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

RE: *Petition of Tennessee-American Water Company Regarding The 2025 Production Costs and Other Pass-Throughs Rider*, TPUC Docket No. 25-00002


Dear Chairman Jones:

Attached for filing please find *Tennessee-American Water Company's Rebuttal Testimony of Robert C. Lane* in the above-captioned matter.

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

Very truly yours,

BUTLER SNOW LLP



Melvin J. Malone

clw

Attachments

cc: Bob Lane, TAWC
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TENNESSEE-AMERICAN WATER COMPANY, INC.

DOCKET NO. 25-00002

REBUTTAL TESTIMONY

OF

ROBERT C. LANE

ON

CHANGES TO THE PRODUCTION COSTS AND OTHER PASS-THROUGHS RIDER

SPONSORING PETITIONER'S EXHIBITS:

PETITIONER REVISED EXHIBIT PROPOSED PCOP TARIFF

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

2 **A.** My name is Robert (Bob) C. Lane, and my business address is 109 Wiehl Street,
3 Chattanooga, Tennessee 37403.

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

5 **A.** I am employed by American Water Works Service Company (“Service Company”).
6 Service Company is a wholly owned subsidiary of American Water Works Company, Inc.
7 (“American Water”) that provides services to Tennessee-American Water Company
8 (“Tennessee-American,” “TAWC” or “Company”) and its affiliates. My current role is Sr.
9 Manager, Rates and Regulatory for Tennessee.

10 **Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?**

11 **A.** The purpose of my rebuttal testimony is to respond to the Pre-filed Testimony of Consumer
12 Advocate Division Witness Mr. William H. Novak’s, which was submitted in this
13 proceeding on April 2, 2025. Specifically, I am rebutting the following assertions made by
14 Mr. Novak: (1) that the Tennessee Public Utility Commission (“TPUC” or “Commission”)
15 adopted a non-revenue water (“NRW”) water loss adjustment in TPUC Docket No. 08-
16 00039; and (2) that a NRW standard is reasonable and supportable. I also support revisions
17 to certain previously submitted Company exhibits. Finally, I support a revised PCOP
18 amount and a revised PCOP Percentage, as well as a revised Proposed PCOP Tariff.

19 **Q. ARE YOU SPONSORING ANY NEW EXHIBITS?**

20 **A.** Yes, I am sponsoring the following new exhibits:

21 1. **Petitioner Revised Exhibit Proposed PCOP Tariff.**

Q. ARE YOU SUPPORTING ANY EXHIBITS THAT WERE REVISED AND SUBMITTED DURING THE DISCOVERY PHASE?

A. Yes. In the Company's Response to CAD DR 1-2, TAWC submitted a revised version of TAW_EXH_RCL. I am sponsoring this Revised Exhibit.

Q. WHAT IS THE PURPOSE OF THIS REVISED EXHIBIT?

A. As noted in the Company's Response to CAD DR 1-2, this exhibit was amended to provide a correction that was discovered in the discovery phase.

Q. CAN YOU HIGHLIGHT THE CHANGES OR REVISIONS MADE IN RESPONSE TO DISCOVERY REQUESTS TO INFORMATION OR SUPPORTING DOCUMENTATION SUBMITTED WITH THE PETITION?

A. Yes. The table below summarizes the changes made in response to discovery.

Discovery Request	Exhibit(s) Updated	Update
CAD 1.02	Workpaper_Revenue & TAW_EXH_RCL	Corrected the Deferred Revenue amount to \$2,134,865 from TPUC Docket No.24-00002
CAD 1.03	Workpaper_Purchased Water – 2024 & TAW_EXH_RCL	Corrected the purchased water amounts for the vendor "Marion Board of Water"
TPUC 1.01	TAW_EXH_RCL	Updated the Jasper Highlands customer count to 467 to reflect the actual customers for the 12 month period ending November 2024
CAD 2.01	TAW_EXH_RCL	Updated the Jasper Highlands actual water sales to 317,099 from the previously used methodology

Q. ARE ANY OF THESE CHANGES REVISED OR UPDATED METHODOLOGIES TO THE PCOP FILING?

A. Yes, the change made in the Response to CAD DR 2.01 changed the methodology previously used to estimate the Jasper Highlands usage. In previous PCOP filings, Jasper Highlands usage was an estimate based on 0.10% of the Company's total water system deliveries. The response to this discovery request was to update the methodology to use Jasper Highlands actual usage for the 12-month period ending November 2024.

