

TENNESSEE-AMERICAN WATER COMPANY, INC

CASE NO. 18-x

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 2018 CAPITAL RIDERS RECONCILIATION**

SPONSORING PETITIONER'S EXHIBIT:

PETITIONER'S EXHIBIT 2017 SCEP RESULTS - BEO

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

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

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

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

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

10 A. Yes. I have previously provided written and oral testimony before the Tennessee Public
11 Utility Commission ("TPUC" or "Commission") in the past. I have also provided written
12 testimony before the Kentucky Public Service Commission.

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

15 A. I received a B.S. degree in Civil Engineering from the University of Illinois in Urbana,
16 Illinois in 1991. I completed a Masters of Business Administration from Eastern Illinois
17 University in Charleston, Illinois in 2002. I am a registered Professional Engineer in the
18 State of Tennessee, Commonwealth of Kentucky, State of Illinois and State of Iowa.

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

1 2005, I accepted the position of Senior Asset Manager with AWW and worked in
2 Reading, England in a joint project with Thames Water. In 2006, I became the ILAWC
3 Project Manager for the construction of a new 15 MGD ground water softening treatment
4 plant, wells, and transmission main in Champaign, Illinois. In March 2008, I became the
5 Engineering Manager Capital Delivery with ILAWC with responsibilities for the delivery
6 of capital projects for the Central and Southern portions Illinois. In April 2013, I
7 accepted my current position as Director of Engineering for Tennessee American Water
8 Company and Kentucky American Water Company with the Service Company. I am an
9 active member of the American Water Works Association (AWWA) and American
10 Society of Civil Engineers (ASCE).

11 **Q. WHAT ARE YOUR DUTIES AS DIRECTOR OF ENGINEERING?**

12 A. I am responsible for the coordination of the Engineering Departments for both TAWC
13 and KAWC, which includes the planning, development, and implementation of all
14 aspects of construction projects. This includes working with all new main extensions and
15 developers, replacement mains, water treatment plant upgrades, new construction and
16 network facilities improvements. I coordinate technical assistance to all other company
17 departments as needed and oversee the capital budget development and implementation.
18 I report to the Presidents of TAWC and KAWC. I am located in Kentucky, but work
19 closely with the staff in Tennessee.

20 **Q. WHAT TOPICS WILL YOUR TESTIMONY ADDRESS?**

21 A. I will discuss the process for determining TAWC's capital investment plan, the oversight
22 for expenditures and changes to the plan, the level of capital expenditures for 2017, and
23 variances from the projected amounts in Docket No. 16-00126.

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

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

3 **Petitioner's Exhibit – 2017 SCEP Results - BEO**
4

5 I will discuss this exhibit in further detail in my testimony below.

6 **Q. WAS THE PETITIONER'S EXHIBIT LISTED ABOVE PREPARED BY YOU OR**
7 **UNDER YOUR DIRECTION AND SUPERVISION?**

8 A. Yes.

9 **Q. WHAT WERE THE SOURCES OF THE DATA USED TO PREPARE THE**
10 **PETITIONER'S EXHIBIT LISTED ABOVE?**

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

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

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

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

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

9 The major project needs are developed from the Comprehensive Planning Study
10 that identifies major improvements needed to ensure safe, dependable and reliable
11 operations of the facilities and allows the facilities to meet the regulatory requirements
12 for the production and distribution of drinking water. The projects identified within the
13 study are prioritized for importance and are placed in the budgets based on the available
14 capital remaining after the determination of the needed capital for the recurring
15 construction needs described above.

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

18 A. Since 2003, the entire American Water system has used a process for the development
19 and review of capital expenditures that has incorporated industry best practices. TAWC,
20 like its sister companies, has benefitted from that process. The process includes a
21 regional Capital Investment Management Committee (“CIMC”) to ensure capital
22 expenditure plans meet the strategic intent of the business, which intent includes
23 introduction of new technologies that result in efficiencies. In turn, this ensures that

1 capital expenditure plans are integrated with operating expense plans, and provides more
2 effective controls on budgets and individual capital projects.

