity and interest on debt as authorized in the most recent case), as well as depreciation expense and taxes. The proposed return on the investment is calculated on a 12 month average of how long the investment was in service during the forecasted period; in other words, if the investment was placed into service in month six of the twelve month period, only 7/12 of that investment (seven months' worth) would be used to calculate the return on that investment. The QIIP would then be calculated as a percentage of the water bill, and show up as a line item on a customer's bill. Then at the end of the year, the Company verifies that it invested the capital it projected, and trues up the amount it collected to carry those investments for the next year, along with the new investments for that next year to come up with a new percentage.

Attached to my testimony is Petitioner's Exhibit QIIP1 – GMV, which shows the actual calculation of the QIIP for this filing. In addition, Petitioner's Exhibit QIIP2 – GMV, also attached to my testimony, breaks down the investment categories by asset account, and the respective calculation of the QIIP by those asset categories. As shown on Line 16 of Petitioner's Exhibit QIIP1 – GMV, the total annualized QIIP surcharge requested in this filing is $381,281, or a total increase of 0.81%, as shown on Line 20 of that same exhibit.

Q. Please describe the categories of utility plant that would qualify for inclusion in the Company's proposed QIIP.

A. The QIIP proposed by TAWC would include replacement plant asset categories, with the primary utility plant categories proposed for inclusion in the QIIP for 2014 are: (1) Account 331, Transmission and Distribution Mains, including valves; (2) Account 333, Services; (3) Account 334, Meters and Meter Installations; (4) Account 335, Hydrants; (5) Account 320, Water Treatment Equipment, Non-Media; (6) Account 311, Pumping Equipment; and (7) Account 330003, Capitalized Tank Painting. There may be other appropriate utility plants related to qualified infrastructure replacement that would be included in the future; however, these are the primary accounts at this time. The above would include main extensions to eliminate dead ends and the unreimbursed costs associated with relocations of mains, services, and hydrants occasioned by street or highway construction. Mains installed to provide service to new customers would either be funded by developers or part of economic development and not be included in the QIIP.

Q. Please discuss the general operation of the proposed QIIP mechanism.

A. The QIIP mechanism is a regulatory tool to provide for the recovery of the costs of capital and depreciation (i.e. return on and return of) associated with qualified infrastructure investment between Base Rate case filings. The QIIP will apply only to qualified, non-revenue producing (no new customers) plant investment that has not been included in rate base in a prior Base Rate case proceeding. The QIIP would be established on an annual prospective basis utilizing 12 month average end-of-month balances and would reflect only those qualified plant additions installed after the conclusion of the initial rate year in Docket No. 12-00049. The qualified plant additions would be reduced by the projected retirements associated with the QIIP additions in the calculation of applicable depreciation and property tax expense. The Company would make its QIIP filing establishing the applicable QIIP not later than 120 days prior to the effective date of each QIIP implementation.[5] In this case, Tennessee American has proposed to begin the QIIP attrition period January 1, 2014 which is actually one month later than the end of the attrition year in Docket No. 12-00049, Tennessee American's last rate case. Tennessee American is not proposing to pick up any investment in the one-month period not included. Not later than 60 days after the conclusion of each QIIP year, the Company would file reconciliation schedules detailing any over/under recoveries, with such over/under recoveries returned to or recovered from customers as applicable in the succeeding QIIP year. The QIIP would be cumulative and remain in place until reset back to zero at the conclusion of the Company's next Base Rate case

[5] The TRA issued its Order in the Base Rate case proceeding, Docket No. 12-00049, with such rates inclusive of utility plant additions based on 13 month average month-end balances for the attrition year 12/1/12 to 11/30/13. Tennessee American has proposed the first prospective QIIP year would be 1/1/14-12/31/14. The subsequent QIIP filing would be not later than 9/1/14 for rates implementation on 1/1/15.

filing, at which point the capital costs, depreciation and taxes previously recovered through the QIIP are then subsumed within Base Rates.

Q. Please discuss any detailed specifics to the operation of the proposed QIIP not addressed above.

A. Tennessee American will utilize an annual prospective approach to the utility plant additions that would be included for recovery through the QIIP. The QIIP will provide for the recovery of revenue sufficient to cover the capital cost, depreciation and tax expense related to the projected investment in qualified utility plant. These costs will consider the effects of associated retirements ("Net Plant"), Contributions in Aid of Construction (CIAC), and Removal Spending net of Salvage value for the period at issue. To determine the rate of return recovery, the 12 month-end balances of new utility plant in service will be averaged, less ½ of the anticipated annual associated CIAC, plus ½ of the anticipated annual associated cost of removal net of salvage spending, to derive the "Net Plant" amount. The current approved pre-tax rate of return ("PTR") would then be applied to this net amount to determine the revenue requirement of the rate base portion. The PTR is calculated from the weighted common equity and preferred equity, grossed up to include state and federal taxes, plus the weighted cost of long-term debt and the weighted cost of short-term debt. Next, the annual depreciation expense of the additional Net Plant would be calculated ("NetDep"), utilizing the current TRA approved depreciation rates by account and then would be added. Next, incremental new property and Franchise taxes ("PFT") would be added. The sum of these components would be grossed up to include the recovery of the associated additional revenue taxes (Gross

Receipts and TRA Utility Fees) and Uncollectible expense ("RT") to derive the final revenue requirement. Then, any over or under QIIP collection of prior periods would be added or subtracted as applicable ("R"). This total would then be divided by the authorized annual level of general metered service and private fire service customer revenues from the prior docket (Docket No. 12-00049) subject to the QIIP, i.e. not including any other revenues, ("PAR") to render the new QIIP percentage. Prior to the implementation of the next year's QIIP, a similar analysis and approval process will occur and the QIIP will be adjusted accordingly on a cumulative basis until Base Rates are established in Base Rate case and the QIIP is reset to zero.

Q. Can the above described QIIP mechanism be shown as a formula?

A. Yes, the calculation of the QIIP would be as follows:

$$\text{QIIP \%} = \frac{[\{(\text{NetPlant} \times \text{PTR}) + \text{NetDep} + \text{PFT}\} / 1 - \text{RT}] + \text{R}}{\text{PAR}}$$

where:

(i) NetPlant: average forecasted cost of QIIP qualified plant additions l (computed by use of average of 12 end-of-month balances).

(ii) PTR: current pre-tax rate of return as calculated from authorized weighted cost of equity, grossed up for taxes, added to the authorized weighted cost of debt from most recent Base Rate case Order.

(iii) NetDep: net annual depreciation expense related to the average forecasted QIIP additions, net of retirements and CIAC, per application of current TRA approved depreciation rates by account.

(iv) PFT: property taxes and Franchise Tax

(v) R: reconciliation component related to over/under recovery of QIIP costs during the prior QIIP year.

(vi) RT: sum of revenue taxes % (Gross Receipts Tax and TRA Utility Fees) and uncollectible expense %, expressed as a decimal

(vii) PAR: authorized annual base revenue subject to QIIP

Q. How will the QIIP revenue be recovered?

A. The QIIP would be expressed as a percentage and would be applied to the total amount billed to each customer under the otherwise applicable rates and charges for basic service, metered usage charges, and private fire charges, and would be applied prior to the inclusion of any other taxes, charges, or surcharges. The QIIP would be reflected as a line item on the bill of each customer.

Q. What will happen to the QIIP upon approval of new rates in a rate case proceeding?

A. The QIIP will be reset to zero as of the effective date of the new base rates which Base Rates then provide for the recovery of the annual costs that had theretofore been recovered through the QIIP. Thereafter, only the new QIIP qualified plant additions not previously included in rate base and Base Rates will be reflected in the future QIIP filings.

Q. What cost of capital will be utilized in the QIIP formula?

A. The cost of capital will be the established rate of return (on a pre-tax basis) in the Company's immediately preceding Base Rate case Order.

Q. What depreciation rates will be used to determine the depreciation expense to be recovered by the QIIP?

A. The depreciation rates last approved by the TRA, for the respective plant accounts in which the specific items of qualified QIIP plant are recorded, would be used to determine the depreciation expense.

Q. What property tax rate will be used to determine the property tax expense related to the additional investment to be recovered by the QIIP?

A. The property tax rate will be based on the proportion of property taxes authorized in the last case to the utility plant in service, multiplied by the additional utility plant less retirements..

Q. What franchise fee rates will be used to determine the franchise fee expense related to the additional investment to be recovered by the QIIP?

A. The franchise fee rate will be 0.25% per $100 of Net Plant, as authorized in the last case to the rate base, multiplied by the additional Net Plant.

Q. How will the annual revenues be determined for the QIIP?

A. The projected annual revenues will be the authorized water services revenues from the last case, including all service charges and volumetric charges for all classes that are subject to the QIIP.

Q. Could the amount of QIIP revenue collected from Tennessee American's customers vary from the actual amount of revenue needed to cover a return of and a return on the Company's QIIP infrastructure investment and taxes?

A. Yes. This could occur as a result of a difference between the actual and the allowed water operating revenues upon which the QIIP is based.

Q. Does the QIIP include a reconciliation mechanism for the protection of the Company's customers in the event that the level of revenue varies from the actual costs?

A. Yes. As discussed earlier, the QIIP will be subject to an annual reconciliation whereby the revenue received under the QIIP for the reconciliation period will be compared to the revenue necessary for the Company to recover its return of and return on investment plus taxes, for that QIIP year. Any over or under recovery will be included in the calculation of the next adjustment to the QIIP.

Q. In addition to the protections provided to customers through the Company's proposed annual reconciliation filings, are there others?

A. Yes, the QIIP mechanism will ensure smaller more gradual increases to customers' bills rather than the larger rate increases associated with Base Rate cases resulting in part from the recognition in rates of the Company's plant investments on single lump sum bases. Lastly, qualifying plant for the QIIP will not include infrastructure investments made by the Company that would produce new customer sales revenues.

Q. What is the amount of the QIIP rider that Tennessee American is proposing?

A. TAWC is proposing a QIIP rider that results in an annualized revenue recovery of $381,281, or a surcharge of 0.81%. This is shown on Line 2 of Petitioner's Exhibit

Summary-GMV. As stated earlier, detail of the calculation is shown in Petitioner's Exhibit QIIP1 – GMV and Petitioner's Exhibit QIIP2 – GMV.

Q. Has Tennessee American filed a tariff rider addressing the proposed QIIP as a part of this proceeding?

A. Yes. A QIIP tariff rider has been included in the tariffs filed as Petitioner's Exhibit Tariff – 12- QIIP - GMV.

ECONOMIC DEVELOPMENT INVESTMENT RIDER ("EDI")

Q. Please explain why the Company is proposing the adoption of an Economic Development Investment Rider ("EDI"), a tariff rate adjustment mechanism for the investment of infrastructure to promote economic development.

A. Many communities across the country are competing for limited economic growth opportunities through expansion. The State of Tennessee has clearly seen the need for flexibility in dealing with the infrastructure investment in order to be competitive in soliciting new economic opportunities. House Bill 191 specifically allowed that "A public utility may request and the authority may authorize a mechanism to recover the operational expenses, capital costs or both related to the expansion of infrastructure for

the purpose of economic development, if such expenses or costs are found by the authority to be in the public interest."[6]

Q. Why is Tennessee American requesting an EDI in this proceeding?

A. At this time, there are limited capital and operational expenses items identified in the proposed attrition period that are related to Economic Development. However, the time to determine the most appropriate way to address a potential alternate rate-making approach for economic development is well in advance of when an opportunity presents itself. That allows the merits of the rider to be based strictly on the mechanism itself, and not be bogged down with a debate on the merits of potential opportunity that is available to a community. This approach is clearly encouraged in the legislation.

With economic development opportunities being so limited and the competition for each one so rigid, Tennessee has placed itself in an enviable position of being able to respond quickly and equitably to economic development that will benefit all of the consumers. Infrastructure can be expanded or enhanced as needed and alternative vehicle transportation fuel infrastructure can grow, all while mitigating the impact of large rate increases as part of the economic development growth.

Q. Beyond the EDI being a regulatory tool to help enable water utilities to accelerate the infrastructure enhancements for growth opportunities on a continuing basis while mitigating the impact of large rate increases, are there other customer benefits?

[6] House Bill 191 Section 5. Page 4. Amends Tennessee Code Annotated, Section 65-5-103 (d)(3)(A).

A. Yes. Tennessee will continue to grow with a reputation for economic development opportunities which benefit all customers. Infrastructure investment, on a proactive rather than reactive basis, will also achieve direct customer benefits in the form of improved distribution and production systems. Capital cost savings may also be achieved through increased coordination of distribution system projects and sharing of paving costs with other infrastructure development including the Tennessee Department of Transportation ("TDOT"), local government, and other utilities.

Q. Are there other benefits as well?

A. Yes. One of the most important benefits for the State of Tennessee, City of Chattanooga and the surrounding communities is through an increase in jobs and tax base brought about by the economic development.

Q. In general, how would the EDI Rider work?

A. Similar to the QIIP Rider, the company will forecast the amount of capital expenditures that it will need to make that qualify as EDI expenditures for the upcoming year. The Company will then calculate what it costs to recover the expenses associated with that capital investment. For example, if the Company were to invest $1 million dollars on a project, the Company is not going to recover that entire $1 million in the upcoming year. Rather, it will only recover a return on that investment (which includes a weighted return on equity and interest on debt as authorized in the most recent case), as well as depreciation expense and taxes. The proposed return on the investment is calculated on a 12 month average of how long the investment was in service during the forecasted

period; in other words, if the investment was placed into service in month six of the twelve month period, only 7/12 of that investment (seven months' worth) would be used to calculate the return on that investment. Additionally, the company will include EDI expenses as identified in the statute. The total revenue requirement authorized will be calculated as a percentage of the water bill, and show up as a line item on a customer's bill. Then at the end of the year, the Company verifies that it spent the money it projected, and trues up the amount it collected to carry those investments for the next year, along with the new investments for that next year to come up with a new percentage.

Attached to my testimony is Petitioner's Exhibit EDI1 – GMV, which shows the actual calculation of the EDI for this filing. In addition, Petitioner's Exhibit EDI2 – GMV, also attached to my testimony, breaks down the investment categories by asset account, and the respective calculation of the EDI by those asset categories. As shown on Line 16 of Petitioner's Exhibit EDI1 – GMV, the total annualized EDI surcharge requested in this filing is $86,500, or a total increase of 0.18%, as shown on Line 20 of that same exhibit.

Q. Please describe the categories of utility plant that would qualify for inclusion in the Company's proposed EDI.

A. The primary utility plant categories proposed for inclusion in the EDI for 2014 are: (1) Account 331, Transmission and Distribution Mains, including valves; (2) Account 333, Services; (3) Account 334, Meters and Meter Installations; (4) Account 335, Hydrants, and (5) Account 341, Transportation Equipment. There may be other appropriate utility plants related to economic development that would be included in the future; however,

these are the primary account at this time. The above would include main extensions to serve new customers, new meters and meter installations, new hydrants associated with new mains, new service lines, and investments in alternative fuel capabilities for Tennessee American's vehicles.

Q. Please discuss the general operation of the proposed EDI mechanism.

A. The EDI mechanism is a regulatory tool to provide for the recovery of the costs of capital and depreciation (return on and return of) associated with economic development infrastructure investment and expenses related directly to economic development, between Base Rate case filings. The EDI Rider is very similar to the QIIP as discussed above, with two exceptions. First, the EDI Rider will apply only to qualified investment that has not been included in rate base in a prior Base Rate case proceeding but may be revenue producing. Second, the EDI Rider may include other operational expenses directly related to economic development that have not been included in the Base Rate case filings.

The EDI would be established on an annual prospective basis utilizing 12 month average end-of-month balances and would include only those plant additions installed after the conclusion of the rate year in Docket No. 12-00049. The qualified plant additions would be reduced by the projected retirements associated with the EDI additions in the calculation of applicable depreciation and property tax expense. The Company would make its EDI filing establishing the applicable EDI not later than 120 days prior to the effective date of each EDI implementation. In this case, Tennessee American has proposed to begin the EDI attrition period January 1, 2014 which is actually one month

later than the end of the attrition year in Docket No. 12-00049, Tennessee American's last rate case. Tennessee American is not proposing to pick up any investment in the one-month period not included. Not later than 60 days after the conclusion of each EDI year, the Company would file reconciliation schedules detailing any over/under recoveries, with such over/under recoveries returned to or recovered from customers as applicable in the succeeding EDI year. The EDI would be cumulative and remain in place until reset back to zero at the conclusion of the Company's next Base Rate case filing, at which point the capital costs and depreciation previously recovered through the EDI are then subsumed within Base Rates.