1 **Q. WHY IS THE COMPANY PROPOSING TO UPDATE THIS METHODOLOGY?**

2 A. Basing Jasper Highlands usage on an estimate of 0.10% of the Company's total water
3 system deliveries was appropriate for previous filings. Now that we have Jasper Highlands
4 actual usage for 12-month periods, the 0.10% surrogate is no longer the best approach for
5 this methodology.

6 **Q. DOES THE REVISED EXHIBIT TAW_EXH_RCL_REVISED INCLUDE ANY**
7 **PROPOSED CHANGES NOT MADE IN RESPONSE TO DISCOVERY**
8 **REQUESTS?**

9 A. Yes, this revised exhibit includes a change to the Projected Annual Base Rate Revenue
10 subject to PCOP. The Company is proposing to update the Base Rate Revenue of
11 \$71,148,607 pursuant to the Commission's decisions in TPUC Docket No. 24-00032, as
12 these decisions were made subsequent to the filing of the Petition in this proceeding, TPUC
13 Docket No. 25-00002.

14 **Q. BASED UPON THE CHANGE TO THE PROJECTED ANNUAL BASE REVENUE**
15 **SUBJECT TO PCOP, WHAT IS THE REVISED PROPOSED PCOP REVENUE**
16 **AND PCOP PERCENTAGE?**

17 A. TAWC is proposing a revised PCOP Percentage of 3.85% to recover the PCOP Deferred
18 Amount of \$2,742,339.

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

21 A. Yes.

1 **Q. DO THE PETITIONER'S EXHIBITS LISTED ABOVE ACCURATELY**
2 **SUMMARIZE SUCH DATA AND THE RESULTS OF ANALYSIS USING SUCH**
3 **DATA?**

4 A. Yes, they do.

5 **Q. DO YOU ACCEPT MR. NOVAK'S CALCULATION OF THE NRW %**
6 **PRESENTED IN HIS PRE-FILED TESTIMONY?**

7 A. I accept Mr. Novak's calculation of 25.67% NRW% but not for use in this proceeding.
8 TAWC continues to disagree that the Commission established a 15% NRW standard in
9 TPUC Docket No. 08-00039. Hence, I do not support a 15% NRW% limitation as a
10 reasonable or supportable interpretation or application of the Commission's establishment
11 of a 15% unaccounted-for water standard in TPUC Docket No. 08-00039.

12 **Q. DO YOU ACCEPT MR. NOVAK'S ASSERTION THAT THE TERMS**
13 **UNACCOUNTED-FOR WATER AND NON-REVENUE WATER ARE OR**
14 **COULD BE INTERCHANGEABLE?**¹

15 A. Absolutely not and certainly not based on the evidentiary record and decisions in TPUC
16 Docket No. 08-00039. As I will show below, the only way the regulatory terms
17 "unaccounted-for water" and "non-revenue water" could be used interchangeably would
18 be by mistake, as doing so intentionally is simply not reasonable.

¹ See *Pre-filed Testimony of CAD's Witness William H. Novak*, TPUC Docket No. 25-00016 (April 2, 2025) (hereinafter "*Novak Pre-filed*").

