TENNESSEE-AMERICAN WATER COMPANY, INC.

DOCKET NO. 24-00032

DIRECT TESTIMONY

OF

GRADY STOUT

ON

TENNESSEE-AMERICAN WATER COMPANY'S OPERATIONS, WATER QUALITY AND SOURCE WATER MONITORING EFFORTS, LEAD SERVICE LINE PROGRAM PROPOSAL, SAFETY PERFORMANCE, OPERATING AND MAINTENANCE EXPENSE, WATER EFFICIENCIES, AND EMPLOYEE LEVELS AND COMPENSATION

SPONSORING PETITIONER'S EXHIBITS:
Exhibit GS-1: Map of TAWC Service Area

DIRECT TESTIMONY
GRADY STOUT
TENNESSEE AMERICAN WATER COMPANY
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I. INTRODUCTION

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") as Vice President of Operations.

Q. WHAT ARE YOUR RESPONSIBILITIES IN THIS POSITION?

A. As Vice President of Operations, I am responsible for leading TAWC's operations (production, distribution, field services, and construction), water quality/environmental compliance, operational risk management (safety), and business performance (collectively, "Operations") functions. I lead the Company's Operations team by providing goals and directions that strive to increase cost effectiveness, performance, customer service and service quality.

Q. PLEASE STATE YOUR PROFESSIONAL AND EDUCATIONAL BACKGROUND AND WHETHER YOU ARE A MEMBER OF ANY PROFESSIONAL ORGANIZATIONS.

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, which included the

installation of wells, a chemical building, a storage tank, and a distribution system. In 2012, after the Little Milligan Water System 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, TAWC promoted me to Engineering Manager of TAWC. In May of 2022, I was promoted to Director, Engineering. In February of 2024, I was promoted to my current role, Vice President of Operations. That said, I previously served twice on an interim basis as Vice President of Operations for TAWC, the first from January 2020 – April of 2020, and the second from April of 2021-June of 2021. I am an active member of American Water Works Association (AWWA), American Society of Civil Engineers (ASCE), and served as the 2020 President of the Chattanooga Engineer's Club. I am currently the Chair of the Tennessee AWWA section's Water Utility Council.

Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY BEFORE THE TENNESSEE PUBLIC UTILITY COMMISSION?

A. Yes. I have submitted testimony in a several Tennessee Public Utility Commission ("TPUC" or "Commission") matters, including Docket Nos. 20-00011, 20-00128, 21-00030, 22-00021, 22-00049, 23-00066 and 24-00011.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. Generally, the purpose of my testimony is to describe TAWC's physical operations and strong operational performance in Tennessee. Specifically, I will first describe the Company's water operations and facilities. Second, I will explain TAWC's industry leading water quality improvement and source water monitoring efforts. Third, I will describe the Company's proposed Lead Service Line program. Fourth, I will describe our strong safety record and Company commitment to safety for the benefit of both our customers and employees. Fifth, I will provide information regarding TAWC's operating and maintenance expenses. Sixth, I will describe the water efficiencies established by TAWC's Operations, such as the Company's usage of state-of-the-art technology in the field, including Geographic Information System ("GIS") platforms. Finally, I will explain the Company's current and anticipated employee levels and employee compensation philosophy.

Q. ARE YOU SPONSORING ANY EXHIBITS?

A. Yes, I am. I am sponsoring Exhibit GS-1, which is a map of TAWC's service area.

II. OVERVIEW OF OPERATIONS

A. Operations and Facilities

Q. PLEASE DESCRIBE TAWC'S OPERATIONS.

A. TAWC owns, operates, and maintains potable water production, treatment, storage, transmission and distribution systems, pumping, and treatment systems, for furnishing water to approximately 87,000 water and private fire service customers throughout the states of Tennessee and Georgia. A map showing the Company's service area is attached to my testimony as Exhibit GS-1. TAWC's customers are served by field operations

employees who report to two operations centers located in Chattanooga, TN and Powells Cross Roads, TN. In addition to providing direct water service to its customers, TAWC also provides "sale for resale" water service to four customers that receive service under special contracts approved by the TPUC.

Q. PLEASE DESCRIBE THE WATER ASSETS AND FACILITIES THAT TAWC USES TO PROVIDE WATER SERVICE TO ITS CUSTOMERS.

A. TAWC currently owns, operates, and provides service through four separate public community water systems in the areas of Chattanooga, Suck Creek, Whitwell and Jasper Highlands. Three of the four water systems include its own source of supply, production, treatment, storage and distribution facilities, with the fourth (Jasper Highlands) receiving its water from South Pittsburg Board of Water Works & Sewers. The Company operates two surface water treatment plants - One serving Chattanooga with a capacity of 65.0 million gallons per day and the other serving Whitwell with a capacity of 1.2 million gallons per day. The Company also operates one groundwater production and treatment facility serving Suck Creek with a Capacity of 0.1 million gallons per day. The average water produced for TAWC in 2023 was 35.3 million gallons per day ("MGD"). Within the TAWC operations structure, the Production Department is responsible for the operations and maintenance of the sources of supply, treatment plants, clearwells, booster stations, and treated water storage facilities.

Q. HOW DOES TAWC MANAGE THE OPERATIONS AND MAINTENANCE OF ITS WATER SYSTEMS?

A. Field Operations is responsible for operating and maintaining transmission and distribution assets, utility service lines, fire services, and metering assets. In addition, Field

Operations provides field-level service to customers, including meter reading, service requests, and field-related leak repairs. Finally, Field Operations works with the Engineering Department and new customers to provide new and replacement services and to coordinate the construction of certain new and replacement or rehabilitated distribution assets.

Q. HOW DOES TAWC OPERATE THIS SYSTEM ON A DAILY BASIS?

A. To operate and maintain the distribution systems, the Company employs a management team, technical staff, and skilled workforce, which works around the clock every day of the year. No matter the time of day, the day of the week, or the weather conditions, Tennessee- American Water employees are working to maintain safe and reliable water service to its customers. A SCADA (Supervisory Control And Data Acquisition) system is utilized to remotely monitor and, in some instances, control the Company's many storage, booster, and PRV (Pressure Reducing Valve) facilities in the distribution systems.

II. COMMITMENT TO SAFETY

Q. PLEASE DESCRIBE TAWC'S OVERALL COMMITMENT TO SAFETY.

A. The health and safety of our employees and customers, as well as protecting the quality of the water we deliver, are the top priorities for our Company and critical to our success. Our colleagues', contractors', and customers' safety are very important, and we focus on safety every day. TAWC's commitment is to ensure that every employee chooses safety, so they go home each day in the same or better condition than when they came to work.

The Company is also committed to securing assets across our system and recognizes the importance of protecting our water sources, treatment plants, infrastructure,

and data from malevolent acts, as demonstrated by our robust security and cyber security programs. American Water has invested in several technology improvements to our security programs. Investments in a new modernized Video Management System software and expanded use of video cameras across American Water facilities improve the physical security posture of the American Water locations. American Water has invested heavily in cyber security as well with a focus on Operational Technology ("OT") or SCADA security. These investments include replacement of all OT firewalls across the American Water environment and implementation of Tenable OT, an OT specific technology to help identify vulnerable OT assets across the organization, including for TAWC.

Finally, the Company's emergency response program demonstrates the Company's recognition that rapid response and recovery from security incidents are critical to maintaining a resilient water system.

Q. HOW IS SAFETY RELEVANT TO TAWC'S OPERATIONAL PERFORMANCE?

A. The Company considers safety to be a core value, as well as a strategy. Employee health and safety is the responsibility of every TAWC employee, and to that end, every employee strives for safety. We ask our employees to place safety first in everything they do. We have a strong commitment to our employees (and their families) to keep them, our

customers, and the public safe. A safe workplace increases employee morale, increases our commitment to one another, and makes for a more engaged and productive workforce.

Q. PLEASE DESCRIBE TAWC'S SAFETY PROGRAM AND OPERATIONS' ROLE IN PROMOTING SAFETY AND A SAFE WORKING ENVIRONMENT AT TAWC.

A. The Company's safety program includes multiple activities and initiatives to maintain compliance, support employee engagement and to help ensure the safety of our workforce and our customers, as well as the public. Operations is responsible for administering the health and safety program, which includes the delivery of all Occupational Safety and Health Administration ("OSHA") required training, training and qualification of employees, physical security, cyber security, business continuity planning, and event management. We are supported by functional departments within the Service Company, such as Health & Safety, Learning & Development, Security, and Human Resources, to deliver core operations services.