Q. Please discuss any specifics to the operation of the proposed EDI not addressed above.

A. Tennessee American will utilize an annual prospective approach to the utility plant additions that would be included for recovery through the EDI. The EDI will provide for the recovery of revenue sufficient to cover the capital cost, depreciation and property expense related to the projected investment in qualified utility plant. These costs will consider the effects of associated retirements, Contributions in Aid of Construction (CIAC), and removal spending net of salvage value for the period at issue as well as operating expenses for economic development. To determine the rate of return recovery, the 12 month-end balances of new utility plant in service will be averaged, less ½ of the anticipated annual associated CIAC, plus ½ of the anticipated annual associated cost of removal net of salvage spending, to derive the "Net Plant" amount. The current approved pre-tax rate of return ("PTR") would then be applied to this net amount to determine the

revenue requirement of the rate base portion. The PTR is calculated from the weighted common equity and preferred equity, grossed up to include state and federal taxes, plus the weighted cost of long-term debt and the weighted cost of short-term debt. Next, the annual depreciation expense of the additional Net Plant would be calculated ("NetDep"), utilizing the current TRA approved depreciation rates by account and then would be added. Next, incremental new property and Franchise taxes ("PFT") would be added. After that, and Economic Development Investment operational expenses would be added ("EDEx"). Then, any over or under EDI collection of prior periods would be added or subtracted as applicable ("R"). The sum of these components would be grossed up to include the recovery of the associated additional revenue taxes (Gross Receipts and TRA Utility Fees) and Uncollectible expense ("RT") to derive the final revenue requirement. This total would then be divided by the authorized annual level of general metered service and private fire service customer revenues from the prior docket (Docket No. 12-00049) subject to the EDI, i.e. not including any other revenues, ("PAR") to render the new EDI percentage. Prior to the implementation of the next year's EDI, a similar analysis and approval process will occur and the EDI will be adjusted accordingly on a cumulative basis until Base Rates are established in Base Rate case and the EDI is reset to zero.

Q. Can the above described EDI mechanism be shown as a formula?

A. Yes, the calculation of the EDI would be as follows:

$$EDI\ \% = \frac{[\{(NetPlant \times PTR) + NetDep + PFT + EDEx\} / 1 - RT] + R}{PAR}$$

where:

(i) NetPlant: average forecasted cost of EDI qualified plant additions (computed by averaging the 12 end-of-month plant balances).

(ii) PTR: current pre-tax rate of return as calculated from authorized weighted cost of equity, grossed up for taxes, added to the authorized weighted cost of debt from most recent Base Rate case Order.

(iii) NetDep: net annual depreciation expense related to the average forecasted EDI additions, net of retirements and CIAC, per application of current TRA approved depreciation rates by account.

(iv) PFT: property taxes and Franchise Tax

(v) EDIEx: operational expense items related directly to economic development

(vi) R: reconciliation component related to over/under recovery of EDI costs during the prior EDI year.

(vii) RT: sum of revenue taxes % (Gross Receipts Tax and TRA Utility Fees) and uncollectible expense %, expressed as a decimal

(viii) PAR: authorized annual base revenue subject to EDI

Q. How will the EDI revenue be recovered?

A. Similar to the QIIP, the EDI would be expressed as a percentage and would be applied to the total amount billed to each customer under the otherwise applicable rates and charges for basic service, metered usage charges, and private fire charges, and would be applied prior to the inclusion of any other taxes, charges, or surcharges. The EDI would be reflected as a line item on the bill of each customer.

Q. What will happen to the EDI upon approval of new rates in a rate case proceeding?

A. Just like the QIIP, the EDI will be reset to zero as of the effective date of the new base rates which Base Rates then provide for the recovery of the annual costs that had theretofore been recovered through the EDI. Thereafter, only the new EDI qualified

plant additions not previously included in rate base and Base Rates will be reflected in the future EDI filings.

Q. What cost of capital will be utilized in the EDI formula?

A. Again, like the QIIP, the cost of capital will be the established rate of return (on a pre-tax basis) in the Company's immediately preceding Base Rate case Order.

Q. What depreciation rates will be used to determine the depreciation expense to be recovered by the EDI?

A. The depreciation rates last approved by the TRA, for the respective plant accounts in which the specific items of qualified EDI plant are recorded, would be used to determine the depreciation expense. This is the same as the QIIP.

Q. What property tax rate will be used to determine the property tax expense related to the additional investment to be recovered by the EDI?

A. The property tax rate will be based on the proportion of property taxes authorized in the last case to the utility plant in service, multiplied by the additional utility plant, less retirements, exactly like the QIIP.

Q. What franchise fee rates will be used to determine the franchise fee expense related to the additional investment to be recovered by the EDI?

A. Like the QIIP, the franchise fee rate will be 0.25% for every $100 of Net Plant as authorized in Docket No. 12-00049.

Q. How will the annual revenues be determined for the EDI?

A. Identical to the QIIP, the projected annual revenues will be the authorized water services revenues from the last case, including all service charges and volumetric charges for all classes that are subject to the EDI.

Q. Could the amount of EDI revenue collected from Tennessee American's customers vary from the actual amount of revenue needed to cover a return of and a return on the Company's EDI infrastructure investment and taxes?

A. Yes. This could occur as a result of a difference between the actual and the allowed water operating revenues upon which the EDI is based in a manner the same as the QIIP rider.

Q. Does the EDI include a reconciliation mechanism for the protection of the Company's customers in the event that the level of revenue varies from the actual costs?

A. Yes. As discussed earlier and in the QIIP, the EDI will be subject to an annual reconciliation whereby the revenue received under the EDI for the reconciliation period will be compared to the revenue necessary for the Company to recover its return of and return on investment plus taxes, for that EDI year. Any over or under recovery will be included in the calculation of the next adjustment to the EDI.

Q. In addition to the protections provided to customers through the Company's proposed annual reconciliation filings, are there others?

A. Yes, the EDI mechanism will ensure smaller more gradual increases to customers' bills rather than the larger rate increases associated with Base Rate cases resulting in part from the recognition in rates of the Company's plant investments on single lump sum bases.

Q. How much is the EDI proposed by Tennessee American?

A. TAWC is proposing a EDI rider that results in an annualized revenue recovery of $86,500, or a surcharge of 0.18%. This is shown on Line 4 of Petitioner's Exhibit Summary – GMV. As stated earlier, detail of the calculation is shown in Petitioner's Exhibit EDI1 – GMV and Petitioner's Exhibit EDI2 – GMV.

Q. Has Tennessee American filed a tariff rider addressing the proposed EDI as a part of this proceeding?

A. Yes. An EDI tariff rider has been included in the tariffs filed as Petitioner's Exhibit Tariff – 12 - EDI - GMV.

SAFETY AND ENVIRONMENTAL COMPLIANCE ("SEC") RIDER

Q. Please explain why the Company is proposing the adoption of an Safety and Environmental Compliance Rider ("SEC"), a tariff rate adjustment mechanism for

the investment of infrastructure to ensure safety and environmental compliance requirements imposed by the state or federal government.

A. In addition to the need for capital investment for replacement of aging infrastructure, and the need for investment in infrastructure for economic development, water and wastewater utilities are continually faced with additional infrastructure investment requirements to meet safety and environmental compliance mandates from state and federal government. The USEPA has entered into Consent Decrees with hundreds of communities across the country to reduce water resource pollution, driving hundreds of millions of dollars of investments. In turn, those sanitary and stormwater utilities are requiring additional investments of their customers, including water utilities. The USEPA is continually increasing water quality standards for potable drinking water. Other regulatory agencies from time to time change safety and environmental compliance requirements that lead to the need for further infrastructure investment. House Bill 191 specifically allowed that "A public utility may request and the authority may authorize a mechanism to recover the operational expenses, capital costs or both, if such expenses or costs are found by the authority to be in the public interest, related to any one (1) of the following: (i) Safety requirements imposed by the state or federal government;"[7] Tennessee American Water believes that environmental compliance investments are specifically related to the safety of the drinking water and in the public interest.

Q. Why is Tennessee American requesting an SEC Rider in this proceeding?

[7] House Bill 191 Section 5. Page 3. Amends Tennessee Code Annotated, Section 65-5-103 (d)(2)(A)(i).

A. At this time, there are limited capital and operational expenses items identified in the proposed attrition period that are related to Safety and Environmental Compliance. Similar to the EDI, the time to determine the most appropriate way to address a potential alternate rate-making approach for safety and environmental compliance is well in advance of the need to invest in the infrastructure. Specifically, Tennessee American anticipates a larger investment that will be required as part of two ongoing projects that will be in-service in 2015. This approach is clearly encouraged in the legislation.

With potential penalties to the community for not meeting USEPA consent decree requirements, Tennessee American must be able to invest infrastructure timely while avoiding rate shock if possible.

Q. Beyond the SEC Rider being a regulatory tool to help enable water utilities to accelerate the safety and environmental requirements on a continuing basis while mitigating the impact of large rate increases, are there other customer benefits?

A. Yes. Tennessee will continue to grow with a reputation for safety and environmental compliance which will which benefit all customers. Infrastructure investment on a proactive rather than reactive basis, will also achieve direct customer benefits in synergy with infrastructure replacement and economic development goals.

Q. In general, how would the SEC Rider work?

A. Similar to the EDI Rider, the company will forecast the amount of capital expenditures that it will need to make that qualify as SEC expenditures for the upcoming year. The Company will then calculate what it costs to recover the expenses associated with that

capital investment. For example, if the Company were to invest $1 million dollars on a project, the Company is not going to recover that entire $1 million in the upcoming year. Rather, it will only recover a return on that investment (which includes a weighted return on equity and interest on debt as authorized in the most recent case), as well as depreciation expense and taxes. The proposed return on the investment is calculated on a 12 month average of how long the investment was in service during the forecasted period; in other words, if the investment was placed into service in month six of the twelve month period, only 7/12 of that investment (seven months' worth) would be used to calculate the return on that investment. Additionally, the company will include SEC expenses as identified in the statute. The total authorized revenue requirement for the rider will be calculated as a percentage of the water bill, and show up as a line item on a customer's bill. Then at the end of the year, the Company verifies that it spent the money it projected, and trues up the amount it collected to carry those investments for the next year, along with the new investments for that next year to come up with a new percentage.

Attached to my testimony is Petitioner's Exhibit SEC1 – GMV, which shows the actual calculation of the SEC for this filing. In addition, Petitioner's Exhibit SEC2 – GMV, also attached to my testimony, breaks down the investment categories by asset account, and the respective calculation of the SEC by those asset categories. As shown on Line 16 of Petitioner's Exhibit SEC1 – GMV, the total annualized SEC surcharge requested in this filing is $52,575, or a total increase of 0.12%, as shown on Line 20 of that same exhibit.

Q. Please describe the categories of utility plant that would qualify for inclusion in the Company's proposed SEC Rider.

A. The primary utility plant categories proposed for inclusion in the SEC for 2014 are: (1) Account 304, Structures; (3) Account 320, Water Treatment Equipment; (4) Account 311, Pumping Equipment; and (5) Account 304200, Computer and Peripheral Equipment (SCADA Equipment and Systems). There may be other appropriate utility plants related to safety and environmental compliance however, these are the primary account at this times. The above would include new equipment and infrastructure.

Q. Please discuss the general operation of the proposed SEC Rider mechanism.

A. The SEC Rider mechanism is a regulatory tool to provide for the recovery of the costs of capital and depreciation (return on and return of) associated with safety and environmental compliance infrastructure investment and expenses related directly to safety and environmental compliance, between Base Rate case filings. The SEC Rider is very similar to the QIIP as discussed above, with two exceptions. First, the SEC Rider will apply only to qualified investment that has not been included in rate base in a prior Base Rate case proceeding but may be revenue producing. Second, the SEC Rider may include other operational expenses directly related to safety and environmental compliance that have not been included in the Base Rate case filings. The SEC would be established on an annual prospective basis utilizing 12 month average end-of-month balances and would reflect only those qualified plant additions installed after the conclusion of the base rate year from Docket No. 12-00049. The qualified plant additions would be reduced by the projected retirements associated with the SEC additions in the calculation of applicable depreciation and property tax expense. The Company would make its SEC Rider filing establishing the applicable SEC Rider not

later than 120 days prior to the effective date of each SEC Rider implementation. In this case, Tennessee American has proposed to begin the SEC Rider attrition period January 1, 2014 which is actually one month later than the end of the attrition year in Docket No. 12-00049, Tennessee American's last rate case. Tennessee American is not proposing to pick up any investment in the one-month period not included. Not later than 60 days after the conclusion of each SEC Rider year, the Company would file reconciliation schedules detailing any over/under recoveries, with such over/under recoveries returned to or recovered from customers as applicable in the succeeding SEC Rider year. The SEC Rider would be cumulative and remain in place until reset to a zero % at the conclusion of the Company's next Base Rate case filing, at which point the capital costs and depreciation previously recovered through the SEC Rider are then subsumed within Base Rates.

Q. Please discuss any specifics to the operation of the proposed SEC Rider not addressed above.

A. Tennessee American will utilize an annual prospective approach to the utility plant additions that would be included for recovery through the SEC Rider. The SEC Rider will provide for the recovery of revenue sufficient to cover the capital cost, depreciation and property expense related to the projected investment in qualified utility plant. These costs will consider the effects of associated retirements, Contributions in Aid of Construction (CIAC), and removal spending net of salvage value for the period at issue. To determine the rate of return recovery, the 12 month-end balances of new utility plant in service will be averaged, less ½ of the anticipated annual associated CIAC, plus ½ of

the anticipated annual associated cost of removal net of salvage spending, to derive the "Net Plant" amount. The current approved pre-tax rate of return ("PTR") would then be applied to this net amount to determine the revenue requirement of the rate base portion. The PTR is calculated from the weighted common equity and preferred equity, grossed up to include state and federal taxes, plus the weighted cost of long-term debt and the weighted cost of short-term debt. Next, the annual depreciation expense of the additional utility plant less retirements and CIAC, would be calculated ("NetDep"), utilizing the current TRA approved depreciation rates by account and then would be added. Next, incremental new property and Franchise taxes ("PFT") would be added. After that, and safety and environmental compliance operational expenses would be added ("SECEx"). Then, any over or under Rider collection of prior periods would be added or subtracted as applicable ("R"). The sum of these components would be grossed up to include the recovery of the associated additional revenue taxes (Gross Receipts and TRA Utility Fees) and Uncollectible expense ("RT") to derive the final revenue requirement. This total would then be divided by the authorized annual level of general metered service and private fire service customer revenues from the prior docket (Docket No. 12-00049) subject to the SEC Rider, i.e. not including any other revenues, ("PAR") to render the new SEC Rider percentage. Prior to the implementation of the next year's SEC Rider, a similar analysis and approval process will occur and the SEC Rider will be adjusted accordingly on a cumulative basis until Base Rates are established in Base Rate case and the SEC Rider is reset to zero.

Q. Can the above described SEC Rider mechanism be shown as a formula?

A. Yes, the calculation of the SEC Rider would be as follows:

$$\text{SEC \%} = \frac{[\{(\text{NetPlant} \times \text{PTR}) + \text{NetDep} + \text{PFT} + \text{SECEx}\} / 1 - \text{RT}] + \text{R}}{\text{PAR}}$$

where:

(i) NetPlant: average forecasted cost of SEC Rider qualified plant additions (computed by averaging the 12 end-of-month balances).

(ii) PTR: current pre-tax rate of return as calculated from authorized weighted cost of equity, grossed up for taxes, added to the authorized weighted cost of debt from most recent Base Rate case Order.

(iii) NetDep: net annual depreciation expense related to the average forecasted SEC Rider additions, net of retirements and CIAC, per application of current TRA approved depreciation rates by account.