1 **Q. CAN YOU ELABORATE ON WHY YOU THINK THESE TWO TERMS ARE NOT**
2 **REASONABLY INTERCHANGEABLE?**

3 A. Yes. I discussed this in some detail on pages 8-11 of my Pre-filed Direct Testimony in this
4 proceeding. For instance, NRW is limited to water for which revenue is not collected. In
5 other words, NRW is the difference between the system delivered water and the amount
6 that is billed to customers. Unaccounted-for water, on the other hand, is the portion of
7 NRW that a water utility is not able to track/measure (e.g., meter inaccuracies, data errors
8 and unauthorized non-metered charges). So, while there is a portion of NRW for which a
9 utility company cannot account, there is also a portion for which it can account. Moreover,
10 a significant portion of NRW may be productively used water, which is used in a way that
11 serves the public interest. That is, public policy encourages some amount of NRW be
12 available for use rather than punishes utilities for having it available. For example, it could
13 be water used for firefighting, testing fire hydrants, flushing pipes (to maintain water
14 quality and reliability), or performing flow tests. Further, metered water used by the Fire
15 Academy is not billed.

16 **Q. IN TAWC’S 2008 GENERAL RATE CASE, TPUC DOCKET NO. 08-00039, DID**
17 **THE COMMISSION ADOPT A NON-REVENUE WATER (NRW) LOSS**
18 **STANDARD?**

19 A. No, it did not. As noted in my Pre-filed Direct Testimony, the Commission unambiguously
20 adopted an Unaccounted-for Water loss standard stating on page 15 of its Order in TPUC
21 Docket No. 08-00039 “the panel limited the unaccounted-for water percentage to 15%.²

² Order, p. 15, TPUC Docket No. 08-00039 (Jan. 13, 2009) (hereinafter “2008 Rate Case Order”).

1 The testimony the Commission cited as its factual basis for adopting a water loss
2 limitation of 15% was Mr. Gorman’s testimony on behalf of the Chattanooga
3 Manufacturers Association (“CMA”).³ It is clear, therefore, that the factual support for the
4 15% water loss information is premised on a measure of unaccounted-for water and not on
5 NRW.⁴ TAWC’s unaccounted-for water loss percentage is 12.6%. This is below the
6 unaccounted-for water loss percentage standard set by the Commission of 15% in TPUC
7 Docket No. 08-00039.

8 On page 136 of the AWWA’s document entitled “Benchmarking Performance
9 Indicators or Water and Waste Water Utilities: Survey Data and Analysis Report,” upon
10 which CMA’s witness Mr. Gorman relied for his recommendation, and cited by the
11 Commission as the basis for its unaccounted-for water loss limitation of 15%,⁵ defines
12 unaccounted-for water as: $(\text{Distributed water} - (\text{volume billed} + \text{authorized water use})) /$
13 Distributed water).⁶ Conversely, the definition of non-revenue water as defined by and
14 calculated by the Tennessee Comptroller of the Treasury and Tennessee Board of Utility
15 Regulation is: $(\text{Water Produced}) - (\text{Water Sold}) / (\text{Water Produced}) = \text{Water Loss Percent}$.⁷
16 Consistent with my Pre-filed Direct Testimony, comparing these two formulas makes it
17 clear that the two terms “Unaccounted for Water” and “Non-revenue Water” are not
18 interchangeable and are completely different measures of water loss.

³ 2008 Rate Case Order at 14-15.

⁴ See, e.g., 2008 Rate Case Order at 14 (“The CMA proposed that an acceptable lost and unaccounted-for water percentage should be no greater than 15% for an annual period for use in the calculation of Fuel and Power Expense.”) (citing Michael Gorman, Pre-filed Direct Testimony, pp. 14-15 (July 18, 2008).

⁵ 2008 Rate Case Order at 15.

⁶ See *Rebuttal Testimony of TAWC Witness Mr. Michael A. Miller*, pp. 69-73, Exhibit MAM-9, TPUC Docket No. 08-00039 (Aug. 13, 2008).

⁷ See, *Presentation of Ross Colona, Assistant Director: Tennessee Comptroller of the Treasurer Presentation to the Tennessee House of Representatives Budget and Utilities Subcommittee*, Tennessee General Assembly House Business & Utilities Subcommittee (Feb. 26, 2025). (See [Link to Audio and Video Utility Regulation](#) at 1::11:23).

