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June 28, 2021

VIA ELECTRONIC FILING

Hon. Kenneth C. Hill, Chairman
c/o Ectory Lawless, Docket Room Manager
Tennessee Public Utility Commission
502 Deaderick Street, 4th Floor
Nashville, TN 37243
TPUC.DocketRoom@tn.gov

RE: ***Petition of Tennessee-American Water Company Regarding the 2021 Investment and Related Expenses Under the Qualified Infrastructure Investment Program Rider, the Economic Development Investment Rider and the Safety and Environmental Compliance Rider*, TPUC Docket No. 20-00128**

Dear Chairman Hill:

Attached for filing please find the *Pre-Filed Direct Testimony of Grady Stout Adopting Pre-Filed Direct Testimony of Kurt A. Stafford* in the above-captioned matter.

As required, one (1) hard copy will be mailed to your office. Should you have any questions concerning this filing, or require additional information, please do not hesitate to contact me.

Very truly yours,

BUTLER SNOW LLP

Melvin J. Malone

clw
Attachment
cc: Todd Wright, TAWC
Grady Stout, TAWC
Rachel Bowen, Consumer Advocate Unit
Vance Broemel, Consumer Advocate Unit

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PETITIONER'S EXHIBIT GS-2

BEFORE THE TENNESSEE PUBLIC UTILITY COMMISSION
NASHVILLE, TENNESSEE

PETITION OF TENNESSEE-AMERICAN WATER COMPANY REGARDING THE 2021 INVESTMENTS AND RELATED EXPENSES UNDER THE QUALIFIED INFRASTRUCTURE INVESTMENT PROGRAM RIDER, THE ECONOMIC DEVELOPMENT INVESTMENT RIDER AND THE SAFETY AND ENVIRONMENTAL COMPLIANCE RIDER	)	**DOCKET NO. 20-00128**

PRE-FILED DIRECT TESTIMONY OF GRADY STOUT
ADOPTING PRE-FILED DIRECT TESTIMONY OF KURT A. STAFFORD

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Grady Stout, and my business address is 1500 Riverside Drive, Chattanooga, Tennessee 37406.

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

A. I am employed by Tennessee-American Water Company ("TAWC" or "Company"). My current role is Manager of Engineering.

Q. WHAT ARE YOUR DUTIES AS MANAGER OF ENGINEERING?

A. I am responsible for the coordination and administration of the TAWC Engineering Department. This includes the planning, development, and implementation of all aspects of construction projects. My responsibilities include working with developers for all new main extensions, replacement of existing mains, water treatment plant upgrades and modifications, new construction and improvement to network facilities. I also coordinate

technical assistance to all other TAWC departments as needed and oversee the capital budget development and implementation. I report directly to the President of TAWC.

Q. PLEASE STATE YOUR PROFESSIONAL AND EDUCATIONAL BACKGROUND.

A. I received a B.S. degree in Civil Engineering from Tennessee Technological University in 2011. I am a licensed Professional Engineer in the State of Tennessee. Upon graduation from Tennessee Technological University, I began working with Tysinger, Hampton, & Partners, an engineering consultant firm in Johnson City, Tennessee. While with this firm, I served as the inspector over the Little Milligan Water System project that included the installation of wells, a chemical building, a storage tank, and distribution system. In 2012, after the project was complete, I became a Construction Project Manager for Bob Stout Construction Company, Inc. In this role I was the project manager of a 16" water main replacement project. I began working with TAWC in 2013 as an Engineer in the Engineering Department. My primary role was to design and manage water main replacements and other production projects in the Chattanooga, Whitwell, and Suck Creek districts of TAWC. In 2016, I was promoted to Project Manager. In this role I had both engineering and managerial responsibilities, along with managing relationships of key stakeholders, elected officials, and regulators. In 2019, I was again promoted to Manager of Engineering of TAWC. I have also served twice as VP of Operations for TAWC, the first from January 2020 – April of 2020, and the second from April of 2021- June of 2021. After serving as VP of Operations I returned to my duties of Manager of Engineering. I am an active member of American Water Works Association (AWWA), American Society of

Civil Engineers (ASCE), and serve as the 2020 President of the Chattanooga Engineer's Club.

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

A. Yes. I have previously provided testimony before the Tennessee Public Utility Commission in TPUC Docket Nos. 20-00011 and 20-00128.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY TODAY?

A. The purpose of my testimony is to adopt the pre-filed direct testimony previously submitted in this matter by Kurt A. Stafford supporting the Petition filed by Tennessee-American. A copy of Kurt A. Stafford's Pre-filed Testimony is attached as Exhibit 1.

Q. WHY ARE YOU ADOPTING MR. STAFFORD'S PRE-FILED DIRECT TESTIMONY?

A. Mr. Stafford is no longer employed by the Service Company, as he voluntarily left the Service Company effective May 14, 2021. Therefore, I am adopting his pre-filed testimony.

Q. ARE YOU FAMILIAR WITH THE PRE-FILED DIRECT TESTIMONY OF KURT STAFFORD?

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

Q. IF ASKED THE SAME QUESTIONS AS ARE IN THE DIRECT PRE-FILED TESTIMONY OF KURT STAFFORD, WOULD YOU ANSWER EACH QUESTION THE SAME?

