

**TENNESSEE-AMERICAN WATER COMPANY, INC**

**DOCKET NO. 22- 00021**

**DIRECT TESTIMONY**

**OF**

**GRADY STOUT, P.E.**

**ON**

**CHANGES TO THE QUALIFIED INFRASTRUCTURE INVESTMENT PROGRAM  
RIDER, THE ECONOMIC DEVELOPMENT INVESTMENT RIDERS, AND THE  
SAFETY AND ENVIRONMENTAL COMPLIANCE RIDER AND IN SUPPORT OF  
THE CALCULATION OF THE 2021 CAPITAL RIDERS RECONCILIATION**

**SPONSORING PETITIONER'S EXHIBIT:**

**PETITIONER'S EXHIBIT - 2021 SCEP RESULTS - GS**

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

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

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

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

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

9   A.     Yes. I have previously provided testimony before the Tennessee Public Utility Commission  
10        in TPUC Docket Nos. 20-00011, 20-00128 and 21-00030.

11  **Q.     PLEASE     STATE     YOUR     EDUCATIONAL     AND     PROFESSIONAL**  
12         **BACKGROUND.**

13  A.     I received a B.S. degree in Civil Engineering from Tennessee Technological University in  
14         2011. I am a licensed Professional Engineer in the State of Tennessee. Upon graduation  
15         from Tennessee Technological University, I began working with Tysinger, Hampton, &  
16         Partners, an engineering consultant firm in Johnson City, Tennessee. While with this firm,  
17         I served as the inspector over the Little Milligan Water System project that included the  
18         installation of wells, a chemical building, a storage tank, and distribution system. In 2012,  
19         after the project was complete, I became a Construction Project Manager for Bob Stout  
20         Construction Company, Inc. In this role I was the project manager of a 16” water main  
21         replacement project. I began working with TAWC in 2013 as an Engineer in the  
22         Engineering Department. My primary role was to design and manage water main  
23         replacements and other production projects in the Chattanooga, Whitwell, and Suck Creek

1 districts of TAWC. In 2016, I was promoted to Project Manager. In this role I had both  
2 engineering and managerial responsibilities, along with managing relationships of key  
3 stakeholders, elected officials, and regulators. In 2019, I was promoted to Manager of  
4 Engineering of TAWC. I have also served twice as VP of Operations for TAWC, the first  
5 from January 2020 – April of 2020, and the second from April of 2021- June of 2021. After  
6 serving as VP of Operations I returned to my duties of Manager of Engineering. I am an  
7 active member of American Water Works Association (AWWA), American Society of  
8 Civil Engineers (ASCE), and served as the 2020 President of the Chattanooga Engineer's  
9 Club.

10 **Q. WHAT ARE YOUR DUTIES AS MANAGER OF ENGINEERING?**

11 A. I am responsible for the coordination and administration of the TAWC Engineering  
12 Department. This includes the planning, development, and implementation of all aspects  
13 of construction projects. My responsibilities include working with developers for all new  
14 main extensions, replacement of existing mains, water treatment plant upgrades and  
15 modifications, new construction and improvement to network facilities. I also coordinate  
16 technical assistance to all other TAWC departments as needed and oversee the capital  
17 budget development and implementation. I report directly to the President of TAWC.

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

19 A. I will discuss the process for determining TAWC's capital investment plan, the oversight  
20 for expenditures and changes to the plan, the level of capital expenditures for 2021, and  
21 variances from the projected amounts in Docket No. 20-00128.

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

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

**Petitioner's Exhibit – 2021 SCEP Results - GS**

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

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

A. Yes.

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

A. The data used to prepare the exhibits was acquired from the books of account and business records of 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. 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 Service Company for review of the reasonableness of the projects proposed and their forecasted costs. Although

1 the Service Company may make suggestions with respect to that budget, TAWC ultimately  
2 determines the Capital Investment Plan and approves the plan. This process is the basis  
3 for the capital expenditures reflected in the Company's Investment Plan.

