PETITIONER'S EXHIBIT BEO-1

TENNESSEE-AMERICAN WATER COMPANY, INC

CASE NO. 17-_____

DIRECT TESTIMONY

OF

BRENT E O'NEILL, P.E.

ON

CHANGES TO THE QUALIFIED INFRASTRUCTURE INVESTMENT PROGRAM RIDER, THE ECONOMIC DEVELOPMENT INVESTMENT RIDERS, AND THE SAFETY AND ENVIRONMENTAL COMPLIANCE RIDER AND IN SUPPORT OF THE CALCULATION OF THE 2017 CAPITAL RIDERS RECONCILIATION

SPONSORING PETITIONER'S EXHIBIT:

PETITIONER'S EXHIBIT 2016 SCEP RESULTS - 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", "Tennessee American", or "Company") and Kentucky American Water Company ("KAWC" or "Kentucky American").

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

A. Yes. I provided both written and oral testimony before the Tennessee Regulatory Authority ("TRA" or "Authority") in TRA Docket Nos. 14-00121, 15-00029, 15-00111, 16-00022, and I've provided written testimony in TRA Docket No. 16-00126. I have also provided written testimony in support of Kentucky American with the Kentucky Public Service Commission.

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 a registered Professional Engineer in the State of Tennessee, Commonwealth of Kentucky, State of Illinois and State of 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 in a joint project with Thames Water. In 2006, I became the ILAWC Project Manager for the construction of a new 15 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 portions Illinois. 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) and American Society of Civil Engineers (ASCE).

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. I am located in Kentucky, but work closely with the staff in Tennessee.

Q. WHAT TOPICS WILL YOUR TESTIMONY ADDRESS?

A. I will discuss the process for determining TAWC's capital investment plan, the oversight for expenditures and changes to the plan, the level of capital expenditures for 2016, and variances from the projected amounts in Docket No. 15-00111.

Q. ARE YOU SPONSORING ANY EXHIBITS?

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

Petitioner's Exhibit – 2016 SCEP Results – BEO

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

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

A. Yes.

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

A. The data used to prepare the exhibits was acquired from the books of account and business records of Tennessee American, the officers and associates of Tennessee American with knowledge of the facts based on their job responsibilities and activities, and other internal sources which I examined in the course of my investigation of the matters addressed in this testimony. The accounting data set forth in this exhibit and in this filing is reflected in the Company's General Ledger, or have been reconciled from the Company's General.

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. DOES THE PETITIONER'S EXHIBIT LISTED ABOVE ACCURATELY SUMMARIZE SUCH DATA AND THE RESULTS OF ANALYSIS USING SUCH DATA?

A. Yes, it does.

Q. CAN YOU DESCRIBE THE PROCESS FOR DETERMINING THE CAPITAL INVESTMENT PLAN?

A. Yes. The Company's capital investment plan 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.

Purchase of tools, furniture, equipment, and vehicles are based on needs. Each item is reviewed independently and an itemized list of expenditures is prepared. Estimates are made based on current year pricing.

The major project needs are developed from the Comprehensive Planning Study that identifies major improvements needed to ensure safe, dependable and reliable

operations of the facilities and allows the facilities to meet the regulatory requirements for the production and distribution of safe and reliable drinking water. The projects identified within the study are prioritized for importance and are placed in the budgets based on the available capital remaining after the determination of the needed capital for the recurring construction needs described above.

Q. CAN YOU DESCRIBE HOW THE CONSTRUCTION BUDGET IS MONITORED DURING THE YEAR?

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 meets monthly. 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. Discussions are held on variances to budgets that include the reason for the variance and suggestions to bring the budget lines back in line with the approved budget.

If changes in the budgets are required due to changes in priorities or unexpected expenditures, then the CIMC reviews the request for changes and approves the movement of available capital from other budget lines to offset the changes in the capital spend. 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 projects, while providing oversight on capital expenditures.