3 The CIMC includes the TAWC President, TAWC Operations Manager, TAWC
4 Engineering Project Manager, TAWC Financial Analyst, and TAWC Operations
5 Specialist. The CIMC meets monthly. The CIMC receives capital expenditure plans
6 from project managers and evaluates them as required by the process. Once budgets are
7 approved, the CIMC meets monthly to review capital expenditures compared to budgeted
8 levels. Discussions are held on variances to budgets that include the reason for the
9 variance and suggestions to bring the budget lines back in line with the approved budget.

10 If changes in the budgets are required due to changes in priorities or unexpected
11 expenditures, then the CIMC reviews the request for changes and approves the movement
12 of available capital from other budget lines to offset the changes in the capital spend. All
13 projects, including normal recurring items, have an identified project manager
14 responsible for processing the stages of the project. The focus of the CIMC, along with
15 the monthly meetings, has allowed TAWC to be more flexible with changes that
16 inevitably occur during the course of implementation of projects while providing
17 oversight on capital expenditures.

18 As an added level of coordination, a Functional Sign-Off (“FSO”) Committee
19 meets monthly to sign-off on projects and review spending. This committee includes the
20 TAWC Operations Manager, the TAWC Engineering Project Manager, TAWC
21 Operations Specialist and the appropriate Distribution and Operations supervisors and
22 project managers. The purpose of the committee is to review projects that are moving
23 forward in the next step of approval, or that require a change. This allows the project

1 manager and operational area supervisors to communicate about the project on a monthly
2 basis and help coordinate projects from initial development through in-service as
3 compared to the approved budget and spending plan.

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

9 **Q. HOW DOES TAWC HIRE CONTRACTORS?**

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

22 **Q. ARE YOU FAMILIAR WITH THE FACILITIES AND ENGINEERING**
23 **OPERATIONS OF THE COMPANY IN EACH OF ITS SERVICE AREAS?**

24 A. Yes.

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

3 A. The CIMC and FSO meetings described above are used to oversee the progress of
4 projects from inception to completion. Along with the review of the capital expenditures,
5 the committee also reviews the requirements of an investment project and ensure that the
6 projects meet the business need for expenditure and usefulness. The process includes
7 five stages of project review: 1) a Preliminary Need Identification defining the project at
8 an early stage; 2) a Project Implementation Proposal that confirms all aspects of the
9 project are in a position to begin work; 3) Project Change Requests, if needed (if the cost
10 changes more than 5% or \$100,000); 4) a Post Project Review; and 5) Asset
11 Management. TAWC personnel handle all of the stages, with oversight by the CIMC and
12 FSO Committees.

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

15 A. Through the budgeting and planning process a broad and comprehensive review of
16 facility needs is conducted to establish a general guide for needed improvements over a
17 short-term horizon. These improvements are prioritized by TAWC to allow it to:
18 provide safe, adequate, and reliable service to its customers to meet their domestic,
19 commercial, and industrial needs; provide flows adequate for fire protection; satisfy all
20 regulatory requirements; and enhance economic growth. The plan provides a general
21 scope of each project along with a preliminary design. The criteria for evaluating the
22 various system improvements are engineering requirements; consideration of national,

1 state, and local trends; environmental impact evaluations; and water resource
2 management.

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

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

10 A. For 2017, TAWC ended the year with a net capital expenditures of \$17,614,346
11 compared to an approved budget of \$16,012,925 resulting in a total capital expenditure
12 spend of \$1,601,421 or 10.0% over the originally approved budget.

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

17 A. The 2017 QIIP Rider expected spend was projected at \$9,799,207 with an actual spend of
18 \$11,283,753. A portion of the spend was offset by a reimbursement of \$1,325,412 from
19 the Tennessee Department of Transportation associated with the widening of East
20 Brainerd Drive. This resulted in an overall spend of \$9,958,341 for 2017 or 1.6% over
21 the Budget Capital Expenditures.