4 **Q. CAN YOU DESCRIBE HOW THE CAPITAL INVESTMENT PLAN IS**  
5 **MONITORED DURING THE YEAR?**

6 A. Since 2003, the entire American Water system has used a process for the development and  
7 review of capital expenditures that has incorporated industry best practices. TAWC, like  
8 its sister companies, has benefitted from that process. The process includes a regional  
9 Capital Program Management Committee ("CPMC") to ensure capital investment plans  
10 meet the strategic intent of the business. In turn, this process ensures that capital  
11 expenditure plans are integrated with operating expense plans and provides more effective  
12 controls on budgets and individual capital projects.

13 The CPMC includes the TAWC President, Vice President of Operations, Engineering  
14 Manager, Engineering Project Managers, Financial Analyst, and Capital Coordinator. The  
15 CPMC meets monthly. The CPMC receives capital expenditure plans from project  
16 managers and approves them as required by the process. Once budgets are approved, the  
17 CPMC meets monthly to review capital expenditures compared to budgeted levels.  
18 Discussions are held on variances to budgets that include the reason for the variance and  
19 suggestions to bring the budget lines back in line with the approved budget.

20 If changes in the budgets are required due to changes in priorities or unexpected  
21 expenditures, the CPMC reviews the request for changes and approves the movement of  
22 available capital from other budget lines to offset the changes in the capital spend. All  
23 projects, including normal recurring items, have an identified project manager responsible

1 for processing the stages of the project. The focus of the CPMC, along with the monthly  
2 meetings, has allowed TAWC to be more flexible with changes that inevitably occur during  
3 the course of implementation of projects while providing oversight on capital expenditures.

4 As an added level of coordination, a Functional Review Meeting (“FRM”)  
5 Committee meets monthly to sign-off on projects and review spending. This committee  
6 includes the TAWC Vice President of Operations, the TAWC Engineering Manager,  
7 TAWC Engineering Project Managers, TAWC Operations Specialists and the appropriate  
8 Operation supervisors and project managers. The purpose of the committee is to review  
9 projects that are moving forward to the next step of approval, or that require a change. This  
10 allows the project manager and operational area supervisors to communicate about the  
11 project on a monthly basis and help coordinate projects from initial development through  
12 in-service as compared to the approved budget and spending plan.

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

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

19 A. All significant construction work done by independent contractors and significant  
20 purchases are completed pursuant to a bid solicitation process. We maintain a list of  
21 qualified bidders, and we believe that our construction costs are very reasonable. American  
22 Water Works (AWW) takes competitive bids for material and supplies that are either  
23 manufactured or distributed regionally and nationally through its centralized procurement

1 group. We have the advantage of being able to purchase these materials and supplies on  
2 an as-needed basis at favorable prices. In the past ten years, AWW also has undertaken a  
3 number of procurement initiatives for services and materials to reduce costs through either  
4 streamlined selection or utilization of large volume purchasing power. Some of the  
5 initiatives that have directly influenced capital expenditures include the use of master  
6 services agreements with pre-qualified engineering consultants, national vehicle fleet  
7 procurement, and national preferred vendor identification.

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

10 A. Yes.

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

13 A. The CPMC and FRM meetings described above are used to oversee the progress of  
14 projects from inception to completion. Along with the review of the capital expenditures,  
15 the committee also reviews potential Customer impacts and the requirements of an  
16 investment project to ensure that the projects meet the business need for expenditure and  
17 usefulness. The process includes five stages of project review: 1) a Preliminary Need  
18 Identification defining the project at an early stage; 2) a Project Implementation Proposal  
19 that confirms all aspects of the project are in a position to begin work; 3) Project Change  
20 Requests, if needed (if the cost changes more than 5% or \$100,000); 4) a Post Project  
21 Review; and 5) Asset Management. TAWC personnel handle all stages, with oversight  
22 by the CPMC and FRM Committees.