As an added level of coordination, a Functional Sign-Off ("FSO") Committee meets monthly to sign-off on projects and to review spending. This committee includes the TAWC Operations Manager, the TAWC Engineering Project Manager, 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 the approval process, 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 as compared to the approved budget and spending plan.

Both of these committees allow a continuous review of capital expenditures as unexpected projects arise or the need to adjust projects to offset delays in other projects. The use of the CIMC and FSO processes allows TAWC to immediately address an increase or decrease in projected spending in each line and make appropriate adjustments to maintain the overall capital spend.

Q. HOW DOES TAWC HIRE CONTRACTORS?

A. 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. American Water Works (AWW) 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. ARE YOU FAMILIAR WITH THE FACILITIES AND ENGINEERING OPERATIONS OF THE COMPANY IN EACH OF ITS SERVICE AREAS?

A. Yes.

Q. WHAT CONTROLS ARE IN PLACE TO REVIEW THE PROGRESS OF A PROJECT?

A. The CIMC and FSO meetings described above are used to oversee the progress of projects from inception to completion. Along with review of the capital expenditures, the committee also reviews the requirements of an investment project and ensure that the projects meet the business need for expenditure and usefulness. 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 and FSO Committees.

Q. WHAT CONTROLS ARE IN PLACE TO MAKE SURE PROPOSED PROJECTS ARE IN THE PUBLIC INTEREST?

A. Through the budgeting and planning processes a broad and comprehensive review of facility needs is conducted to establish a general guide for needed improvements over a short-term horizon. These improvements are prioritized by TAWC to allow it 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.

Q. OVERALL, HOW DID TAWC DO WITH REGARD TO ITS CONSTRUCTION BUDGET COMPARED TO ACTUAL EXPENDITURES?

A. For 2016, TAWC ended the year with a net capital expenditures of $15,815,605 compared to an approved budget of $14,387,751, resulting in an overspend of $1,428,982 or 9.9% to the budget. This is reflected on the exhibit attached to my testimony, **Petitioner's Exhibit 2016 SCEP Results – BEO.**

Q. HOW DID TAWC PERFORM WITH REGARD TO ITS ACTUAL EXPENDITURES COMPARED TO THE BUDGETED CAPITAL EXPENDITURES FOR THE QIIP RIDER AND PROVIDE DETAIL OF ANY VARIANCES?

B. The 2016 QIIP Rider expected spend was projected at $9,924,427 with an actual spend of $10,474,503 or 5.5% over the Budget Capital Expenditures. The major variance within the QIIP Rider was additional costs associated with the Line C Mains – Unscheduled. More specifically, on April 4, 2016 the 30-inch concrete main under the Tennessee River ruptured unexpectedly, which resulted in TAWC isolating the main for approximately two weeks to allow it to insert a new 24-inch High Density Polyethylene (HDPE) pipe using the ruptured 30-inch main as a sleeve for the new main. During the non-operability or temporary loss of the 30-inch main, TAWC relied on the existing 16-inch steel main and made emergency provisions to ensure service to the area north of the Tennessee River. The project to insert the 24-inch HDPE pipe resulted in an overall unscheduled cost of $801,026 and was not included in the original 2016 budget for Line C Mains – Relocated. In addition, TAWC experienced a larger amount of main breaks during the latter part of the year that was associated with the dry conditions. This also contributed to the Line C Mains – Relocated being $1,361,368 over the original budget and was the significant reason for the variance within the QIIP Rider. These developments caused

TAWC to review other projects within the QIIP Rider to determine if adjustments could be made and implemented some cost savings in order to limit the impact of the 24-inch HDPE pipe and additional work associated with the main breaks.

Q. HOW DID TAWC DO WITH REGARD TO ITS ACTUAL EXPENDITURES COMPARED TO THE BUDGETED CAPITAL EXPENDITURES FOR THE EDI RIDER AND PROVIDE DETAIL OF ANY VARIANCES?