1 **Q. TO THE EXTENT THAT MR. NOVAK ASSERTS THAT AN UNACCOUNTED-**
2 **FOR WATER LOSS METHODOLOGY AND A NON-REVENUE WATER LOSS**
3 **METHODOLOGY ARE THE SAME, DO YOU AGREE?⁸**

4 A. No, I do not agree. As I outlined directly above, the methodology for an unaccounted-for
5 water loss calculation and the methodology for a non-revenue water loss calculation are
6 certainly very different. While Unaccounted for water is a subset of NRW, the calculation
7 and treatment of each from a public policy perspective are not consistent and thus are not
8 and never have been interchangeable.

9 **Q. DOES MR. NOVAK ACKNOWLEDGE THE EVIDENTIARY RECORD RELIED**
10 **UPON BY THE COMMISSION IN TPUC DOCKET NO. 08-00039 TO ESTABLISH**
11 **THE UNACCOUNTED-FOR WATER LOSS PERCENTAGE FOR TAWC?**

12 A. No, he does not. Rather, Mr. Novak refers to the difference between unaccounted-for water
13 loss and non-revenue water loss as something only proposed by the Company in this
14 proceeding.⁹

15 **Q. MR. NOVAK REFERS TO THE SETTLEMENT IN TPUC DOCKET NO. 13-00130**
16 **TO SUPPORT THE CAD'S NRW POSITION.¹⁰ DO YOU HAVE ANY**
17 **COMMENTS ON THIS REFERENCE?**

18 A. Yes. Mr. Novak referenced his own testimony from Docket No. 13-00130. Ironically, this
19 testimony clearly demonstrates that the parties intended, in Docket No. 13-00130, to adopt
20 the *unaccounted-for water* loss percentage *established by the Commission* in the 2008 Rate

⁸ *Novak Pre-filed* at 11 (“Although Mr. Buckner uses the terms “unaccounted for” and “non-revenue” interchangeably in his testimony to refer to the loss calculation, the methodology used is consistent.”).

⁹ *Novak Pre-filed* at 7 (“The Unaccounted-For Water Percentage, *as used by the Company*, is the portion of [Non-Revenue Water] a utility is not able to track/measure (e.g., meter inaccuracies, data errors and unauthorized non-metered charges”) (Emphasis added).

¹⁰ *Novak Pre-filed* at 8-10.

1 *Case Order*. As noted by Mr. Novak’s own testimony, the objective was to “capture the
2 TRA’s policy[.]”¹¹ The “policy” referred to by Mr. Novak was established by the
3 Commission, as noted by Mr. Novak, in the *2008 Rate Case Order*. Moreover, the Pre-
4 filed Rebuttal Testimony of TAWC Witness Gary VerDouw in Docket No. 13-00130 also
5 sheds light on the intent of the parties, as well as the Commission’s, at that time. Mr.
6 VerDouw testified then that “Tennessee American does not have a problem with adjusting
7 for a 15% water loss cap as *per previous TRA direction*.”¹²

8 **Q. IN THE EVENT THE COMMISSION ABANDONS ITS LONG-**
9 **ESTABLISHMENT OF UNACCOUNTED-FOR WATER AS THE STANDARD AS**
10 **ADVOCATED BY THE CAD,¹³ IS THERE ANY GUIDANCE THAT THE**
11 **COMMISSION CAN RELY UPON REGARDING WHAT IS A REASONABLE**
12 **NRW LIMITATION?**

¹¹ *Novak Pre-filed* at 8-9.

¹² *Pre-filed Rebuttal Testimony of TAWC Witness Gary VerDouw*, p. 29, TPUC Docket No. 00130 (Dec. 30. 2013) (Emphasis added). In fact, Mr. VerDouw relied upon the Company’s response to the Commission’s Data Request No. 48:

“The TRA addressed this in their Data Request Item 48 to Tennessee American. The full data request and the Company’s 19 response are included below:

Question: 48. During recent rate cases, the TRA has capped water loss at 15% in calculating Fuel and Power and Chemicals expense. Do the proposed calculations incorporate a 15% water loss (as previously ordered by the TRA) in the calculations that are based upon water volumes? If not, VerDouw Rebuttal Testimony - please explain. If so, please identify where this appears in the calculations.