Q. ARE THERE ANY SPECIFIC SAFETY PROGRAMS THAT YOU WOULD LIKE TO HIGHLIGHT?

A. Yes, I will highlight a few safety programs that TAWC has implemented over the years that have aided in promoting the Company's strong safety culture. The Company's Near Miss Reporting Program involves employees identifying hazards that could have resulted in an injury or accident. For example, if a piece of equipment becomes worn outside of a regular maintenance cycle, an employee reports this as a "Near Miss" and we can then replace the worn part and avoid a potential injury from an equipment malfunction. Near Misses improve safety by encouraging employees to look for hazards in the workplace,

which improves the employees' awareness and helps make our workspaces safer. American Water's Health and Safety Group collects these Near Misses from operating utilities across the American Water footprint each week and selects several to highlight in a safety video that is distributed across the business for use in safety tailgate discussions (short informational meetings held with employees to discuss worksite safety issues).

TAWC also uses the services of WE R CPR to provide employees with first aid, CPR and AED training. WE R CPR is an American Heart Association authorized training center located in the Chattanooga area and provides both on-site and off-site classes with effective resources and hands-on application of the techniques. In 2023, TAWC has also utilized WE R CPR to provide First Aid/CPR/AED training for our employees and, at the end of 2023, had 100% of our employees certified. TAWC also uses York Safety Solutions, a Veteran-owned business which specializes in safety training, inspections and consulting, which is located in the Knoxville area. York Safety Solutions provided Confined Space, Workplace Violence, and Forklift training to our employees in 2023. Power for America, a union-led, peer-to-peer training program provided hands-on Trenching and Excavation training for distribution employees in November of 2023.

TAWC employees also participated in a program called the "Certified Safe Worker" program. This program is a self-directed program promoting safety and health awareness and participation, documenting work, and at-home safety activities. In 2023,

100% of TAWC employees completed the program. This is an increase from 2022, when 69% of employees completed the Certified Safe Worker program.

Q. HOW DID TAWC PERFORM IN THE NEAR MISS REPORTING PROGRAM?

A. In 2023, TAWC employees reported 409 Near Misses from across the state. This is a 79% increase over the number of Near Misses reported in 2022 and reflects the increased employee awareness and use of this program. Most Near Miss reports are corrected by an individual employee identifying the issue and resolving the issue or working with the appropriate people to obtain resources where necessary. TAWC prides itself on correcting 100% of Near Miss submissions by identifying and mitigating the root cause rather than focusing on quick fixes.

Q. HOW DO YOU KNOW THE COMMITMENT TO SAFETY IS EFFECTIVE?

A. The increase in the level of employee participation in each of our safety programs indicates that we are building a strong safety culture at TAWC. TAWC encourages all employees to participate in safety related programs, and to report unsafe behaviors or conditions. As a people-powered organization, the voices and actions of our employees are essential to our success, and the high level of participation in safety programs and the fact that employees feel comfortable sharing their experiences and speaking up, to me is the best gauge for assessing effectiveness.

Q. HOW HAS A STRONG SAFETY CULTURE BENEFITED CUSTOMERS?

A. A strong safety culture is a cornerstone for any high performing organization. Customers benefit because the Company, through strong health and safety programs, has enhanced productivity and decreased absenteeism. This means that crews operate with a full staff

and can fix problems quicker, reducing any service down time to the customer. Tennessee-American's strong safety culture also improves employee morale, as our employees know that we care for them and their families. In turn, TAWC's safety culture illustrates that our employees are thoughtful in their work, which directly benefits our customers. Lastly, proactive investment in safety measures and strong safety performance reduce safety-related incidents and the attendant costs, which also benefits customers.

Q. HOW DO SAFETY PROGRAMS PROVIDE AN OVERALL PUBLIC BENEFIT?

A. The public benefits from TAWC's safety and security programs because they help us provide safe water service. Our safe operations and compliance with occupational safety regulations provide the public with the confidence that the Company operates in a safe and secure manner. In addition, TAWC crews operate daily in public areas and must protect their worksites from hazards as well as help shield the public from exposure to these hazards.

Q. SHIFTING FROM SAFETY TO SECURITY ISSUES, HOW IS THE COMPANY ADDRESSING THE PHYSICAL SECURITY OF ITS ASSETS AS WELL AS CYBERSECURITY?

A. TAWC has taken a comprehensive approach to address physical and cybersecurity. Physical security consists of cameras, badge readers and cyber keys that monitor situations and are programmed to limit access to secure areas, including offices, shops, well sites, treatment, pump stations and chemical storage facilities. The Company has strategically placed cameras at critical infrastructure (e.g., tank and well sites) and secure work locations (e.g., offices and shops). Cameras are connected to a secure line that provides video output to the local operations control rooms and American Water's central security and reliability

control room. In addition, identification badges are issued for the purpose of facility access control at the Company's facilities. All employees must wear and openly display the identification badge visibly while on any TAWC property, while on Company business or while representing the Company publicly or privately. Unauthorized entries are registered as an alarm that is received by the local operations control room.

The Company takes cybersecurity just as seriously as physical security. Cybersecurity technology solutions are vital to reliable and resilient water systems. For that reason, cybersecurity is core to the American Water vision of resiliency and sustainability. Investments in cybersecurity, which include enhancements to controls of identity and management of access to our systems, monitoring of sensitive information, and increased visibility of potential intrusion attempts to our systems, protect our existing systems and enable the implementation of secure innovation. Safeguarding the integrity of Company information and systems, as well as customer data, while enhancing the customer experience is our security mission. The Company's cybersecurity program is consistent with industry best practices, including the National Institute of Standards and Technology ("NIST") Cybersecurity Framework and the AWWA Process Control System Security Guidance for the Water Sector.

Q. HOW DOES TAWC HANDLE EMERGENCY RESPONSE?

A. TAWC maintains emergency response plans ("ERP") for the Chattanooga Water System, Whitwell Water System, Suck Creek Water System and Jasper Highlands Water System. At a minimum, the ERPs are reviewed and updated each year by Company leadership to ensure the information is accurate and compliant with the Environmental Protective Agency, OSHA and TDEC expectations. The ERPs contains information on what to do as

well as contacts to call in case of an event that either affects our ability to provide water to our customers or involves a safety incident impacting our employees. In 2023, TAWC conducted two exercises, one at our Citico Water Treatment Plant and one at our Sequatchie Valley Operations center. Both exercises were focused on evaluating the functionality of the ERP and our internal Incident Command System by responding to a loss of critical infrastructure (booster stations) due to severe weather. A significant benefit of these sessions is enhancing our cross-functional communications and emphasizing the importance of including outside resources such as County Emergency Response teams and local fire departments. During these exercises a key element is the discussions held regarding the testing of our communications; both internally and externally. The exercises included participation from some of our external partners, including state, county and city regulators and first responders. By strengthening our relationships with these external partners, we can better understand their expectations and the support that they may provide during emergencies. Situational awareness is also a key takeaway from these exercises because we alert participants to some hazards they might face if responding to our facilities. Additionally, discussions are held to broaden TAWC's awareness of the support and guidance to the business available from the Service Company during significant and severe incidents as they occur.

Our 2024 plans include two tabletop exercises, with the tentative topic being our response to Loss of SCADA with a focus on critical equipment.

IV. COMMITMENT TO WATER QUALITY AND ENVIRONMENTAL COMPLIANCE

Q. PLEASE DESCRIBE TENNESSEE-AMERICAN WATER COMPANY'S OVERALL COMMITMENT TO WATER QUALITY AND ENVIRONMENTAL COMPLIANCE.

A. TAWC has provided water service to customers for over 137 years. We are acutely aware that water is the only utility intended for customers to ingest, and that our customers rely on TAWC to provide them with safe and reliable water services. Water quality is of paramount importance to the health and well-being of our customers. Beyond health and safety, we know that TAWC's customers are also interested in the aesthetic qualities of the water we treat and deliver to them. We proactively look for ways to optimize treatment capabilities to continue to improve the overall quality of drinking water delivered to our customers and do so in a way that strives to create operational efficiencies that also benefit our customers. The Company has several programs and initiatives designed to enable TAWC to comply with all drinking water quality, water pollution, residuals management, and hazardous materials laws and regulations. Such programs include but are not limited to the following: source water monitoring program including water surveillance monitoring of our watershed and tributaries, taste and odor monitoring, corrosion control program including weekly water quality parameter monitoring, and monthly residual monitoring.

Q. PLEASE DISCUSS SOME OF TAWC'S WATER QUALITY INITIATIVES.

A. TAWC is deeply committed to ensuring our customers receive water that meets all regulatory requirements, and we strive to provide water that exceeds those requirements. To meet these goals, TAWC has and continues to take the actions outlined below to enhance its water quality.

