TENNESSEE-AMERICAN WATER COMPANY, INC

DOCKET NO. 24-00011

DIRECT TESTIMONY

OF

GRADY STOUT, P.E.

ON

2024 ANNUAL INCREMENTAL CAPITAL RECOVERY RIDER TARIFF FILING, CHANGES TO THE QUALIFIED INFRASTRUCTURE INVESTMENT PROGRAM RIDER, THE ECONOMIC DEVELOPMENT INVESTMENT RIDER, AND THE SAFETY AND ENVIRONMENTAL COMPLIANCE RIDER, AND IN SUPPORT OF THE CALCULATION OF THE INCREMENTAL CAPITAL RIDER REVENUE REQUIREMENT

SPONSORING PETITIONER'S EXHIBIT:

PETITIONER'S EXHIBIT - 2023 SCEP RESULTS - GS

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Grady Stout, and my business address is 109 Wiehl Street, Chattanooga, Tennessee 37403.

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 Vice President, Operations.

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

A. Yes. I have previously provided testimony before the Tennessee Public Utility Commission in several TPUC matters, including Docket Nos. 20-00011, 20-00128, 21-00030, 22-00021, 22-00049, 22-00072 and 23-00018.

Q. PLEASE STATE YOUR EDUCATIONAL AND PROFESSIONAL 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, and regulators. In 2019, I was 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 as Manager of Engineering. In May of 2022 I was promoted to Director, Engineering. In February of 2024 I was promoted to Vice President, Operations. I am an active member of American Water Works Association (AWWA), the current chair of the TN AWWA Water Utility Council, and an active member of American Society of Civil Engineers (ASCE). Finally, I served as the 2020 President of the Chattanooga Engineer's Club.

Q. WHAT ARE YOUR DUTIES AS VP, OPERATIONS?

A. I am responsible for all operations of TAWC, including field services, maintenance, water production and distribution, and regulatory compliance for water. I am also responsible for water quality management, which includes all regulatory monitoring, reporting, and compliance activities. I oversee business performance, which includes business activities related to operations support (fleet, supply chain, inventory, data management, asset management, major accounts, non-revenue water), customer support, and strategic process improvements. Finally, I am responsible for the Company's health and safety program. I report directly to the President of TAWC.

Q. **WHY ARE YOU PROVIDING TESTIMONY FOR THE CAPITAL RIDERS WHILE IN THE ROLE OF VP, OPERATIONS?**

A. I became the VP, Operations effective in February of 2024. Since this filing entails 2023 eligible capital Recovery riders investment during my tenure as Director, Engineering, I have the knowledge and experience to provide this testimony.

Q. WHAT WERE YOUR DUTIES AS DIRECTOR, ENGINEERING?

A. I was 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 included 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 coordinated technical assistance to all other TAWC departments as needed and oversee the capital budget development and implementation. I reported directly to the President of TAWC.

Q. WHAT SUBJECTS 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, and the level of capital Recovery Riders eligible expenditures for 2023.

Q. ARE YOU SPONSORING ANY EXHIBITS?

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

Petitioner's Exhibit – 2023 SCEP Results - GS

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

Q. WAS THE PETITIONER'S EXHIBIT 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 EXHIBIT LISTED ABOVE?

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

Q. PLEASE DESCRIBE THE ACTUAL TAWC CAPITAL INVESTMENT FOR 2023.

A. The Company's Capital Investment 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 2023 Strategic Capital Expenditures Plan ("SCEP") is attached to my testimony as **Petitioner's Exhibit 2023 SCEP – GS.**

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

Yes. 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 Vice President of Operations for their review and approval. The proposed capital budget is also shared with the American Water Works Service Company ("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 (RP) that are included within the Company's Capital Investment Plan and are related to the riders include 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 COMPANY'S CAPITAL INVESTMENT PLAN AS IT RELATES TO THE RECURRING PROJECTS?

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 include 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 it is 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 IP. 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 utilizes these plans to facilitate 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 benefit.

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 Program Management Committee ("CPMC") to ensure capital investment plans meet the strategic intent of the business. In turn, this process ensures that capital expenditure plans are integrated with operating expense plans and provides more effective controls on budgets and individual capital projects.