Response: The expenses in the settlement agreement on which the base production costs and other pass-throughs are calculated include an adjustment to no more than 15% water loss. The calculation for the PCOP did not specifically include an adjustment for no more than 15% water loss as the attrition year period is not completed. However, Tennessee American would expect to make that adjustment *based on previous TRA Orders* if water loss exceeds 15% during the actual attrition year and each period going forward.” (Emphasis added).

Pre-filed Rebuttal Testimony of TAWC Witness Gary VerDouw at 29-30, TPUC Docket No. 00130 (Dec. 30. 2013). It is noteworthy, if not dispositive, that the Commission’s Data Request also references *previous Commission orders*.

¹³ *Novak Pre-filed* at 6-11.

A. Yes, there are a number of sources available to the Commission. The Commission could look to 1) the level the of NRW experienced by TAWC's peers in the Tennessee (i.e. similarly situated utilities), 2) any criteria established by other State agencies governing an NRW standard to be applied to water utilities not subject to regulation by the TPUC, 3) the typical NRW of water utilities looking to the average or median NRW of water providers in Tennessee, 3) the standards are set by other Public Utility Commission for the Investor Owned Water Utilities they regulate.

Q. WHAT IS THE AVERAGE NON-REVENUE WATER LOSS REPORTED BY THE FIVE LARGEST WATER PROVIDERS IN TENNESSEE?

A. The Chart below shows the Loss Water % (NRW%) Calculated for each of the five largest water providers based on their annual filings with the Tennessee Board of Utility Regulators ("TBOUR"). These five, along with TAWC, make up the state's largest water companies, and these five are the most comparable peers to TAWC in Tennessee. As this chart demonstrates, the weighted average NRW water loss for these five utilities is 26.2%. This average is slightly above the Non-Revenue Water loss percentage that Mr. Novak calculated on page 7 of his Pre-filed Testimony. This clearly demonstrates that TAWC water loss, as measured by Non-Revenue Water, is not excessive, but rather in line with the water loss averages of its peers in Tennessee that also service larger Metropolitan Areas.

Legal Name of Utility	Active Water Customer Count	Water Produced /Purchased Last Fiscal Year	Water Sold Last Fiscal Year	LOST WATER (C-D)	Lost Water %
City of Memphis	249,204	44,221.42	36,719.72	7,501.70	17.0%
Metropolitan Government of Nashville and Davidson County	204,143	38,847.00	24,593.00	14,254.00	36.7%

City of Knoxville	82,799	12,694.96	8,447.06	4,247.90	33.5%
City of Clarksville	80,002	7,358.03	5,562.98	1,795.05	24.4%
Consolidated Utility District of Rutherford County	68,159	5,380.60	4,767.93	612.67	11.4%
Weighted Average Non-Revenue Water Loss		108,502	80,091	28,411.32	26.2%

Source: <https://comptroller.tn.gov/boards/utilities/utility-reporting/annual-utility-reporting.html>
accessed 4/11/2025

Further this unambiguously and fairly demonstrates that a NRW Water loss limitation of 15%, as proposed by the CAD, is not a reasonable measure of what should be considered excessive as it is just 57.2% of the average NRW water loss among TAWC's peers.

Q. COMPARED TO ITS PEERS OF LARGE WATER PROVIDERS SERVING METROPOLITAN AREAS, IS TAWC'S WATER LOSS PERCENTAGE OF 25.67% EXCESSIVE?

A. No. The average water loss percentage (NRW) of the five largest water providers in Tennessee (Memphis, Nashville, Knoxville, Clarksville, and CUD of Rutherford County) is 26.2%, slightly higher than the 25.67% NRW calculated for TAWC by Mr. Novak. Below average water loss compared to its peers cannot be reasonably considered excessive. It is clear that TAWC's NRW loss compares favorably to its peers.

Q. HAS TBOUR DEFINED WHAT EXCESSIVE WATER LOSS IS FOR THE UTILITIES IT REGULATES?

A. Yes. Excessive water loss has been defined in Tennessee by TBOUR as any system with non-revenue water by volume of 40% or more in accordance with Tenn Code Ann. § 7-82-707.