The Company continually evaluates new treatment chemicals for improved treatment effectiveness, safety and cost efficiencies. Since the Company's last rate case, TAWC has converted its Citico treatment plant, located in Chattanooga, from using gaseous chlorine to using liquid sodium hypochlorite for disinfection. This change eliminates chlorine gas, thereby reducing the risk of toxic exposures for our employees and the surrounding communities. TAWC's other two water treatment plants have been using liquid sodium hypochlorite since acquired by the Company.

TAWC requires that all sample collection, review of results, and reporting undergo dual validation internally, which is the process of having more than one person review each step of the processes (sample collection (COCs), review the results, and reporting, prior to submittal to the reviewing regulatory agency. This serves to ensure both data accuracy and that the concerning results are addressed immediately. The Company also instituted a policy requiring the development of internal action plans to address testing results that show a contaminant level above 80% of the established primary maximum contaminant level. The plans are site specific and may include changes to treatment chemicals, distribution system improvements, or modifications or additions to treatment trains.

The Company's compliance efforts are supported by our internal monitoring results program, Sample 1 View ("Sample 1V"). Sample 1V provides a user-friendly dashboard for several critical water quality measurements that is reflective of real-time sample collection in the field and includes bacteriological sample information. This is a powerful tool that allows TAWC staff to ensure all required samples are collected and observe and react to trends in samples. It is GIS capable, so employees can more easily route themselves to the sampling locations. In addition, Sample 1V is capable of producing bacteriological

reports for submission to the regulating authorities. Sample 1V is being used by all TAWC staff for the collection and reporting of bacteriological compliance samples and has improved staffing efficiency.

Another new program being rolled out for operational data and onsite laboratory tests is Waterly. Waterly is user friendly program that provides real time data through connection with SCADA allowing employees to enter their tests results as they are completed. Waterly will be launching a sample management system by the end of the year allowing more visibility to sample schedules by everyone. This insight is invaluable, providing another user friendly tool for added validations and monthly reporting to the regulatory agency.

I would also like to highlight the Company's environmental near miss program. I discuss the Company's near miss program in greater detail elsewhere in my testimony but included within that program is a specific focus on environmental and water quality issues. TAWC takes a proactive approach in identifying potential water quality issues and implementing prompt improvements. The environmental near miss program identifies and addresses or resolves water quality or environmental vulnerabilities before they can create an adverse impact. In 2023, TAWC employees submitted three environmental near miss reports, which identified and avoided potential customer impacts in those instances. In addition, because near miss reports, including environmental near misses, are shared companywide for educational purposes, the impact and positive benefits from such near miss reports is much broader than the specific near misses identified, as the reports often prompt proactive corrections for other customers in different areas of TAWC's system.

Q. WHAT SPECIFIC ENVIRONMENTAL LAWS OR REGULATIONS AFFECT

HOW TENNESSEE-AMERICAN WATER COMPANY OPERATES AND MAINTAINS ITS FACILITIES?

A. TAWC has extensive regulatory responsibilities relating to drinking water (e.g., the Safe Drinking Water Act), for which the Tennessee Department of Environment and Conservation ("TDEC") has the responsibility for implementation and enforcement. The Company is also subject to the Commission's water regulations and standards set forth in, TPUC Rules 1220-04-03 et. seq., including standards for meter installation, testing, and accuracy, and water quality.

Q. PLEASE DESCRIBE TENNESSEE-AMERICAN'S WATER QUALITY TESTING PROGRAM UNDER THE SAFE DRINKING WATER ACT?

A. TAWC routinely tests water in all of its Company-owned public water systems to determine if it is meeting the standards established by the federal and state regulatory authorities. Our drinking water is tested both before and after treatment to confirm that it satisfies all chemical and bacteriological criteria. To help protect the public health, we have multiple barriers in the treatment process to help prevent contamination from reaching our customers. We test for the presence of synthetic organic chemicals, inorganic chemicals, VOCs, radionuclides, bacteria, disinfection byproducts, and all other contaminants that the regulators require us to monitor, at the frequency prescribed by the federal and state regulations, and report the results of this testing to the TDEC in accordance with the requirements In addition, we work with our customers to collect and analyze samples for compliance with the United States Environmental Protection Agency's

Revised Lead and Copper Rule[1] ("LCR"), as well as participate in the federal Unregulated Contaminant Monitoring Rule programs.

In 2023, TAWC collected more than 27,000 water chemistry and routine bacteriological samples with more than 8,000 parameters analyzed. Many additional samples are taken to assess process effectiveness, support pilot treatment studies, and monitor emerging contaminant threats. We also collect other bacteriological samples as needed in response to main breaks and similar emergencies. TAWC's four water systems (Chattanooga, Whitwell, Suck Creek and Jasper Highlands) are served by two Senior Water Quality/Environmental Compliance ("WQ/EC") Specialists and a WQ/EC manager, for its water quality testing and compliance programs.

IV. LEAD SERVICE LINE REPLACEMENT PROPOSAL

Q. Please provide an overview of the Company's proposal to replace customer-owned lead service lines.

A. As part of this case, the Company's is seeking approval to replace customer-owned lead service lines and to recover the cost through TAWC's Qualified Infrastructure Investment Program Rider ("QIIP"). Historically, the Company has only replaced the Company-owned portion of the service line when lead is identified and notifies the customer about their service line containing lead and their option to replace their service line at their expense. This is so because the customer and not the Company, is responsible for the customer-side service line. Based on a growing body of

[1] On December 6, 2023, the US EPA published proposed revisions to the National Primary Drinking Water Regulations for lead and copper under the Safe Drinking Water Act. The new proposed rules will strengthen and build on the 2021 Lead and Copper Rule Revisions and the original 1991 Lead and Cooper Rule. See https://www.federalregister.gov/documents/2023/12/06/2023-26148/national-primary-drinking-water-regulations-for-lead-and-copper-improvements-lcri.

research, the Company believes it is appropriate to remove lead from both the Company and the customer-owned portion of the lead service line (including lead goosenecks and galvanized lines that are or may have been downstream from lead) to promote and protect public health. By removing the entire lead service line ("LSL") from active operation, a source of lead will be removed, further reducing the potential for exposure to lead in the drinking water supplied to customers. Therefore, the Company is proposing a proactive approach that favors full lead service line replacements over partial lead service line replacements where practicable. This will include lead service lines owned by the Company and by the customer. Thus, we propose to replace lead service lines whenever we encounter them and that both Company and customer-owned portions be replaced at the same time whenever possible and integrated in the Company's water main replacement program in the short-term. Over the long-term, the Company is committed to replacing all lead service lines and should be granted the same recovery even if they may need to be replaced outside the specific context of a main replacement. Company Witness Lane will address the regulatory policy and ratemaking aspects of the Company's proposal in his Direct Testimony.

Q. WHY SHOULD WE BE CONCERNED ABOUT LEAD?

A. Lead is a naturally occurring metal that can cause a variety of health effects, including delays in physical and mental development of young children. Lead exposure is most common from soil, paint chips, or dust, but exposure can also come from drinking water. Recent events, including those in Flint, Michigan and Newark, NJ, have heightened water

utilities' and customers' concerns about the possible presence of lead in their drinking water.

Q. PLEASE DESCRIBE THE COMPANY'S OBLIGATIONS UNDER FEDERAL AND STATE REGULATORY STANDARDS TO CONTROL LEAD LEVELS IN THE DRINKING WATER AT THE CUSTOMER'S TAP.

A. The Company is required to follow, among other rules, the guidelines of the LCR. The LCR requires, among other things, that public water suppliers employ water treatment methods, as necessary, to minimize the corrosive quality of the water they provide because corrosion can cause lead piping and lead solder to leach lead into the water drawn at the customer's tap. The LCR also requires robust inventory management, comprehensive sampling and reporting and full-service line replacement under certain circumstances, as further discussed below.

Q. PLEASE DESCRIBE THE COMPANY'S APPROACH TO ADDRESS POTENTIAL SOURCES OF LEAD IN DRINKING WATER.

A. The Company employs a proactive, multi-faceted approach to manage the potential exposure to lead as part of its commitment to maintain excellent water quality and protect the health and safety of its customers. These layers of protection include treatment of water, monitoring of key indicators of water quality, use of corrosion controls, identification and inventorying of service line materials, development of a replacement program, and communication with the customer about ways to reduce potential exposure. The primary mitigation to potential exposure of lead in drinking water is stable water quality and treatment of water to minimize corrosion. The Company utilizes corrosion control treatment measures in its treatment facilities. For purchased water supplies, the Company

reviews the corrosion control plans of the supplier and monitors the water quality at the interconnections. The Company maintains a sampling protocol for each service area, which is approved by TDEC. In addition, the Company employs a wide variety of tools to help customers understand how they can reduce the potential risk of lead exposure from their own older plumbing.