The CPMC includes the TAWC President, Vice President of Operations, Engineering Manager, Engineering Project Managers, Financial Analyst, and Capital Coordinator. The CPMC meets monthly. The CPMC receives capital expenditure plans from project managers and approves them as required by the process. Once budgets are approved, the CPMC 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, the CPMC reviews the request for changes and, if appropriate, 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 CPMC, 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 Review Meeting ("FRM") Committee meets monthly to sign-off on projects and review spending. This committee includes the TAWC Vice President of Operations, the TAWC Engineering Manager,

TAWC Engineering Project Managers, TAWC Operations Specialists and the appropriate Operation supervisors and project managers. The purpose of the committee is to review projects that are moving forward to the next step of approval, or that require a change. This allows the project manager and operational area supervisors to communicate about the project on a monthly basis and help coordinate projects from initial development through in-service as compared to the approved budget and spending plan.

Both of these committees allow a continuous review of capital expenditures as unexpected projects, or the need to adjust projects to offset delays in other projects, arise. The use of the CPMC and FRM process 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. Service Company 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, Service Company 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 the initiatives that have directly influenced 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 CPMC and FRM meetings described above are used to oversee the progress of projects from inception to completion. Along with the review of the capital expenditures, the committee also reviews potential customer impacts and the requirements of an investment project to 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 handles all stages, with oversight by the CPMC and FRM Committees.

Q. ARE CONSIDERATIONS UNDERTAKEN TO EVALUATE WHETHER PROPOSED PROJECTS SERVE PUBLIC INTEREST?

A. Yes. Through the budgeting and planning process, 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 include 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. HOW DOES THE ELIGIBLE RIDERS SPEND OF 2023 COMPARE TO PRIOR YEARS?

A. See the table below for historical net rider spend since 2014.

TAWC Net Rider Capex 2014 - 2023	
Year	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	$22,340,421
2021	$18,102,887
2022	$19,599,434
2023	$26,778,307

QUALIFIED INFRASTRUCTURE INVESTMENT PROGRAM

Q. WHAT IS THE QUALIFIED INTRASTRUCTURE INVESTMENT PROGRAM?

A substantial portion of the TAWC's distribution infrastructure is between 50 and 100 years old and is nearing the end of its useful service life. The pace of infrastructure replacement is a continuing concern for TAWC. The anticipated level of necessary distribution infrastructure improvement projects is increasing at a rapid pace. This is due, in part, to the advanced age of the Company's water facilities. While the United States Environmental Protection Agency[1] ("EPA") has opined that the State of Tennessee will require more than $10 billion in combined water and wastewater infrastructure investment over the next 20 years, a Tennessee Department of Environment and Conversation report (the "TN H2O Report[2]") predicts an even greater need - $15.6 billion – to accommodate Tennessee's projected growth.

The Qualified Infrastructure Investment Program (QIIP) is an alternative ratemaking mechanism that allows TAWC to recover costs associated with the replacement of critical infrastructure in a more efficient manner. The QIIP more accurately reflects the ongoing investments and improvements that are made in the water distribution and production systems versus the less frequent but larger step increases that would result from a base rate increase without QIIP. The timely recovery of the fixed costs of infrastructure replacement through the QIIP provides a framework or pathway for increased and continued levels of capital replacement. This results in a stronger and more reliable water

[1] *See* EPA., "Clean Watersheds Needs Survey 2012 Report to Congress," p. A-2, Table A-1 (Jan. 2016) (available at https://www.epa.gov/cwns/clean-watersheds-needs-survey-cwns-2012-report-and-data) ($1.55B for wastewater); EPA, "Drinking Water Needs Survey Sixth Report to Congress," p.36, Exhibit 2.1 (March 2018) (available at https://ww.w.epa.gov/dwsrf/epas-6th-drinking-water-infrastructure-needs-survey-and-assessment) ($8.76B for drinking water).

[2] Tenn. Dept. of Environment and Conservation, "TN H2O: Tennessee's Roadmap to Securing the Future of Our Water Resources," p.39 (Nov. 2018) (available at https://www.tn.gov/environment/program-areas/wr-water-resources/tnh2o/the-2018-tn-h2o-plan.html) ("TN H2O Report") ("Meeting those [future infrastructure] needs and the need to repair or replace existing infrastructure will require an estimated investment of $15.6 billion between now and 2040.").

distribution and production system for both current and future customers. TAWC is focusing its replacement program on small diameter mains and mains that have shown a chronic level of breaks. These types of mains are responsible for the majority of the distribution system leaks and failures. The need to replace service lines, meters, hydrants, treatment structures, pumps and equipment is critical to maintaining public safety and imperative to maintaining a reliable system.