A. Yes, excepting that our professional and educational backgrounds are different.

Q. DO YOU WISH TO ADOPT THE PRE-FILED TESTIMONY OF KURT STAFFORD WITHOUT CHANGES?

A. Yes.

No further questions.

EXHIBIT 1 TO PETITIONER'S EXHIBIT GS-2

PETITIONER'S EXHIBIT KAS-1

TENNESSEE-AMERICAN WATER COMPANY, INC

DOCKET NO. 20- 00128

DIRECT TESTIMONY

OF

KURT A. STAFFORD, P.E.

ON

CHANGES TO THE QUALIFIED INFRASTRUCTURE IMPROVEMENT RIDER, ECONOMIC DEVELOPMENT INVESTMENT RIDER AND SAFETY AND ENVIRONMENTAL COMPLIANCE RIDER

SPONSORING PETITIONER'S EXHIBITS

PETITIONER'S EXHIBIT 2021 SCEP – KAS

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Kurt A. Stafford 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. Yes. I have previously provided written and oral testimony before the Tennessee Public Utility Commission ("TPUC" or "Commission") in TPUC Docket No 18-00120 and written testimony in TPUC Docket Nos 19-00031, 19-00105, 20-00028. I have also provided written and oral testimony before the Kentucky Public Service Commission in Case No 2020-00027.

Q. PLEASE STATE YOUR EDUCATIONAL AND PROFESSIONAL BACKGROUND.

A. I received a B.S. degree in Civil Engineering from the University of Tennessee in Knoxville, Tennessee in 2000. I have also completed a Masters of Urban and Regional Planning from the University of Tennessee in 2004, as well as a Masters of Business Administration from Tennessee Tech University in Cookeville, Tennessee in 2012. I am a registered Professional Engineer in the State of Tennessee and the Commonwealth of Virginia.

I have been employed by Service Company in my current role since September 2019. Prior to that, I served as Engineering Manager for TAWC from April 2016 to September 2019. I began my career as a Consulting Engineer in the utility and environmental remediation fields working for engineering firms in Knoxville, Tennessee and Lexington, Kentucky. In June 2004, I accepted a role as a Staff Engineer at the Virginia Department of Environmental Quality in Richmond, Virginia. In January 2007, I began working for the Knoxville Utilities Board ("KUB") as a Project Engineer managing wastewater construction projects related to KUB's $650 million dollar Wastewater Consent Decree Program. In 2010, I was promoted to Team Leader at KUB where I managed an engineering team working on construction projects for KUB's Wastewater Consent Decree Program. In 2012, I was assigned as Team Leader for an engineering team that managed construction and planning projects for KUB's water distribution system. Additionally, I served as a certified Level II Erosion Control Inspector responsible for managing erosion control inspections and ensuring construction projects for all four of KUB's utilities (gas, water, wastewater and electric) conformed to local, state and federal requirements. I also served as the main point of contact for both Water and Wastewater Engineering in regard to new service requests and projects. I am an active member of the American Water Works Association (AWWA) and the Tennessee Society of Professional Engineers (TSPE).

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. I also coordinate technical assistance to other Company departments as needed and oversee the development and implementation of the capital budgets. I report

to the Presidents of TAWC and KAWC. I am located in Kentucky, but work very closely with the TAWC staff in Tennessee.

Q. ARE YOU SPONSORING ANY EXHIBITS?

A.Yes, as set forth below, I am sponsoring one exhibit.

Q.WAS THE PETITIONER'S EXHIBIT THAT YOU ARE SPONSORING 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 and other internal sources, which I examined in the course of my investigation of the matters addressed in this testimony.

Q. WHAT TOPICS WILL YOUR TESTIMONY ADDRESS?

A. In addition to describing TAWC's Capital Investment Plan, I will present the planned investment for the Economic Development Investment ("EDI") Rider and the Safety and Environmental Compliance ("SEC") Rider for 2021.

Q. PLEASE DESCRIBE TAWC CAPITAL INVESTMENT PLAN FOR THE FORECAST PERIOD?

A. The Company's Capital Investment Plan can be divided into two distinct areas: 1) Recurring Projects ("RP") and 2) Major Projects identified as Investment Projects ("IP"). Typically, Major Projects are those having a Company investment of $250,000 or greater. A copy of the 2021 Strategic Capital Expenditures Plan ("SCEP") is attached to my testimony as **Petitioner's Exhibit 2021 SCEP – KAS.**

Q. HOW IS THE CAPITAL INVESTMENT PLAN DEVELOPED?

A. Capital planning needs are addressed in both the short term (one year) and longer term (five years). Projects are prioritized using objective criteria that validate the need for a project and assess the risk of not performing the project. A key component of this planning technique is that it is flexible and can be adjusted when required to address new needs, such as unplanned equipment failures, large or sudden growth of a service area, or new regulatory requirements. TAWC's Engineering Department develops a proposed capital budget with input from Operations Supervisors and Project Managers and then shares the plan with the TAWC President and the TAWC Director of Operations for their review and approval. The proposed capital budget is also shared with the Service Company for review of the reasonableness of the projects proposed and their forecasted costs. Although the Service Company may make suggestions with respect to that budget, TAWC ultimately determines the Capital Investment Plan and approves the plan. This process is the basis for the capital expenditures reflected in the Company's Investment Plan.

Q. PLEASE DESCRIBE THE RECURRING PROJECTS THAT ARE INCLUDED WITHIN THE COMPANY'S CAPITAL INVESTMENT PLAN AS IT RELATES TO THE QIIP, EDI AND SEC PROGRAMS?