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

3 A. Yes. Through the budgeting and planning process, a broad and comprehensive review of  
4 facility needs is conducted to establish a general guide for needed improvements over a  
5 short-term horizon. These improvements are prioritized by TAWC to allow it to provide  
6 safe, adequate, and reliable service to its customers to meet their domestic, commercial,  
7 and industrial needs; provide flows adequate for fire protection; satisfy all regulatory  
8 requirements; and enhance economic growth. The plan provides a general scope of each  
9 project along with a preliminary design. The criteria for evaluating the various system  
10 improvements are engineering requirements; consideration of national, state, and local  
11 trends; environmental impact evaluations; and water resource management.

12 The engineering criteria used are accepted engineering standards and practices that  
13 provide adequate capacity and appropriate levels of reliability to satisfy residential,  
14 commercial, industrial, and public authority needs, and provide flows for fire protection.  
15 The criteria are developed from regulations, professional standards, and company  
16 engineering policies and procedures.

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

19 A. For 2021, TAWC ended the year with net capital expenditures of \$24,308,999 compared  
20 to an approved budget of \$24,733,671, resulting in a total capital expenditure underspend  
21 of \$424,672 or -1.71% of the originally approved budget.

22 **Q. HOW DID TAWC PERFORM WITH REGARD TO ITS ACTUAL**  
23 **EXPENDITURES COMPARED TO THE BUDGETED CAPITAL**



**EXPENDITURES FOR THE QIIP RIDER AND PROVIDE THE PRIMARY CAUSE OF ANY VARIANCES?**

A. The 2021 QIIP Rider expected spend was projected at \$14,617,704 with an actual spend of \$14,323,445, resulting in a total QIIP expenditure underspend of \$294,259 or 2.0% less than the original QIIP forecasted budget. The major variance within the QIIP Rider was related to timing of the Filter House 2 Rehabilitation. The \$2.5M Filter House 2 Rehabilitation project was balanced against delays related to the Lookout Valley Redundancy- Citico Tank project.

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

A. The EDI expected spend was projected at \$400,116 with an actual spend of \$1,353,108, resulting in an overspend of \$952,992 or 238.2% of the projected Budget Capital Expenditures. The major drivers for the overspend came from three projects. The first two drivers were carryover spend from projects that went into service in 2020. The River Gorge Booster Station had approximately \$420k of carryover spend related to site restoration and booster station programming work. The River Gorge Transmission Mains had approximately \$195k of carryover spend related to restoration costs, as well as an additional transmission main valve, fire hydrant, and hydrostatic testing. Much of the delayed spend, for both projects, was due to weather and material shortages. The final driver was the Cummings Road Main Extension Project. This project exceeded estimated budget by approximately \$334k. This was due to higher construction and restoration costs than estimated.

1 **Q. HOW DID TAWC PERFORM WITH REGARD TO ITS ACTUAL**  
2 **EXPENDITURES COMPARED TO THE BUDGETED CAPITAL**  
3 **EXPENDITURES FOR THE SEC RIDER AND PROVIDE THE PRIMARY**  
4 **CAUSE OF ANY VARIANCES?**

5 A. The original SEC expected spend was projected at \$1,842,462 with an actual spend of  
6 \$2,426,334, resulting in an overspend of \$583,871 or 31.7% over the originally projected  
7 amount. The overspend in the SEC Rider was caused largely by two projects both  
8 occurring in Budget Line Q – Process Plant Facilities and Equipment. First, there were  
9 additional cost related to the Missionary Ridge #3 Pump, Motor, and Starter Replacement,  
10 which resulted in an additional spend of about \$200k as compared to the budgeted amount.  
11 This was due to the discovery of additional broken valves in the booster station that were  
12 replaced to complete the project. Second, about \$350k of additional spend was needed for  
13 the Minnehahda Booster Station Replacement. This was due to increased construction cost  
14 from the terrain of the work site, as well as additional earth work and retaining wall  
15 construction. This was to accommodate a parking location and stairs required to obtain a  
16 City of Chattanooga Land Disturbance Permit.