Q. WHAT ARE THE BUDGET LINES THAT ARE INCLUDED UNDER THE QUALIFIED INFRASTRUCTURE INVESTMENT PROGRAM FOR 2023?

A. The budget lines that are included in the QIIP are Line B - Mains Replaced, Line C - Mains Unscheduled, Line D - Mains Relocated, Line F - Hydrants and Valves Replaced, Line H - Services Replaced, Line J - Meters Replaced, and Line R - Capitalized Tank Rehabilitation/Painting. These budget lines represent investment to replace aging infrastructure that is non-revenue producing. This means infrastructure that does not produce additional revenue by adding new customers. Examples of infrastructure that would produce additional revenue are main extensions for new development and new services or new meters for new customers.

Q. WHAT WORK IS ASSOCIATED WITH MAINS REPLACED - LINE B AND WHY DOES IT FALL UNDER THE QIIP?

A. This investment plan line includes the scheduled replacement, renewal or improvement of existing water mains, including valves and other appurtenances, that are necessary to perform the work. Work under this line is the planned and scheduled proactive replacement of water main that has been determined to have reached its useful life or is causing service problems to the area serviced by the main. Water main replaced under Main Replaced –

Line B will result in a stronger more reliable and resilient water distribution system. By replacing the aged water main infrastructure on an accelerated basis, and on a proactive rather than reactive basis, the distribution system will provide direct customer benefits in the form of improved and sustained water quality, improved fire protection, fewer service disruptions and lower operating and maintenance costs over time. TAWC believes that this type of replacement work is appropriate and should be included in the QIIP.

Q. WHAT WAS THE REPLACEMENT INVESTMENT FOR WATER MAIN REPLACEMENTS ASSOCIATED WITH LINE B FOR 2023?

A. TAWC spent $5,071,599 to replace various size water mains within seventeen (17) projects during 2023. TAWC replaced approximately 20,598 feet of main during the period. These projects are not only important in addressing the aging infrastructure needs of the community, but also allow the Company to take a leadership role in reducing its carbon footprint. By replacing infrastructure that is leaking or has a high potential for failure, TAWC is able to reduce the amount of water that is produced and reduce the amount of electricity that is used. The overall result is a reduction in the amount of fossil fuel generation required for Company facilities.

Q. WHAT PROJECTS WERE INCLUDED IN THE WATER MAIN REPLACEMENTS ASSOCIATED WITH LINE B?

A. TAWC completed the following projects as part of the scheduled work associated with Line B in 2023:

1. Installed 1,576 linear feet of 6-inch ductile iron water main along the 800 to 1000 block of E 10th Street to replace 2-inch galvanized main.
2. Installed 1,992 linear feet of 6-inch ductile iron main along the 300 to 4500 block of S Mayfair Ave to replace 2-inch cast iron main.

3. Installed 1,587 linear feet of 4-inch ductile iron pipe along the 5900 block of Portview Circle to replace 2-inch cast iron main.
4. Installed 1,724 linear feet of 6-inch ductile iron main along the 1000 to 1200 block of Collins Circle to replace 2-inch cast iron main.
5. Installed 1,398 linear feet of 6-inch ductile iron main along the 0 to 200 block of N Howell Ave to replace 2-inch cast iron main.
6. Installed 988 linear feet of 4-inch and 6-inch ductile iron main along the 0 to 100 block of Drew Rd to replace 1.5-inch galvanized main.
7. Installed 1,278 linear feet of 8-inch ductile iron main along the 3400 to 3600 blocks of Clio Ave to replace 2-inch galvanized main.
8. Installed 507 linear feet of 8-inch ductile iron main along the 3400 block of S Orchard Knob to replace 2-inch galvanized main.
9. Installed 1,633 linear feet of 6-inch and 8-inch ductile iron main along the 2900 to 3200 block of E 46th Street to replace 2-inch galvanized main.
10. Installed 792 linear feet of 4-inch and 6-inch ductile iron main along the 2100 to 2200 blocks of Wheeler Ave to replace 2-inch galvanized main.
11. Installed 852 linear feet of 6-inch ductile iron main along 5000 to 5100 blocks of Jarrett Rd to replace 2.25-inch galvanized main.
12. Installed 1,583 linear feet of 8-inch ductile iron main along the 5000 to 5100 blocks of Lynnwood Ave to replace 2-inch galvanized main.
13. Installed 892 linear feet of 6-inch ductile iron main along the 3300 block of Rondaboo Drive to replace 2-inch galvanized main.
14. Installed 819 linear feet of 4-inch and 6-inch ductile iron main along the 700 block of Curve Street to replace 2-inch galvanized main.
15. Installed 898 linear feet of 6-inch ductile iron main along the 3900 to 4000 block of Teakwood Drive to replace 2.25-inch cast iron main.
16. Installed 1403 linear feet of 8-inch ductile iron main along the 500 to 600 block of Oneal Street to replace 2-inch cast iron main.
17. Installed 676 linear feet of 4-inch and 6-inch ductile iron main along the 1200 block of Albany Street to replace 2-inch galvanized main.