(iv) PFT: property taxes and Franchise Tax

(v) SECEx: operational expense items related directly to safety and environmental compliance

(vi) R: reconciliation component related to over/under recovery of SEC Rider costs during the prior SEC Rider year.

(vii) RT: sum of revenue taxes % (Gross Receipts Tax and TRA Inspection Fees) and uncollectible expense %, expressed as a decimal

(viii) PAR: authorized annual base revenue subject to SEC Rider

Q. How will the SEC Rider revenue be recovered?

A. Similar to the QIIP and the EDI, the SEC Rider would be expressed as a percentage and would be applied to the total amount billed to each customer under the otherwise applicable rates and charges for basic service, metered usage charges, and private fire charges, and would be applied prior to the inclusion of any other taxes, charges, or surcharges. The SEC Rider would be reflected as a line item on the bill of each customer.

Q. What will happen to the SEC Rider upon approval of new rates in a rate case proceeding?

A. Just like the QIIP and EDI, the SEC Rider will be reset to zero as of the effective date of the new base rates which Base Rates then provide for the recovery of the annual costs that had theretofore been recovered through the SEC Rider. Thereafter, only the new SEC Rider qualified plant additions not previously included in rate base and Base Rates will be reflected in the future SEC Rider filings.

Q. What cost of capital will be utilized in the SEC Rider formula?

A. Again, like the QIIP and the EDI, the cost of capital will be the established rate of return (on a pre-tax basis) in the Company's immediately preceding Base Rate case Order.

Q. What depreciation rates will be used to determine the depreciation expense to be recovered by the SEC Rider?

A. The depreciation rates last approved by the TRA, for the respective plant accounts in which the specific items of qualified SEC Rider plant are recorded, would be used to determine the depreciation expense. This is the same as the QIIP and the EDI.

Q. What property tax rate will be used to determine the property tax expense related to the additional investment to be recovered by the SEC Rider?

A. The property tax rate will be based on the proportion of property taxes authorized in the last case to the utility plant, multiplied by the additional utility plant less retirements, exactly like the QIIP and the EDI.

Q. What franchise fee rates will be used to determine the franchise fee expense related to the additional investment to be recovered by the SEC Rider?

A. Like the QIIP and the EDI, the franchise fee rate will be .25% for every $100 of Net Plant as authorized in Docket No. 12-00049.

Q. How will the annual revenues be determined for the SEC Rider?

A. Identical to the QIIP and the EDI, the projected annual revenues will be the authorized water services revenues from the last case, including all service charges and volumetric charges for all classes that are subject to the SEC Rider.

Q. Could the amount of SEC Rider revenue collected from Tennessee American's customers vary from the actual amount of revenue needed to cover a return of and a return on the Company's SEC Rider infrastructure investment and taxes?

A. Yes. This could occur as a result of a difference between the actual and the allowed water operating revenues upon which the SEC Rider is based in a manner the same as the QIIP rider and the EDI rider.

Q. Does the SEC Rider include a reconciliation mechanism for the protection of the Company's customers in the event that the level of revenue varies from the actual costs?

A. Yes. As discussed earlier and in the QIIP and the EDI, the SEC Rider will be subject to an annual reconciliation whereby the revenue received under the SEC Rider for the reconciliation period will be compared to the revenue necessary for the Company to recover its return of and return on investment plus taxes, for that SEC Rider year. Any over or under recovery will be included in the calculation of the next adjustment to the SEC Rider.

Q. In addition to the protections provided to customers through the Company's proposed annual reconciliation filings, are there others?

A. Yes, the SEC Rider mechanism will ensure smaller more gradual increases to customers' bills rather than the larger rate increases associated with Base Rate cases resulting in part from the recognition in rates of the Company's plant investments on single lump sum bases. Lastly, qualifying plant for the SEC Rider will not include infrastructure investments made by the Company that would produce new customer sales revenues.

Q. How much is the SEC Rider proposed by Tennessee American?

A. TAWC is proposing a SEC rider that results in an annualized revenue recovery of $55,042, or a surcharge of 0.12%. This is shown on Line 6 of Petitioner's Exhibit

Summary-GMV. As stated earlier, detail of the calculation is shown in Petitioner's Exhibit SEC1 – GMV and Petitioner's Exhibit SEC2 – GMV.

Q. Has Tennessee American filed a tariff rider addressing the proposed SEC Rider as a part of this proceeding?

A. Yes. An SEC tariff rider has been included in the tariffs filed as Petitioner's Exhibit Tariff – 12- SEC - GMV.

Q. What is the total impact of the QIIP, EDI, and SEC Riders on the typical residential customer bill at Tennessee American?

A. For the typical residential customer living in the City of Chattanooga, and using an average of 4,154 gallons per month (5.55 hundred cubic feet, or CCF), the impact of the QIIP, EDI, and SEC riders is $0.24 per month, or $2.88 per year. This is an increase of 1.11% over the current monthly average residential bill. A summary of this information is attached to my testimony as Petitioner's Exhibit Avg. Impact – GMV.

PROPOSAL FOR IMPLEMENTATION OF AN ADJUSTMENT MECHANISM TO ADJUST FOR FUTURE PURCHASED POWER, PURCHASED CHEMICAL, PURCHASED WATER, WHEELING CHARGES, WASTE DISPOSAL, AND TRA INSPECTION FEE EXPENSE CHARGES

Q. Please describe the Company's proposal for the adoption of a Tariff Rider for the recovery of incremental changes in purchased power, purchased chemical, purchased water, wheeling charges, waste disposal, and TRA Inspection Fee costs.

A. The Company is proposing a Purchased Power, Chemical, Purchased Water, wheeling charges, waste disposal, and TRA Inspection Fee (Production Cost and Other Pass-Throughs, or "PCOP") Tariff Rider. This is a Tariff rate adjustment mechanism, for recovery or crediting to customers incremental changes in essential, non-discretionary expenses such as purchased power expense, purchased chemical expense, purchased water expense, wheeling charge expense, waste disposal expense, and TRA inspection fees that are above or below the level authorized for recovery in a Base Rate case proceeding through Base Tariff Rates. The reasons for the Company's PCOP Rider proposal and a description of the mechanism are provided below.

Q. Please explain why the PCOP is being proposed.

A. The combined cost of purchased power expense, purchased chemical expense, purchased water expense, wheeling charge expense, waste disposal expense, and TRA inspection fee assessments is the largest non-labor related component of the Company's operations and maintenance expenses. Additionally, these kinds of expenditures are essential and non-discretionary, the costs are generally outside the control of the Company's management, and the costs can be volatile in nature. The ever-changing nature of purchased power, purchased chemicals, waste disposal, and purchased water costs does not fit well within the traditional test year ratemaking framework that requires pro forma rate case adjustments to be fixed, known and measurable and occurring before the end of the attrition year. Wheeling charges for water delivery using another utility's pipes are also out of the control of TAWC. Recent legislative changes to the TRA inspection fee assessment have also demonstrated volatility. The Company therefore does not have the

opportunity to recover or credit changes in these significant and potentially volatile costs beyond the timeframe from the attrition period of a Base Rate case. The timely recovery of prudently incurred, essential, non-discretionary costs of this nature is reasonable from a ratemaking perspective, in that a basic tenet of regulation is that the utility should have a reasonable opportunity to recover its prudently-incurred costs of providing service to its customers. It is also permitted and encouraged by recent revisions to the Tennessee Code, to Section 65-5-103, part d, subsection 5B.

Q. Did Tennessee American file for a Purchased Power and Chemical Charge tariff in Docket No. 12-00049?

A. Yes. The proposed tariff in that docket did not include purchased water, wheeling charges, waste disposal expense, or the TRA Inspection Fee, but was otherwise very similar to the current proposal. The proposed Purchased Power and Chemical Charge tariff proposal did not go forward with the settlement that was agreed to by all parties in that Docket, but Tennessee American believes strongly that the alternative mechanism is a benefit to all the stakeholders and that it is appropriate to reconsider at this time.

Q. In your opinion, what factors should the TRA consider in evaluating whether a PCOP tariff rider is an appropriate ratemaking tool for the recovery or crediting of these costs?

A. In my opinion, the traditional ratemaking approach described above is not the appropriate means for recovery when the following characteristics are present:

- Costs are certain to occur and necessary, but future levels are variable from year to year, and accurate projections for pro forma adjustments are not easily determined;

- Costs are to a great extent beyond the control of the utility;

- Costs are a significant expense of the utility and have a significant probability of cost increases or decreases;

- Cost over-recovery or under-recovery is possible due to the above factors, creating the possibility of a detrimental impact on customers or shareholders.

When these characteristics are present, the most accurate, fair and efficient means of matching recoveries with costs is through the use of the tracker regulatory ratemaking mechanism.

Q. Are the above characteristics present with respect to the purchased power, purchased chemical, purchased water, wheeling charges, waste disposal, and TRA inspection fee assessments that are proposed to be subject to the PCOP?

A. Yes. These costs are certain to occur and necessary, while substantial uncertainties exist with respect to the level of those costs. Moreover, purchased power, purchased chemical, purchased water, wheeling charges, waste disposal, and TRA inspection fee assessment costs are to a great extent beyond the control of the utility. Finally, these costs represent the largest non-labor component of the Company's operation and maintenance expenses.

Q. Please describe the Company's proposed PCOP Rider.

A. The proposed PCOP Tariff Rider would have the following features:

- An appropriate pro forma amount of purchased power expense, purchased chemical expense, purchased water expense, wheeling charge expense, waste disposal expense, and TRA inspection fee assessment costs would be determined and included within base rates. The PCOP, then, would reflect only the incremental increase or decrease in actual purchased power, purchased chemical, purchased water, wheeling charges, waste disposal expense, and TRA Inspection Fee assessments from the amount included in base rates, which amount would be reflected as a deferral on the Company's accounting books.
- The PCOP would be based on actual historical purchased power, purchased chemical, purchased water, wheeling charges, waste disposal expense, and TRA Inspection Fee assessment costs incurred during a previous twelve month period. To allow for TRA examination and approval of each PCOP, the Company would make an annual filing with the TRA that would consist of the actual purchased power, purchased chemical, purchased water, wheeling charges, waste disposal expense, and TRA Inspection Fee assessment costs incurred, as well as the reconciliation of any prior period PCOP Rider over or under-recoveries.
- The PCOP would be determined by dividing the cumulative annual incremental increase or decrease in purchased power, purchased chemical, purchased water, wheeling charges, waste disposal expense, and TRA Inspection Fee assessment costs, grossed-up for the associated impact of revenue taxes, by projected annual base rate revenue subject to the PCOP Rider.
- The PCOP Rider would be expressed as a percentage and would be applied to the amount billed to each customer under the otherwise applicable rates and charges for basic service, metered usage charges and private fire charges and would be applied to the inclusion of any other charge. The PCOP Rider amount would be reflected as a separate line item on the bill of each customer.
- The PCOP Rider would be subject to an annual reconciliation to determine the amount of any prior period PCOP Rider over or under-recovery which amount would be deferred and included in the Company's next PCOP for return to or recovery from customers.

Q. How will the historical actual purchased power, purchased chemical, purchased water, wheeling charge expense, waste disposal expense, and TRA Inspection Fee assessment costs be determined?

A. Purchased water costs are segregated and recorded in accounts 51000000-5109999 for purchased water including wheeling charges, accounts 51510000-51599999 for purchased power, accounts 51800000-51899999 for purchased chemicals, accounts 51110000-51115000 for waste disposal, and TRA Inspection Fee Assessments in

Account 68545000. Therefore, the historical actual costs recorded in these accounts for the previous 12 months would be used as the basis for comparison to the amounts included in Base Rates.

Q. How will the incremental difference between the actual cost and the base rate cost level be determined and then deferred for inclusion in a future PCOP?

A. The purchased power, purchased chemical, purchased water, wheeling charge, waste disposal, and TRA Inspection Fee assessment costs per 100 gallons of water sales as authorized in the Company's prior Base Rate case for recovery in Base Rates will be compared to the corresponding actual costs on a per 100 gallons of water sales basis on a current basis. The unit cost difference would be applied against the authorized Base Rate case water sales level on a current basis. The resulting amount would be deferred for recovery or crediting through the PCOP Rider. This methodology ensures that only the incremental changes in the unit costs of purchased power, purchased chemical, purchased water, wheeling charges, waste disposal, and TRA Inspection Fee assessments is deferred and not changes in the expense resulting from increases/decreases in water sales. The purchased power, purchased chemical, purchased water, wheeling charges, waste disposal, and TRA Assessment costs per 100 gallons of water sales as authorized in the Company's Base Rate case would be identified as part of the PCOP Tariff Rider and utilized in comparison to the current actual cost for the monthly deferral calculation.

Q. Please discuss the general operation of the proposed PCOP Tariff Rider mechanism.

A. The PCOP Rider would provide for the implementation of a charge/credit between Base Rate case filings for the recovery or crediting of incremental changes in purchased power, purchased chemical, purchased water, wheeling charges, waste disposal, and TRA Inspection Fee assessment costs, with such amount grossed-up for the associated impact of revenue taxes (sum of Gross Receipts Taxes, TRA Inspection Fees and Uncollectible expense). The PCOP Rider would be implemented on an annual basis reflecting the 12 month cumulative deferral amount (the PCOP deferral period) calculated in accordance with the description above, and billed for recovery, or crediting as applicable, to customers over a 12 month period (the PCOP Rider year).[8]

Q. Has a schedule been presented that demonstrates the various calculations supporting the proposed PCOP?

A. Yes. Two schedules have been attached to this testimony. Petitioner's Exhibit PCOP – GMV provides current authorized levels of expenses (per Docket Number 12-00049) for the PCOP expense categories, as well as authorized sales level, which determines the cost per hundred gallons of the authorized PCOP expense levels, Petitioner's Exhibit PCOP Sample Calculation- - GMV, contains calculations based on hypothetical amounts demonstrating the following:

[8] For illustrative purposes, assuming the TRA were to issue its Order in this proceeding with Base Rates reflecting purchased power, chemical and TRA Assessment costs for the attrition year 12/1/12 to 11/30/13 from Docket No. 12-00049, then the initial PCOP deferral period would be 12/1/12-11/30/13, with the initial PCOP filing not later than 60 days thereafter or 1/29/14. It is proposed that the TRA would have 60 days to review the PCOP filing. Accordingly, the effective date of the initial PCOP Rider year would be 4/1/14-3/31/15.

(i) calculation of the Base Rate Cost of purchased power, purchased chemical, purchased water, wheeling charges, waste disposal, and TRA Inspection Fee assessments as determined and authorized in the Base Rate case;

(ii) deferral calculation of Actual Cost of purchased power, purchased chemical, purchased water, wheeling charges, waste disposal, and TRA Inspection Fee assessments vs. Base Rate Cost; and

(iii) calculation of PCOP Rider percentage.

Q. Mr. VerDouw, please explain the calculations that are shown in Petitioner's Exhibit PCOP Sample Calculation- - GMV.

A. The calculations shown in Petitioner's Exhibit PCOP Sample Calculation- - GMV, are fairly self-explanatory in the fact that each of the calculations made references the line numbers used in making that calculation. Essentially, the calculation starts with levels of purchased power, purchased chemical, purchased water, wheeling charges, waste disposal, and TRA Inspection Fee assessments (Line 1.) and water sales (Line 2.) that are authorized in the Company's most recent rate case. In this hypothetical example, an authorized level of purchased power, purchased chemical, purchased water, wheeling charges, waste disposal, and TRA Inspection Fee assessments of $3,700,000 and an authorized level of water sales in hundred gallons of 15,200,000 are assumed. From there, the example goes on to show a hypothetical "actual" level of purchased power, purchased chemical, purchased water, wheeling charges, waste disposal, and TRA Inspection Fee assessments (Line 4.) and water sales (Line 5.). Please note that in this example the "actual" level of purchased power, purchased chemical, purchased water, wheeling charges, waste disposal, and TRA Inspection Fee assessments shown on Line 4. has decreased from the authorized level shown on Line 1., while "actual" water sales (Line 5.) has increased from the authorized level of sales (Line 2.). In this example, the

combination of lower purchased power, purchased chemical, purchased water, wheeling charges, waste disposal, and TRA Inspection Fee assessment expense and increased sales would result in a calculated PCOP decrease (Line 15.) to Tennessee American's customers. What this example shows is that the PCOP calculation can result in either an increase or a decrease to the Company's customers.