1 **Q. WERE THERE MAJOR CHANGES IN THE PROJECTED WORK THAT WAS**
2 **ORIGINALLY BUDGETED FOR THE QIIP RIDER?**

3 A. Yes. TAWC had included the Tennessee River Transmission Main Crossing Project
4 under the Qualified Infrastructure Investment Program because it believed that the project
5 would be placed in service during 2017. Delays in the project resulted in the project not
6 making sufficient progress to be placed in service during 2017.

7 **Q. WHAT TYPE OF DELAYS WERE EXPERIENCED?**

8 A. The long lead time item for any river crossing project that crosses over or under
9 waterways controlled by the Tennessee Valley Authority (TVA) is a 26A Permit. A 26A
10 permit is associated with the Tennessee Valley Authority Act of 1933, which provides
11 authority to the TVA related to the unified conservation and development of the
12 Tennessee River Valley and surrounding area and directs that property in TVA's custody
13 be used to promote the Act's purposes. In particular, section 26A of the Act requires that
14 TVA's approval be obtained prior to the construction, operation, or maintenance of any
15 dam, appurtenant works, or other obstruction affecting navigation, flood control, or
16 public lands or reservations along or in the Tennessee River or any of its tributaries.

17 Initial conversations with TVA indicated that a full permit would not be required for the
18 crossing and a 'no objection' letter would be issued. However, following further
19 development of the project plans and subsequent communications, the TVA ultimately
20 decided a full permit would be required. This involved an extensive archeological and
21 endangered species study of the proposed route. TVA develops the scope of these studies
22 and an extensive amount of time is needed to complete the studies and then receive

1 decisions from TVA. Given the scope of the permit requirements, it was decided to
2 complete the permitting in 2017 and defer construction to 2018.

3 **Q. WHEN DID THE DELAY IN TENNESSEE RIVER TRANSMISSION MAIN**
4 **CROSSING PROJECT BECOME APPARENT?**

5 A. Clarification of the required permit was received during April and further analysis of the
6 project schedule indicated that the time needed to obtain the 26A Permit would limit the
7 amount of construction that could take place in 2017.

8 **Q. WHAT IMPACT DID THIS HAVE ON THE QIIP RIDER AT THE TIME OF**
9 **THE DELAY?**

10 A. TAWC had budgeted \$2,001,711 on the Tennessee River Transmission Main Crossing
11 Project. By delaying the project from not being in service by December 2017 the
12 resulting expected spend for the QIIP was projected to be \$7,954,815 or 19% below the
13 budgeted amount of \$9,799,207.

14 **Q. HOW DID TAWC PROPOSE TO MANAGE THE STRATEGIC CAPITAL**
15 **EXPENDITURES PLAN TO ADDRESS THE DELAY IN THE TENNESSEE**
16 **RIVER PROJECT?**

17 A. During the May and June CIMC meetings the impact of the delay of the Tennessee River
18 Transmission Main Project was discussed, and approval was given for projects and
19 expenditures that were originally slated for 2018 completion to be pulled forward into
20 2017 to offset the loss of the River Crossing Project spend. However, these projects were
21 to be addressed under the SEC Rider rather than the QIIP Rider. This change would
22 create a large variance in the SEC Rider results that would need to be addressed during

1 the reconciliation, although the overall variance to the combined three Capital Recovery
2 Riders amount was not expected to be significant.

3 **Q. WAS THE POTENTIAL FOR THE LARGE VARIANCE BETWEEN THE SEC**
4 **BUDGET AMOUNT AND POTENTIAL NEW AUTHORIZED SPENDING**
5 **DISCUSSED DURING THE APPROVAL PROCESS?**

6 A. Yes, approval was given to the increase in Line Q – Process Plant Facilities and
7 Equipment during the June 2017 CIMC Meeting from the originally approved budget of
8 \$520,000 to a new authorized spend amount of \$2,375,000 or an increase of \$1,855,000.
9 Through the approval of the additional spend in Line Q – Process Plant Facilities and
10 Equipment it was recognized that the impact to the SEC Budget would be significant due
11 to adding the increase of \$1,855,000 to a rider projected originally at only \$1,850,318,
12 The SEC Rider only represented 15% of the overall budgeted capital spend for 2017.
13 Through the addition of new Line Q spending and the authorization to accelerate the
14 Facility Upgrades at Whitwell WTP amount, the SEC Rider would double from the
15 original budgeted amount of construction expenditures. With the May CIMC approval of
16 the acceleration of projects and the June CIMC approval of the new authorized spend in
17 the Line Q it resulted in a projection that the SEC Riders would be 115% over the
18 original budget at the end of 2017 or \$3,978,856.