1 **Q. BY THE DEFINITION OF EXCESS WATER LOSS PROMULGATED BY THE**
2 **TBOUR, DOES TAWC HAVE EXCESS WATER LOSS?**

3 A. No. TAWC's water loss (NRW) percentage of 25.67% is well below the 40% threshold of
4 "excess water loss" that TBOUR establish in accordance with Tenn. Code Ann. § 7-82-
5 702.

6 **Q. WHAT IS THE AVERAGE NON-REVENUE WATER LOSS REPORTED BY THE**
7 **TENNESSEE COMPTROLLER OF THE TREASURY AND TBOUR FOR ALL OF**
8 **THE WATER PROVIDERS TBOUR REGULATES?**

9 A. The Tennessee Board of Utility Regulation has compiled the Water Loss percentage for all
10 of the 375 water utilities it regulates and publishes it in Memorandum with the Subject:
11 *Water Loss Filing per §7-82-401(i), Tennessee Code Annotated.* For 2023, TBOUR found
12 that the average water loss for these utilities was 31.1% and the Median Water loss was
13 30.91%.¹⁴ Compared to this statewide average, TAWC's NRW water loss is not excessive.
14 TAWC's NRW loss percentage of 25.67% is just 82.5% of the average of All water
15 providers in the state and just 83% of the median of water loss among all water utilities
16 reporting to TBOUR. TAWC's water loss is not excessive, as it is well below both the
17 average and median of utilities regulated by TBOUR.

18 **Q. DID YOU REFERENCE THE INFORMATION ABOVE FROM THE TENNESSEE**
19 **COMPTROLLER OF THE TREASURY AND TBOUR IN YOUR PRE-FILED**
20 **DIRECT TESTIMONY IN THIS PROCEEDING?**

21 A. Yes.

¹⁴ See, **Petitioner Exhibit Comptroller 2023 Memorandum – RCL** (submitted with the Pre-filed Direct Testimony of Mr. Lane in Docket No. 25-00016).

1 **Q. ARE YOU AWARE OF ANY PUBLIC UTILITY OR STATE REGULATORY**
2 **COMMISSION THAT HAS ADOPTED, AND CONTINUES TO APPLY, THE**
3 **NRW WATER LOSS STANDARD ADVOCATED BY THE CAD IN THIS**
4 **PROCEEDING?**

5 A. No. I am not aware of any jurisdiction that has a NRW reasonableness standard used to
6 reduce cost recovery in rates for actual costs incurred if exceeded.

7 **Q. ARE YOU AWARE OF STATES THAT DO HAVE SOME TYPE OF WATER**
8 **LOSS STANDARD, AND IF SO, COULD YOU EXPLAIN WHICH STATE AND**
9 **WHAT THAT STANDARD IS?**

10 A. Yes. I am aware of two states that have an unaccounted-for water standard for Investor
11 Owned Public Water Utilities: Illinois and Kentucky. Neither state, however, has a NRW
12 standard. Both states only apply an unaccounted-for water standard.

13 **Kentucky:** Turning first to Kentucky, the Kentucky Public Service Commission has
14 defined "Unaccounted-for-water loss" at 807 KAR 5:067, Section 1(7)

15 "Unaccounted for water (UFW) means the volumetric sum of all
16 water purchased and produced by the utility less the volume of
17 water: (a) Sold; (b) Provided to customers without charge as
18 authorized by the utility's tariff; and (c) Used by the utility to
19 conduct the daily operation and maintenance of its treatment,
20 transmission, and distribution systems."

21
22 Pursuant to Kentucky Public Service Commission regulations for ratemaking purposes, a
23 utility's unaccounted-for water loss shall not exceed 15 percent of the total amount of water
24 produced and purchased, excluding water used by a utility in its own operations.