Q. Please continue with your description of the operation of the proposed PCOP.

A. The PCOP Rider would be subject to an annual reconciliation to determine the amount of any prior period PCOP Rider over or under-recovery. Any such amount would be deferred separately from the purchased power, purchased chemical, purchased water, wheeling charges, waste disposal. and TRA Inspection Fee assessment cost deferral and would be included in the Company's next PCOP for return to or recovery from customers.

Q. Has the Company filed a Tariff Rider addressing the proposed PCOP?

A. Yes. A PCOP Rider schedule has been included as part of the Company's overall proposed tariffs filed as Petitioner's Exhibit Tariffs – 12 - PCOP - GMV.

Q. If the TRA approves all of these mechanisms, how would it be reflected on the customer's bill?

A. The customer's bill would then have four distinctive line items that identify each rider and the amount of additional costs on the bill for each of those items. After the next rate case, the riders would all be reset to zero.

Q. Does this conclude your prepared direct testimony?

A. Yes it does.

Petitioner's Exhibit Summary - GMV

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

Line Number	Rate Mechanism	Revenue Requirement	Percentage Applied to Bill
1			
2	QIIP	$ 381,281	0.81%
3			
4	EDI	86,500	0.18%
5			
6	SEC	55,042	0.12%
7			
8	**Total**	**$ 522,824**	**1.11%**
9			
10			

Petitioner's Exhibit Avg. Impact - GMV

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

Line Number	Area	Meter Fee	Volumetric Charges	Bill Before Surcharges	QIIP Surcharge at 0.81%	EDI Surcharge at 0.18%	SEC Surcharge at 0.12%	Total Surcharges
1								
2	Chattanooga	$ 13.96	$ 7.60	$ 21.56	$ 0.17	$ 0.04	$ 0.03	$ 0.24
3								
4	Lookout Mountain	$ 15.66	$ 12.39	$ 28.05	$ 0.23	$ 0.05	$ 0.03	$ 0.31
5								
6	Lakeview	$ 15.66	$ 9.16	$ 24.82	$ 0.20	$ 0.05	$ 0.03	$ 0.28
7								
8	Suck Creek	$ 30.60	$ 16.12	$ 46.72	$ 0.38	$ 0.09	$ 0.05	$ 0.52
9								
10	Lone Oak	$ 42.03	$ 15.65	$ 57.68	$ 0.47	$ 0.11	$ 0.07	$ 0.64
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								

Petitioner's Exhibit QIIP 1 - GMV

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

Line Number	Description	Company Totals
1	Additions Subject to QIIP:	$ 2,514,170
2	Plus: Cost of Removal less Salvage	97,710
3	Less: Contributions in Aid to Construction (CIAC)	-
4	Net Investment Supplied QIIP Additions:	2,611,881
5		
6	Pre-Tax Rate of Return:	9.45%
7	Pre-Tax Return on Additions:	$ 246,881
8		
9	Depreciation Expense on QIIP Additions:	84,448
10		
11	Property and Franchise Taxes Associated with QIIP:	$ 32,862
12		
13	QIIP Revenues:	$ 364,192
14		
15	Revenue Taxes	4.48%
16	Total QIIP Revenues with Revenue Taxes	$ 381,281
17		
18	Volumetric and Metered Revenue as Per Docket No. 12-00049	$ 47,073,724
19		
20	QIIP Percentage to Apply to Bill:	0.81%
21		

Petitioner's Exhibit QIIP 2 - GMV

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

QIIP

Line #	Investment by Plant Account	Account Description	1 Additions	2 Retirements	3 CIAC	4 Net Investments (for Prop Tax) = 1 + 2	5 Cost of Removal Net of Salvage	6 Earnings Basis Net Investment = 1 + 3 + 5	7 Earnings Basis x PTR = 6 x 9.4522%	8 Depr Exp =(1+2+3)x Depreciation Rate	9 Prop Tax & Franchise Fees = (4 x Prop Tax Rate) + (4 x Franchise Rate)	10 Total Before Revenue Tax = 7 + 8 + 9	11 Total With Revenue Tax = 10 / (1 - 4.482%)
1	**304200**	**Computer & Peripheral Equipment**											
2	Recurring Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
3	Investment Projects		$ 24,113	$ -	$ -	$ 24,113	$ -	$ 24,113	$ 2,279	$ 477	$ 326	$ 3,082	3,227
4	Total QIP		$ 24,113	$ -	$ -	$ 24,113	$ -	$ 24,113	$ 2,279	$ 477	$ 326	$ 3,082	$ 3,227
5													
6	**304S00**	**Structures & Improvement - General**											
7	Recurring Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
8	Investment Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	-
9	Total QIP		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
10													
11	**311S20**	**Pumping Equipment SOS**											
12	Recurring Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
13	Investment Projects		$ 24,113	$ -	$ -	$ 24,113	$ -	$ 24,113	$ 2,279	$ 441	$ 326	$ 3,046	3,189
14	Total QIP		$ 24,113	$ -	$ -	$ 24,113	$ -	$ 24,113	$ 2,279	$ 441	$ 326	$ 3,046	$ 3,189
15													
16	**320200**	**Water Trmt Equip Filter Media**											
17	Recurring Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
18	Investment Projects		$ 32,150	$ -	$ -	$ 32,150	$ -	$ 32,150	$ 3,039	$ 10,831	$ 434	$ 14,305	14,976
19	Total QIP		$ 32,150	$ -	$ -	$ 32,150	$ -	$ 32,150	$ 3,039	$ 10,831	$ 434	$ 14,305	$ 14,976
20													
21	**340200**	**Computer & Peripheral Equipment**											
22	Recurring Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
23	Investment Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	-
24	Total QIP		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
25													
26	**340315**	**Computer Software Special Deprec Rate**											
27	Recurring Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
28	Investment Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	-
29	Total QIP		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
30													
31	**341100**	**Transportation Equip Lt Duty Trucks**											
32	Recurring Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
33	Investment Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	-
34	Total QIP		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
35													
36	**341200**	**Transportation Equip Hvy Duty Trucks**											
37	Recurring Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
38	Investment Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	-
39	Total QIP		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

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

QIIP

Line #	Investment by Plant Account	Account Description	1 Additions	2 Retirements	3 CIAC	4 Net Investments (for Prop Tax) = 1 + 2	5 Cost of Removal Net of Salvage	6 Earnings Basis Net Investment = 1 + 3 + 5	7 Earnings Basis x PTR = 6 x 9.4522%	8 Depr Exp =(1+2+3)x Depreciation Rate	9 Prop Tax & Franchise Fees = (4 x Prop Tax Rate) + (4 x Franchise Rate)	10 Total Before Revenue Tax = 7 + 8 + 9	11 Total With Revenue Tax = 10 / (1 - 4.482%)
40													
41	**341300**	**Transportation Equip Autos**											
42	Recurring Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
43	Investment Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	-
44	Total QIP		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
45													
46	**343000**	**Tools, Shop, Garage Equipment**											
47	Recurring Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
48	Investment Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	-
49	Total QIP		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
50													
51	**331001**	**Transmission & Distribution Mains**											
52	Recurring Projects		$ 1,138,355	$ (17,198)	$ -	$ 1,121,157	$ 20,531	$ 1,158,886	$ 109,541	$ 14,014	$ 15,148	$ 138,703	$ 145,211
53	Investment Projects		$ 455,458	$ -	$ -	$ 455,458	$ -	$ 455,458	$ 43,051	$ 5,693	$ 6,154	$ 54,898	57,474
54	Total QIP		$ 1,593,813	$ (17,198)	$ -	$ 1,576,615	$ 20,531	$ 1,614,344	$ 152,592	$ 19,708	$ 21,301	$ 193,601	$ 202,685
55													
56	**333000**	**Services**											
57	Recurring Projects		$ 138,934	$ (11,899)	$ -	$ 127,035	$ 14,205	$ 153,140	$ 14,475	$ 1,410	$ 1,716	$ 17,602	$ 18,427
58	Investment Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	-
59	Total		$ 138,934	$ (11,899)	$ -	$ 127,035	$ 14,205	$ 153,140	$ 14,475	$ 1,410	$ 1,716	$ 17,602	$ 18,427
60													
61	**334100**	**Meters**											
62	Recurring Projects		$ 260,397	$ (2,515)	$ -	$ 257,882	$ 3,002	$ 263,398	$ 24,897	$ 19,264	$ 3,484	$ 47,645	$ 49,881
63	Investment Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	-
64	Total		$ 260,397	$ (2,515)	$ -	$ 257,882	$ 3,002	$ 263,398	$ 24,897	$ 19,264	$ 3,484	$ 47,645	$ 49,881
65													
66	**334200**	**Meter Installations**											
67	Recurring Projects		$ 98,771	$ (48,400)	$ -	$ 50,371	$ 57,779	$ 156,550	$ 14,798	$ 1,375	$ 681	$ 16,853	$ 17,644
68	Investment Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	-
69	Total		$ 98,771	$ (48,400)	$ -	$ 50,371	$ 57,779	$ 156,550	$ 14,798	$ 1,375	$ 681	$ 16,853	$ 17,644
70													
71	**335000**	**Hydrants**											
72	Recurring Projects		$ 78,546	$ (1,837)	$ -	$ 76,710	$ 2,193	$ 80,739	$ 7,632	$ 1,764	$ 1,036	$ 10,432	$ 10,922
73	Investment Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	-
74	Total		$ 78,546	$ (1,837)	$ -	$ 76,710	$ 2,193	$ 80,739	$ 7,632	$ 1,764	$ 1,036	$ 10,432	$ 10,922
75													
76	**330003**	**Tank Repainting**											
77	Recurring Projects		$ 263,333	$ -	$ -	$ 263,333	$ -	$ 263,333	$ 24,891	$ 29,177	$ 3,558	$ 57,626	$ 60,330
78	Investment Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	-
79	Total		$ 263,333	$ -	$ -	$ 263,333	$ -	$ 263,333	$ 24,891	$ 29,177	$ 3,558	$ 57,626	$ 60,330
80													
81													
82													
83	**Total**		**$ 2,514,170**	**$ (81,849)**	**$ -**	**$ 2,432,321**	**$ 97,710**	**$ 2,611,881**	**$ 246,881**	**$ 84,448**	**$ 32,862**	**$ 364,192**	**$ 381,281**
84													
85													

Petitioner's Exhibit EDI 1 - GMV

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

Line Number	Description	Company Totals
1	Additions Subject to EDI:	$ 604,569
2	Plus: Cost of Removal less Salvage	-
3	Less: Contributions in Aid to Construction (CIAC)	53,204
4	Net Investment Supplied EDI Additions:	$ 551,366
5		
6	Pre-Tax Rate of Return:	9.45%
7	Pre-Tax Return on Additions:	$ 52,116
8		
9	Depreciation Expense on EDI Additions:	22,339
10		
11	Property and Franchise Taxes Associated with EDI:	8,168
12		
13	EDI Revenues:	$ 82,624
14		
15	Revenue Taxes	4.48%
16	Total EDI Revenues with Revenue Taxes	$ 86,500
17		
18	Volumetric and Metered Revenue as Per Docket No. 12-00049	$ 47,073,724
19		
20	EDI Percentage to Apply to Bill:	0.18%
21		

Tennessee American Water Company
Economic Development (EDI)
Investment Worksheet

Line #	Investment by Plant Account	EDI Account Description	1 Additions	2 Retirements	3 CIAC	4 Net Investments (for Prop Tax) = 1 + 2	5 Cost of Removal Net of Salvage	6 Earnings Basis Net Investment = 1 + 3 + 5	7 Earnings Basis x PTR = 6 x 9.4522%	8 Depr Exp =(1+2+3)x Depreciation Rate	9 Prop Tax & Franchise Fees = (4 x Prop Tax Rate) + (4 x Franchise Rate)	10 Total Before Revenue Tax = 7 + 8 + 9	11 Total With Revenue Tax = 10 / (1 - 4.482%)
1	**304200**	**Computer & Peripheral Equipment**											
2	Recurring Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
3	Investment Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	-
4	Total QIP		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
5													
6	**304500**	**Structures & Improvement - General**											
7	Recurring Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
8	Investment Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	-
9	Total QIP		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
10													
11	**311520**	**Pumping Equipment SOS**											
12	Recurring Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
13	Investment Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	-
14	Total QIP		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
15													
16	**320200**	**Water Trmt Equip Filter Media**											
17	Recurring Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
18	Investment Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	-
19	Total QIP		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
20													
21	**340200**	**Computer & Peripheral Equipment**											
22	Recurring Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
23	Investment Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	-
24	Total QIP		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
25													
26	**340315**	**Computer Software Special Deprec Rate**											
27	Recurring Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
28	Investment Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	-
29	Total QIP		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
30													
31	**341100**	**Transportation Equip Lt Duty Trucks**											
32	Recurring Projects		$ 2,201	$ -	$ -	$ 2,201	$ -	$ 2,201	$ 208	$ 352	$ 30	$ 590	$ 618
33	Investment Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	-
34	Total QIP		$ 2,201	$ -	$ -	$ 2,201	$ -	$ 2,201	$ 208	$ 352	$ 30	$ 590	$ 618
35													
36	**341200**	**Transportation Equip Hvy Duty Trucks**											
37	Recurring Projects		$ 7,252	$ -	$ -	$ 7,252	$ -	$ 7,252	$ 685	$ 1,205	$ 98	$ 1,989	$ 2,082
38	Investment Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	-
39	Total QIP		$ 7,252	$ -	$ -	$ 7,252	$ -	$ 7,252	$ 685	$ 1,205	$ 98	$ 1,989	$ 2,082
40													
41	**341300**	**Transportation Equip Autos**											
42	Recurring Projects		$ 1,950	$ -	$ -	$ 1,950	$ -	$ 1,950	$ 184	$ 222	$ 26	$ 433	$ 453
43	Investment Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	-
44	Total QIP		$ 1,950	$ -	$ -	$ 1,950	$ -	$ 1,950	$ 184	$ 222	$ 26	$ 433	$ 453
45													
46	**343000**	**Tools, Shop, Garage Equipment**											
47	Recurring Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
48	Investment Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	-
49	Total QIP		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
50													
51	**331001**	**Transmission & Distribution Mains**											

Tennessee American Water Company
Economic Development (EDI)
Investment Worksheet

EDI

Line #	Investment by Plant Account	Account Description	1 Additions	2 Retirements	3 CIAC	4 Net Investments (for Prop Tax) = 1 + 2	5 Cost of Removal Net of Salvage	6 Earnings Basis Net Investment = 1 + 3 + 5	7 Earnings Basis x PTR = 6 x 9.4522%	8 Depr Exp =(1+2+3)x Depreciation Rate	9 Prop Tax & Franchise Fees = (4 x Prop Tax Rate) + (4 x Franchise Rate)	10 Total Before Revenue Tax = 7 + 8 + 9	11 Total With Revenue Tax = 10 / (1 - 4.482%)
52	Recurring Projects		$ 53,240	$ -	$ -	$ 53,240	$ -	$ 53,240	$ 5,032	$ 665	$ 719	$ 6,417	$ 6,718
53	Investment Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
54	Total QIP		$ 53,240	$ -	$ -	$ 53,240	$ -	$ 53,240	$ 5,032	$ 665	$ 719	$ 6,417	$ 6,718
55													
56	**333000**	**Services**											
57	Recurring Projects		$ 222,449	$ -	$ (53,204)	$ 222,449	$ -	$ 169,246	$ 15,998	$ 1,879	$ 3,005	$ 20,882	$ 21,861
58	Investment Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
59	Total		$ 222,449	$ -	$ (53,204)	$ 222,449	$ -	$ 169,246	$ 15,998	$ 1,879	$ 3,005	$ 20,882	$ 21,861
60													
61	**334100**	**Meters**											
62	Recurring Projects		$ 198,041	$ -	$ -	$ 198,041	$ -	$ 198,041	$ 18,719	$ 14,794	$ 2,676	$ 36,189	$ 37,887
63	Investment Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
64	Total		$ 198,041	$ -	$ -	$ 198,041	$ -	$ 198,041	$ 18,719	$ 14,794	$ 2,676	$ 36,189	$ 37,887
65													
66	**334200**	**Meter Installations**											
67	Recurring Projects		$ 110,434	$ -	$ -	$ 110,434	$ -	$ 110,434	$ 10,439	$ 3,015	$ 1,492	$ 14,945	$ 15,647
68	Investment Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
69	Total		$ 110,434	$ -	$ -	$ 110,434	$ -	$ 110,434	$ 10,439	$ 3,015	$ 1,492	$ 14,945	$ 15,647
70													
71	**335000**	**Hydrants**											
72	Recurring Projects		$ 9,003	$ -	$ -	$ 9,003	$ -	$ 9,003	$ 851	$ 207	$ 122	$ 1,180	$ 1,235
73	Investment Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
74	Total		$ 9,003	$ -	$ -	$ 9,003	$ -	$ 9,003	$ 851	$ 207	$ 122	$ 1,180	$ 1,235
75													
76													
77								$ -					
78	**Total**		**$ 604,569**	**$ -**	**$ (53,204)**	**$ 604,569**	**$ -**	**$ 551,366**	**$ 52,116**	**$ 22,339**	**$ 8,168**	**$ 82,624**	**$ 86,500**
79													
80													
81													
82													
83													