A. The Recurring Projects that are included within the Company's Capital Investment Plan and are related to the riders includes smaller main projects for reinforcement and replacement, replacement of hydrants and valves, service line and meter setting replacements, security improvements, plant control improvements, projects to replace and maintain treatment facilities and equipment and new mains, hydrants and valves to assist with economic development.

Q. PLEASE DESCRIBE THE FACTORS USED IN THE PREPARATION OF THE FORCAST PERIOD AS IT RELATES TO THE RECURRING PROJECTS THAT ARE INCLUDED WITHIN THE COMPANY'S CAPITAL INVESTMENT PLAN?

A. TAWC uses engineering criteria based on accepted engineering standards and practices to determine the amount of work needed on the distribution system or the treatment facilities that provide adequate capacity and appropriate levels of reliability. The identified work 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; and satisfy all regulatory and safety requirements. The criteria for evaluating the need for the recurring projects are engineering requirements; consideration of national, state and local trends; environmental impact evaluations; and water resource management. The criteria are developed from regulations, professional standards and TAWC engineering policies and procedures.

Main replacement projects or new main installations are designed to meet two conditions of service. They are expected to deliver projected peak hour Customer demands while maintaining system pressures at 25 psi or greater in accordance with TPUC pressure requirements (Chapter 1220-4-3.41) and to provide adequate fire flow identified by the Insurance Services Office (ISO) while maintaining distribution system pressure at 20 psi or greater.

TAWC utilizes historical and forecasted data to develop the program costs based on the determined level of work for each RP line.

Q. PLEASE DESCRIBE HOW INVESTMENT PROJECTS ARE INCLUDED WITHIN THE COMPANY'S CAPITAL INVESTMENT PLAN?

A. Investment Projects (IP) are typically projects greater than $250,000 that the Company describes as Major Projects. These projects represent investments that are needed to meet environmental or water quality regulations, infrastructure capacity expansion or rehabilitation and to ensure a safe working environment. These projects allow the Company to ensure that they are able to meet the service demands of the community, ensure regulatory compliance and ensure the reduction of asset failure.

This determination of including an IP within the investment plan starts with a process that begins with the development of the anticipated demand projections of the system, the identification of improvements needed to meet those demands and a review of the current facilities located in the system. This process is documented through the Comprehensive Planning Study ("CPS") and is the basis for the development of IPs. TAWC utilizes the CPS study along with a review of changes in the needs of the system that may have occurred since the development of the CPS and develops the schedule of projects within the Capital Investment Plan. TAWC plans these to bring about the correct prioritization and distribution of capital spending for the various needs of the business.

Q. IN DEVELOPING ITS CAPITAL INVESTMENT PLAN, DOES THE COMPANY CONSIDER CUSTOMER IMPACT IN ADDITION TO CUSTOMER BENEFIT?

A. Yes. The Capital Investment Plan takes into account historical spending as well as proposed improvements as documented through the CPS and knowledge of other current system needs. During the planning process, projects are strategically staggered over a five-year period to balance spending and ensure TAWC continues to provide safe, adequate and

reliable service to its Customers. Projects are chosen and scheduled in a prudent manner in order to balance the critical need for replacing aging infrastructure with system safety and reliability as well as Customer impact.

Q. PLEASE DESCRIBE THE COMPANY'S RECENT PERFORMANCE FOR ITS CAPITAL INVESTMENT PLAN DURING THE USE OF QIIP, EDI AND SEC PROGRAMS?

A. TAWC is projecting to deliver its capital investment plan with the QIIP, EDI and SEC programs during the period of 2014 to 2020 by slightly exceeding the budget by 2.88% on a cumulative basis over the period. Net capital rider investment budgets, actual capital investment deliveries, and variances to budgets by year are shown in the table below.

TAWC Net Rider Budget vs Actual Rider Capex for 2014 though 2020				
Year	Budget	Actual	Variance	
2014	$18,337,559	$18,205,874	($131,685)	-0.72%
2015	$17,539,272	$19,160,770	$1,621,498	9.24%
2016	$12,429,427	$12,940,387	$510,960	4.11%
2017	$12,033,965	$12,323,574	$289,609	2.41%
2018	$13,053,960	$13,546,799	$492,839	3.78%
2019	$19,285,896	$18,843,693	($442,203)	-2.35%
2020*	$23,205,517	$24,096,259	$890,742	3.70%
Cumulative	$115,885,596	$119,117,356	$2,783,221	2.88%
* Current Year End Projection as of September 2020				

Since the inception of the Capital Riders, over 119 million dollars have been spent on critical water infrastructure projects which support the safety and reliability of the TAWC treatment and distribution systems for its Customers. The Capital Riders have also assisted the Company in achieving regulatory compliance with zero notices of violation. For example, during 2014 and 2015, the Company constructed a dewatering facility to ensure regulatory compliance with revised wastewater effluent standards under the City of

Chattanooga's EPA Wastewater Consent Decree. The new facility reduced naturally occurring levels of zinc in the Citico Plant's effluent to ensure the City and the Company achieved compliance with pretreatment standards under the Wastewater Consent Decree. Strict adherence to capital management processes have allowed the Company to manage this budget very closely to the yearly net rider budget and minimize deviations in the capital investment plan for the QIIP, EDI and SEC programs. This shows that the capital riders are working as intended for the benefit of the Company's Customers.