Q. WHY IS THE MAJORITY OF THE MAIN BEING REPLACED CAST IRON AND GALVANIZED?

A. Within the TAWC distribution system, cast iron main and galvanized main represents approximately 46.8% of the total footage of main. However, these two types of pipe material have experienced approximately 84.5% of all the breaks within the system during the period of 2013-2023. Over the past several years, TAWC has concentrated on replacing cast iron and galvanized main to begin the process of removing the main to start to reduce the number of main breaks the system experiences. TAWC expects this effort of replacing cast iron and galvanized main will continue for decades as the approximately 687 miles of this material is removed from the system.

Q. WHAT IMPACT HAVE MAIN REPLACEMENT PROJECTS FROM THE B LINE HAD ON CAST IRON AND GALVANIZED MAINS?

A. Between 2014 and December 2023, the percentage of galvanized and cast iron water mains in the TAWC distribution system has dropped from 54.2% in 2014 to 46.8% in December 2023. Removing these mains from the distribution system has had a positive impact on system reliability. While the overall number of main breaks have decreased, the percentage of breaks caused by galvanized and cast iron main has increased, going from a 10 year average of 83.2% to a 2022-2023 average of 86.7%. These are indications that main replacement projects through Budget Line B are having an impact on decreasing customer disruptions due to main breaks, but the need for replacing galvanized and cast iron remains high.

Q. WHAT IMPACTS ARE EXPECTED FROM ADDITIONAL LINE B SPENDING IN 2023?

A. It is expected that these additional main replacement projects will continue the positive trends described above. Reducing the amount of galvanized and cast iron mains in the TAWC distribution system should continue to drive down the total number of main breaks as the percentage of these pipes in the distribution system decreases. The average yearly main breaks from 2010-2016 was 415 main breaks per year. Comparatively, the average yearly main breaks from 2017-2023 was 298 main breaks per year. These trends represent a real benefit to customers and helps decrease the Company's carbon footprint.

Q. HOW DOES THE 2023 SPEND COMPARE TO RECENT YEARS SPEND ASSOCIATED WITH LINE B?

A. TAWC had a greater focus on main replacements during 2023 than it has in recent years. The 2023 expenditures for Line B, is about $1,739,646 more than the three-year average taken between 2020 and 2022 of $3,331,953.

Part of this increase is due to the completion of several major rehabilitation projects at the Citico Water Treatment Plant. These necessary projects improved the facility's ability to meet regulatory requirements into the future. As these projects have wrapped up, TAWC is refocusing its investment on replacing water main that is nearing the end of its useful life.

Q. WHAT WORK IS ASSOCIATED WITH UNSCHEDULED MAIN REPLACEMENTS - LINE C AND WHY DOES IT FALL UNDER THE QIIP?

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

work. The work associated with the Unscheduled Main Replacements of Line C is similar to that of Main Replaced on Line B and addresses water mains that have started to experience chronic issues. However, unlike the Main Replaced on Line B, the work associated in Line C is a result of an unexpected failure of the main or valve that causes impact to the Customer and requires immediate work to correct the failure. The nature of the work is a reaction to an unexpected event. The work associated in Line C cannot be planned and scheduled, thus TAWC considers this work as unscheduled. The majority of work associated with Line C is replacement of water mains that have experienced an unscheduled break or failure, and the Company has determined that the replacement of a section of the main will allow the service life of the main to be extended rather than just repairing the failure with a temporary clamp and replacing the main through Line B. The Company believes that this type of replacement work is appropriate and should be included in the QIIP.

Q. WHAT WAS THE INVESMENT FOR WATER MAIN REPLACEMENTS ASSOCIATED WITH THE UNSCHEDULED MAIN REPLACEMENTS OF LINE C?

A. TAWC spent approximately $2,007,593 to replace various size water mains during unscheduled events. This number is slightly more than the three-year average of $1,812,672 for 2020-2022. While we have experienced fewer main breaks, we have seen an increase in average cost per main break. This is largely due to an increase in restoration cost driven by material cost inflation and paving ordinances changes. As we replace sections of main, the existing main will be more stable and the life of the main will be

extended, which will allow for a more concentrated effort for main replacements on mains that have a larger history of breaks.