25 807 KAR 5:066. (3) Unaccounted-for water loss. Except for
26 purchased water rate adjustments for water districts and water
27 associations, and rate adjustments pursuant to KRS 278.023(4), for
28 rate making purposes a utility's unaccounted-for water loss shall not

1 exceed fifteen (15) percent of total water produced and purchased,
2 excluding water used by a utility in its own operations.¹⁵
3

4 This is clearly an Unaccounted for Water standard and not a NRW standard.

5 In Kentucky, the Unaccounted-for water loss is “the difference of the total amount
6 of water produced and purchased and the sum of water sold, water used for fire protection
7 purposes, and water used in treatment and distribution operations (e.g., backwashing
8 filters, line flushing).”¹⁶

9 Pursuant to KRS 278.280(2), the Commission has prescribed in its regulations
10 that: Except for purchased water rate adjustments for water districts and water associations,
11 and rate adjustments pursuant to KRS 278.023(4), for rate making purposes a utility’s
12 unaccounted-for water loss shall not exceed fifteen (15) percent of total water produced
13 and purchased, excluding water used by a utility in its own operations.¹⁷

14 **Illinois:** In Illinois, the term 'Unaccounted-for Water' or ‘UFW’ refers to the amount of
15 water that enters the Company's distribution system and is not used for sales to Customers
16 or for other known purposes as determined by meter measurement or, where no meter
17 reading is available, by reasonable estimation procedures. In areas service by purchased
18 water, water utilities recover the cost of that water via a Variable Service Charge based on
19 the cost of the water they purchase to serve a customer plus a surcharge on top of the
20 Variable Charge from the supplier to recover the costs associated with unaccounted for
21 water. This surcharge is based on specified levels of unaccounted for water for each area.

¹⁵ 807 KAR 5:066. (3).

¹⁶ KY PSC Case No. 2012-00009, p. 3, n. 4 (April 30, 2024).

¹⁷ 807 KAR 5:066 Section 6.

1 However, the utility may request a higher surcharge from the Illinois Commerce
2 Commission, which regulates utilities in Illinois. Again, this is NOT a NRW standard.¹⁸

3 Consistent with my Pre-filed Direct Testimony, both of these states use an
4 unaccounted for water standard that allow for water put to productive use by a water utility
5 to be accounted for. Whereas a non-revenue water standard does not allow for the
6 accounting for water put to productive uses, such as, but not limited to, water used for
7 firefighting, valve and hydrant testing, system flushing to maintain water quality and other
8 uses in by the utility in its operations.

9 The original establishment of the unaccounted-for water loss percentage for TAWC
10 in the *2008 Rate Case Order* is consistent with both Kentucky and Illinois. The approach
11 advocated by the CAD is not consistent with either Kentucky or Illinois. If the CAD's
12 position is continued in Tennessee, the utility is financially penalized for the productive
13 use of water used for firefighting, valve and hydrant testing, system flushing to maintain
14 water quality and other uses by the utility in its operations. To the best of my knowledge,
15 no other state in the country – *not a single one* - exacts such a penalty upon water utilities.
16 Continuing the CAD's misinterpretation of the Commission's *2008 Rate Case Order* will
17 render Tennessee an unintended regulatory outlier.

18 **Q. ARE THERE ANY DOWNSTREAM IMPACTS OF THE CAD'S NRW 15%**
19 **LIMITATION OF RECOVERY ON PRODUCTION COSTS ON OTHER FUTURE**
20 **REGULATORY PROCESSES AND PROCEEDING?**

21 A. CAD's NRW approach of not allowing recovery in the PCOP of a portion of Chemical and
22 Purchased Power and Fuel Costs has many downstream impacts associated with it for

¹⁸ See, Illinois American Water Tarriff - Unaccounted for Water Component of Purchase Water Surcharge, Illinois Commerce Commission.

1 future regulatory processes and proceedings. These impacts include 1) CAD's NRW
2 approach undermines the opportunity of the Company to achieve its authorized ROE, 2)
3 unintentionally affecting the reasonableness and sustainability of an Annual Rate Review
4 Mechanism and thus negatively impact any ongoing considerations by the Company
5 regarding a potential ARRM.