19 **Q. WHAT TYPE OF SEC PROJECTS WERE APPROVED DURING THE MAY**
20 **AND JUNE CIMC MEETINGS?**

21 A. The CIMC approved bringing forward project originally planned for 2018 that included
22 Facility Upgrades at Whitwell WTP, Elder Mountain Tank and Booster Upgrade, and
23 Replacement of three Citico Filter Underdrains (Filter 10, 13 and 15).

1 **Q. WHY WERE SEC RIDER PROJECTS CHOSEN TO OFFSET THE TENNESSEE**
2 **RIVER TRANSMISION MAIN CROSSING?**

3 A. During any given year, there are far more capital projects identified than it would be
4 appropriate to complete. Part of TAWC's task is to prioritize projects and balance the
5 work to be done with a reasonable impact to customer rates. During the May CIMC
6 Meeting, the delay of the Tennessee River Transmission Main Crossing Project due to the
7 TVA permit approval was discussed. The discussion included the necessity to manage
8 the capital plan by considering projects that were high priority for completion and could
9 be accelerated and completed within the same period that was originally anticipated for
10 the river crossing project to offset the delay of the project. The projects that met these
11 criteria were a majority of SEC Rider projects that were associated with the replacement
12 and renewal of an existing facility.

13 **Q. WHERE THESE NEW PROJECTS OR PROJECTS PLANNED FOR FUTURE**
14 **YEARS?**

15 A. The projects chosen were projects that had been previously discussed and vetted by the
16 business and were programmed for future years when the budget allowed for the projects
17 to be completed. These projects were chosen to be accelerated due to the ability for them
18 to be completed in the remaining 6 months of 2017 and would have a benefit to the
19 operation of the facilities that they were replacing.

1 **Q. WERE THERE OTHER MAJOR VARIANCES WITHIN THE QIIP RIDER**
2 **THAT OCCURRED DURING THE LAST HALF OF 2017 THAT RESULTED IN**
3 **ADDITIONAL COST TO SPECIFIC LINES ABOVE THAT EXPECTED WHEN**
4 **CHANGES WERE MADE DURING THE MAY AND JUNE CIMC MEETINGS?**

5 A. Yes, there were major variances within the QIIP Rider associated with the Line B Mains
6 – Replaced/Restored, Line C Mains – Unscheduled, Line D Mains – Relocated, and Line
7 R Capitalized Tank Rehabilitation / Painting. More specifically, during the last half of
8 2017 these four lines experienced an increase of \$1,892,766 over what was planned when
9 changes were made to the budget to offset the delay in the Tennessee River Transmission
10 Main Crossing Project.

11 **Q. CAN YOU PROVIDE MORE DETAIL TO THE REASON FOR THE**
12 **INCREASES IN SPENDING FOLLOWING THE APPROVED INCREASES IN**
13 **THE SEC RIDER TO OFFSET THE TENNESSEE RIVER TRANSMISION**
14 **CROSSING PROJECT DELAY?**

15 A. Yes.

16 **Q. WHAT CAUSED THE LINE B MAINS – REPLACED/ RESTORED SPENDING**
17 **TO BE MORE THAN PROJECTED?**

18 A. In Line B Mains – Replaced/Restored, Cheek Street Main Replacement and 14th Street
19 Main Replacement experienced a \$328,889 cost increase over the expected cost of
20 \$272,645 due to unexpected challenges during construction. In addition, a new main
21 replacement project was added along 12th Avenue to replace 650 lf of 2 inch galvanized
22 as result of a storm drain project by the City of Chattanooga at cost of \$137,586. These
23 projects increases occurred during the last half of 2017.