Petitioner's Exhibit SEC 1 - GMV

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

Line Number	Description	Company Totals
1	Additions Subject to SEC:	$ 270,289
2	Plus: Cost of Removal less Salvage	-
3	Less: Contributions in Aid to Construction (CIAC)	-
4	Net Investment Supplied SEC Additions:	$ 270,289
5		
6	Pre-Tax Rate of Return:	9.45%
7	Pre-Tax Return on Additions:	$ 25,548
8		
9	Depreciation Expense on SEC Additions:	23,375
10		
11	Property and Franchise Taxes Associated with SEC:	3,652
12		
13	SEC Revenues:	$ 52,575
14		
15	Revenue Taxes	4.48%
16	Total EDI Revenues with Revenue Taxes	$ 55,042
17		
18	Volumetric and Metered Revenue as Per Docket No. 12-00049	$ 47,073,724
19		
20	SEC Percentage to Apply to Bill:	0.12%
21		

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

SEC

Line #	Investment by Plant Account	Account Description	1 Additions	2 Retirements	3 CIAC	4 Net Investments (for Prop Tax) = 1 + 2	5 Cost of Removal Net of Salvage	6 Earnings Basis Net Investment = 1 + 3 + 5	7 Earnings Basis x PTR = 6 x 9.4522%	8 Depr Exp =(1+2+3)x Depreciation Rate	9 Prop Tax & Franchise Fees = (4 x Prop Tax Rate) + (4 x Franchise Rate)	10 Total Before Revenue Tax = 7 + 8 + 9	11 Total With Revenue Tax = 10 / (1 - 4.482%)
1	**304200**	**Computer & Peripheral Equipment**											
2	Recurring Projects		$ 21,525	$ -	$ -	$ 21,525	$ -	$ 21,525	$ 2,035	$ 426	$ 291	$ 2,752	$ 2,881
3	Investment Projects		-	-	-	-	-	-	-	$ -	$ -	-	-
4	Total QIP		$ 21,525	$ -	$ -	$ 21,525	$ -	$ 21,525	$ 2,035	$ 426	$ 291	$ 2,752	$ 2,881
5													
6	**304500**	**Structures & Improvement - General**											
7	Recurring Projects		$ 70,417	$ -	$ -	$ 70,417	$ -	$ 70,417	$ 6,656	$ 796	$ 951	$ 8,403	$ 8,797
8	Investment Projects		-	-	-	-	-	-	-	$ -	$ -	-	-
9	Total QIP		$ 70,417	$ -	$ -	$ 70,417	$ -	$ 70,417	$ 6,656	$ 796	$ 951	$ 8,403	$ 8,797
10													
11	**311520**	**Pumping Equipment SOS**											
12	Recurring Projects		$ 21,219	$ -	$ -	$ 21,219	$ -	$ 21,219	$ 2,006	$ 388	$ 287	$ 2,681	$ 2,807
13	Investment Projects		-	-	-	-	-	-	-	$ -	$ -	-	-
14	Total QIP		$ 21,219	$ -	$ -	$ 21,219	$ -	$ 21,219	$ 2,006	$ 388	$ 287	$ 2,681	$ 2,807
15													
16	**320200**	**Water Trmt Equip Filter Media**											
17	Recurring Projects		$ 58,170	$ -	$ -	$ 58,170	$ -	$ 58,170	$ 5,498	$ 19,598	$ 786	$ 25,882	$ 27,096
18	Investment Projects		-	-	-	-	-	-	-	$ -	$ -	-	-
19	Total QIP		$ 58,170	$ -	$ -	$ 58,170	$ -	$ 58,170	$ 5,498	$ 19,598	$ 786	$ 25,882	$ 27,096
20													
21	**340200**	**Computer & Peripheral Equipment**											
22	Recurring Projects		$ 98,957	$ -	$ -	$ 98,957	$ -	$ 98,957	$ 9,354	$ 2,167	$ 1,337	$ 12,858	$ 13,461
23	Investment Projects		-	-	-	-	-	-	-	$ -	$ -	-	-
24	Total QIP		$ 98,957	$ -	$ -	$ 98,957	$ -	$ 98,957	$ 9,354	$ 2,167	$ 1,337	$ 12,858	$ 13,461
25													
26	**340315**	**Computer Software Special Deprec Rate**											
27	Recurring Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
28	Investment Projects		-	-	-	-	-	-	-	$ -	$ -	-	-
29	Total QIP		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
30													
31	**341100**	**Transportation Equip Lt Duty Trucks**											
32	Recurring Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
33	Investment Projects		-	-	-	-	-	-	-	$ -	$ -	-	-
34	Total QIP		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
35													
36	**341200**	**Transportation Equip Hvy Duty Trucks**											
37	Recurring Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
38	Investment Projects		-	-	-	-	-	-	-	$ -	$ -	-	-
39	Total QIP		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
40													
41	**341300**	**Transportation Equip Autos**											
42	Recurring Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
43	Investment Projects		-	-	-	-	-	-	-	$ -	$ -	-	-
44	Total QIP		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
45													
46	**343000**	**Tools, Shop, Garage Equipment**											
47	Recurring Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
48	Investment Projects		-	-	-	-	-	-	-	$ -	$ -	-	-
49	Total QIP		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

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

			1	2	3	4	5	6	7	8	9	10	11
		SEC				= 1 + 2		= 1 + 3 + 5	= 6 x 9.4522%	=(1+2+3)x Depreciation Rate	= (4 x Prop Tax Rate) + (4 x Franchise Rate)	= 7 + 8 + 9	= 10 / (1 - 4.482%)
Line #	Investment by Plant Account	Account Description	Additions	Retirements	CIAC	Net Investments (for Prop Tax)	Cost of Removal Net of Salvage	Earnings Basis Net Investment	Earnings Basis x PTR	Depr Exp	Prop Tax & Franchise Fees	Total Before Revenue Tax	Total With Revenue Tax
50													
51	331001	Transmission & Distribution Mains											
52	Recurring Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
53	Investment Projects		-	-	-	-	-	-	-	$ -	$ -	-	-
54	Total QIP		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
55													
56	333000	Services											
57	Recurring Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
58	Investment Projects		-	-	-	-	-	-	-	$ -	$ -	-	-
59	Total		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
60													
61	334100	Meters											
62	Recurring Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
63	Investment Projects		-	-	-	-	-	-	-	$ -	$ -	-	-
64	Total		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
65													
66	334200	Meter Installations											
67	Recurring Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
68	Investment Projects		-	-	-	-	-	-	-	$ -	$ -	-	-
69	Total		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
70													
71	335000	Hydrants											
72	Recurring Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
73	Investment Projects		-	-	-	-	-	-	-	$ -	$ -	-	-
74	Total		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
75													
76													
77								$ -					
78	**Total**		**$ 270,289**	**$ -**	**$ -**	**$ 270,289**	**$ -**	**$ 270,289**	**$ 25,548**	**$ 23,375**	**$ 3,652**	**$ 52,575**	**$ 55,042**
79													
80													
81													

Petitioner's Exhibit PCOP - GMV

Tennessee American Water Company
Production Costs and Other Pass-Throughs (PCOP)
Calculation of PCOP Revenue Requirement

Line Number	Description	Authorized Amount Per Docket 12-00049
1	Purchased Power	$ 2,678,772
2	Plus: Chemicals	986,930
3	Plus: Purchased Water	51,331
4	Plus: TRA Inspection Fee	131,826
5	Plus: Waste Disposal	213,308
6		
7	Net Pass-Throughs:	$ 4,062,167
8		
9	Authorized Sales in 100 Gallons	100,589,065
10		
11	Base Case Pass-Through per 100 Gallons	0.0404
12		
13	Authorized Cost per 100 Gallons	$ 0.04038
14		
15		
16		
17		
18		
19		

Petitioner's Exhibit PCOP - GMV

Tennessee American Water Company
Production Costs and Other Pass-Throughs (PCOP)
Investment Worksheet

Line Number	Item	Authorized Amount Per Docket 12-00049
1	Purchased Power	$ 2,678,772
2	Chemicals	986,930
3	Purchased Water	51,331
4	TRA Inspection Fee	131,826
5	Waste Disposal	213,308
6		
7	**Total**	**$ 4,062,167**
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		

TENNESSEE-AMERICAN WATER COMPANY

TRA NO. 19
Original Sheet No. 12-QIIP-1

CLASSIFICATION OF SERVICE

QUALIFIED INFRASTRUCTURE IMPROVEMENT PROGRAM – RIDER

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 of 0.81% 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.

General Description:

To recover the operational expenses, capital costs, or both related to qualified infrastructure investment projects. The initial annual prospective QIIP year will be January 1, 2014 through December 31, 2014. Annual prospective QIIP years are anticipated to be approximately January 1 of one year through December 31 of the succeeding year.

QIIP Eligible Utility Plant:

Distribution Infrastructure – replacement distribution and transmission systems 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; Un-reimbursed funds related to capital projects to relocate facilities required by a 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, reinforcement or otherwise insuring reliability of existing facilities.

ISSUED: **October 4, 2013** **EFFECTIVE:**

BY:

Deron E. Allen
PRESIDENT

1101 Broad Street
Chattanooga, Tennessee 37401

TENNESSEE-AMERICAN WATER COMPANY

TRA NO. 19
Original Sheet No. 12-QIIP-2

CLASSIFICATION OF SERVICE

QUALIFIED INFRASTRUCTURE IMPROVEMENT PROGRAM – RIDER
(Continued)

Determination of the Annual Qualified Infrastructure Improvement Program Percentage:

(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 annual prospective basis.

QIIP percentage formula:

$$QIIP\ \% = \frac{[\{(NetPlant \times PTR) + NetDep + PFT\} \ / \ 1 - RT] + R}{PAR}$$

Where:

QIIP % = QIIP percentage

NetPlant = Average forecasted cost of QIIP qualified plant additions (computed by use of average of 12 end-of-month balances).

PTR = Current pre-tax rate of return as calculated from authorized weighted cost of equity, grossed up for taxes, added to the authorized weighted cost of debt from most recent Base Rate case Order.

ISSUED: October 4, 2013 **EFFECTIVE:**

BY:

Deron E. Allen
PRESIDENT

1101 Broad Street
Chattanooga, Tennessee 37401

TENNESSEE-AMERICAN WATER COMPANY

TRA NO. 19
Original Sheet No. 12-QIIP-3

CLASSIFICATION OF SERVICE

QUALIFIED INFRASTRUCTURE IMPROVEMENT PROGRAM – RIDER
(Continued)

Where:

NetDep = Net annual depreciation expense related to the average forecasted QIIP additions, net of retirements and CIAC, per application of current TRA approved depreciation rates by account.

PFT = Property and Franchise Taxes

R = Reconciliation component related to over/under recovery of QIIP costs during the prior QIIP year.

RT = Sum of revenue taxes % (Gross Receipts Tax and TRA Utility Fees) and uncollectible expense %, expressed as a decimal

PAR = Authorized annual base revenue subject to QIIP

TENNESSEE-AMERICAN WATER COMPANY

TRA NO. 19
Original Sheet No. 12-QIIP-4

CLASSIFICATION OF SERVICE

QUALIFIED INFRASTRUCTURE IMPROVEMENT PROGRAM – RIDER
(Continued)

The QIIP Rider shall be subject to an annual reconciliation.

Annual Reconciliation:

On or before March 1 of each QIIP year, if the Company had a QIIP in effect for all or part of the immediately preceding QIIP year, it shall submit to the Commission an annual reconciliation regarding the results for the previous QIIP year. The annual reconciliation shall be verified by an officer of the Company. The annual reconciliation shall include a calculation of the R formula component necessary to adjust revenue collected under the QIIP Rider in effect for prior QIIP year to an amount equivalent to the actual level of prudently-incurred QIIP cost for the prior QIIP year. Any over or under recovery will be included in the calculation of the next adjustment to the QIIP.

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 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.

ISSUED: **October 4, 2013** **EFFECTIVE:**

BY:

Deron E. Allen
PRESIDENT

1101 Broad Street
Chattanooga, Tennessee 37401

TENNESSEE-AMERICAN WATER COMPANY

TRA NO. 19
Original Sheet No. 12-EDI-1

CLASSIFICATION OF SERVICE

ECONOMIC DEVELOPMENT INVESTMENT PROGRAM – RIDER

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, an Economic Development Investment ("EDI") Rider of 0.18% 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.

General Description:

To recover the operational expenses, capital costs, or both related to the expansion of infrastructure for the purpose of economic development. The initial annual prospective EDI year will be January 1, 2014 through December 31, 2014. Annual prospective EDI years are anticipated to be approximately January 1 of one year through December 31 of the succeeding year.

EDI Eligible Utility Plant:

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

EDI Eligible Expenses:

Operational expenses similar to other expenses authorized in previous rate cases that are specifically for economic development or to support economic development utility plant.

ISSUED: **October 4, 2013** **EFFECTIVE:**

BY:

Deron E. Allen
PRESIDENT

1101 Broad Street
Chattanooga, Tennessee 37401

TENNESSEE-AMERICAN WATER COMPANY

CLASSIFICATION OF SERVICE

ECONOMIC DEVELOPMENT INVESTMENT PROGRAM – RIDER
(Continued)

Determination of the Annual Economic Development Investment Program Percentage:

(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 annual prospective basis.

EDI percentage formula:

$$EDI\ \% = \left[\frac{\{(NetPlant \times PTR) + NetDep + PFT + EDIEx\}\ /\ 1 - RT]}{PAR}\right] + R$$

Where:

EDI % = EDI percentage

NetPlant = Average forecasted cost of EDI qualified plant additions (computed by averaging the 12 end-of-month plant balances).

PTR = Current pre-tax rate of return as calculated from authorized weighted cost of equity, grossed up for taxes, added to the authorized weighted cost of debt from most recent Base Rate case Order.

ISSUED: **October 4, 2013** **EFFECTIVE:**

BY:

Deron E. Allen
PRESIDENT

1101 Broad Street
Chattanooga, Tennessee 37401

TENNESSEE-AMERICAN WATER COMPANY

TRA NO. 19
Original Sheet No. 12-EDI-3

CLASSIFICATION OF SERVICE

ECONOMIC DEVELOPMENT INVESTMENT PROGRAM – RIDER
(Continued)

Where:

NetDep = Net annual depreciation expense related to the average forecasted EDI additions, net of retirements and CIAC, per application of current TRA approved depreciation rates by account.

PFT = Property and Franchise Taxes

R = Reconciliation component related to over/under recovery of EDI costs during the prior EDI year.

EDIEx = Operational expense items related directly to economic development

RT = Sum of revenue taxes % (Gross Receipts Tax and TRA Utility Fees) and uncollectible expense %, expressed as a decimal

PAR = Authorized annual base revenue subject to EDI

TENNESSEE-AMERICAN WATER COMPANY

TRA NO. 19
Original Sheet No. 12-EDI-4

CLASSIFICATION OF SERVICE

ECONOMIC DEVELOPMENT INVESTMENT PROGRAM – RIDER
(Continued)

The EDI Rider shall be subject to an annual reconciliation.