Q. PLEASE FURTHER DESCRIBE THE COMPANY'S PROPOSAL TO REPLACE CUSTOMER-OWNED LEAD SERVICE LINES.

A. As discussed by Company Witness Kruchinski, the Company has a main replacement program to replace water mains throughout our service areas, and main replacement is prioritized by considering a variety of factors. It is during this regular main replacement process that the Company anticipates replacing most of the Company and customer-owned lead service lines it encounters. Under the Company's proposal, when the Company encounters lead service lines, it will proactively replace the lead portion of the service line. This may include Company-owned lead service lines as well as customer-owned lead service lines. If only the goose neck on the Company side is lead, the Company will replace the service line up to the meter. If the customer-owned service line is also lead or galvanized, the Company will, with the customer's permission, replace the entire service line from the main to up to five feet within the customer's premises or to the shut off valve, whichever is shortest. In some cases, the limit may be to just outside the customer premises if safety conditions warrant.

Q. PLEASE DESCRIBE THE SPECIFIC STEPS THAT WILL BE TAKEN DURING THE REPLACEMENT PROCESS.

A. As we plan the replacement of existing water mains, we will first review tap records along

the project route. If the tap cards indicate that service lines were installed before 1945, the main was installed before 1945 or if the material indicated in the record is listed as lead, then the Company will field inspect the existing Company-owned service line connected to the main. If a lead service line or lead gooseneck is encountered on the Company side during this field investigation, then the Company will contact the customer to discuss performing a pothole excavation to expose the customer-owned service line to both confirm location and make a determination of size and material of the service line. If any of the service line (Company or customer-owned) is found to be lead (or galvanized), then the following general steps will be taken: First, the customer will be notified of the possibility of lead in the service line and the need to further investigate. Once the service line material is identified, the customer will be notified of the type of material found. If lead is found, the Company will seek the property owner's consent to replace their service line, and if consent is granted, the lead service line replacement is performed. All lead portions of the lines are replaced either: 1) to the foundation (or through the foundation to the interior shut-off valve if possible); or, 2) to the meter if only the gooseneck on the Company side is lead and there is no lead on the customer side. Lines are then flushed in coordination with the customer. Post replacement sampling is done and the customer and property owner are notified of sampling results.

Q. WHAT IS THE COMPANY'S TRACK RECORD IN MEETING LCR REQUIREMENTS?

A. The Company has a well-established history of LCR compliance. The Company has not triggered the LCR action level requirements in any portion of its system despite the presence of lead service lines to homes or older plumbing fixtures contained in some homes

in our service areas. This history of compliance is a testament to the effectiveness of the Company's corrosion control measures and prudent management of its distribution system.

Q. GIVEN THE COMPANY'S FULL COMPLIANCE WITH LCR REQUIREMENTS, WHY IS THE COMPANY PROPOSING TO REPLACE CUSTOMER-OWNED LEAD SERVICE LINES?

A. While the Company's treatment and sampling efforts have effectively reduced potential lead exposure from drinking water, as the research regarding potential exposure to lead has been further developed and refined, the Company has determined it should take additional steps to further mitigate potential customer exposure to lead in drinking water. A growing body of research indicates that a "partial" replacement, which physically disturbs, but leaves in place, the customer-owned portion of the lead service line, potentially elevates the risk of lead exposure through drinking water after the replacement occurs.[2] This is the case for both lead and galvanized service lines that are or may have been downstream of lead.

Due to our improved understanding of lead, including partial replacement impacts, now when the Company encounters a lead service line during its main replacement projects, the Company believes all segments of lead in the service line, both company and customer-owned, should be replaced. Given that the disturbance of the customer-owned LSL will occur when the Company removes its lead service line, the Company proposes to

[2] Please see the EPA Science Advisory Board report available online at https://www.epa.gov/sites/default/files/2015-09/documents/sab_evaluation_partial_lead_service_lines_epa-sab-11-015.pdf

restore the customer-owned service line, subject to the customer's consent, as though it were restoring a road or sidewalk as part of its work.

Replacing lead service lines in conjunction with main replacements is the most cost-effective, efficient, and responsible way to continue the Company's main replacement program while addressing the health and safety concerns associated with partial lead service line replacements. The Company's approach is consistent with the National Drinking Water Advisory Council recommendation that the EPA revise the LCR regulations to require complete and proactive replacement of both Company-owned and customer-owned portions of service connections that contain lead, which as discussed below, the EPA has done.

Q. HOW MANY LEAD SERVICE LINES DOES THE COMPANY EXPECT TO IDENTIFY AND REPLACE?

A. Based on a comprehensive review of tap records and sampling, the Company estimates that the Company has 3,000 Company-owned lead service lines. The Company's tap records do not consistently identify the material of the customer-owned service line. Consequently, the Company does not have an exact count of customer-owned LSLs that would be replaced under the Company's proposal. The expectation is there is likely to be lead on the customer side where lead is found on the Company side. The Company proposes to engage in full lead service line replacement as it encounters lead through its main replacement program, if lead is discovered during a company owned service line leak

repair, or after identified following the completion of the service line inventory as required by the LCR Revisions.

Q. ARE THERE CIRCUMSTANCES UNDER WHICH THE COMPANY MAY BE REQUIRED BY LAW TO REPLACE BOTH THE COMPANY AND CUSTOMER-SIDE LEAD SERVICE LINES?

A. Yes. Recently, the EPA issued the Lead and Copper Rule Improvements ("LCRI") to further strengthen public health protections. The proposed revisions include identification of the materials of all service lines of unknown material and the elimination of all lead service lines and certain galvanized service lines from water systems in 10 years or less. The EPA expects to finalize the LCRI later this year.

Q. WILL THIS CHANGE IN LAW IMPACT THE COMPANY'S PROPOSED LSLR PROGRAM?

A. Possibly. Many distribution system pipes are not at the end of their useful life and are not presently contemplated to be replaced within the Company nearer term view - at least within the next ten years, and likely longer depending on pipe condition. To the extent the LCRI requires the replacement of all LSLs within 10 years, the Company plans to complete LSLRs on these mains (without replacing the mains themselves), including the Company

owned portion of the service line and the customer owned portion of the service line if the customer agrees to the replacement of their line on their property (as discussed above).

Q. HAS THE COMPANY ESTIMATED THE COST FOR REPLACEMENT OF CUSTOMER-OWNED LSLS?

A. Yes, the Company estimates that the replacement of the customer-owned portion of the lead service line would average approximately $7,500 when performed in conjunction with a main replacement project, as proposed by the Company.

V. OPERATING AND MAINTENANCE EXPENSE

Q. What level of O&M expense is the Company seeking in this case?

A. TAWC is seeking recovery of approximately $31.7 million in O&M expense, which represents the forecasted expense levels for the twelve months ending December 31, 2025. While operating expenses have increased since the Company's 2012 Rate case, the Company's overall O&M expenses remain reasonable as TAWC has been successful in managing O&M costs. As Company Witness Lane explains, the Company has managed to keep the rate of increases in O&M expense below that of inflation. For example, the O&M cost per customer authorized by the Commission in our last rate case in 2012 was $314. If that cost were increased at the rate of inflation, it would be $380 per customer in this proceeding rather than the proposed $349 per customer, or over $2.8 million more of annual O&M expense than that proposed by the Company in this case. This demonstrates that the Company has been successful in controlling its O&M costs per customer over the past decade and is continuing to do so. The requested increases in O&M expense over these

periods supported the Company's efforts to continue providing high quality water service in the most cost-effective way to our customers in the long-term.

Q. Why is the Company seeking an increase in O&M expense in this case?

A. The Company is requesting an increase in O&M expense in order to continue providing high quality water service in the most cost-effective way to our customers over the long term. Company Witnesses Robert Prendergast and John Wakins discuss TAWC's specific O&M pro forma adjustments in this case. The requested increase in O&M expense is driven by increases in employee related expenses, increases in the cost of insurance other than group insurance, increases in material and contractor costs, and increases in our production costs. Our production costs include the chemicals we use to treat water, power, water division fees and waste disposal. Some of the increases in costs for chemicals and waste disposal are driven by new water standards, as well as supply side constraints. The increases in insurance and production costs are not unique to TAWC but rather are national phenomena. As discussed later in my testimony, TAWC mitigates these increases by leveraging the buying power and expertise of the Service Company.

VI. IMPROVING WATER EFFICIENCY

Q. WHAT IS MEANT BY "WATER EFFICIENCY"?

A. In simple terms, water efficiency means using improved practices and technologies to deliver water service more efficiently. TAWC's efforts to improve water efficiency cover a wide range, and include supply-side practices, such as improved pump efficiency, more accurate meter reading and leak detection, main replacement and repair programs, as well as demand-side strategies, such as customer efficiency and public education programs and supportive rate design that provides incentives to support water efficiency. From an

operations perspective, improving water efficiency requires achieving a cost-effective mix of prudent investments and improved operations and maintenance management capabilities targeting safety, customer satisfaction, sustainability, and system efficiency. Improving water efficiency results is a win-win-win situation. Customers, businesses, and the environment can all benefit from more efficient, higher quality service, reduced or mitigated costs and sustainable use of natural resources.