Q. WHAT BENEFIT HAS TAWC SEEN WITH THE WATER MAIN REPLACEMENTS ASSOCIATED WITH UNSCHEDULED MAIN REPLACEMENTS OF LINE C AND MAIN REPLACEMENTS OF LINE B?

A. TAWC had a 16% reduction in water main breaks during 2023 (267) when compared to the ten-year average from 2013 to 2023 (317). TAWC contributes this reduction, in part, due to the focus on replacing main with a chronic history of main breaks rather than the previous initiative of repairing mains. TAWC further believes that the reduction in the average number of main breaks between 2013 and 2023 is directly correlated to the level of spending in the Unscheduled Main Replacement of Line C and Main Replacements of Line B.

Q. WHAT WORK IS ASSOCIATED WITH MAINS RELOCATED - LINE D AND WHY DOES IT FALL UNDER THE QIIP?

A. This budget line includes the relocation of existing water mains, including valves and other appurtenances, which are necessary due to ongoing municipal or state agency projects. These costs are not reimbursable. The work associated with the Main Relocated –Line D is a replacement of infrastructure that is impacted by improvements being proposed by municipal or state agencies that cause a conflict with the Company's infrastructure. The Customer benefits by work associated with the Main Relocated – Line D since the replacement main that is installed to eliminate the conflict with the municipal or state agency projects is typically a newer main that is stronger and more reliable than the main

being replaced. TAWC believes this type of relocation work is appropriate and should be included in QIIP.

Q. WHAT WAS THE RELOCATION INVESTMENT ASSOCIATED WITH LINE D FOR 2023?

A. TAWC spent $355,008 to replace water mains within the distribution system that were required to be relocated due to the work of a municipal or state agency. Historically, the three-year average spend (2020-2022) for this category has been $60,273. The spend was driven by a City of Chattanooga bridge rehabilitation project, where the Company's water main was relocated off the bridge.

Q. WHAT WORK IS ASSOCIATED WITH HYDRANTS AND VALVES REPLACED - LINE F AND WHY DOES IT FALL UNDER THE QIIP?

A. This line item includes the replacement of leaking, failed or obsolete hydrants, including hydrant assemblies and valves that are Company funded. Through the replacement of hydrants and valves that have been determined to not function properly through ongoing inspections allows TAWC to maintain public safety and ensure the distribution system is able to provide adequate and reliable service to the community. Since the work is associated with the replacement of infrastructure to maintain public safety and provide reliable service, the Company believes it is appropriate and should be included in QIIP.

Q. WHAT WAS THE REPLACEMENT INVESTMENT FOR HYDRANTS AND VALVES IN 2023?

A. TAWC spent $520,799 to replace hydrants and valves. Of this amount, TAWC spent a majority of this amount on replacing 12 valves that had been identified during valve

inspections over the past several years. Within this line, TAWC replaced 46 hydrants that had been determined during inspections to be damaged or in need of extensive repair. The amount spent for Line F during 2023 is slightly lower than the 3-year average spend between 2020 and 2022 of $536,983.

Q. WHAT BENEFIT HAS LINE F SPENDING HAD ON VALVES AND HYDRANTS?

A. From 2014 through 2023, the Company has replaced 538 fire hydrants and 1034 valves. These replacements are identified through routine valve and hydrants inspections, which allows TAWC to proactively replace assets found to be damaged or broken. This budget line provides a significant benefit to customers through increased system reliability and ensures fire hydrants are ready to be operated in the event of a fire.

Q. WHAT WORK IS ASSOCIATED WITH SERVICES REPLACED - LINE H AND WHY DOES IT FALL UNDER THE QIIP?

A. This investment plan item includes the replacement of water services or the small diameter pipe that connects the customer to the Company's distribution main. The work includes the replacement of the water service between the Company's distribution main and the customer's property line, including the replacement of corporation stops, or shut-off valves. The replacement of water service that is causing reduction in water service or concerns with water quality are included in the work performed within this spending line. By replacing these services, the Company can provide better service to customers. TAWC believes this type of replacement work is appropriate to maintain reliable service to customers and should be included in QIIP.

Q. WHAT WAS THE REPLACEMENT INVESTMENT FOR SERVICES WITHIN LINE H IN 2023?

A. TAWC spent $1,023,908 replacing 454 services during this period. The spend during 2023 is higher than the three-year average spend of $660,951 between 2020 and 2022. A portion of the higher spend was driven by a City of Chattanooga road resurfacing project where shallow service lines were discovered due to rocky ground conditions. These service lines began to fail during the resurfacing project and were lowered to avoid issues with the resurfacing project.