1 **Q. WHAT CAUSED THE LINE D MAINS – RELOCTED TO HAVE A LARGER**
2 **VARIANCE THAN PROJECTED?**

3 A. Line D Mains – Relocated experienced a \$400,000 increase due to a reduction in the
4 refund amount from the Tennessee Department of Transportation (TDOT) for the
5 relocation main associated with the widening of East Brainerd Road. TAWC had
6 anticipated a full reimbursement for the work performed based on an agreement between
7 TAWC and TDOT. However, upon completion of the work during the first quarter of
8 2017, TAWC was informed that the wrong agreement had been executed and that the
9 reimbursement amount would be reduced by 25%. During July 2017, TAWC placed the
10 work in service and indicated the reduction in the contributed amount from TDOT.
11 TAWC, along with several other utilities effected by the change in reimbursement, are
12 pursuing negotiations with TDOT to recover the remaining reimbursement for the work
13 performed.

14 **Q. WHAT CAUSED THE LINE R – CAPITALIZE TANK REHABILITATION/**
15 **PAINTING TO EXPERIENCE AN INCREASE IN COSTS?**

16 A. Line R Capitalized Tank Rehabilitation/ Painting experienced an increase in the cost to
17 rehabilitate and paint the South End Ground Storage Tank due to the need to address
18 concerns with the roof structure following removal of the existing paint. The additional
19 work resulted in a \$272,090 increase over the planned cost of \$867,610. The change
20 order to approve the additional work was issued on November 15, 2017. In addition,
21 TAWC initiated the painting and rehabilitation of the Missionary Ridge Tank at the end
22 of October 2017, with the expectations that a majority of the work would be
23 accomplished during the beginning of 2018. The contractor was able to take advantage

1 of favorable weather conditions during November and December causing higher than
2 expected spend during the two months. Together the two projects resulted in an increase
3 in expected spending for Line R in the amount of \$647,400 during the last few months of
4 2017, after other projects had been accelerated to offset the delay of the Tennessee River
5 Crossing project.

6 **Q. WHAT CAUSED THE LINE C MAIN – UNSCHEDULED TO HAVE A HIGHER**
7 **THAN EXPECTED SPEND?**

8 A. Line C Main – Unscheduled experienced an increase in expected costs due to several
9 main breaks occurring in areas requiring extensive pavement restoration and several
10 mains that required additional replacement of main to address concerns of future breaks.
11 For example, a 24-inch valve on Curtis Street was added to the work to address a main
12 break that occurred near the value because the 24-inch valve was 51 years old and was
13 not operating correctly. The replacement of the valve resulted in an ultimate cost of
14 \$128,716 to address the break and valve.

15 **Q. IF CHANGES WERE MADE DURING THE MAY AND JUNE CIMC**
16 **MEETINGS TO ADDRESS THE DELAY IN THE TENNESSE RIVER**
17 **TRANSMISSION MAIN PROJECT TO OFFSET THE REDUCTION IN QIIP**
18 **SPENDING, WHY DID THE QIIP SPENDING EXCEED THE ORIGINAL**
19 **BUDGET?**

20 A. At the time of the changes during the May and June CIMC meetings the projected
21 variance for the Net TAWC Capital Plan was 3.8% over the budget or a variance of
22 \$542,453 on a budget of \$16,602,925. During the remainder of the year, the projected
23 variance remained in a range of 3.3% to 5.25% from July to November. A majority of

1 the increased project costs occurred during the end of 2017 that made it difficult to make
2 adjustments in the overall plan.

3 **Q. CAN YOU EXPLAIN WHY THE CONTRIBUTIONS FOR 2017 ARE HIGHER**
4 **THAN IN PREVIOUS YEARS?**

5 A. The contributions that TAWC typically receive are from developers of new subdivision
6 or new residential lots that require an extension of the water distribution system in order
7 for the new area to be served. The contribution from the developer is cover the cost of
8 the new water mains that are required and are associated with Line DV – Projects Funded
9 by Others. In previous years, the contributions collected by the Company had no impact
10 on the riders since the Line DV – Projects Funded by Others is not included in the riders.
11 During 2017, TAWC received a contribution from TDOT to reimburse the company for
12 the relocation work that was associated with widening of East Brainerd Drive. This
13 project was included in Line D – Mains Relocated. Currently, TDOT has reimbursed
14 TAWC for 75% of the cost for the work associated with the relocation work in the
15 amount of \$1,325,412. TAWC, along with several other utilities are pursuing
16 negotiations with TDOT to recover the remaining 25% reimbursement amount for the
17 work performed.