Q. CAN YOU ELABORATE ON THE YEARLY VARIANCES BETWEEN THE NET RIDER BUDGET AND THE NET RIDER ACTUAL?

A. Certainly. Since 2014, the Company has been able to successfully manage rider eligible projects to within 2.88% of budgeted costs on a cumulative basis. These variances have been kept very low because the Company uses a highly structured program to monitor project progress and spend. Countless variables can impact the cost and progress of capital projects. These variables include, but are not limited to, weather, fluctuations in material costs, special permitting requirements, site conditions and availability of construction crews. During the year, capital expenditures are closely managed to ensure estimated project costs and schedules are met. Closely monitoring these project costs and schedules has allowed the Company to very accurately deliver the capital budgets it has proposed.

Q. HOW DOES THE RIDER SPEND PROPOSED FOR 2021 COMPARE TO PRIOR YEARS?

A. On a net basis, the budgeted rider spend for 2021 is estimated to be approximately $16.7M. This is about $6.5M less than the budgeted amount for 2020 and $2.1M less than the actual spend in 2019. It is also slightly less than the average yearly net rider spend from 2014

through 2020, which is approximately $16.9M. See the table below for historical net rider spend since 2014.

TAWC Net Rider Capex 2014 - 2021		
Year	Budgeted	Actual
2014		$18,205,874
2015		$19,160,770
2016		$12,940,387
2017		$12,323,574
2018		$13,546,799
2019		$18,843,693
2020	$23,205,517	
2021	$16,699,656	

Q. THE PROPOSED SURCHARGE ADJUSTMENT FOR 2021 IS 5.88%. WHAT CONTRIBUTES TO THIS PROPOSED ADJUSTMENT?

A. As mentioned in my testimony above, the proposed 2021 capital rider spend is slightly less than the 2014-2020 average yearly net rider spend. However, several significant projects went in-service in the later part of 2020 and are therefore included in the 13-month average for 2021. This roll forward effect from 2020 has a significant impact on the percentage of the overall proposed surcharge for 2021.

Q. WHAT 2020 PROJECTS ARE HAVING A SIGNIFICANT IMPACT ON THE 2021 PROPOSED SURCHARGE?

A. The most significant of these projects is the Replace Basin 2 and Plate Settlers Investment Project. This project consisted of replacing a century year old concrete sedimentation basin and greatly increased the treatment capacity of the basin by using newer treatment technology. The efficiencies gained by this new basin will allow TAWC to improve both treatment resiliency and operational efficiency. The improved treatment capacity of the

new basin will also allow TAWC to take another existing sedimentation basin out of service rather than replace it, thereby saving Customers the cost of an additional basin replacement project. Other significant 2020 projects that impact the 2021 proposed surcharge include increased spending on several reoccurring projects or RP budget lines including Budget Line B – Mains Replaced.

Q. WILL THESE PROJECTS IMPACT FUTURE YEARS?

A. No. These projects will roll off the 13-month average in 2021.

Q. WHAT IS THE TOTAL ROLL FORWARD AMOUNT FOR ALL OF THE PROJECTS PLACED IN-SERVICE DURING THE LATER PART OF 2020 THAT ARE INCLUDED IN THE 13-MONTH AVERAGE FOR 2021?

A. $12,270,690.00.

Q. CAN YOU DESCRIBE HOW THE CAPITAL INVESTMENT PLAN 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 investment plans meet the strategic intent of the business. In turn, this ensures that capital investment plans are integrated with operating expense plans, and provides more effective controls on budgets and individual capital projects.

The CIMC includes the TAWC President, Director of Operations, Engineering Project Managers, Engineering Manager, Financial Analyst, and Capital Coordinator. 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.

ECONOMIC DEVELOPMENT INVESTMENT PROGRAM

Q. WHAT IS THE ECONOMIC DEVELOPMENT INVESTMENT RIDER?

A. This rider provides a mechanism to recover the operational expenses, capital costs or both related to the expansion of infrastructure for the purpose of economic development. With economic development opportunities being limited and the competition for each development fierce, the rider allows infrastructure to be expanded or enhanced to respond quickly and equitably to economic development that will benefit all of the consumers.

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

A. The budget lines that are included in the Economic Development Investment Rider are Line A - Mains New and Line E - Hydrants and Valves New. These budget lines support

the economic development of the community and place the distribution system in a position to aid new development within the service area.

Q. WHAT WORK IS ASSOCIATED WITH MAINS NEW - LINE A AND WHY IS THIS APPROPRIATE FOR THE EDI RIDER?

A. This line item includes new water mains, valves, and other appurtenances that are necessary to perform the work that assist with the economic growth of the community. This work includes the installation of new infrastructure to expand or extend the distribution system that supports economic growth in the community and is appropriate to be included within the EDI Rider.

Q. WHAT OTHER WORK IS ASSOCIATED WITH MAIN NEW – LINE A AND WHY IS THIS ADDITIONAL WORK APPROPRIATE FOR THE EDI RIDER?

A. In addition to the extension or expansion of the distribution system to assist with an economic development project, Line A work can also be related to the extension or expansion of new mains that position the distribution system to be able to support future growth of the community. In addition, Line A work includes new mains that provide new transmission capacity, provide reliability, or establish an additional pressure gradient. This work is considered appropriate for the EDI Rider because it enhances the distribution system and allows it to respond quickly to future growth of the community. These types of projects promote growth and are designed to accommodate future growth in the surrounding areas. Among other ways, the Customer benefits from these projects through their enhancement of the distribution system and improvement in reliability.