Q. WHAT IS THE WORK ASSOCIATED WITH METERS REPLACED - LINE J AND WHY DOES IT FALL UNDER THE QIIP?

A. This investment plan item includes the replacement or improvement of existing Customer meters and meter settings with or without technology changes. The work associated with this spending line allows for the replacement of meters and meter settings that are nearing the end of their useful service life and could cause service disruptions or inconveniences to a Customer if they were to fail. The Company believes this type of replacement work is appropriate to maintain reliable service to a Customer and should be included in QIIP.

Q. WHAT WAS THE REPLACEMENT INVESTMENT FOR METERS?

A. The total meter replacement cost for the period is $5,446,902. Based upon an average cost of meter replacements of approximately $356 per meter, TAWC replaced 15,297 meters.

Q. HOW DOES THIS COMPARE TO PAST YEARS OF METER REPLACEMENTS?

A. The 2023 investment of $5,446,902 is an increase as compared to the three-year average between 2020 and 2022 of $1,860,804. Spending on this budget line substantially increased in 2023 due to a high number of meters reaching the end of their useful life. The transition to 100% Automatic Meter Reading ("AMR") was also completed in 2023, providing customers with increased confidence they are being billed correctly for the

amount of water they use. Also, efficiencies gained through less manual meter reads means that Company personnel can be re-tasked to maintaining AMR equipment and be positioned to respond to customer inquiries more efficiently.

Q. WHAT IS THE WORK ASSOCIATED WITH CAPITALIZED TANK REHABILITATION/ PAINTING – LINE R AND WHY DOES IT FALL UNDER THE QIIP?

A. This investment plan item includes the rehabilitation and painting of water storage tanks within the distribution system. Performance of periodic rehabilitation and painting of these water storage tanks maintains the ability of the water distribution system to provide reliable service and ensure the system is able to meet the demands during peak customer demand periods and during firefighting periods. In addition, this rehabilitation work allows the system to ensure that it is able to provide safe water to its customers. Through the rehabilitation of the tank, the system's reliability is maintained and should be included in QIIP.

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

A. TAWC spent $2,521,143 completing four tank rehabilitation/painting projects in 2023. These projects consisted of two tanks located at the Citico Water Treatment Plant (Wash Water Tank # 3 and Clearwell # 3) and two remote tanks (Lookout Mountain # 2 and St. Elmo # 2). The spend for capitalized tank rehabilitation/painting in 2023 was higher than the three-year average for the years 2020 to 2022 of $1,087,730. This was mostly driven by the Rehabilitation of Clearwell # 3 due to its large size (3,560,000 gallons).

Q. WERE THERE ANY CAPITAL INVESTMENT PROJECTS ("IP") THAT ARE INCLUDED UNDER THE QUALIFIED INFRASTRUCTURE INVESTMENT PROGRAM?

A. Yes. TAWC has two Capital Investment Projects that was placed in service during 2023. The projects are Lookout Valley Redundancy Booster Station, and Magnolia Main Replacement.

Q. WHAT IS THE LOOKOUT VALLEY REDUNDANCY BOOSTER STATION?

A. The Lookout Valley System is one of the fastest growing zones for TAWC. A study was performed in 2019 that looked at current capacity and population growth for the Lookout Valley Zone. This study predicts if trends continue, the current system will be under capacity before the year 2030. The other issue is that there is a bottleneck in how the system receives its water. All water for the Lookout Valley Zone goes through a single booster station called the St. Elmo Booster Station. This booster station is over 75 years old and needs electrical improvements. To make these improvements, a redundant feed is required to serve the Lookout Valley Zone while the St. Elmo Booster Station is offline for rehabilitation. This booster station project will increase the water pressure to the appropriate hydraulic grade line to send water into the Lookout Valley pressure system and provide the redundant feed. The total spend for this project in 2023 was $1,586,423.

Q. WHAT IS THE MAGNOLIA MAIN REPLACEMENT?

A. The Magnolia Main Replacement project replaced approximately 5,350 of water lines of various sizes and materials with a new twelve-inch ductile iron main. This replacement will provide improved water quality, fire flow, and service and reliability to the customers along the waterline and downstream from it. The total project cost in 2023 was $609,192.

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 WAS THE INVESTMENT FOR NEW WATER MAIN ASSOCIATED WITH LINE A IN 2023?

A. TAWC spent $602,844 in 2023 on New Water Mains associated with Line A. These charges were mostly split across two major projects: Black Creek 14 meant to provide additional service to the growing Black Creek Development, in Chattanooga; and Stadium Way Extension to provide service to a new entertainment district in East Ridge, TN.