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

21 A. The EDI expected spend was projected at \$384,400 with an actual spend of \$443,020 or
22 15.2% over the projected Budget Capital Expenditures. The over spend was mostly due
23 to an actual spend of \$276,664 compared to the budget amount of \$200,000 for the West

1 Valley Highway project in the Line A – Mains-New. The new main increased water
2 capacity to support a new customer at the Valley View Industrial Park, as requested by
3 the Marion County Mayor, the Marion County Chamber of Commerce and the City of
4 Owenton Mayor. Approximately 5,400 linear feet of main was ultimately installed on this
5 project. During design, it was noted that adding an additional 2,000 lineal feet to this
6 project would allow better water turnover, bidirectional flow to the industrial park and
7 fire protection to areas along the route that enhanced the ability of the Company to
8 support the new customer.

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

13 A. The original SEC expected spend was projected at \$1,850,358 with an actual spend of
14 \$3,292,055 or 77.9% over the originally projected amount. As was previously discussed,
15 the major variance in the SEC Rider was caused by bringing forward 2018 anticipated
16 projects to offset the delay in the Tennessee River Transmission Main Crossing. During
17 the May and June CIMC meetings it was approved that the SEC Rider would have a
18 revised spend amount of \$3,978,856 or an increase of 115%. TAWC was able to offset
19 some of the late increased spending in the QIIP Rider by slowing down a few projects
20 during November and December. This resulted in an overall actual spend of \$3,292,055
21 compared to the revised authorized of \$3,978,856 or 17.3% below the new revised
22 amount.

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

4 A. Yes. I have attached to my testimony Petitioner's Exhibit 2017 SCEP Results – BEO.
5 This exhibit provides a comparison of the 2017 Strategic Capital Expenditures Plan with
6 Actual Capital Expenditures by recurring project lines and investment project lines.

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

10 A. During any given year, unexpected changes in priorities may occur due to outside
11 influences, or recognition of unfavorable trends, that are occurring and affect the
12 infrastructure or ability to serve the customer. The majority of such unexpected changes
13 are caused by conflicts between the company's infrastructure and outside agencies'
14 projects or changes that occur in the community that effect the schedule or scope of a
15 planned project. In both of these cases, a previously unbudgeted new priority project is
16 initiated to address the need or an existing project effort is increased or decreased. Since
17 these changes were not identified during the original budgeting process, the need to offset
18 the new efforts expected cost is required to ensure that the overall company budget is
19 maintained. As a result, projects that were originally identified within the budget are
20 changed or delayed to make room for the new, unexpected projects or a change in an
21 existing project.

1 **Q. WHAT IS THE PROCESS FOR APPROVING THESE CHANGES?**

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

10 **Q. CAN YOU PROVIDE THE OVERALL AMOUNT OF IN SERVICE PLANT FOR**
11 **2017?**

12 A. Yes. TAWC was able to ensure that capital spending on projects led to those projects
13 being implemented and placed in service. TAWC utilized the FSO process to manage
14 projects and make sure that approved capital spending was utilized on projects that would
15 be placed in service in a timely manner. With regard to the Capital Recover Riders and
16 the projected level of expenditures compared to those projects that were implemented and
17 placed in service, the overall variance with projects placed in service compared with the
18 projected spend for all three riders was 10.4%, matching the capital spend variance
19 previously discussed. In sum, this means that TAWC was able to place in service the
20 projects that was part of the capital spending for 2017. This is the cumulative plant
21 additions, and is reflected in **Petitioner’s Exhibit Capital Riders Reconciliation—LCB**
22 attached to Ms. Bridwell’s testimony.