A. The EDI expected spend was projected at $270,000 with an actual spend of $148,761 or 45% under the projected Budget Capital Expenditures. The under spend was mostly due to an actual spend of $76,549 compared to the budget amount of $220,000 in the Line A – Mains-New. TAWC completed the installation of 1,454 lineal feet of 12-inch main along Camp Jordan Parkway but did not received any requests for any additional projects during 2016.

Q. HOW DID TAWC PERFORM WITH REGARD TO ITS ACTUAL EXPENDITURES COMPARED TO THE BUDGETED CAPITAL EXPENDITURES FOR THE SEC RIDER AND PROVIDE DETAIL OF ANY VARIANCES?

A. The SEC expected spend was projected at $1,435,000 with an actual spend of $2,317,122 or 61.5% over projected. The major variance in the SEC Rider was caused by carry over capital spend in 2016 for the CITICO Wastewater Treatment and Handling Improvements due to delays in construction during 2014 that resulted in $546,286 of additional spend in 2016 that was originally budgeted in 2015[1]. The contractor experienced construction delays in 2014 due to additional construction time to remove

[1] Additional details of the CITICO Wastewater Treatment and Handling Improvements project are outlined in my Direct Testimony in TRA Docket No. 14-00121 (Oct. 29, 2014)

the abandoned clearwell structure under the construction site and uncovering unstable soil conditions that resulted in the need for additional excavation and the addition of compacted fill material. These delays caused the project to spend less than budgeted in 2014 moving the spend of capital dollars to 2015 and 2016 as the contractor worked to completed the project. The project was placed in service toward the end of 2015 with a total addition cost of $15,401,897. The capital spend during 2016 was to complete the project cleanup and paving associated with the project and to allow some minor work to ensure efficient operation of the facility.

Along with the carryover spend of the CITICO Wastewater Treatment and Handling Improvements project, spending on the Line Q – Process Plant Facilities and Equipment was greater than originally budgeted due to unexpected projects that arose at the end of 2016. The actual spend for Line Q – Process Plant Facilities and Equipment was $1,458,160 compared to the original budget of $975,000. The additional spend for Line Q was due to the initiation of the replacement of the Suck Creek Pressure Filters upon their failure during the year and work to replace the motor control equipment on Low Service Pump 12. Both of these projects were in response to safety concerns with the existing pieces of equipment and initiated spending 2016 but will not be placed into service until 2017.

Q. WERE THESE VARIANCES IN ACTUAL EXPENDITURES COMPARED TO THE BUDGETED CAPITAL EXPENDITURES REVIEWED DURING THE YEAR?

A. Yes. TAWC was able to make adjustments in construction spending throughout the year by the use of the FSO and CIMC processes to manage emerging project to reduce the

overall impact to the original budget. TAWC was able to offset unexpected spend of the Line C – Mains-Unscheduled by approximately $811,292 so that the overall QIIP overage was 105.5% of the original budget. Without the management through the FSO and CIMC processes, the QIIP lines collectively could have been 13.7% above the budgeted amount.

Q. CAN YOU PROVIDE SPECIFIC INFORMATION ABOUT THE ACTUAL CAPITAL EXPENDITURES COMPARED TO THE BUDGETED CAPITAL EXPENDITURES?

A. Yes. I have attached to my testimony an exhibit that provides a comparison of the 2016 Strategic Capital Expenditures Plan with Actual Capital Expenditures by recurring project lines and investment project lines. This exhibit is labelled as **Petitioner's Exhibit 2016 SCEP Results – BEO.**

Q. WHY ARE CERTAIN PROJECTS SOMETIMES DELAYED AND CHANGES OCCUR IN THE ACTUAL CAPITAL EXPENDITURES COMPARED TO THE BUDGETED EXPENDITURES?