Annual Reconciliation:

On or before March 1 of each EDI year, if the Company had a EDI in effect for all or part of the immediately preceding EDI year, it shall submit to the Commission an annual reconciliation regarding the results for the previous EDI year. The annual reconciliation shall be verified by an officer of the Company. The annual reconciliation shall include a calculation of the R formula component necessary to adjust revenue collected under the EDI Rider in effect for prior EDI year to an amount equivalent to the actual level of prudently-incurred EDI cost for the prior EDI year. Any over or under recovery will be included in the calculation of the next adjustment to the EDI.

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 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.

ISSUED: October 4, 2013 **EFFECTIVE:**

BY:

Deron E. Allen
PRESIDENT

1101 Broad Street
Chattanooga, Tennessee 37401

TENNESSEE-AMERICAN WATER COMPANY

TRA NO. 19
Original Sheet No. 12-SEC-1

CLASSIFICATION OF SERVICE

SAFETY AND ENVIRONMENTAL COMPLIANCE – RIDER

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, an Safety and Environmental Compliance ("SEC") Rider of 0.12% 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.

General Description:

To recover the operational expenses, capital costs, or both related to Safety and Environmental Compliance. The initial annual prospective SEC year will be January 1, 2014 through December 31, 2014. Annual prospective SEC years are anticipated to be approximately January 1 of one year through December 31 of the succeeding year.

SEC Eligible Utility Plant:

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

SEC Eligible Expenses:

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.

CLASSIFICATION OF SERVICE

SAFETY AND ENVIRONMENTAL COMPLIANCE PROGRAM – RIDER
(Continued)

TENNESSEE-AMERICAN WATER COMPANY

TRA NO. 19
Original Sheet No. 12-SEC-2

Determination of the Annual Safety and Environmental Compliance Program Percentage:

(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 annual prospective basis.

SEC percentage formula:

$$SEC\ \% = \frac{[\{(NetPlant \times PTR) + NetDep + PFT + SECEx\} \ / \ 1 - RT] + R}{PAR}$$

Where:

SEC % = SEC percentage

NetPlant = Average forecasted cost of SEC Rider qualified plant additions (computed by averaging the 12 end-of-month balances).

PTR = Current pre-tax rate of return as calculated from authorized weighted cost of equity, grossed up for taxes, added to the authorized weighted cost of debt from most recent Base Rate case Order.

CLASSIFICATION OF SERVICE

ISSUED: **October 4, 2013** **EFFECTIVE:**

BY:

Deron E. Allen
PRESIDENT

1101 Broad Street
Chattanooga, Tennessee 37401

TENNESSEE-AMERICAN WATER COMPANY

TRA NO. 19
Original Sheet No. 12-SEC-3

SAFETY AND ENVIRONMENTAL COMPLIANCE PROGRAM – RIDER
(Continued)

Where:

NetDep = Net annual depreciation expense related to the average forecasted SEC Rider additions, net of retirements and CIAC, per application of current TRA approved depreciation rates by account.

PFT = Property and Franchise Taxes

R = Reconciliation component related to over/under recovery of SEC Rider costs during the prior SEC Rider year.

SECEx = Operational expenses for safety and environmental compliance

RT = Sum of revenue taxes % (Gross Receipts Tax and TRA Inspection Fees) and uncollectible expense %, expressed as a decimal

PAR = Authorized annual base revenue subject to SEC Rider

TENNESSEE-AMERICAN WATER COMPANY

TRA NO. 19
Original Sheet No. 12-SEC-4

CLASSIFICATION OF SERVICE

SAFETY AND ENVIRONMENTAL COMPLIANCE PROGRAM – RIDER
(Continued)

The SEC Rider shall be subject to an annual reconciliation.

Annual Reconciliation:

On or before March 1 of each SEC year, if the Company had a SEC in effect for all or part of the immediately preceding SEC year, it shall submit to the Commission an annual reconciliation regarding the results for the previous SEC year. The annual reconciliation shall be verified by an officer of the Company. The annual reconciliation shall include a calculation of the R formula component necessary to adjust revenue collected under the SEC Rider in effect for prior SEC year to an amount equivalent to the actual level of prudently-incurred SEC cost for the prior SEC year. Any over or under recovery will be included in the calculation of the next adjustment to the SEC.

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 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.

ISSUED: **October 4, 2013** **EFFECTIVE:**

BY:

Deron E. Allen
PRESIDENT

1101 Broad Street
Chattanooga, Tennessee 37401

TENNESSEE-AMERICAN WATER COMPANY

TRA No. 19
Original Sheet No. 12-PCOP

CLASSIFICATION OF SERVICE

PRODUCTION COSTS AND OTHER PASS-THROUGHS ("PCOP") RIDER

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 PCOP charge or credit of x.xx% will apply.

The above PCOP % will be recomputed annually.

General Description:

Provides for recovery or crediting of incremental increases in the cost of purchased power, chemicals, waste disposal costs at the treatment plant, purchased water from other utilities, wheeling of water by other utilities and TRA inspection fee between base rate cases.

BASE RATE COST OF PRODUCTION COSTS AND OTHER PASS-THROUGHS

The Base Rate Cost of Purchased Power, Chemicals, Waste Disposal, Purchased Water, Wheeling Water and TRA Inspection Fee per 100 Gallons of Water Sales determined and authorized in the Base Rate proceeding in Docket No. 12-00049 is as set forth below:

Base Rate Cost per 100 Gallons $ 0.04038

ISSUED: **October 4, 2013** **EFFECTIVE:**

BY:

Deron E. Allen
PRESIDENT

1101 Broad Street
Chattanooga, Tennessee 37401

STATE OF Kentucky)
)
COUNTY OF Fayette)

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared Brent E. O'Neill, being by me first duly sworn deposed and said that:

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

Brent E. O'Neill

Sworn to and subscribed before me
this 2nd day of October, 2013.

Notary Public

My Commission Expires: 10/3/2016

PETITIONER'S EXHIBIT BEO-1

TENNESSEE-AMERICAN WATER COMPANY, INC

DOCKET NO. _____

DIRECT TESTIMONY

OF

BRENT E. O'NEILL, P.E.

ON

APPLICATION FOR A QUALIFIED INFRASTRUCTURE INVESTMENT PROGRAM, ECONOMIC DEVELOPMENT INVESTMENT RIDER, SAFETY AND ENVIORMENTAL COMPLIANCE RIDER, AND PASS THROUGHS FOR PURCHASED POWER, CHEMICALS, PURCHASED WATER, WHEELING WATER COSTS, WASTE DISPOSAL AND TENNESSEE REGULATORY AUTHORITY INSPECTION FEE

SPONSORING PETITIONER'S EXHIBIT
2014 SCEP-BEO

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Brent E. O'Neill and my business address is 2300 Richmond Road, Lexington, Kentucky 40502.

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

A. I am employed by the American Water Works Service Company ("Service Company") as Director of Engineering for Tennessee American Water Company ("TAWC" or "Company") and Kentucky American Water Company ("KAWC").

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

A. No. I have assisted in the preparation of information in a few different proceedings before the Illinois Commerce Commission including rate cases, special investigations, and applications for a Certificate of Public Convenience and Necessity, but have not provided direct written or oral testimony.

Q. PLEASE STATE YOUR EDUCATIONAL AND PROFESSIONAL BACKGROUND.

A. I received a B.S. degree in Civil Engineering from the University of Illinois in Urbana, Illinois in 1991. I completed a Masters of Business Administration from Eastern Illinois University in Charleston, Illinois in 2002. I am currently a registered Professional Engineer in Illinois and Iowa.

I have been employed by American Water Works Company ("AWW") or one of its subsidiaries since 1996. I began as a Staff Engineer for Northern Illinois Water Company ("NIWC") until 1999 when I was promoted to Engineering Manager for Illinois American Water Company ("ILAWC"). In July 2004, I accepted the position of

Network Operations Manager for the Champaign County District of ILAWC. In June 2005, I accepted the position of Senior Asset Manager with AWW and worked in Reading, England on a joint project with Thames Water. In 2006, I became the ILAWC Project Manager for the construction of a new 15 Million Gallon per Day ("MGD") ground water softening treatment plant, wells, and transmission main in Champaign, Illinois. In March 2008, I became the Engineering Manager Capital Delivery with ILAWC with responsibilities for the delivery of capital projects for the Central and Southern service areas of Illinois American Water. In April 2013, I accepted my current position as Director of Engineering for Tennessee American Water Company and Kentucky American Water Company with the Service Company. I am an active member of the American Water Works Association (AWWA).

Q. WHAT ARE YOUR DUTIES AS DIRECTOR OF ENGINEERING?

A. I am responsible for the coordination of the Engineering Departments for both TAWC and KAWC, which includes the planning, development, and implementation of all aspects of construction projects. This includes working with all new main extensions and developers, replacement mains, water treatment plant upgrades, new construction and network facilities improvements. I coordinate technical assistance to all other company departments as needed and oversee the capital budget development and implementation. I report to the Presidents of TAWC and KAWC.

Q. WHAT TOPICS WILL YOUR TESTIMONY ADDRESS?

A. I will discuss the strategy for preparing and implementing capital expenditures. I will also describe the items that are part of the Company's 2014 Strategic Capital Expenditures plan for the Qualified Infrastructure Investment Program ("QIIP"), the

Economic Development Investment Rider ("EDI") Program and the Safety and Environmental Compliance ("SEC") Rider, which TAWC is now seeking to implement. In particular, I will provide additional support information related to the proposed projects, history of failures, reasons for increases in the rate of replacement, and data regarding the replacement rate for each plant account, and specific plans for future replacements.

Q. PLEASE IDENTIFY THE EXHIBITS YOU ARE SPONSORING AND DESCRIBING IN YOUR TESTIMONY.

A. I am sponsoring the following exhibits:

- Petitioner's Exhibit 2014 SCEP-BEO

Q. CAN YOU DESCRIBE THE CAPITAL BUDGET IN THE ATTRITION PERIOD?

A. Yes. The Company's capital investment plan, the Strategic Capital Expenditures Plan ("SCEP"), can be divided into two distinct areas: 1) normal recurring construction (RPs), and 2) major projects identified as investment projects (IPs). Normal recurring construction includes water main installation for new development, smaller main projects for reinforcement and replacement, service line and meter setting installation, meter purchases and the purchase of tools, furniture, equipment and vehicles.

Recurring construction costs are trended from historical and forecasted data. Estimates are prepared for the installation of new mains, service lines, meter settings and the purchase of new meters based on preliminary plats from the appropriate governmental planning agencies and consultations with developers, homebuilders, and engineering firms.

Other recurring capital expenditures include the purchase of tools, furniture, equipment, and vehicles. Each year, these expenditures are planned based on historic levels and on needs. Each item is reviewed independently and an itemized list of expenditures is prepared. Estimates are made based on current year pricing.

Q. HOW IS THE SCEP PREPARED?

A. TAWC undertakes a detailed capital planning process. The intent of the planning process is to provide a broad and comprehensive review of facility needs that will allow us to then establish a general guide for needed improvements over a short-term horizon. These improvements will enable TAWC to: provide safe, adequate, and reliable service to its customers to meet their domestic, commercial, and industrial needs; provide flows adequate for fire protection; satisfy all regulatory requirements; and enhance economic growth. The plan provides a general scope of each project along with a preliminary design. The criteria for evaluating the various system improvements are engineering requirements; consideration of national, state, and local trends; environmental impact evaluations; and water resource management.

The engineering criteria used are accepted engineering standards and practices that provide adequate capacity and appropriate levels of reliability to satisfy residential, commercial, industrial, and public authority needs, and provide flows for fire protection. The criteria are developed from regulations, professional standards, and company engineering policies and procedures.

Pipelines are designed to meet two conditions of service. They are expected to deliver projected peak hour customer demands while maintaining system pressures at 30 pounds per square inch ("psi") or greater and to provide adequate fire flow identified by

the Insurance Service Office ("ISO") while maintaining distribution system pressure at 20 psi or greater.

Q. DOES TAWC FOCUS ON COST CONTROL OF CAPITAL EXPENDITURES IN ITS NORMAL DAY-TO-DAY ACTIVITIES?

A. Yes. All significant construction work done by independent contractors and significant purchases are completed pursuant to a bid solicitation process. We maintain a list of qualified bidders and we believe that our construction costs are very reasonable. AWW annually takes competitive bids for material and supplies that are either manufactured or distributed regionally and nationally through its centralized procurement group. We have the advantage of being able to purchase these materials and supplies on an as-needed basis at favorable prices. In the past ten years, AWW also has undertaken a number of procurement initiatives for services and materials to reduce costs through either streamlined selection or utilization of large volume purchasing power. Some of these initiatives that have directly impacted capital expenditures include the use of master services agreements with pre-qualified engineering consultants, national vehicle fleet procurement, and national preferred vendor identification.

Q. HOW DOES TAWC MANAGE ITS IMPLEMENTATION OF ITS CAPITAL PLAN?

A. Since 2003, the entire American Water system has used a process for the development and review of capital expenditures that has incorporated industry best practices. TAWC, like its sister companies, has benefitted from that process. The process includes a regional Capital Investment Management Committee ("CIMC") to ensure capital expenditure plans meet the strategic intent of the business, which intent includes

introduction of new technologies that result in efficiencies. In turn, this ensures that capital expenditure plans are integrated with operating expense plans, and provides more effective controls on budgets and individual capital projects.

The CIMC includes the TAWC President, TAWC Operations Manager, TAWC Engineering Project Manager, TAWC Financial Analyst, and TAWC Operations Specialist. The CIMC receives capital expenditure plans from project managers and approves them as required by the process. Once budgets are approved, the CIMC meets monthly to review capital expenditures compared to budgeted levels. The process includes five stages of project review: 1) a Preliminary Need Identification defining the project at an early stage; 2) a Project Implementation Proposal that confirms all aspects of the project are in a position to begin work; 3) Project Change Requests, if needed (if the cost changes more than 5% or $100,000); 4) a Post Project Review; and 5) Asset Management. TAWC personnel handle all of the stages, with oversight by the CIMC. All projects, including normal recurring items, have an identified project manager responsible for processing the stages of the project. The focus of the CIMC, along with the monthly meetings, has allowed TAWC to be more flexible with changes that inevitably occur during the course of implementation of large construction projects. TAWC made tremendous progress in its delivery of capital expenditures over the last ten years in regard to schedules, budgets, and quality of delivery.

As an added level of coordination a "Functional Sign-Off" Committee meets monthly to sign-off on projects. This committee includes the TAWC President, TAWC Operations Manager, the TAWC Engineering Project Manager, TAWC Financial Analyst, TAWC Operations Specialist and the appropriate Distribution and Operations

supervisors and project managers. The purpose of the committee is to review projects that are moving forward in the next step of approval, or that require a change. This allows the project manager and operational area supervisors to communicate about the project on a monthly basis and help coordinate projects from initial development through in-service.

Q. HOW DOES TAWC ADDRESS CAPITAL EXPENDITURES FOR THE RELOCATION OR REPLACEMENT OF ASSETS IN CONJUNCTION WITH ROAD PROJECTS?

One of the most challenging aspects of planning capital expenditures continues to be determining the amount of construction that is required for individual municipal and state road projects. Some of these projects required significant capital expenditures on the part of TAWC, but the company has no control over the schedule. TAWC would be required to act promptly if the project is to stay on schedule, but sometimes would not be informed of project delays until waterline relocation was underway or nearly complete. It is a guessing game to determine which projects will be delayed and how long. Investment project funding is requested early in case a project remains on the road relocation schedule, but more often than not the project schedule will be delayed, sometimes even for years. In reviewing historical spending, it appeared that a consistent expenditure level proceeded each year, but it was difficult to determine which specific project was going to be delayed. TAWC creates an IP for each project to better track each of the major highway relocations, and we annually estimate which projects will be built during that year in the budget. These estimates are based on regular meetings with state and local agencies in charge of road projects. This process allows flexible approval

of capital expenditures as unexpected projects arise, offsetting other projects that may be postponed. The flexibility of the CIMC process allows TAWC to immediately address an increase or decrease in relocation projects due to highway work.