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

2 A. Yes.

3

CAPITAL EXPENDITURE PLAN

Actual to Budget

Tennessee 2017

Units = \$

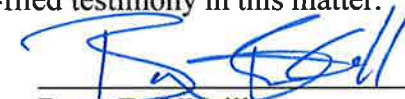
Project Code	Brief Description of Proposed Expenditures	Rider	Year to Date Actual (4)	Year to Date Original Budget (3)	Year to Date Original Variance (4-3)
DV	Projects Funded by Others (Contrib. /Adv./ Refunds)	None	420,891	1,000,000	(579,109)
A	Mains - New	EDI	393,623	310,000	83,623
B	Mains - Replaced / Restored	QIIP	3,125,083	2,620,255	504,828
C	Mains - Unscheduled	QIIP	1,846,131	1,009,000	837,131
D	Mains - Relocated	QIIP	1,967,643	100,000	1,867,643
E	Hydrants, Valves, and Manholes - New	EDI	49,397	74,400	(25,003)
F	Hydrants, Valves, and Manholes - Replaced	QIIP	164,983	374,100	(209,117)
G	Services and Laterals - New	-	1,208,310	846,000	362,310
H	Services and Laterals - Replaced	QIIP	605,191	398,500	206,691
I	Meters - New	-	280,448	209,000	71,448
J	Meters - Replaced	QIIP	1,741,312	1,687,825	53,487
K1	ITS Equipment and Systems	-	1,490,484	1,227,596	262,888
K3	ITS CS Projects	-	250,552	301,364	(50,812)
L	SCADA Equipment and Systems	SEC	156,964	175,000	(18,036)
M	Security Equipment and Systems	SEC	157,492	140,000	17,492
N	Offices and Operations Centers	-	14,097	15,000	(903)
O	Vehicles	-	523,736	525,000	(1,264)
P	Tools and Equipment	-	32,300	145,000	(112,700)
Q	Process Plant Facilities and Equipment	SEC	2,481,014	520,000	1,961,014
R	Capitalized Tank Rehabilitation / Painting	QIIP	1,471,606	1,110,125	361,481
S	Engineering Studies	-	142,966	50,000	92,966
	TOTAL RECURRING PROJECTS DV - S		18,524,223	12,838,165	5,686,058
	TOTAL RECURRING PROJECTS A - S		18,103,332	11,838,165	6,265,167
I26-020028	Citico Plant Improvements Phase 1B	QIIP	32,603	0	32,603
I26-020041	Electrical - Breakers and Relays	QIIP		430,211	(430,211)
I26-020042	Pumping Auxiliary Power	SEC		683,165	(420,655)
I26-020034	Tennessee River Crossing	QIIP	262,510	2,001,711	(1,935,020)
I26-020045	Renovate Filter Bldg 3	QIIP	66,691	67,480	284,420
I26-050002	Facility Upgrades at Whitwell WTP	SEC	351,900	169,659	(5,979)
I26-050004	Replace 0.1 MG Storage Tank at Whitwell	SEC	163,680	162,534	(181,529)
I26-020032	Wastewater Treatment & Handling	SEC	(18,995)	0	(18,995)
I26-020050	Field Operations Building/ Land Purchase	-	28,711	0	28,711
I26-000002	Post Acquisition BD Capex	-	0	250,000	(250,000)
	TOTAL INVESTMENT PROJECTS		887,100	3,764,760	(2,896,655)
	Indirect Overhead Clearing Accounts Charges		56,180	0	56,180
	TOTAL GROSS		19,467,503	16,602,925	2,845,583
	Contributions		(621,586)	(240,000)	(381,586)
	Contributions (East Brainerd Drive - TDOT)		(1,325,412)		(1,325,412)
	Advances		(236,526)	(700,000)	463,474
	Refunds		330,367	350,000	(19,633)
	Net Advances, Refunds, and Contributions		(1,853,157)	(590,000)	(1,263,157)
	Net US GAAP		17,614,346	16,012,925	1,582,426

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 Public Utility Commission, and if present before the Commission and duly sworn, her testimony would be as set forth in her pre-filed testimony in this matter.


Brent E. O'Neill

Sworn to and subscribed before me
this 1st day of March, 2018.


Notary Public

My Commission Expires: 7/25/2020