A. During any given year, unexpected changes in priorities may occur due to outside influences, or recognition of unfavorable trends, that are occurring and affect the infrastructure or ability to serve the customer. The majority of such unexpected changes are caused by conflicts between the company's infrastructure and outside agencies' projects or changes that occur in the community that effect the schedule or scope of a planned project. In both of these cases, a previously unbudgeted new project is initiated to address the need or an existing project effort is increased or decreased. Since these changes were not identified during the original budgeting process, the need to offset the

new efforts expected cost is required to ensure that the overall company budget is maintained. As a result, projects that were originally identified within the budget are changed or delayed to make room for the new, unexpected projects or a change in an existing project.

Q. WHAT IS THE PROCESS FOR APPROVING THESE CHANGES?

A. Throughout the year, TAWC actively manages each budget line to ensure that the overall spending is consistent with the approved budget levels. The management of the budget lines is carried out during monthly Capital Investment Management Committee ("CIMC") meetings that compare the current capital expenditures to the budged levels. If changes in the budgets are required due to changes in priorities or unexpected changes in projects, the committee reviews the need for the changes and approves or disapproves, as the case may be, the movement of available capital from other budget lines to offset the changes in capital spend and maintain the overall projected spend for the year.

Q. CAN YOU PROVIDE THE OVERALL AMOUNT OF IN SERVICE PLANT FOR 2016?

A. With regard to the Capital Recovery Riders and the projected level of expenditures compared to those projects that were implemented and placed in service, the overall variance with projects placed in service compared with the projected spend for all three riders was 8.6% under expected average year to date spend. This is the cumulative plant additions, and is reflected on Line 6 **Petitioner's Exhibit Capital Riders Reconciliation—LCB** attached to Ms. Bridwell's Direct Testimony.

The major reason for the variance is the unexpected rupture of the 30-inch concrete main under the Tennessee River on April 4, 2016, which resulted in TAWC

isolating the main for approximately two weeks to allow it to insert an emergency 24-inch High Density Polyethylene (HDPE) pipe. The work papers filed in this Petition provide the detailed information regarding the projects that were implemented and placed in service during 2016 for each of the Capital Recovery Riders.

Q. WHY WAS THE 24-INCH HIGH DENSITY POLYETHYLENE PIPE INCLUDED IN THE QIIP RIDER?

A. The area north of the Tennessee River was supplied through what was a 30-inch main and a 16-inch main crossing the river. The 30-inch concrete main was installed in 1965 under the river extending directly north from the Citico Water Treatment Plant. The 16-inch steel main is located below the Walnut Street Bridge and was installed in 1948. Together the 30-inch concrete pipe and the 16-inch steel pipe had a capacity of 21.5 MGD at a flow rate of 5 feet per second. With the installation of the 24-inch High Density Polyethylene (HDPE) pipe, TAWC was able to restore service to the area north of the Tennessee River within a two-week period and reduce the impact to the customers within the area north of the Tennessee River.

TAWC included the 24-inch HDPE pipe in the QIIP because it was a new pipe and has a life expectancy of approximately 80 years and is replacing a portion of the capacity of the 30-inch main. TAWC inserted the new 24-inch HDPE through the original 30-inch pipe to accelerate the restoration of service to the area north of the Tennessee River. TAWC further anticipates that the new 24-inch HDPE will be an integral asset in providing service to its customers north of the Tennessee River along with the proposed new river crossing being constructed during 2017. These two crossings will provide an important redundant feed to the north side of the river and

prepares the system when the aging 16-inch steel pipe hung below Walnut Street Bridge needs to be retired in the next 2 to 12 years as it reaches its life expectancy of between 70 and 80 years.

Q. HOW MUCH CAPACITY WAS LOST AS A RESULT OF THE USE OF THE 24-INCH HDPE PIPE?

A. With the insertion of the 24-inch HDPE pipe within the 30-inch concrete pipe, the capacity was reduced to approximately 10.8 MGD at a flow rate of 5 feet per second, or a loss of approximately 34.5 % capacity.