Q. ARE YOU FAMILIAR WITH THE FACILITIES AND ENGINEERING OPERATIONS OF THE COMPANY IN EACH OF ITS RATE AREAS?

A. Yes.

Q. WHY IS IT IMPORTANT TO REPLACE THE INFRASTRUCTURE?

A. Having a reliable, adequate, and safe drinking water supply is critical to the health and safety of the people in the communities we serve. Our customers consume our product and depend on it for hygiene and health and to protect their homes from fire. With QIIP, the replacement of the aging infrastructure can be accelerated and allow TAWC to proactively address underperforming assets prior to them failing and reduce the need for a reactive respond to unplanned failure. QIIP, EDI, and the SEC riders will also allow the company to be better prepared to meet emerging trends and be prepared to support economic growth for the communities served. As outlined in the American Society of Professional Engineers 2013 Report Card of America's Infrastructure *"much of the drinking water infrastructure is old and in need of replacement. Failures in drinking water infrastructure can result in water disruptions, impediments to emergency response, and damage to other types of infrastructure. Broken water mains can damage roadways and structures and hinder fire-control efforts. Unscheduled repair work to address emergency pipe failures may cause additional disruptions to transportation and commerce."* This is further confirmed with the American Water Works Association's Buried No Longer Report that remarks *"...we face the need for massive reinvestment in our water infrastructure over the coming decades. The pipe networks that were largely*

built and paid for by earlier generations and passed down to us as an inheritance last a long time, but they are not immortal. The nation's drinking water infrastructure especially the underground pipes that deliver safe water to America's homes and businesses is aging and in need of significant reinvestment." With the use of the QIIP and the other riders being requested, TAWC believes we can continue to make the necessary improvements in the infrastructure and allow us to meet the demands expected of our aging infrastructure.

QUALIFIED INFRASTRUCTURE INVESTMENT PROGRAM

Q. DOES TAWC CURRENTLY PLAN IN ITS SCEP FOR REPLACEMENT OF INFRASTRUCTURE?

A. Yes. As I described above, TAWC recognizes the critical need to replace infrastructure on an ongoing basis. There are specific SCEP recurring project lines that address replacement of infrastructure. Additionally, TAWC has one Investment Project that addresses replacement of infrastructure and is described further later in my testimony. The entire SCEP is reflected in Exhibit – 2014 SCEP – BEO.

Q. WHAT ARE THE BUDGET LINES THAT ARE INCLUDED IN THE CURRENT APPLICATION UNDER THE QUALIFIED INFRASTRUCTURE INVESTMENT PROGRAM?

A. The Recurring Project budget lines that will be included in the QIIP will be Line B Main Replaced, Line C Mains Unscheduled, Line D main Relocated, Line F Hydrants and Valves Replaced, Line H Services Replaced, Line J Meters Replaced, Line R Capitalized Tank Rehabilitation/ Painting, and the Whitwell IP Project.

Q. WHAT WORK IS ASSOCIATED WITH LINE B?

A. This investment plan line includes the scheduled replacement, renewal or improvement of existing water mains including valves and other appurtenances that are necessary to perform the work.

Q. WHAT IS THE PROPOSED REPLACEMENT SCHEDULE FOR WATER MAIN REPLACEMENTS ASSOCIATED WITH LINE B?

A. TAWC plans to spend approximately $1,148,192 to replace various size water mains within fourteen (14) projects during 2014. TAW will replace approximately 14,387 feet of main during the period.

Q. HAS TAWC ANALYZED THE WATER MAIN FAILURES FOR THE MAINS BEING REPLACED AS REQUESTED IN THIS FILING UNDER LINE B MAINS REPLACED?

A. Yes. TAWC maintains a leak listing for the system and a review of the list during the past five years for the period 2008-2012 shows that on average the TAWC distribution system has seen an average of 472 main leaks during this period. The list was reviewed to determine which mains have experienced a high break history. The average number of breaks/mile for TAWC during this period was 0.36 breaks/mile. For this period, the mains selected for replacement have experienced an average number of breaks/mile of 14.6.

Q. CAN YOU PROVIDE AN EXAMPLE OF A SMALL DIAMETER WATER MAIN REPLACEMENT PROJECT?

A. Yes. A good example is 1400 Block of West 54th Street Project which involves the replacement of 300 lineal feet (LF) of six-inch cast iron water main with new six-inch ductile iron water main. This section of water main was a high priority replacement

project due to the main's failure rate of approximately 66 breaks/mile. The replacement of this piping not only eliminated a costly maintenance problem but also provided vastly improved the reliably for the area.

Q. WHAT WORK IS ASSOCIATED WITH LINE C?

A. This investment plan item includes the unscheduled replacement or restoration of existing water mains, including valves and other appurtenances that are necessary to perform the work.

Q. WHAT IS THE PROPOSED REPLACEMENT RATE FOR WATER MAIN REPLACEMENTS ASSOCIATED WITH THE UNSCHEDULED MAIN REPLACEMENTS OF LINE C?

A. TAWC has experienced an average of 472 main breaks during the period of 2008-2012. Historically TAWC has utilized repair bands and other temporary repair techniques to repair main that experienced unscheduled breaks with the understanding that these mains would be replaced in a short period of time. As the system continues to age this method of temporary repair resulted in a larger list of mains that needed repair in a timely manner. TAWC expects to conduct a more extensive repair in the future when unscheduled breaks occur and affect a more extensive repair by replacing sections of distressed main instead of installing a repair band to the affected area. TAWC plans to spend approximately $800,000 to replace various size water mains during unscheduled events. This is an increase over the average three year spend of $324,371 during the period of 2010 to 2012. TAWC believes by replacing sections of main that the existing main will be more stable and extend the life of the main allowing for a more concentrated effort for main replacements on mains that have a larger history of main breaks.

Q. WHAT WORK IS ASSOCIATED WITH LINE D?

A. This budget line includes the relocation of existing water mains, including valves and other appurtenances that are necessary to perform the work, as required by municipal or state agencies. These costs are not reimbursable.

Q. WHAT IS THE PROPOSED REPLACEMENT RATE FOR WATER MAIN REPLACEMENTS ASSOCIATED WITH LINE D?

A. TAWC plans to spend approximately $250,000 to replace various size water mains within the distribution system that is required by municipal or state agencies. This is based on the average spend of $241,494 during the period of 2009 and 2010. TAWC believes this relocation rate is more viable than the rate experienced during the two year average of $977,623 from 2011 to 2012. At this time TAWC is not aware of any major projects being proposed by municipal or state agencies that would require a large investment in relocated main.

Q. WHAT WORK IS ASSOCIATED WITH LINE F?

A. This line item includes the replacement of leaking, failed or obsolete hydrants, including hydrant assemblies and valves that are company funded

Q. WHAT IS THE PROPOSED REPLACEMENT SCHEDULE FOR HYDRANTS AND VALVES?

A. TAWC plans to spend approximately $365,034 to replace hydrants and valves. Of this amount, TAW plans to spend a majority of this amount on replacing 36 broken valves that have been found during the inspection of these valves over the past several years. As part of the 36 valves, 10 valves are classified as large valves and the estimate to replace these valves is $266,034. This is an increase in spend over the three year average of

$102,618 between 2009 to 2011 but is a continuation of the large valve replacement plan that was part of the $875,116 spent during 2012.

Q. WHAT WORK IS ASSOCIATED WITH LINE H?

A. This investment plan item includes the replacement of water services or improvements, including the replacement of corporation stops, or shut-off valves.

Q. WHAT IS THE PROPOSED REPLACEMENT SCHEDULE FOR SERVICES WITHIN LINE H?

A. TAWC plans to spend approximately $246,000 to replace lead and iron services during this period. Based on the average cost per service replacement of $1,640 TAWC will replace approximately 150 services. This is a decrease in the amount spent during 2012 of $407,667 because services previously scheduled in conjunction with scheduled main replacement projects are now budgeted along with the main replacement project in Item B, C or D. This amount is similar to the amount spent during 2011 of $219,605.

Q. WHAT IS THE WORK ASSOCIATED WITH LINE J?

A. This investment plan item includes the replacement or improvement of existing customer meters and meter settings with or without technology changes.

Q. WHAT IS THE PROPOSED REPLACEMENT SCHEDULE FOR METERS?

A. The total estimated meter replacement cost for the period is $663,078. Based upon an average cost of meter replacements of approximately $149 per meter, TAW will replace approximately 4,436 meters. This is consistent with the annual spending over the previous period of 2009 to 2011 of approximately $569,930. This is a decrease in the 2012 spending of $1,276,789 when TAWC replaced several large distribution meters to improve the accuracy of the amount of water supplied to the system.

Q. WHAT IS THE PROPOSED REPLACEMENT SCHEDULE FOR METER SETTINGS?

A. Although meter setting replacements are not specifically budgeted in the forecasted capital spending plan, it is anticipated the same rate of replacements will be necessary in the future to accommodate conditions found while making meter replacements. TAWC anticipates approximately 193 meter renewals will be accomplished during this period The costs for the meter setting replacements, estimated to be approximately $63,114, will be provided from the meter replacement budget.

Q. DISCUSS THE WORK ASSOCIATED WITH CAPITALIZED TANK REHABILITATION/ PAINTING INCLUDED WITH LINE R.

A. TAWC plans to spend approximately $450,000 to rehabilitate and paint one Aldrich Unit based on the cost estimated for the rehabilitation of Aldrich Units 7 and 8 obtained during 2013. This spend is comparable with the average amount of spend during the period of 2010 to 2012 of $448,695.

A. Q. WHAT IS THE WORK ASSOCIATED WITH THE WHITWELL INVESTMENT PROJECT?TAWC plans to spend approximately $1,200,000 to make improvements and add control equipment to the Whitwell System. The improvements will replace existing main in various locations that have caused operational difficulties or reduced the ability to provide reliable service to the customers. The majority of the spend will be used to install a supervisory control system that will allow for efficient operation of the system and ensure that the production and distribution of water meets the required regulatory requirements. A specific list of projects will be developed following a more exhaustive review of the system and analysis of the required improvements.

ECONOMIC DEVELOPMENT INVESTMENT PROGRAM

Q. DOES TAWC CURRENTLY PLAN FOR ECONOMIC DEVELOPMENT IN ITS SCEP?

A. Yes. TAWC has specific recurring project lines in its SCEP that support economic development efforts. The entire SCEP is reflected in Petitioner's Exhibit 2014 SCEP-BEO. These recurring project lines include new facilities that support new customers.

Q. WHAT ARE THE BUDGET LINES THAT ARE INCLUDED UNDER THE ECONOMIC DEVELOPMENT INVESTMENT PROGRAM?

A. The budget lines that are included in the Economic Development Investment Rider are Line A Mains New, Line E Hydrants and Valves New, Line G Services New, Line I Meters New. All of these budget lines support the economic development of the area and place the distribution system in a position to support new development and growth within the service area. In addition this area also includes a portion of Line O Vehicles for service vehicles that are expected to be converted or purchased with alternative fuel capabilities.

Q. WHAT WORK IS ASSOCIATED WITH LINE A?

A. This line item includes new water mains, valves, and other appurtenances that are necessary to perform the work that is funded by the TAWC, including upsizing of developer initiated extensions; Company initiated and funded new mains that are not related to immediate growth, such as new mains that eliminate existing dead ends or provide new transmission capacity; and new customer initiated extensions in accordance with tariffs that may include some customer contribution (customer funded portion under

Developer Initiated Projects). This item may also include new mains that parallel existing mains to increase transmission capacity, provide reliability, or establish an additional pressure gradient

Q. WHAT IS THE PROPOSED INVESTMENT ANTICIPATED FOR NEW WATER MAIN ASSOCIATED WITH LINE A?

A. TAWC plans to spend approximately $91,166 on various size water mains within the distribution system that is associated with eliminating dead ends or upsizing of developer initiated extensions. This is based on the 2012 investment amount of $116,244. This is higher than the average spending of $45,189 during the four year period of 2009 and 2012. TAWC believes the anticipated spend compared to 2012 is more relevant due to the economic challenges during 2009 to 2011 that reduced the amount of developer initiated projects across the system.

Q. WHAT WORK IS ASSOCIATED WITH LINE E?

This investment plan item includes the installation of new hydrants, including hydrant assemblies and valves that are installed on existing mains or installed in conjunction with main extension projects, which are company funded. This item generally includes all public hydrants.

Q. WHAT IS THE PROPOSED SCHEDULE FOR NEW HYDRANTS AND VALVES?

A. TAWC plans to spend approximately $42,797 on a combination of 19 new hydrants and valves. This is an increase in spend over the four year average of $25,041between 2009 to 2012. TAWC believes that with the improving economic health of the communities

served that the level of investment will increase to serve the growing economic development.

Q. WHAT WORK IS ASSOCIATED WITH LINE G?

A. This investment line item includes the installation of new water services or improvements, including corporation stops which are the valves that drill into the main to connect the service line to TAWC's water main and shut-off valves.

Q. WHAT IS THE PROPOSED SCHEDULE FOR NEW WATER SERVICES WITHIN LINE G?

A. TAWC plans to spend approximately $461,000 to install new services. Based on the average cost per service of $1,317 TAW will install approximately 350 services. This is a decrease in the amount spent during the four year period of 2009 to 2012 which had an average spend of $649,417, but similar to the 2011 spend of $545,133 and the 2012 spend of $469,321. TAWC believes that new water services will continue to lag the development of water mains due to the construction period needed to develop new lots that require new services

Q. WHAT IS THE WORK ASSOCIATED WITH LINE I?

A. This investment plan item includes the installation of new meters and meter settings.

Q. WHAT IS THE PROPOSED SCHEDULE FOR NEW METERS?

A. The total estimated meter replacement cost for the period is $562,415. Based upon an average cost of a new meter and setter of approximately $879 per meter and setter, TAW will install approximately 640 new meters and setters. This is consistent with the annual spending over the previous period of 2009 to 2012 of approximately $529,479 and an average installation of 649 meters.

Q. WHAT IS THE WORK ASSOCIATED WITH LINE O?

A. This investment line is for purchase or replacement of vehicles, including utility trucks, cars and light and medium trucks and accessories. In particular the portion of this line associated with the Economic Development Investment Program is for the conversion or purchase of alternative fuel vehicles.

Q. DISCUSS THE EXPECTED VEHICLES TO BE PURCHASED OR CONVERTED TO ALTERNATIVE FUELS INCLUDED WITH LINE O?

A. TAWC plans to spend approximately $95,573 on the purchase of fuel alternative vehicles and/or the conversion of vehicles as part of the overall investment of $382,293. TAWC plans to purchase ten new vehicles to replace existing vehicles that are reaching their expected life expectance or have seen an increase in maintenance cost. Of these ten vehicles, TAWC expects to purchase one to two vehicles with the capability to use alternative fuels such as Liquid Propane ("LP") or natural gas. In addition TAWC plans to convert four existing vehicles to be able to use LP.

SAFETY AND ENVIRONMENTAL COMPLIANCE RIDER

Q. DOES TAWC CURRENTLY PLAN FOR SAFETY AND ENVIRONMENTAL COMPLIANCE IN ITS SCEP?

A. Yes. There are recurring project lines that specifically address safety and environmental compliance. The entire 2014 SCEP is reflected in Exhibit 2014 SCEP – BEO.

Q. WHAT ARE THE BUDGET LINES THAT ARE INCLUDED UNDER THE SAFETY AND ENVIRONMENTAL COMPLIANCE RIDER?

A. The Recurring Project budget lines that are included in the Safety and Environmental Compliance Rider are Line L SCADA Equipment and Systems, Line M Security Equipment and Systems and Line Q Process Plant Facilities and Equipment. All of these budget lines support the improvement of safety and enhances the environmental compliance of the system.

Q. WHAT WORK IS ASSOCIATED WITH LINE L?

A. This investment item is for the installation or replacement of existing SCADA Equipment and Systems. The acronym SCADA can be defined in several slightly different ways, but TAWC generally prefers the definition as System Control and Data Acquisition, which is the computerized system for monitoring and operating the treatment plants and network facilities.