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

20 A. Yes. I have attached to my testimony Petitioner's Exhibit 2021 SCEP Results – GS.  
21 This exhibit provides a comparison of the 2021 Strategic Capital Expenditures Plan with  
22 Actual Capital Expenditures by recurring project lines and investment project lines.

1 **Q. CAN YOU SUMMARIZE THE COMPANY'S PERFORMANCE ON THE EDI,**  
2 **SEC AND QIIP?**

3 A. Yes. As described previously, TAWC overspent in the EDI and SEC Riders by \$952,992  
4 and \$583,871, respectively. Spend on the QIIP Rider was \$294,259 under projected.  
5 Taking all three Riders into account, TAWC was able to effectively manage Capital  
6 Recovery Rider spend in 2021 with an overspend of \$1,242,604. As I explained earlier,  
7 this overspend was actively monitored, necessary and reasonable. Even though the actual  
8 spend was over by \$1,242,604, the actual average in-service amount above projected was  
9 \$351k as shown in Mrs. Sinopole's testimony.

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

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

1 changed or delayed to make room for the new, unexpected projects or a change in an  
2 existing project.

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

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

12 **Q. CAN YOU PROVIDE THE OVERALL AMOUNT OF IN SERVICE PLANT FOR**  
13 **2021?**

14 A. Yes. TAWC was able to ensure that capital spending on projects led to those projects being  
15 implemented and placed in service. TAWC utilized the FRM process to manage projects  
16 and make sure that approved capital spending was utilized on projects that would be placed  
17 in service in a timely manner. With regard to the Capital Recover Riders and the projected  
18 level of expenditures compared to those projects that were implemented and placed in  
19 service, the overall variance with projects placed in service compared with the projected  
20 spend for all three riders was 0.29% over the expected average year to date spend. This is  
21 the cumulative plant additions, and is reflected in **Petitioner's Exhibit Capital Riders**  
22 **Reconciliation -TNS** attached to Mrs. Tricia Sinopole's testimony.

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

2    A.     Yes.

3

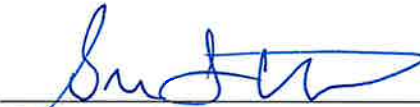
Tennessee-American Water Company  
Case No. 2022-XXXXX  
2021 Capital Rider Reconciliation  
2021 Actual vs Budget Capital Expenditures