Q. WILL THIS LOSS OF CAPACITY IMPACT THE AREA NORTH OF THE TENNESSEE RIVER?

A. Currently, the 16-inch steel pipe and the inserted 24-inch HDPE are sufficient to provide for the demands experienced by the area north of the Tennessee River. However, if any disruption is experienced on either existing main, the ability for TAWC to sufficiently serve the area is significantly impacted. TAWC will address that with the installation of a third river crossing. TAWC will be able to ensure reliable service to the area north of the river and ensure that it can provide an adequate supply into the future when the 16-inch steel pipe needs to be retired.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

CAPITAL EXPENDITURE PLAN
Actual to Budget
Tennessee 2016
Units = $

Project Code	Brief Description of Proposed Expenditures	Rider	Year to Date Actual (4)	Year to Date Original Budget (3)	Year to Date Original Variance (4-3)
DV	Projects Funded by Others (Contrib. /Adv./ Refunds)	None	593,398	800,000	(206,602)
A	Mains - New	EDI	76,549	220,000	(143,451)
B	Mains - Replaced / Restored	QIIP	687,213	830,500	(143,287)
C	Mains - Unscheduled	QIIP	2,281,368	920,000	1,361,368
D	Mains - Relocated	QIIP	256,354	250,000	6,354
E	Hydrants, Valves, and Manholes - New	EDI	72,212	50,000	22,212
F	Hydrants, Valves, and Manholes - Replaced	QIIP	118,668	270,000	(151,332)
G	Services and Laterals - New	-	830,866	521,800	309,066
H	Services and Laterals - Replaced	QIIP	414,906	250,000	164,906
I	Meters - New	-	222,151	194,900	27,251
J	Meters - Replaced	QIIP	868,404	753,930	114,474
K1	ITS Equipment and Systems	-	37,159	147,678	(110,519)
K3	ITS CS Projects	-	940,520	890,946	49,574
L	SCADA Equipment and Systems	SEC	211,320	260,000	(48,680)
M	Security Equipment and Systems	SEC	101,356	200,000	(98,644)
N	Offices and Operations Centers	-	8,983	40,000	(31,017)
O	Vehicles	-	400,818	333,000	67,818
P	Tools and Equipment	-	87,888	60,000	27,888
Q	Process Plant Facilities and Equipment	SEC	1,458,160	975,000	483,160
R	Capitalized Tank Rehabilitation / Painting	QIIP	(898,525)	0	(898,525)
S	Engineering Studies		69,044	0	69,044
	TOTAL RECURRING PROJECTS DV - S		**8,838,812**	**7,967,754**	**871,058**
	TOTAL RECURRING PROJECTS A - S		**8,245,414**	**7,167,754**	**1,077,660**
I26-020028	Citico Plant Improvements Phase 1B	QIIP	6,746,115	6,649,997	96,118
I26-020032	Wastewater Treatm't & Handling Impr	SEC	546,286	0	546,286
I26-020038	Retire Basin 1		0	300,000	(300,000)
I26-000002	Post Acquisition BD Capex		186	60,000	(59,814)
	TOTAL INVESTMENT PROJECTS		**7,292,587**	**7,009,997**	**282,590**
	Indirect Overhead Clearing Accounts Charges		(1,128)	0	(1,128)
	TOTAL GROSS		**16,130,271**	**14,977,751**	**1,152,520**
	Contributions		(162,326)	(240,000)	77,674
	Advances		(476,114)	(700,000)	223,886
	Refunds		323,774	350,000	(26,226)
	Net Advances, Refunds, and Contributions		**(314,666)**	**(590,000)**	**275,334**
	Net US GAAP		**15,815,605**	**14,387,751**	**1,428,982**

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 be as set forth in his pre-filed testimony in this matter.

Brent E. O'Neill

Sworn to and subscribed before me
this 28th day of February, 2017.

Peggy A. Slone
Notary Public

My Commission Expires: 10/3/2020

Peggy A. Slone
Notary Public, ID No. 564370
State at Large, Kentucky
My Commission Expires on Oct. 3, 2020