Q. HOW IS THE CONCEPT OF IMPROVING WATER EFFICIENCY RELEVANT TO THIS CASE?

A. Improving water efficiency not only reduces expenses, but also is a more environmentally friendly way of conducting business. When water is used efficiently, it reduces capital and operating costs related to providing water services, while also helping to protect and preserve our natural resources. Improving water efficiency saves customers money in the long run, protects the environment, supports integrated resource planning, and enhances the economy. As Company Witness Kruchinski will outline in his testimony, TAWC is proactively investing in our infrastructure . In addition, to address water efficiency, we react to system emergencies as quickly as possible, conduct preventative maintenance in the distribution system, implemented a leak detection strategy, and responded to address inactive customer accounts that show metered usage without an ability to bill for the water usage.

Q. PLEASE DESCRIBE SOME OF TENNESSEE-AMERICAN WATER'S STRATEGIES TO IMPROVE WATER EFFICIENCY.

A. The Company strives to improve water efficiency through operational excellence, the use of technology, system maintenance, and efforts to manage costs as resourcefully as

possible to provide a more cost-effective level of service for our customers over the long term. In addition, TAWC uses various operational and efficiency reviews to further focus on improving customer service and efficiency of production and field operations. The Company also leverages the size and scale of the Service Company to improve transactional efficiencies through increased automation, the adoption of more effective business practices, and a continuous improvement mindset.

Q. HOW IS TAWC USING TECHNOLOGY TO IMPROVE EMPLOYEE EFFECTIVENESS?

A. The Company is using technology in a number of ways in order to enhance productivity and efficiency. For example, the Company's use of LIMS and Sample1View systems that allow efficient storage and retrieval of our water sampling data, making those tasks far more efficient. In addition, accurate GIS maps ensure that the Company's institutional infrastructure knowledge is readily available for use by employees. To that end, TAWC has loaded its facilities into GIS so that maps of its water system assets are accessible on its internal network. The information available in GIS includes the location and a short description of the facilities, giving an electronic spatial view of the entire system. GIS also helps locate customers that might be affected by related service issues and allows us to communicate with our customers more effectively. The Company continues to enhance its GIS platform through integration with our Enterprise Asset Management system, our computer-aided design system, or work management system ("MapCall") and our fixed asset records. This integration allows communication across the various platforms that makes data retrieval more efficient. The Company continues to build the GIS platform by adding new assets and retiring old assets to ensure our technicians have access to the most

current information while working in the field. The Company implemented a 'Digital As-built Workflow' that is focused on standardizing the how, what and when GIS is updated as well as facilitating better integration between GIS and MapCall. This improved the lag time between when the asset was installed to when GIS and other systems are updated. The goal is to keep our GIS current, complete and accurate for our end users.

Q. HOW HAS TAWC AND ITS CUSTOMERS BENEFITTED FROM THE GIS PLATFORM?

A. The location of water quality events, maintenance events and pipe failures are all plotted on GIS map layers. The spatially presented information can be used to answer customer water quality inquiries, identify trends, and prioritize water main replacement projects. GIS also is a tool used to assist compliance with federal and state lead service line inventory and management. Known customer and Company service line material data has been loaded into the MapCall service records that is integrated to display on the GIS maps. This will provide employees and customers with a visual representation of known and suspected lead service lines within the service territory.

Q. HOW DOES TAWC'S WORK MANAGEMENT SYSTEM IMPROVE EMPLOYEE EFFECTIVENESS?

A. MapCall is a web-based application that enables employees and contractors to complete the lifecycle of work orders and assets in the field. Employees can view historical information, including work order history on an asset, standard operating practices associated with an asset, maintenance history, O&M manuals, and tap card images. MapCall provides the flexibility to create work orders, configure workflows and report progress while in the field. For example, a supervisor can create a work order to flush a

dozen hydrants in a particular area. Using MapCall, the field worker can report progress as flushing is performed, and both the supervisor and others in the field can visually see the progress made toward completing the identified work in real time through the MapCall interface. The same can be done to schedule and monitor other routine work, as well as emergency work, such as main break repairs. MapCall also allows those in the field to communicate water quality and other events more efficiently through preloaded notifications via email to both internal and external stakeholders, including regulators, allowing workers to quickly shift back to focusing on the task at hand in the field and providing quality service to customers. Water main break locations are continually added to GIS and MapCall to help identify sections of pipe that have outlived their useful life. This information is used to prioritize water main replacements by strategically focusing on the pipe with the highest risk of failure.

Q. ARE THERE OTHER TECHNOLOGY SOLUTIONS THAT HAVE BEEN IMPLEMENTED TO IMPROVE EMPLOYEE EFFECTIVENESS?

A. Yes. In addition to GIS and MapCall, the Company is implementing other technology solutions to enhance employee effectiveness. As discussed above, Waterly allows for more efficient data capture and regulatory reporting. MyWater and Work1View ("W1V") are software applications that provide more comprehensive and easily accessible information to employees.

Q. PLEASE DESCRIBE HOW MYWATER AND W1V IMPROVE EMPLOYEE EFFECTIVENESS.

A. MyWater has been implemented by the Company to better serve our customers. MyWater provides improved access to customer information (e.g., premise and service order history,

meter details, billing and payment information) to field service representatives ("FSRs") who regularly interact with our customers. This means that FSRs can view the same information as customer service representatives ("CSRs") who regularly interact with our customers. This allows our FSRs to review customer information that can help them address the customer's issue and provide customers information while speaking with them, rather than having to contact the customer service organization ("CSO") for information or requiring customers themselves to follow up with the CSO. FSRs can also update customer information and record notes on customer interactions on the spot, providing other employees that serve our customers timely access to the most up-to-date information. MyWater is also the customer facing website that allows customers to view much of the same information in the same format used by both the FSRs and CSRs which makes for a more seamless discussion when interacting with the customer. Recent and planned enhancements have and will also improve the Company's customers' self-service capabilities and the resiliency and usability of the website.

W1V provides employees with a single view for managing customer service order work in the field, customer information and meter information. W1V includes a real-time operations map to see work orders with optimized routing, as well as other types of work and alerts happening nearby. In addition, using W1V, FSRs can manage their own work based on the day's demands by adding or deferring undated work, and putting orders on hold to do emergency work needed at another location. Supervisors can also reroute work as appropriate. W1V has been integrated with MyWater for easy access to customer information during field visits. It has also been integrated with MapCall to provide FSRs

one point of access for all information needs. Taken together, these types of improvements continue to support improved customer experience and satisfaction.

Q. ARE THERE OTHER TECHNOLOGY SOLUTIONS TAWC HAS IMPLEMENTED TO IMPROVE WATER EFFICIENCY?

A. Yes, the Company continues to upgrade and enhance its SCADA systems that monitor and control water production equipment. These upgrades to several SCADA systems across the state enable TAWC to collect, manage and present real time SCADA information from multiple remote water systems enabling the Company to identify opportunities to monitor and control systems remotely, better protect operational assets, and increase the accuracy of TAWC's hydraulic models.

Q. IS TAWC TAKING OTHER STEPS TO IMPROVE WATER EFFICIENCY?

A. Yes, the Company also works to help manage water loss to improve water efficiency. There are several metrics that can be used to measure water loss: non-revenue water ("NRW"), and unaccounted for water ("UFW") to name a few. NRW is the difference between system delivery and water sales, and reflects not just leaks but, among other things, water used for known purposes such as firefighting and annual flushing, as well as unauthorized consumption. TAWC can define NRW into accounted for water and UFW. Accounted for water includes water (a) sold; (b) provided to customers without charge as authorized by the utility's tariff; and (c) used by the utility to conduct the daily operation and maintenance of its treatment, transmission, and distribution systems. UFW is the volumetric sum of all water purchased and produced by the utility less the volume of water that is accounted for.

The benchmarking, tracking, and reduction of water loss is essential to improving water efficiency and, therefore, operational performance.

Q. PLEASE DESCRIBE THE COMPANY'S EFFORTS TO MANAGE WATER LOSS.

A. The Company strives to follow industry accepted standards to track and reduce non-revenue water. The key elements are (1) accurately measure water production, consumption and estimate known losses; (2) reduce real water loss; and (3) continuous improvement.

Q. HOW DOES TAWC ACCURATELY MEASURE WATER PRODUCTION AND CONSUMPTION AND ESTIMATE KNOWN WATER LOSS.

A. TAWC takes several actions to accurately measure water production and consumption, and to accurately estimate known water loss. Once such action is that the Company engages in proactive meter replacement and upgrades to metering technology for accurate measurement and billing. In 2023 the Company replaced 15,297 meters.