Q. WHAT IS THE PROPOSED INVESTMENT ANTICIPATED TO SCADA ASSOCIATED WITH LINE L?

A. TAWC plans to spend approximately $185,414 on various SCADA improvements throughout the system. A majority of the spend will be associated with the Programmable Logic Controller ("PLC") upgrade for the conventional filters. This improvement is approximately $173,414 of the total expected spend for this line. With this improvement it is expected to replace the existing computer control system with a more modern, robust system that is open architecture compared to the existing priority system. This investment is greater than the average spend of $42,423 from 2009 to 2012, but TAWC believes the PLC Upgrade of the conventional filters is import to ensure

reliable production of water and ensure the filters run efficiently and within environmental compliance.

Q. WHAT WORK IS ASSOCIATED WITH LINE M?

A. This investment item is a division for Security Equipment and Systems that is separate from generally office and Operation Center expenses. This may include fencing, alarm systems, cameras, barricades, electronic detection or locking systems, software, or other assets related directly to security.

Q. WHAT IS THE PROPOSED SCHEDULE FOR SECURITY EQUIPMENT AND SYSTEMS?

A. TAWC plans to spend approximately $130,000 on a combination of upgrades to existing security systems to improve the security of the existing facilities. These improvements allow TAWC to maintain its security system and follow the Homeland Security Directive 9 to *"develop robust, comprehensive, and fully coordinated surveillance and monitoring systems."* TAWC believes it is paramount to ensure that its facilities are monitored actively and these improvements will maintain the equipment and ensure current technology is employed to provide safe drinking water and protect its infrastructure.

Q. WHAT WORK IS ASSOCIATED WITH LINE Q?

A. This investment line item is for the new purchase or replacement of existing components of water supply, water treatment, water pumping, water storage, and water pressure regulation facilities, including associated building components and equipment. Replacements may be planned or made because of failure, or may include improvements.

Q. WHAT IS THE PROPOSED SCHEDULE FOR PROCESS PLANT FACILITIES AND EQUIPMENT IMPROVEMENTS WITHIN LINE Q?

A, TAWC plans to spend approximately $797,990 within the Process Plant Facilities and Equipment Improvements within Line Q. This level of investment is in line with the average spending of $847,604 over the period of 2009 to 2012. The investment level is based on the replacement of two high service motors to improve on power efficiency and the replacement of four conventional filter underdrain systems to ensure continued environmental compliance.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

STRATEGIC CAPITAL EXPENDITURE PLAN
PROGRAM

Business Unit Tennessee
Revision Date July 14, 2013
Description TN BP 2014-2018 SCEP

Business Unit	Business Unit No.	Project Title			2014	Period 1	2	3	4	5	6	7	8
		RECURRING PROJECTS											
Tennessee	**DV**	**Projects Funded by Others**			**$ 50,000**	**$ 80,000**	**$ 100,000**	**$ 140,000**	**$ 160,000**	**$ 180,000**	**$ 180,000**	**$ 160,000**
					112,757	**91,378**	**76,667**	**106,667**	**133,333**	**160,000**	**173,333**	**173,333**
Tennessee	A	Mains - New				-		8,000	15,000	20,000	20,000	15,000
Tennessee	B	Mains - Replaced / Restored				25,000	45,000	75,000	125,000	150,000	200,000	150,000	100,000
Tennessee	C	Mains - Unscheduled				62,000	80,000	95,000	36,000	50,000	80,000	85,000	80,000
Tennessee	D	Mains - Relocated				-	-	10,000	20,000	40,000	70,000	60,000	40,000
Tennessee	E	Hydrants, Valves, and Manholes - New				-	-	4,000	6,000	5,000	4,797	4,000	5,000
Tennessee	F	Hydrants, Valves, and Manholes - Replaced				5,000	15,000	30,000	40,000	45,000	65,000	53,034	40,000
Tennessee	G	Services and Laterals - New				19,660	22,880	32,880	36,270	46,270	59,490	32,880	29,490
Tennessee	H	Services and Laterals - Replaced				18,200	18,200	18,200	18,200	18,300	18,300	18,300	18,200
Tennessee	I	Meters - New				40,000	40,000	48,000	52,000	58,000	58,015	47,600	47,800
Tennessee	J	Meters - Replaced				45,000	45,000	60,385	60,385	60,385	60,385	60,385	60,385
Tennessee	K	ITS Equipment and Systems				-	5,000	10,000	15,000	10,000	5,000	15,000	20,000
Tennessee	L	SCADA Equipment and Systems				5,000	10,000	15,000	25,000	20,000	15,000	15,414	20,000
Tennessee	M	Security Equipment and Systems				10,833	10,833	10,833	10,833	10,833	10,833	10,833	10,833
Tennessee	N	Offices and Operations Centers				-	-	-	-	-	1,200	2,500	5,000
Tennessee	O	Vehicles				-	-	-	-	-	30,000	90,000	40,000
Tennessee	P	Tools and Equipment				-	-	-	-	3,360	7,000	10,000	5,000
Tennessee	Q	Process Plant Facilities and Equipment				37,500	37,500	75,000	75,000	75,000	75,000	85,000	85,000
Tennessee	R	Capitalized Tank Rehabilitation/Painting				10,000	50,000	120,000	70,000	20,000	5,000	5,000	15,000
Tennessee	S	Engineering Studies				10,000	15,554	15,000	10,000	10,000	5,000		
		Total Recurring Projects				-	-	-	-	-		-	-
		ACQUISITIONS											
Tennessee													
		Total Acquisitions				-	-	-	-	-	-	-	-
		CENTRALLY SPONSORED PROJECTS											
Tennessee	T26-0202	Business Transformation 2010 - 2014				39,782	38,775	38,699					
Tennessee	T26-0203	Business Transformation 2010 - 2014											
		Total Centrally Sponsored Projects			**$ 39,782**	**$ 38,775**	**$ 38,699**	-	-	-	-	-
				In Service									
		INVESTMENT PROJECTS	**Total**	**Date**									
Tennessee	I26-020016	Metershop Building Additions	1,300,000	12/31/16									
Tennessee	I26-020017	Electrical Motor Efficiency Enhancement ($2.9)	2,900,000	12/31/17									
Tennessee	I26-020019	Interconnects Adjacent Water UD ($0.6)	600,000	12/31/16									
Tennessee	I12-020024	Install New Hill City Pumps ($0.7)	700,000	12/31/17									
Tennessee	I26-020025	Install 5,700' of 16"- East Braine ($1.0)	1,000,000	12/31/16									
Tennessee	I26-020026	5800'-16" Main in Navajo Dr. ($1.0)	1,000,000	12/31/17									
Tennessee	I26-020027	Construct 1.0MG Tank & 2500-16" ER ($1.0)	-										
Tennessee	I26-020030	5933 lf of 20" Ringgold Rd. at I-75 ($2.1)	1,000,000	12/31/13									
Tennessee	I26-020031	Citico Plant Improvements Phase 1B ($8.6)	4,500,000	6/30/15						15,000	35,000	50,000	150,000
Tennessee	I26-020032	Wastewater Treatm't & Handling Impr ($4.5)	900,000	4/30/15		20,000	25,000	35,000	30,000	15,000	50,000	150,000	250,000
Tennessee	I26-020033	Convert ER Reservoir to Pump Storag ($0.25)	-										
Tennessee	I26-020034	3000'-24" Tennessee River Crossing ($0.5)	500,000	12/31/17									
Tennessee	I26-020035	Repl Lktout Mtn Pump #4 ($0.9)	900,000	12/31/16									
Tennessee	I26-020036	New Office Building	-										
Tennessee	I26-020022	Post Acquisition BD Capex	1,080,000			20,286	20,286	20,286	20,286	20,286	20,286	20,286	21,186
Tennessee		IP Project Unbudgeted Capital											
Tennessee		Whitwell Acquisition Capital Investment	1,200,000	12/31/14		20,000	40,000	40,000	60,000	80,000	120,000	150,000	180,000
		Total Investment Projects			**$ 60,286**	**$ 85,286**	**$ 95,286**	**$ 110,286**	**$ 130,286**	**$ 225,286**	**$ 370,286**	**$ 601,186**
		Total Investment and Centrally Sponsored Projects			**$ 100,068**	**$ 124,061**	**$ 133,985**	**$ 110,286**	**$ 130,286**	**$ 225,286**	**$ 370,286**	**$ 601,186**
		Contributions				(80,000)	(90,000)	(110,000)	(90,000)	(80,000)	(90,000)	(100,000)	(90,000)
		Advances				(20,000)	(20,000)	(30,000)	(40,000)	(50,000)	(50,000)	(40,000)	(35,000)
		Total Refunds				20,000	30,000	40,000	60,000	40,000	35,000	40,000	50,000
		Gross minus BT			**$ 110,286**	**$ 165,286**	**$ 195,286**	**$ 250,286**	**$ 290,286**	**$ 405,286**	**$ 550,286**	**$ 761,186**
						(80,000)	(80,000)	(100,000)	(70,000)	(90,000)	(105,000)	(100,000)	(75,000)
		Net minus BT			**$ 30,286**	**$ 85,286**	**$ 95,286**	**$ 180,286**	**$ 200,286**	**$ 300,286**	**$ 450,286**	**$ 686,186**

STRATEGIC CAPITAL EXPENDITURE PLAN
PROGRAM

Business Unit Tennessee
Revision Date July 14, 2013
Description TN BP 2014-2018 SCEP

Business Unit	Business Unit No.	Project Title	2014	Period 1	2	3	4	5	6	7	8
		Gross plus BT	**$ 150,068**	**$ 204,061**	**$ 233,985**	**$ 250,286**	**$ 290,286**	**$ 405,286**	**$ 550,286**	**$ 761,186**
				(80,000)	(80,000)	(100,000)	(70,000)	(90,000)	(105,000)	(100,000)	(75,000)
		Net plus BT	**$ 70,068**	**$ 124,061**	**$ 133,985**	**$ 180,286**	**$ 200,286**	**$ 300,286**	**$ 450,286**	**$ 686,186**

STRATEGIC CAPITAL EXPENDITURE PLAN
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Business Unit Tennessee
Revision Date July 14, 2013
Description TN BP 2014-2018 SCEP

Business Unit	Business Unit No.	Project Title	9	10	11	12	Total	U.S. $ 2014	Surcharge Category
		RECURRING PROJECTS							
Tennessee	**DV**	**Projects Funded by Others**	**$ 160,000**	**$ 140,000**	**$ 90,000**	**$ 60,000**	**$**	**1,500,000**	
			166,667	**153,333**	**130,000**	**96,667**			
Tennessee	A	Mains - New	10,000	3,166		-		91,166	EDI
Tennessee	B	Mains - Replaced / Restored	100,000	80,000	63,192	35,000		1,148,192	QIIP
Tennessee	C	Mains - Unscheduled	60,000	60,000	62,000	50,000		800,000	QIIP
Tennessee	D	Mains - Relocated	10,000		-	-		250,000	QIIP
Tennessee	E	Hydrants, Valves, and Manholes - New	6,000	5,000	3,000	-		42,797	EDI
Tennessee	F	Hydrants, Valves, and Manholes - Replaced	30,000	25,000	10,000	7,000		365,034	QIIP
Tennessee	G	Services and Laterals - New	26,270	36,270	62,710	55,930		461,000	EDI
Tennessee	H	Services and Laterals - Replaced	18,200	27,300	27,300	27,300		246,000	QIIP
Tennessee	I	Meters - New	46,000	45,000	40,000	40,000		562,415	EDI
Tennessee	J	Meters - Replaced	60,384	60,384	45,000	45,000		663,078	QIIP
Tennessee	K	IT5 Equipment and Systems	28,662	25,000	10,000	5,000		148,662	
Tennessee	L	SCADA Equipment and Systems	25,000	20,000	10,000	5,000		185,414	SEC
Tennessee	M	Security Equipment and Systems	10,833	10,833	10,833	10,833		130,000	SEC
Tennessee	N	Offices and Operations Centers	5,000	5,000	2,500	1,800		23,000	
Tennessee	O	Vehicles	25,000	106,293	50,000	41,000		382,293	EDI
Tennessee	P	Tools and Equipment	2,500	1,663				29,523	
Tennessee	Q	Process Plant Facilities and Equipment	85,000	75,000	55,490	37,500		797,990	SEC
Tennessee	R	Capitalized Tank Rehabilitation/Painting	20,000	40,000	65,000	30,000		450,000	QIIP
Tennessee	S	Engineering Studies						65,554	
		Total Recurring Projects	-	-	-	-	**$**	**6,842,118**	
		ACQUISITIONS							
Tennessee								-	
		Total Acquisitions	-	-	-	-		-	
		CENTRALLY SPONSORED PROJECTS							
Tennessee	T26-0202	Business Transformation 2010 - 2014			-	-		117,256	
Tennessee	T26-0203	Business Transformation 2010 - 2014							
		Total Centrally Sponsored Projects	-	-	-	-	**$**	**117,256**	
		INVESTMENT PROJECTS							
Tennessee	I26-020016	Metershop Building Additions						-	
Tennessee	I26-020017	Electrical Motor Efficiency Enhancement ($2.9)						-	
Tennessee	I26-020019	Interconnects Adjacent Water UD ($0.6)						-	
Tennessee	I12-020024	Install New Hill City Pumps ($0.7)				-		-	SEC
Tennessee	I26-020025	Install 5,700' of 16"- East Braine ($1.0)						-	
Tennessee	I26-020026	5800'-16" Main in Navajo Dr. ($1.0)						-	
Tennessee	I26-020027	Construct 1.0MG Tank & 2500-16" ER ($1.0)						-	
Tennessee	I26-020030	5933 lf of 20" Ringgold Rd. at I-75 ($2.1)						-	
Tennessee	I26-020031	Citico Plant Improvements Phase 1B ($8.6)	450,000	650,000	750,000	900,000		3,000,000	SEC
Tennessee	I26-020032	Wastewater Treatm't & Handling Impr ($4.5)	500,000	450,000	350,000	125,000		2,000,000	SEC
Tennessee	I26-020033	Convert ER Reservoir to Pump Storag ($0.25)						-	
Tennessee	I26-020034	3000'-24" Tennessee River Crossing ($0.5)						-	EDI
Tennessee	I26-020035	Repl Uktout Mtn Pump #4 ($0.9)						-	QIIP
Tennessee	I26-020036	New Office Building						-	
Tennessee	I26-020022	Post Acquisition BD Capex	21,261	18,726	18,726	18,725		240,626	
Tennessee		IP Project Unbudgeted Capital						-	
Tennessee		Whitwell Acquisition Capital Investment	200,000	150,000	120,000	40,000		1,200,000	QIIP
		Total Investment Projects	**$ 1,171,261**	**$ 1,268,726**	**$ 1,238,726**	**$ 1,083,725**	**$**	**6,440,626**	
		Total Investment and Centrally Sponsored Projec	**$ 1,171,261**	**$ 1,268,726**	**$ 1,238,726**	**$ 1,083,725**	**$**	**6,557,882**	
		Contributions	(80,000)	(70,000)	(60,000)	(60,000)		(1,000,000)	
		Advances	(35,000)	(30,000)	(30,000)	(20,000)		(400,000)	
		Total Refunds	60,000	50,000	40,000	35,000		500,000	
								-	
		Gross minus BT	**$ 1,331,261**	**$ 1,408,726**	**$ 1,328,726**	**$ 1,143,725**	**$**	**14,782,744**	
			(55,000)	(50,000)	(50,000)	(45,000)		(900,000)	
		Net minus BT	**$ 1,276,261**	**$ 1,358,726**	**$ 1,278,726**	**$ 1,098,725**	**$**	**13,882,744**	

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Business Unit Tennessee
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Business Unit	Business Unit No.	Project Title		9	10	11	12	U.S. $ Total 2014	Surcharge Category
			Gross plus BT	$ 1,331,261	$ 1,408,726	$ 1,328,726	$ 1,143,725	$ 14,900,000	
				(55,000)	(50,000)	(50,000)	(45,000)	(900,000)	
			Net plus BT	$ 1,276,261	$ 1,358,726	$ 1,278,726	$ 1,098,725	$ 14,000,000	