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

A. TAWC plans to spend approximately $275,616 on various size water mains within the distribution system that are associated with eliminating dead ends or positioning the distribution system for future development. At this time, the Company has identified one new main project. In Chattanooga, a 2,300 lineal foot 12-inch extension along Cummings Road is needed to provide a secondary feed into an area on the western end of the system. This project was initially projected to be completed in 2020. However, another project to supply water to a new development in East Ridge took precedence. Therefore, the Cummings Road Project was designed in 2020 and construction is slated to occur in 2021. The historical five-year average spend for 2015 to 2019 for new mains is $437,594 per year. The Company believes that the Cumming Road project is important to ensure capacity and the continued reliability of our system.

Q. WHAT WORK IS ASSOCIATED WITH NEW HYDRANTS AND VALVES – LINE E AND WHY IS THIS APPROPRIATE FOR THE EDI RIDER?

A. 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. This work is associated with the installation of new infrastructure to foster economic development by providing new fire protection or enhancing fire protection in currently served areas. Improved infrastructure in existing older service areas, including fire protection, is a key to redevelopment in economic growth and is appropriate to be included within the EDI Rider.

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

A. TAWC plans to spend approximately $124,499 on a combination of 22 new hydrants and 9 valves. This is a slight increase over the five-year average between 2015 and 2019 of $101,581. TAWC believes that with the improving economic health of the communities served the level of investment will increase to serve the growing economic development.

Q. ARE THERE ANY CAPITAL INVESTMENT PROJECTS (IP) INCLUDED UNDER THE ECONOMIC DEVELOPMENT RIDER?

A. No. There are no additional qualifying projects.

SAFETY AND ENVIRONMENTAL COMPLIANCE RIDER

Q. WHAT IS THE SAFETY AND ENVIORNMENTAL COMPLAINCE RIDER?

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 the additional infrastructure investment requirements to meet safety and environmental compliance mandates from state and federal government. The United States Environmental Protection Agency is continually increasing water quality standards for potable drinking water and discharge requirements for wastewater facilities. Other regulatory agencies from time to time change safety and environmental compliance requirements that lead to the need for further infrastructure investment. TAWC believes that environmental compliance investments are specifically related to the safety of the drinking water and in the public interest.

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

A. The 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. These budget lines support the improvement of safety and enhances the environmental compliance of the system.

Q. WHAT WORK IS ASSOCIATED WITH SCADA EQUIPMENT AND SYSTEMS - LINE L AND HOW IS IT RELATED TO THE SEC?

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. However, 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. By making investment in the monitoring and control system for the treatment plants and the network facilities, TAWC is able to ensure that the operation of the system is meeting safety and environmental requirements and is appropriate to be included in the SEC.

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

A. TAWC plans to spend approximately $160,000 on various SCADA improvements throughout the system. A majority of the spending will be associated with replacement work at remote sites. In addition, some licensing fees are required to maintain SCADA (supervisory control and data acquisition) software. This matches up to the five-year average spend of 176,967 for the years between 2015 and 2019.

Q. WHAT WORK IS ASSOCIATED WITH SECURITY EQUIPMENT AND SYSTEMS - LINE M AND HOW IS IT RELATED TO THE SEC?

A. This investment item is associated with the security equipment and systems that are employed at the TAWC facilities. This may include fencing, alarm systems, cameras,

barricades, electronic detection or locking systems, software, or other assets related directly to security. 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. These improvements will maintain the equipment and ensure current technology is employed to provide safe drinking water and protect its infrastructure and are appropriate to be included in the SEC.

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

A. TAWC plans to spend approximately $154,800 on a combination of upgrades to existing security systems to improve the security of the existing facilities. TAWC believes this level of spend on the installation and enhancement of the facility security systems will ensure a sufficient level of health and safety risk reduction for the Company's employees.

Q. WHAT WORK IS ASSOCIATED WITH PROCESS PLANT FACILITIES AND EQUIPMENT – LINE Q AND HOW IS IT RELATED TO THE SEC?

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. Through the investment in the improvements associated with this spending line, TAWC is able to ensure compliance with federal and state safety and environmental compliance requirements that will ensure safe drinking water. By ensuring compliance with federal and state requirements, these investments are appropriate to be included in the SEC.

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

A. TAWC plans to spend approximately $1,615,000 within the Process Plant Facilities and Equipment Improvements within Line Q. This level of investment is a slight increase in the line compared with the five-year average spending of $1,394,595 over the period of 2015 to 2019. Larger items projected for 2021 include a pump, drive and starter at Missionary Ridge Station as well as a valve associated with the high service pumps at the Citico Plant.

Q. BESIDES THE REPLACEMENT OF PROCESS PLANT FACILITIES AND EQUIPMENT DUE TO A FACILITY OR PIECE OF EQUIPEMENT BEING AT THE END OF ITS USEFUL LIFE, WHAT BENEFITS DOES WORK PERFORMED UNDER LINE Q PROVIDES?