The Company also recently 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 Water Treatment Plant, with future upgrades planned. The Company also annually calibrates or upgrades the meters at its water treatment plants to ensure that system delivery is accurately measured.

To reduce data handling errors, the Company uses Automated Meter Reading ("AMR") technology and other advanced metering, which allows for accurate handling of data to ensure data errors do not influence water efficiency. In 2023 the company reached 100% AMR, eliminating manual reads and thus reducing human error when calculating

billing. The Company intends to eventually transition to Advanced Metering Infrastructure ("AMI") technology to further solidify accurate measurement and billing.

In terms of estimating water loss, the Company uses a consistent method to estimate leaks, and works to meter other water used for water quality flushing, new water main installation flushing, fire flow testing, backwashing filters and other non-billed usage. The Company also has a working relationship with fire departments, in the areas we serve, to track water usage for firefighting and training performed by the fire department.

Q. PLEASE DESCRIBE TAWC'S EFFORTS TO REDUCE REAL WATER LOSS.

Real water loss are actual physical water leaks from a storage system and consist of leakage from tanks, transmission and distribution mains, and service lines up to and including the meter. TAWC'S efforts to reduce water loss include main and service line replacement and leak repair, proactive leak detection, system monitoring, and use of district metering areas ("DMAs"). Regarding main and service line replacement and leak repairs, the Company engages in a proactive main replacement program that analyzes water mains for replacement and works to proactively address these aging water mains to reduce future failures. In terms of proactive leak detection, the Company has a dedicated crew for proactive leak detection. These employees conduct leak detection surveys across the entire system to detect potential leaks. For system monitoring, the Company uses its SCADA system to monitor the system for indications of leaks. For example, longer run times at booster stations could be a clue to investigate a particular area for hidden leaks. The use of SCADA also provides sight to tank levels to ensure water tanks aren't "overfilled" to the overflow level. DMA's have been established to identify specific areas of the system

experiencing higher levels of flow, allowing the Company to target its actions to problematic areas.

Q. PLEASE EXPLAIN WHAT IS MEANT BY CONTINUOUS IMPROVEMENT, AS IT RELATES TO WATER LOSS.

A. Continuous improvement is the ongoing process of assessing and making incremental improvements to its efforts to reduce water loss. TAWC's continuous improvement methods include:

Management – The Company has an established a committee that regularly meets to address tactical and strategic approaches to resolve water loss. This committee provides updates on specific projects and reviews data to track any emerging issues.

KPIs – The Company establishes Key Performance Indicators and other goals that are directly related to water loss, such as targets for system delivery, meter reading, and overall water loss level.

Technological Improvement – The Company analyzes and deploys technological improvements to reduce water loss, such as variable frequency drives at booster stations that more carefully manage system pressures to avoid spikes that can cause main breaks. The Company has also piloted emerging technology to address water loss such as satellite leak detection and helium-based leak detection.

Training- The Company provides employees with training opportunities on water loss-related tasks. Recently, employees were trained on transducer mounted metering technology to be able to measure water flow on large diameter fire services that can be installed temporarily and without disruption to the pipe. This technology can help provide

more accurate information on fire service leaks. The Company also has a certified AWWA-qualified water loss auditor that has completed the certified training program.

VII. EMPLOYEE LEVELS AND COMPENSATION

A. Employee Levels

Q. PLEASE DISCUSS HOW TAWC STAFFS ITS BUSINESS OPERATIONS.

A. We recognize our duty to staff our business in a manner consistent with the provision of safe and adequate utility service. This requires a constant evaluation of the right mix of internal and contract labor, straight time versus overtime, training programs, and technology. In this vein, we continue to evaluate costs and expenses going forward, always looking for the best solution for the unique and changing challenges we face. A large portion of our cost structure is for labor, and as a position becomes vacant in our organization, we review and evaluate the internal and operational value of that position. We review the overall need for that position and consider, among other things, whether it should be transferred to another area, modified, or even eliminated. Cost control and improved business performance are the goals of these efforts. We continue to evaluate the new roles that will be created as new regulatory requirements are promulgated, and the

appropriate positions that TAWC will need to optimize new technology and most effectively serve our customers.

Q. WHAT IS TAWC'S CURRENT STAFFING LEVEL?

A. As of December 31, 2023, TAWC had 101 full time employees. Because this staffing level didn't, and doesn't, support completion of all necessary day-to-day work, we utilize contracted labor and contractors in order to maintain appropriate service levels.

Q. WHAT IS TAWC'S FORECASTED STAFFING LEVEL IN THIS CASE?

A. The Company has forecasted 117 full-time employees for the Attrition Year.

Q. WHAT IS THE BASIS FOR THE COMPANY'S FORECASTED STAFFING LEVEL?

A. The forecasted staffing level seeks to maintain the company's current level of operations while also managing increased organic customer growth and increased water regulation. Since 2012 the company has added 11,449 customers organically (meaning new customers connecting to the company's existing footprint). The rate of which the company is adding customers has also increased over the last eleven years (450 customers added in 2013, 964 customers added in 2018, and 1652 customers added in 2023). An increasing customer base brings more infrastructure improvement projects, customer inquiries, meter readings, and water quality testing. During the company's most recent TDEC sanitary survey, the

number of water quality tests doubled in the Jasper Highlands system due to the system's increasing customer count.

Increasing state and federal regulations is also adding to the company's workload. The EPA's new LCRI rule (that is expected to become effective 10/16/2024) will be an added regulation that will increase work related with customer service lines.

B. Compensation

Q. PLEASE DESCRIBE THE COMPANY'S APPROACH TO EMPLOYEE COMPENSATION.

A. TAWC offers compensation that aims to attract and retain committed, dedicated and highly qualified employees. The Company's overall compensation philosophy is to provide employees with a total compensation package that is market based and competitive with those of comparable organizations with jobs of similar responsibility. As part of its compensation philosophy, TAWC has chosen to make a portion of its compensation variable, driving continued performance across the enterprise. Specifically, the Company targets its total direct compensation (base and variable compensation) for near the market median (50th percentile). By using a combination of fixed and variable compensation, TAWC satisfies a dual objective of providing competitive market-based compensation for our employees, while continuing to motivate employees to achieve goals that improve performance and efficiency for the benefit of our customers. We believe this approach is

superior to setting base compensation targets at market median and not offering performance compensation.

Q. PLEASE IDENTIFY THE VARIOUS EMPLOYEE CLASSIFICATIONS AT TAWC AND BRIEFLY DESCRIBE HOW EACH GROUP IS COMPENSATED.

A. TAWC has three classifications of employees: union hourly employees, non-union hourly employees, and exempt employees. Union and non-union hourly employees receive base pay and variable pay in the form of overtime pay (in some cases shift premiums and meals) and are eligible for performance pay. Exempt employees receive base pay and are eligible for performance pay. Each classification of employees' total compensation, therefore, includes fixed pay (base pay) and some form(s) of variable pay (e.g., overtime, shift pay, or performance pay).

Q. HOW IS PERFORMANCE COMPENSATION PROVIDED TO TAWC EMPLOYEES?

A. Performance pay may be awarded under two plans – the Annual Performance Plan ("APP") and the Long-Term Performance Plan ("LTPP"). All full-time employees participate in the APP. Eligibility for the LTPP is limited to certain exempt employees.

Q. PLEASE DESCRIBE THE KEY PERFORMANCE OBJECTIVES UNDERLYING THE APP.

A. The APP is designed to recognize and reward performance against key performance goals and targets that drive the American Water's strategy. For 2024, the APP goals are as follows:

STRATEGY	GOAL	TARGET	WEIGHT
GROWTH	EPS Range	$5.10 - $5.20	50%
CUSTOMER	Customer Satisfaction	1st Quartile	15%
SAFETY	OSHA Recordable Injury Rate (ORIR)	.61 or less	5%
	Days Away, Restricted and Transfer (DART) severity rate	.29 or less	10%
ENVIRONMENTAL LEADERSHIP	Drinking Water Compliance Notice of Violation (NOVs)	6	5%
	Drinking Water Quality Notice of Violations (NOVs)	2	10%
PEOPLE	Women Representation	25%	2.5%
	Ethnic and Racial Diversity Representation	21%	2.5%

In addition to the explicit goals above, the safety goals include a no fatalities gating factor.

Q. PLEASE DESCRIBE THE LTPP.

A. American Water provides restricted stock units ("RSUs") and performance stock units ("PSUs") as long-term variable compensation under the LTPP. American Water's RSUs

and PSUs are based on three-year vesting periods. RSUs are based on time-based vesting and PSUs are based on performance vesting conditions.