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 WAS THE SCHEDULE FOR NEW HYDRANTS AND VALVES?

A. TAWC spent $203,051 on a combination of 7 new hydrants and 21 valves. This is slightly less than the three-year average between 2020 and 2022 of $230,642. TAWC believes that this level of investment will serve the growing economic development in it's service territory.

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

A. No, TAWC had no Capital Investment Projects that was placed in service during 2023.

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 better positioned to meet safety and environmental requirements and is appropriate to be included in the SEC.

Q. WHAT WAS THE INVESTMENT TO SCADA ASSOCIATED WITH LINE L IN 2023?

A. TAWC spent $415,711 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 is more than the three-year average spend of $218,289 for the years between 2020 and 2022. This was mostly driven by the installation of a new server for TAWC's SCADA. The new server will help protect against emerging cyber security threats and replace a server at the end of its useful life.

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 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 that its facilities are monitored actively. These improvements will maintain the equipment and allow current technology to be employed in order to provide safe drinking water and protect its infrastructure, and are appropriate to be included in the SEC.

Q. WHAT WAS THE INVESTMENT FOR SECURITY EQUIPMENT AND SYSTEMS IN 2023?

A. TAWC spent $264,859 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.

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 better positioned to comply with federal and state safety and environmental compliance requirements to provide safe and reliable water service. To facilitate compliance with federal and state requirements, these investments are appropriate to be included in the SEC.

Q. WHAT WAS THE INVESTMENT FOR PROCESS PLANT FACILITIES AND EQUIPMENT IMPROVEMENTS WITHIN LINE Q IN 2023?

A. TAWC spent $2,468,621 within the Process Plant Facilities and Equipment Improvements within Line Q. This level of investment is a increase in the line compared with the three-year average spending of $1,820,633 over the period of 2020 to 2022. Larger items projects for 2023 include replacing the carbon in Filters 1-6 and 9-13 as well as Aldrich Units 1 and 6. The Company also upgraded its system delivery meters, going from a Venturi style meter to Electromagnetic Flow Meters on 5 of 7 of the system delivery meters for the Citico Plant,

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

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, use less electricity, and reduce 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. WERE THERE ANY CAPITAL INVESTMENT PROJECTS (IP) INCLUDED UNDER THE SAFETY AND ENVIRONMENTAL COMPLIANCE RIDER?

A. Yes. The Whitwell Raw Water Intake Improvements Project Phase 2 was completed under the Safety and Environmental Compliance Rider in 2023.

Q. WHAT IS THE WHITWELL RAW WATER INTAKE IMPROVEMENTS PHASE 2?

A. The Whitwell Raw Water Intake Improvements Phase 2 was for additional improvements to the raw water intake located along the Sequatchie River, East of TAWC's Whitwell Water Treatment Plant. This project consists of upgrading and replacing the motors and starters that power the pumps along with safety improvements. These improvements will make the intake more resilient to allow for continued service for the Whitwell Service Area. It will also make the intake structure safer for TAWC employees during future maintenance and inspections.

Q. CAN YOU PROVIDE THE OVERALL AMOUNT OF IN SERVICE PLANT FOR 2023?

A. Yes. TAWC was able to ensure that capital spending on projects led to those projects being implemented and placed in service. TAWC utilized the FRM process to manage projects and make sure that approved capital spending was utilized on projects that would be placed

in service in a timely manner. 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 0.22% under the expected average year to date spend. This is the cumulative plant additions, and is reflected in **(Petitioner Exhibit TAWC 2024 Incremental Capital Rider Revenue Requirement (ICRRR))** attached to Mr. Robert Lane's Pre-filed Direct Testimony.

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

A. Yes. I have attached to my testimony **Petitioner's Exhibit 2023 SCEP Results – GS**. This exhibit provides a comparison of the 2023 Strategic Capital Expenditures Plan with Actual Capital Expenditures by recurring project lines and investment project lines.

Q. CAN YOU SUMMARIZE THE COMPANY'S PERFORMANCE ON THE QIIP, EDI AND SEC FOR 2023?

A. Yes. As described previously, TAWC spent $19,021,340 in QIIP, $837,529 in EDI, and $6,919,438 in SEC Riders in 2023.

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 priority 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 the overall spending is consistent with the approved budget levels. The management of the budget lines is carried out during monthly CPMC 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. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

STATE OF Tennessee)
)
COUNTY OF Hamilton)

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared 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 7 day of March, 2024.