A. A majority of the work performed by TAWC within Line Q is the replacement of older equipment with new equipment that is far more efficient than the original equipment. This allows TAWC to produce water more efficiently and use less electricity and allows the Company to take a leadership role in reducing its carbon footprint. TAWC has elected to include both replacement and new items in this line specifically that are critically necessary to continue to meet water quality regulations.

Q. ARE THERE ANY SEC IP PROJECTS THAT WILL START IN 2021 THAT WILL GO IN TO SERVICE IN FUTURE YEARS AFTER 2021?

A. Yes. Some projects can span multiple years from the design and planning phase to the end of construction. TAWC plans to spend an estimated $502,663 for design, planning, permitting and construction on one IP project that will go in to service after 2021.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

STRATEGIC CAPITAL EXPENDITURE PLAN
PROGRAM

Business Unit	Tennessee
Revision Date	November 19, 2020
Description	TN BP 2021-2025 SCEP

Business Unit	Rider	Business Unit No.	Project Title			2020 1	2	3	4	5	6
Tennessee	**None**	**DV**	**Projects Funded by Others**			**$10,000**	**$10,000**	**$50,000**	**$80,000**	**$150,000**	**$150,000**
Tennessee	EDI	A	Mains - New			0	31,880	55,013	84,713	87,533	11,525
Tennessee	QIIP	B	Mains - Replaced / Restored			75,000	75,000	115,000	216,590	240,783	250,000
Tennessee	QIIP	C	Mains - Unscheduled			164,182	173,645	161,217	119,254	115,554	105,187
Tennessee	QIIP	D	Mains - Relocated			10,627	16,567	26,008	26,823	27,324	24,481
Tennessee	EDI	E	Hydrants, Valves, and Manholes - New			6,110	7,268	8,206	12,695	13,411	13,803
Tennessee	QIIP	F	Hydrants, Valves, and Manholes - Replaced			23,113	29,258	33,010	44,858	43,532	49,395
Tennessee	None	G	Services and Laterals - New			89,105	96,006	100,853	109,475	112,126	111,167
Tennessee	QIIP	H	Services and Laterals - Replaced			16,126	23,000	23,604	35,000	41,000	44,596
Tennessee	None	I	Meters - New			11,025	12,738	13,477	15,720	21,163	24,349
Tennessee	QIIP	J	Meters - Replaced			32,411	39,875	43,469	43,876	108,987	141,000
Tennessee	None	K	ITS Equipment and Systems			187,500	215,661	214,665	218,825	216,700	218,857
Tennessee	SEC	L	SCADA Equipment and Systems			0	0	0	0	0	0
Tennessee	SEC	M	Security Equipment and Systems			6,376	7,815	10,379	11,098	14,443	14,662
Tennessee	None	N	Offices and Operations Centers			0	0	4,569	269	269	4,569
Tennessee	None	O	Vehicles			0	0	157,275	9,275	9,275	201,999
Tennessee	None	P	Tools and Equipment			3,718	3,939	20,895	5,145	5,145	23,020
Tennessee	SEC	Q	Process Plant Facilities and Equipment			75,000	75,000	75,000	75,000	75,000	75,000
Tennessee	QIIP	R	Capitalized Tank Rehabilitation/Painting			0	0	0	0	0	0
Tennessee	None	S	Engineering Studies			5,646	5,979	11,293	11,586	11,880	11,880
			Total Recurring Projects			705,939	813,630	1,073,935	1,040,203	1,144,127	1,325,492
			ACQUISITIONS								
			Total Acquisitions			**0**	**0**	**0**	**0**	**0**	**0**
			INVESTMENT PROJECTS	**Total**	**In Service Date**						
Tennessee	QIIP	I26-020039	Basin 2 & Plate Settlers		10/31/2020	126,548	125,476	126,280	0	0	0
Tennessee	SEC	I26-020044	New Raw Water Intake - Citico		12/1/2023	0	0	0	0	0	0
Tennessee	QIIP	I26-020048	Replace Elder Mt Transmission Main		10/31/2023	0	0	0	0	0	0
Tennessee	SEC	I26-020051	Replace Switch Gear - Citico		10/31/2022	0	0	48,405	48,697	48,991	49,286
Tennessee	QIIP	I26-020055	Lookout Valley Redun - St Elmo Booster Imprv		9/30/2024	0	0	0	0	0	0
Tennessee	SEC	I26-020058	New Low Service Pump Station - Citico		12/1/2026	0	0	0	0	0	0
Tennessee	QIIP	I26-020060	Replace High Service Header Valve - Citico		10/1/2021	970	101,013	102,015	103,313	207,200	1,079,744
Tennessee	QIIP	I26-020062	Filter House #2 Rehab		1/15/2022	6,025	11,403	153,500	153,500	153,500	142,635
Tennessee	QIIP	I26-02xxxx	Lookout Valley Redun - Piping Upgrade/Booster		11/30/2022	25,852	25,972	26,129	26,286	26,444	26,604
Tennessee	QIIP	I26-02xxxx	Lookout Valley Redun - River Crossing		10/30/2022	0	26,892	27,054	27,217	27,381	27,546
Tennessee	QIIP	I26-02xxxx	Lookout Valley Redun - Citico Tank		12/30/2021	34,959	35,170	35,382	35,595	35,810	36,026
Tennessee	QIIP	I26-02xxxx	Lookout Valley Redun - Lookout Valley Tank		12/31/2024	0	0	0	0	0	0
Tennessee	None	I26-02xxxx	Chattanooga Ops Center		11/1/2022	0	0	107,567	108,216	108,868	109,524
Tennessee	SEC	I26-050001	Raw Water Intake Improvements - Whitwell		11/1/2022	0	0	0	0	0	0
Tennessee	QIIP	I26-050003	Replace Two 0.5 MG Storage Tanks (Seq Valley)		8/30/2022	0	0	0	0	0	0
Tennessee	QIIP	I26-05xxxx	Francis Springs Rd (Sequatchie Valley)		10/31/2023	0	0	0	0	0	0
Tennessee	None	I26-xxxxxx	GIS Project		9/30/2021	89,639	90,179	90,723	91,270	91,820	92,374
Tennessee	None	I26-000002	Post Acquisition BD Capex								
			Total Investment Projects			**$283,993**	**$416,105**	**$717,054**	**$594,093**	**$700,014**	**$1,563,739**
			Contributions			(20,000)	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)
			Advances			(58,333)	(58,333)	(58,333)	(58,333)	(58,333)	(58,333)
			Total Refunds			29,167	29,167	29,167	29,167	29,167	29,167
				Gross		**$999,932**	**$1,239,735**	**$1,840,989**	**$1,714,296**	**$1,994,140**	**$3,039,231**
***Dollar amounts from TAWC's Annual Capital Planning Process**						(49,167)	(49,167)	(49,167)	(49,167)	(49,167)	(49,167)
				Net		**$950,765**	**$1,190,569**	**$1,791,822**	**$1,665,130**	**$1,944,974**	**$2,990,064**
				Gross minus Post Acq		**$999,932**	**$1,239,735**	**$1,840,989**	**$1,714,296**	**$1,994,140**	**$3,039,231**
						(49,167)	(49,167)	(49,167)	(49,167)	(49,167)	(49,167)
				Net minus Post Acq		**$950,765**	**$1,190,569**	**$1,791,822**	**$1,665,130**	**$1,944,974**	**$2,990,064**