Q. HOW DO THE COMPANY'S PERFORMANCE COMPENSATION PLANS BENEFIT CUSTOMERS?

A. The Company's performance compensation plans align the interests of our customers, employees, and investors. The plans emphasize customer service, environmental compliance, a safe work environment, and other operational goals, as well as certain financial goals. All of the APP and LTPP Plans' performance objectives – both operational and financial – focus employees' efforts in ways that benefit customers. The use of multiple measures further strengthens our ability to drive results across the enterprise.

Q. HOW DO THE OPERATIONAL GOALS OF THE APP BENEFIT CUSTOMERS?

A. The operational goals of the APP are designed to focus plan participants on the results that can most directly influence customer satisfaction, health and safety, environmental performance, and workforce diversity. Customers benefit from the plan goals because operational performance is improved by controlling costs, capturing efficiencies, promoting effective safety and risk management practices, enhancing customer service, and doing so with a diverse workforce that reflects the communities we serve. Achievement is determined by goals that directly benefit customers by creating a more productive workforce that is focused on customer satisfaction and achieving efficiency, environmental, and safety goals. For example, goals limiting the number of Notices of Violation ("NOV") for drinking water regulations help maintain a focus on providing safe and reliable water service, while goals for customer satisfaction measure the level to which

customers value the activities and services performed by employees throughout the business.

Q. HOW DO THE FINANCIAL GOALS OF THE APP AND THE LTPP BENEFIT CUSTOMERS?

A. The financial goals of the APP and LTPP are complementary to the operational goals and benefit customers in many ways. Achieving financial goals, such as targeted earnings per share ("EPS"), requires attention to operating efficiency. That is, unless the utility controls its operating costs, it likely will not achieve a targeted EPS. Financial goal-based performance pay thus ensures that employees at all levels of the organization, and not just the upper ranks, remain focused on increasing efficiency, decreasing waste, and boosting overall productivity. Incentivizing employees to control operating costs benefits customers, because doing so mitigates increases in costs ultimately collected in rates. Consequently, when financial performance is achieved through efficiency, as is the case for TAWC as I discuss above, the interests of customers, employees and investors are aligned.

Q. DOES INCENTIVIZING EMPLOYEES TO CONTROL AND REDUCE OPERATING COSTS PROVIDE OTHER CUSTOMER BENEFITS?

A. Yes. Where TAWC can reduce operating expenses, it can increase investment in infrastructure without increasing rates, because every dollar of operating expenses saved can fund approximately $8 of investment. Therefore, customers also benefit from the

Company's enhanced ability to invest in the infrastructure that it needs to meet its service obligations to customers.

Q. IS THERE OTHER EVIDENCE OF THE TANGIBLE BENEFIT TO CUSTOMERS FROM TAWC'S PERFORMANCE PAY PROGRAMS?

A. Yes. Again, as I noted earlier, the financial goals of the APP and LTPP are complementary to the operational goals and benefit customers in many ways. Moreover, the impact of a utility's financial health on its access to capital at reasonable rates must be considered as well. TAWC's customers have benefitted from the Company's access to capital at favorable rates. Because utilities are capital intensive and must routinely and consistently access the capital markets, customers ultimately benefit when their utility has the financial health to do so at reasonable rates. Simply put, a financially healthy utility benefits customers because it enables the utility to meet its service obligations at reasonable financing costs.

Q. PLEASE SUMMARIZE WHY THE COSTS OF THE COMPANY'S MARKET BASED TOTAL COMPENSATION, INCLUDING PERFORMANCE-BASED COMPENSATION SHOULD BE RECOVERABLE IN RATES.

A. The Company's performance compensation plans align the interests of our customers, employees, and investors. The market-based total compensation philosophy that TAWC has adopted allows the Company to attract and retain a highly qualified workforce that is essential to our ability to continue to provide safe and reliable service. The plans, themselves, contain tangible goals that are designed to do several things, i.e., measure and compensate employees for performance based on delivering clean, safe, reliable and affordable water service and providing good customer service when doing so. The

operational components measure performance that can most directly influence customer satisfaction, safety, and environmental leadership. Customers derive a direct benefit from our focus on these key measures in the plan. Further, the plans' well-grounded financial measures keep the organization focused on improved performance at all levels of the organization, particularly in increasing efficiency, decreasing waste, and boosting overall productivity. As discussed below, the Company has demonstrated that its overall compensation levels are in line with the market, and thus, are a reasonable and prudently incurred cost of service that is appropriately included in rates.

Q. HOW SHOULD TAWC'S EMPLOYEE COMPENSATION EXPENSE BE ASSESSED BY THE TPUC?

A. Employee compensation is a necessary cost of providing utility service, like other prudently incurred costs of service recoverable in rates. Employee compensation must therefore be assessed through the same lens as all other operating costs of the Company: if it is prudently incurred and reasonable in amount, relative to what the industry pays for the same services, it should be recoverable through rates. Where the Company's total direct compensation level is in line with the market, as will be demonstrated in this case, regardless of the combination of fixed and variable payments that the employees earn, then the Company's overall compensation expense is reasonable and prudently incurred and thus should be recoverable like all other costs of service.

Q. IS THE COMPANY'S PERFORMANCE COMPENSATION PROGRAM REASONABLE?

A. Yes. The Company retained the services of WTW to perform a total compensation study to determine if the total direct compensation provided to TAWC employees, when viewed

against the market of talent for employees of similar positions, is at market levels, based on the Company's stated compensation philosophy. The findings of WTW's compensation study are described in the Direct Testimony of Robert V. Mustich. Therein, Mr. Mustich reached the following conclusions:

- TAWC's target total direct compensation – which includes base compensation and all performance compensation – is within the range of the competitive market median.
- American Water's short-term performance pay program (APP), which is applicable to TAWC, is comparable to and competitive with plan designs of other utilities.
- American Water's long-term performance pay (LTPP), also applicable to TAWC, is comparable to and competitive with plan designs of other utilities.
- Performance compensation is required to ensure that TAWC's compensation remains at reasonable, competitive levels.
- The analysis performed by WTW shows that TAWC's total direct compensation programs are comparable to and competitive with market practices of other similarly-sized utilities and therefore represent reasonable, market based total compensation.
- Therefore, on a total direct compensation basis, TAWC's compensation expense is reasonable.

Q. IS THE TOTALITY OF THE COMPANY'S MARKET-BASED TOTAL COMPENSATION A PRUDENTLY INCURRED EXPENSE?

A. Yes. As Mr. Mustich has demonstrated in his Direct Testimony, TAWC's overall total direct compensation – which includes base compensation and all performance

compensation – is within the competitive market range. Therefore, TAWC's total compensation expense is reasonable and prudently incurred.

Q. DO THE COMPANY'S EMPLOYEES TYPICALLY EARN THEIR PERFORMANCE COMPENSATION?

A. Yes. The Company has funded performance compensation every year for at least the past decade. The level has varied from year to year based on achievement of targets or exceeding targets, but the organization's performance has resulted in the payment of performance compensation typically equal to or greater than the target level. The Company only seeks recovery at the target level.

Q. IS PROVIDING MARKET-BASED, COMPETITIVE COMPENSATION TO EMPLOYEES CRITICAL TO THE COMPANY'S ABILITY TO CONTINUE TO PROVIDE SAFE AND RELIABLE UTILITY SERVICE?

A. Yes, it is. Recruitment of skilled workers, as well as the retention of existing trained workers, is critical to continuing to provide safe and reliable water service for the benefit of all the Company's customers. Competition among companies to attract and retain the best quality and highest performing employees is fierce. In recruiting new employees or retaining existing employees, both the Company and American Water compete with general industry in surrounding regions and nationally for the same pool of talent. Without the ability to provide competitive compensation and benefits, the Company would be hampered in its efforts to attract new employees and retain existing employees. This is especially true with respect to employee retention, where the loss of skilled employees

imposes a real and added cost on a Company, which must then recruit and train replacements.

Q. **WHY IS IT CHALLENGING TO ATTRACT AND RETAIN HIGH PERFORMING EMPLOYEES, ESPECIALLY IN THE CHATTANOOGA MARKET?**

A. Based upon our experience in the marketplace, competition among companies to attract and retain the best quality and highest performing employees is very real because the demand for such employees is high and the supply low. There are several reasons behind this supply and demand dynamic.