Kathryn Robinson
Notary Public

My Commission Expires: 10/20/2024

Kathryn Robinson
STATE OF TENNESSEE NOTARY PUBLIC
HAMILTON

Tennessee-American Water Company
Case No. 2024-000XX
2024 Capital Rider
2023 Actual vs Budget Capital Expenditures

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)		-	3,636,962	1,300,000	2,336,962
A	Mains - New		EDI	602,844	250,700	352,144
B	Mains - Replaced / Restored		QIIP	5,071,599	2,934,750	2,136,849
C	Mains - Unscheduled		QIIP	2,007,593	1,626,500	381,094
D	Mains - Relocated		QIIP	355,008	302,295	52,713
E	Hydrants, Valves, and Manholes - New		EDI	203,051	289,000	(85,949)
F	Hydrants, Valves, and Manholes - Replaced		QIIP	520,799	975,000	(454,202)
G	Services and Laterals - New		-	3,339,002	2,229,000	1,110,002
H	Services and Laterals - Replaced		QIIP	1,023,908	719,364	304,543
I	Meters - New		-	15,336	0	15,336
J	Meters - Replaced		QIIP	5,446,902	3,150,199	2,296,703
K	ITS Equipment & Systems - Local		-	213,307	333,284	(119,977)
L	SCADA Equipment and Systems		SEC	415,711	350,000	65,711
M	Security Equipment and Systems		SEC	264,859	325,000	(60,142)
N	Offices and Operations Centers		-	48,296	20,000	28,297
O	Vehicles		-	2,039,892	1,830,000	209,892
P	Tools and Equipment		-	406,242	135,000	271,242
Q	Process Plant Facilities and Equipment		SEC	2,468,621	1,418,000	1,050,621
R	Capitalized Tank Rehabilitation / Painting		QIIP	2,521,143	1,400,000	1,121,143
S	Engineering Studies		-	376,375	125,000	251,375
T	Enterprise T&I Solutions		-	1,922,257	2,250,000	(327,743)
	TOTAL RECURRING PROJECTS DV - T			**32,899,706**	**21,963,092**	**10,936,614**
	TOTAL RECURRING PROJECTS A - T			**29,262,744**	**20,663,092**	**8,599,652**
I26-020048	Replace Elder Mt Transmission Main		QIIP	0	18,366	(18,366)
I26-020051	Replace Switch Gear - Citico		SEC	28,411	4,307,197	(4,278,787)
I26-020062	Filter House #2 Rehab		QIIP	(36)	0	(36)
I26-020063	River Gorge Transmission Mains		EDI	0	0	0
I26-020064	River Gorge Booster Station		EDI	0	0	0
I26-020067	Lookout Valley Redun - Citico Tank		QIIP	16,077	2,364,813	(2,348,736)
I26-020068	Lookout Valley Redun - River Crossing		QIIP	434,701	2,815,055	(2,380,353)
I26-020069	Lookout Valley Redun - Piping Upgrade		QIIP	69,100	0	69,100
I26-020071	Black Creek Tank		EDI	31,634	0	31,634
I26-020072	Lookout Valley Redun - Lookout Valley Tank		QIIP	0	114,879	(114,879)
I26-020076	The Bend Phase 1 - Main Ext		EDI	0	337,912	(337,912)
I26-020079	Thickener #1 Sludge Rake Replacement		SEC	106,023	0	106,023
I26-020077	Lookout Valley Redun - Booster Station		SEC	1,586,423	1,492,234	94,189
I26-020078	Chattanooga Ops Center		-	0	2,000,612	(2,000,612)
I26-050001	Raw Water Intake Improvements - Whitwell		SEC	302,174	0	302,174
I26-050003	Whitwell Clearwell		QIIP	868,677	1,164,534	(295,857)
I26-050008	Magnolia Main Extenstion		QIIP	609,192	805,243	(196,050)
I26-050009	Dunlap Interconnect		QIIP	76,677	0	76,677
I26-050011	Raw Water Intake Improvements Ph 2		SEC	1,747,216	0	1,747,216
	TOTAL INVESTMENT PROJECTS			**5,876,270**	**15,420,845**	**(9,544,575)**
	TOTAL GROSS			**38,775,976**	**37,383,937**	**1,392,039**
	Contributions			(831,399)	(540,000)	(291,399)
	Advances			(2,253,031)	(700,000)	(1,553,031)
	Refunds			997,885	350,000	647,885
	Net Advances, Refunds, and Contributions			**(2,086,545)**	**(890,000)**	**(1,196,545)**
	Net US GAAP			**36,689,431**	**36,493,937**	**195,494**