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)
<b>DV</b>	Projects Funded by Others (Contrib. /Adv./ Refunds)	-		2,155,979	1,000,000	1,155,979
<b>A</b>	Mains - New	EDI		538,253	275,616	262,637
<b>B</b>	Mains - Replaced / Restored	QIIP		3,270,773	2,383,224	887,550
<b>C</b>	Mains - Unscheduled	QIIP		1,823,121	1,565,000	258,121
<b>D</b>	Mains - Relocated	QIIP		63,563	215,000	(151,437)
<b>E</b>	Hydrants, Valves, and Manholes - New	EDI		235,896	124,499	111,396
<b>F</b>	Hydrants, Valves, and Manholes - Replaced	QIIP		431,064	486,000	(54,936)
<b>G</b>	Services and Laterals - New	-		2,222,641	1,321,250	901,391
<b>H</b>	Services and Laterals - Replaced	QIIP		717,825	425,557	292,268
<b>I</b>	Meters - New	-		163,351	225,999	(62,648)
<b>J</b>	Meters - Replaced	QIIP		1,797,591	1,341,618	455,973
<b>K1</b>	ITS Equipment and Systems	-		309,424	324,660	(15,236)
<b>L</b>	SCADA Equipment and Systems	SEC		194,017	160,000	34,017
<b>M</b>	Security Equipment and Systems	SEC		128,470	154,800	(26,329)
<b>N</b>	Offices and Operations Centers	-		31,490	20,000	11,490
<b>O</b>	Vehicles	-		1,374,014	739,999	634,015
<b>P</b>	Tools and Equipment	-		300,615	130,000	170,615
<b>Q</b>	Process Plant Facilities and Equipment	SEC		1,896,580	1,025,000	871,580
<b>R</b>	Capitalized Tank Rehabilitation / Painting	QIIP		1,083,296	1,026,210	57,086
<b>S</b>	Engineering Studies	-		(8,576)	125,000	(133,576)
<b>T</b>	Enterprise T&I Solutions	-		1,629,848	2,250,000	(620,152)
	<b>TOTAL RECURRING PROJECTS DV - T</b>			<b>20,359,234</b>	<b>15,319,432</b>	<b>5,039,802</b>
	<b>TOTAL RECURRING PROJECTS A - T</b>			<b>18,203,255</b>	<b>14,319,432</b>	<b>3,883,823</b>
<b>I26-020039</b>	Basin 2 & Plate Settlers	QIIP		224,475	378,303	(153,829)
<b>I26-020040</b>	Citico Chlorine Gas Conversion	SEC		5,993	0	5,993
<b>I26-020051</b>	Replace Switch Gear - Citico	SEC		57,722	502,663	(444,942)
<b>I26-020059</b>	Citico Yard Piping Modifications	QIIP		71,782	0	71,782
<b>I26-020060</b>	Replace High Service Header Valve - Citico	QIIP		2,231,649	2,137,498	94,151
<b>I26-020062</b>	Filter House #2 Rehab	QIIP		2,361,067	1,472,534	888,534
<b>I26-020063</b>	River Gorge Transmission Mains	EDI		200,115	0	200,115
<b>I26-020064</b>	River Gorge Booster Station	EDI		428,496	0	428,496
<b>I26-020065</b>	Replace North Traveling Screen	SEC		1,079	0	1,079
<b>I26-020066</b>	GPS Project	None		829,887	826,480	3,407
<b>I26-020067</b>	Lookout Valley Redun - Citico Tank	QIIP		24,612	2,480,302	(2,455,690)
<b>I26-020069</b>	Lookout Valley Redun - Piping Upgrade/Booster	QIIP		81,711	240,943	(159,232)
<b>I26-020068</b>	Lookout Valley Redun - River Crossing	QIIP		48,428	304,889	(256,461)
<b>I26-02xxxx</b>	Chattanooga Ops Center	None		0	1,500,000	(1,500,000)
<b>I26-050003</b>	Whitwell Clearwell Replacement	QIIP		133,788	160,626	(26,838)
<b>I26-050006</b>	Hwy 283 Main Ext	EDI		(49,652)	0	(49,652)
<b>I26-050001</b>	Whitwell Intake	SEC		142,474	0	142,474
<b>I26-050050</b>	Whitwell Ops Center	None		1,000	0	1,000
<b>I26-020045</b>	Remove Filter Building #3	QIIP		(41,299)	0	(41,299)
	<b>TOTAL INVESTMENT PROJECTS</b>			<b>6,753,326</b>	<b>10,004,238</b>	<b>(3,250,913)</b>
	<b>TOTAL GROSS</b>			<b>27,112,560</b>	<b>25,323,670</b>	<b>1,788,889</b>
	Contributions			(313,499)	(240,000)	(73,499)
	Advances			(3,250,061)	(700,000)	(2,550,061)
	Refunds			760,152	350,000	410,152
	<b>Net Advances, Refunds, and Contributions</b>			<b>(2,803,408)</b>	<b>(590,000)</b>	<b>(2,213,408)</b>
	<b>Net US GAAP</b>			<b>24,309,152</b>	<b>24,733,670</b>	<b>(424,519)</b>

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 24 day of Feb, 2022.

Kathryn Robinson  
Notary Public

My Commission Expires: 10/20/2024