First, while all employers are struggling with replacing an aging workforce, the utility industry is disproportionately impacted. Indeed, the "Baby Boomer" generation, which holds a wealth of knowledge and experience necessary to support the continuation of utility services and which makes up a lot of the workforce, is on the verge of retirement. The pool of qualified talent in the next generation, however, is diminished in size by comparison. This dynamic alone causes increased competition among employers to attract and retain high performing employees from a limited supply. On top of this, is the fact that the Chattanooga market has experienced tremendous economic growth in recent years. According to the U.S. Bureau of Labor Statistics, Hamilton County's job growth in 2022 was 4.9%, which was the greatest among Tennessee's major counties and nearly double the U.S. growth of 2.6%.[3] In fact, two large area employers with which the Company aggressively competes for high performing employees, Volkswagen and McKee Foods, have been expanding in recent years. For example, McKee nearly doubled its local facility

[3] https://www.timesfreepress.com/news/2023/may/30/chattanooga-job-growth-2022-nearly-doubles-us-tfp/

recently, adding hundreds of jobs therewith.[4] Likewise, Volkswagen has expanded in recent years, investing billions of dollars and creating hundreds of jobs.[5]

Needless to say, the Company faces intense competition to attract the best and brightest talent, and the Company's compensation program must provide employees with a total compensation package on par with those offered by companies with which it competes for employees.

Q. ARE YOU AWARE OF RATE CASES IN OTHER STATES IN WHICH PERFORMANCE COMPENSATION HAS BEEN ACCEPTED BY A REGULATORY AUTHORITY?

A. Yes. For instance, in 2015, the Public Service Commission of West Virginia acknowledged in a rate case filed by West Virginia-American Water Company, that "[Annual Incentive Plans] that tie some portion of an employee's compensation to an employee's actual performance are prevalent in the compensation packages for larger businesses and has become the 'norm' for major utility companies."[6] The Public Service Commission of West Virginia further agreed that "the [Annual Incentive Plan] is an integral part of the overall compensation plan of [West Virginia-American Water Company] that the total compensation (the combination of base pay and incentive pay) to eligible employees is intended to place that total compensation at or near the market rate for each particular job or salary band."[7] In the 2015 case, the Commission also approved

[4] https://www.timesfreepress.com/news/2023/sep/21/new-mckee-foods-expansion-to-start-production-in/
[5] https://www.hagerty.com/media/news/volkswagen-breaks-ground-on-chattanooga-expansion/; see also https://www.timesfreepress.com/news/2023/may/13/vw-hiring-over-500-more-workers-in-chattanooga/
[6] Public Service Commission of West Virginia, Case No. 15-0675-S-42T, Final Order at pp. 48-49.
[7] *Id.* at 49.

a portion of the company's long-term performance plan costs.[8] In 2021, the Public Service Commission of West Virginia went further in allowing 100% of the demonstrated long term performance compensation in its revenue requirements finding after concluding that "[i]t is not reasonable to pick one expense and arbitrarily eliminate it or reduce it by 50% because it indirectly benefits shareholders."[9] This was reaffirmed by the Public Service Commission of West Virginia in 2023.[10] This is just one example of regulatory acceptance of this compensation methodology.

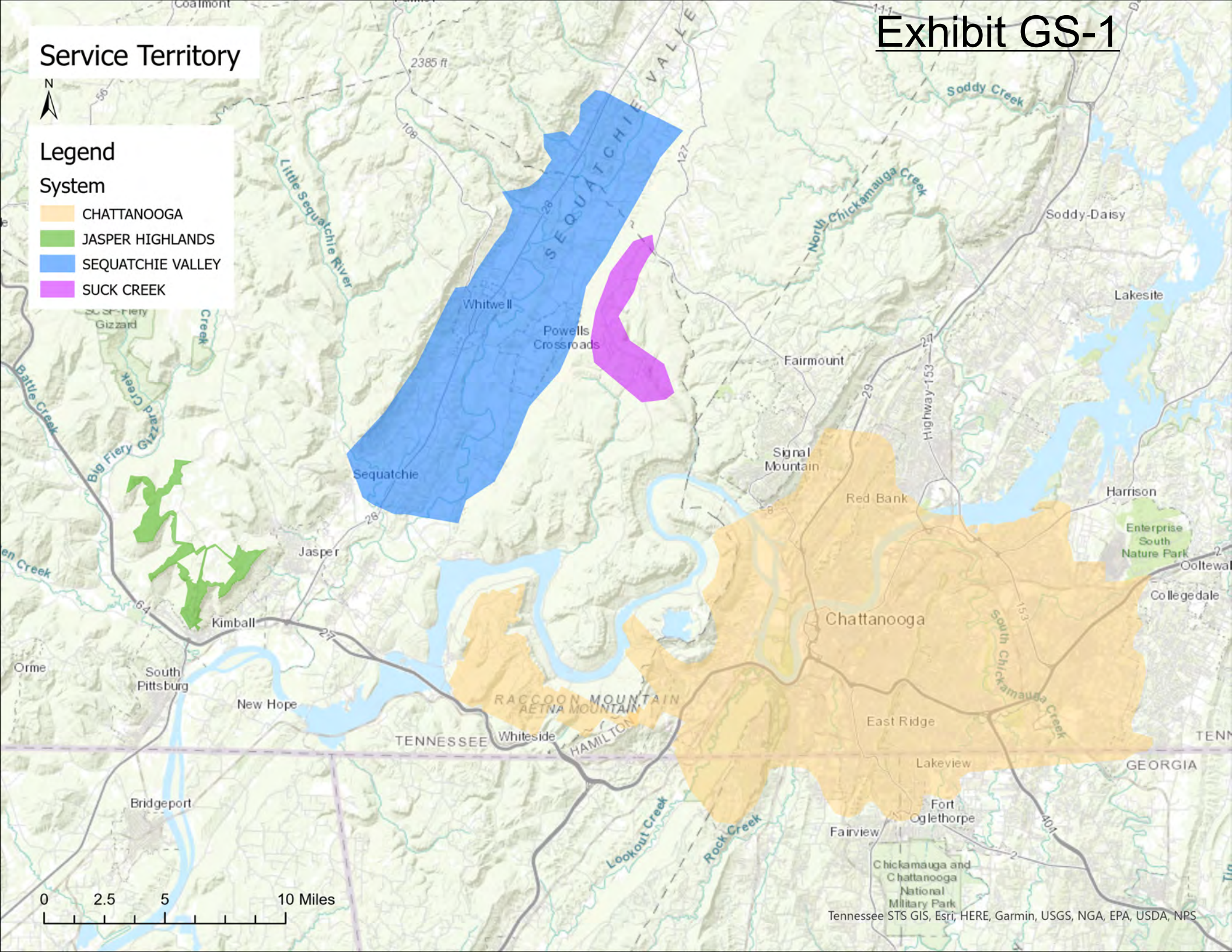
IX. CONCLUSION

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes, it does.

[8] *Id*. at 51.
[9] Public Service Commission of West Virginia, Case No. 21-0369-W-42T, Final Order at p. 40
[10] *See* Public Service Commission of West Virginia, Case No. 23-0383-W-42T, Final Order at p. 31.

Exhibit GS-1


Service Territory
N
Legend
System
CHATTANOOGA
JASPER HIGHLANDS
SEQUATCHIE VALLEY
SUCK CREEK
Whitwell
Powells Crossroads
Sequatchie
Jasper
Kimball
Chattanooga
Red Bank
Signal Mountain
Fairmount
Soddy-Daisy
Lakesite
Harrison
Collegedale
East Ridge
Lakeview
Fort Oglethorpe
Fairview
Orme
South Pittsburg
New Hope
Bridgeport
Whiteside
TENNESSEE
GEORGIA
Soddy Creek
North Chickamauga Creek
Little Sequatchie River
Big Fiery Gizzard Creek
Battle Creek
Lookout Creek
Rock Creek
South Chickamauga Creek
Highway-153
RACCOON MOUNTAIN
AETNA MOUNTAIN
Enterprise South Nature Park
Chickamauga and Chattanooga National Military Park
0 2.5 5 10 Miles
Tennessee STS GIS, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS

BEFORE THE TENNESSEE PUBLIC UTILITY COMMISSION
NASHVILLE, TENNESSEE

PETITION OF TENNESSEE-AMERICAN WATER COMPANY TO CHANGE AND INCREASE CERTAIN RATES AND CHARGES	))))	**DOCKET NO. 24-_____**

VERIFICATION

STATE OF Tennessee)
)
COUNTY OF Hamilton)

I, GRADY STOUT, being duly sworn, state that I am authorized to testify on behalf of Tennessee-American Water Company in the above-referenced docket, that if present before the Commission and duly sworn, my testimony would be as set forth in my pre-filed testimony in this matter, and that my testimony herein is true and correct to the best of my knowledge, information, and belief.

GRADY STOUT

Sworn to and subscribed before me
this 25th day of April, 2024.

Notary Public

My Commission Expires: 2-28-28

TARA WATSON
STATE OF TENNESSEE NOTARY PUBLIC
HAMILTON COUNTY