STRATEGIC CAPITAL EXPENDITURE PLAN
PROGRAM

Business Unit	Tennessee
Revision Date	November 19, 2020
Description	TN BP 2021-2025 SCEP

U.S. $

Business Unit	Rider	Business Unit No.	Project Title	7	8	9	10	11	12	Total 2020
Tennessee	**None**	**DV**	**Projects Funded by Others**	**$90,000**	**$80,000**	**$80,000**	**$80,000**	**$120,000**	**$100,000**	**$1,000,000**
Tennessee	EDI	A	Mains - New	4,825	125	0	0	0	0	275,616
Tennessee	QIIP	B	Mains - Replaced / Restored	275,000	260,426	252,890	228,503	201,683	192,349	2,383,224
Tennessee	QIIP	C	Mains - Unscheduled	103,389	108,154	108,389	108,742	116,143	181,143	1,565,000
Tennessee	QIIP	D	Mains - Relocated	23,968	25,906	26,011	5,574	1,545	166	215,000
Tennessee	EDI	E	Hydrants, Valves, and Manholes - New	13,812	13,945	10,498	9,933	8,311	6,508	124,499
Tennessee	QIIP	F	Hydrants, Valves, and Manholes - Replaced	49,583	52,708	50,593	45,577	32,467	31,906	486,000
Tennessee	None	G	Services and Laterals - New	121,324	121,242	121,114	121,077	120,256	97,504	1,321,250
Tennessee	QIIP	H	Services and Laterals - Replaced	50,000	41,230	41,000	40,000	35,000	35,000	425,557
Tennessee	None	I	Meters - New	26,331	26,582	23,121	19,023	16,435	16,033	225,999
Tennessee	QIIP	J	Meters - Replaced	148,000	148,000	231,000	200,000	125,000	80,000	1,341,618
Tennessee	None	K	ITS Equipment and Systems	216,200	218,825	216,700	219,211	217,643	213,874	2,574,660
Tennessee	SEC	L	SCADA Equipment and Systems	0	0	0	53,333	53,333	53,334	160,000
Tennessee	SEC	M	Security Equipment and Systems	20,163	20,477	15,477	15,125	11,128	7,657	154,800
Tennessee	None	N	Offices and Operations Centers	269	269	4,569	269	269	4,675	20,000
Tennessee	None	O	Vehicles	11,912	11,912	157,275	9,275	162,751	9,051	739,999
Tennessee	None	P	Tools and Equipment	5,270	5,270	24,174	5,338	5,338	22,746	130,000
Tennessee	SEC	Q	Process Plant Facilities and Equipment	75,000	125,000	125,000	100,000	100,000	50,000	1,025,000
Tennessee	QIIP	R	Capitalized Tank Rehabilitation/Painting	0	250,000	250,000	250,000	250,000	26,210	1,026,210
Tennessee	None	S	Engineering Studies	11,880	11,880	11,880	11,880	11,880	7,336	125,000
										0
			Total Recurring Projects	1,156,927	1,441,951	1,669,692	1,442,860	1,469,184	1,035,493	15,319,432
			ACQUISITIONS							
										0
			Total Acquisitions	**0**	**0**	**0**	**0**	**0**	**0**	0
			INVESTMENT PROJECTS							
Tennessee	QIIP	I26-020039	Basin 2 & Plate Settlers	0	0	0	0	0	0	378,303
Tennessee	SEC	I26-020044	New Raw Water Intake - Citico	0	0	0	0	0	0	0
Tennessee	QIIP	I26-020048	Replace Elder Mt Transmission Main	0	0	0	0	0	0	0
Tennessee	SEC	I26-020051	Replace Switch Gear - Citico	49,583	49,882	50,183	50,485	52,817	54,335	502,663
Tennessee	QIIP	I26-020055	Lookout Valley Redun - St Elmo Booster Imprv	0	0	0	0	0	0	0
Tennessee	SEC	I26-020058	New Low Service Pump Station - Citico	0	0	0	0	0	0	0
Tennessee	QIIP	I26-020060	Replace High Service Header Valve - Citico	268,741	220,880	53,622	0	0	0	2,137,498
Tennessee	QIIP	I26-020062	Filter House #2 Rehab	140,946	215,781	215,781	116,819	81,322	81,322	1,472,534
Tennessee	QIIP	I26-02xxxx	Lookout Valley Redun - Piping Upgrade/Booster	26,764	26,926	27,088	1,435	1,444	0	240,943
Tennessee	QIIP	I26-02xxxx	Lookout Valley Redun - River Crossing	27,712	27,879	28,047	28,216	28,386	28,558	304,889
Tennessee	QIIP	I26-02xxxx	Lookout Valley Redun - Citico Tank	318,607	379,690	418,697	384,502	413,712	352,152	2,480,302
Tennessee	QIIP	I26-02xxxx	Lookout Valley Redun - Lookout Valley Tank	0	0	0	0	0	0	0
Tennessee	None	I26-02xxxx	Chattanooga Ops Center	110,184	110,849	192,192	208,267	221,498	222,833	1,500,000
Tennessee	SEC	I26-050001	Raw Water Intake Improvements - Whitwell	0	0	0	0	0	0	0
Tennessee	QIIP	I26-050003	Replace Two 0.5 MG Storage Tanks (Seq Valley)	0	39,557	39,795	40,035	40,276	962	160,626
Tennessee	QIIP	I26-05xxxx	Francis Springs Rd (Sequatchie Valley)	0	0	0	0	0	0	0
Tennessee	None	I26-xxxxxx	GIS Project	92,930	93,491	94,054	0	0	0	826,480
Tennessee	None	I26-000002	Post Acquisition BD Capex							
			Total Investment Projects	**$1,035,469**	**$1,164,934**	**$1,119,459**	**$829,761**	**$839,456**	**$740,162**	**$10,004,239**
			Contributions	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)	(240,000)
			Advances	(58,333)	(58,333)	(58,333)	(58,333)	(58,333)	(58,333)	(700,000)
			Total Refunds	29,167	29,167	29,167	29,167	29,167	29,167	350,000
										0
			Gross	**$2,282,396**	**$2,686,885**	**$2,869,151**	**$2,352,621**	**$2,428,640**	**$1,875,655**	**$25,323,671**
				(49,167)	(49,167)	(49,167)	(49,167)	(49,167)	(49,167)	(590,000)
			Net	**$2,233,230**	**$2,637,718**	**$2,819,984**	**$2,303,454**	**$2,379,473**	**$1,826,488**	**$24,733,671**
			Gross minus Post Acq	**$2,282,396**	**$2,686,885**	**$2,869,151**	**$2,352,621**	**$2,428,640**	**$1,875,655**	**$25,323,671**
				(49,167)	(49,167)	(49,167)	(49,167)	(49,167)	(49,167)	(590,000)
			Net minus Post Acq	**$2,233,230**	**$2,637,718**	**$2,819,984**	**$2,303,454**	**$2,379,473**	**$1,826,488**	**$24,733,671**

***Dollar amounts from TAWC's Annual Capital Planning Process**

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 Kurt A. Stafford, 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, his testimony would be as set forth in his pre-filed testimony in this matter.

Kurt Stafford

Kurt A. Stafford

Sworn to and subscribed before me
this 23rd day of November, 2020.

Sharon Miller

Notary Public ID # KYNP9273

My Commission Expires: 7/25/24

STATE OF TN)
)
COUNTY OF Hamilton)

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared Grady Stout, 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, his testimony would be as set forth in his pre-filed testimony in this matter.

Grady Stout

Sworn to and subscribed before me
this 28th day of June, 2021.

Notary Public

My Commission Expires: 3/13/2022

KIMBERLY JOCE MOORE
STATE OF TENNESSEE NOTARY PUBLIC
COUNTY OF HAMILTON

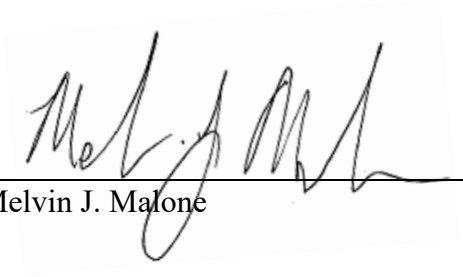
CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing was served via U.S. Mail or electronic mail upon:

Rachel C. Bowen
Counsel for the Consumer Advocate Unit
Practicing Pending Admission
Rachel.Bowen@ag.tn.gov

Vance L. Broemel
Senior Assistant Attorney General
Office of the Tennessee Attorney General
Financial Division, Consumer Advocate Unit
P.O. Box 20207
Nashville, TN 37202-0207
Vance.Broemel@ag.tn.gov

This the 28th day of June, 2021.



Melvin J. Malone