6 **Q. HOW DOES CAD'S NRW APPROACH POTENTIALLY UNDERMINE THE**
7 **OPPORTUNITY OF THE COMPANY TO ACHIEVE ITS AUTHORIZED ROE**
8 **AND POTENTIALLY NEGATIVELY IMPACT THE USEFULNESS OF AN**
9 **ARRM**

10 A. There is no question that TAWC incurs the costs associated with chemicals and electrical
11 power and fuel required for the production and distribution of clean, safe, and reliable water
12 for our customers. There is no doubt about the fact that these costs were actually incurred,
13 and the amounts paid are reasonable and prudent. Rather, CAD's approach is to limit
14 recovery of these costs because the Company's NRW exceeded an arbitrary and capricious
15 standard of 15%. As noted above, there is nothing in the evidentiary record that supports
16 the CAD's proposition that the Commission established a 15% NRW standard in TPUC
17 Docket No. 08-00039, and this standard does not take into account the specific operating
18 conditions of a utility such as TAWC that must operate at higher pressures due to the
19 elevation changes within its systems.

20 Excluding these costs from recovery and by adjusting net income to exclude these
21 costs (as is the case with the implementation of incremental capital riders and potentially
22 an ARRM) means that the Company's opportunity to earn its ROE is negatively impacted,
23 unless this "exclusion" is offset by increased revenues (growth) or by expense reductions.

1 Thus, the NRW exclusion can have the unintended consequences of limiting, if not
2 eliminating altogether, the usefulness of such regulatory mechanisms to defer general rate
3 cases.

4 **Q. DO YOU BELIEVE THAT A 15% NRW STANDARD IS REASONABLE AND**
5 **SUPPORTABLE?**

6 A. No, I do not. Not only that, I also do not believe that the Commission ever intended to
7 adopt, nor did it adopt, a 15% NRW standard.

8 First the Commission explicitly stated in TPUC Docket No. 08-00039 that it was
9 adopting an unaccounted-for water standard.

10 Second, a 15% NRW is far below the 40% standard established by TBOUR in
11 accordance with Tenn Code Ann. § 7-82-707.

12 Third, A 15% NRW standard is also significantly below the average NRW
13 performance of the five other largest water providers whose weighted average NRW is
14 26.2%.

15 Fourth, a 15% standard is below both the mean (average) of 31.10% and the median
16 of 30.91% NRW of the 375 water provides across the state subject to TBOUR jurisdiction.

17 Fifth, I have not been able to identify any State's Public Utility Commission that
18 applies a NRW standard to the utilities they regulate.

19 Sixth, since there are many productive, necessary and reasonable uses of water that
20 are *accounted for* and included in non-revenue water, and as such productive and
21 affirmative uses are intentional, rather than unintentional like "loss" and "unaccounted" for
22 water, characterizing these intentional uses of water to formulate and apply what amounts

1 to a penalty against the utility is neither regulatorily sound nor reasonably just or
2 supportable.

3 Seventh, the precedent established over a decade ago in TPUC Docket No. 08-
4 00039 was not based on any evidence of a reasonable NRW standard but rather was an
5 unaccounted for water standard that over the intervening 17 years has seen the concept of
6 unaccounted for water and Non-revenue water conflated and misapplied by TAWC,
7 intervenors and the Commission itself.

8 Eighth, the 15% standard is arbitrary and capricious, as it is not based on data from
9 utilities that have similar operating characteristics or similar geographical challenges to
10 operating a water system. Such benchmarking is only appropriate when adjustments can
11 be made to place the data in the proper context.

12 **Q. IS CONFLATED AND MISAPPLIED HOW YOU WOULD CHARACTERIZE MR.**
13 **NOVAK'S PURPORTED RELIANCE ON TPUC DOCKET NO. 12-00049 FOR**
14 **SUPPORT OF THE CAD'S CONTINUED MISINTERPRETATION OF THE**
15 **COMMISSION'S UNACCOUNTED-FOR WATER DIRECTIVE IN DOCKET NO.**
16 **08-00039?¹⁹**

17 A. Yes.

18 **Q. TO THE EXTENT THE COMPANY, THE CAD OR EVEN THE COMMISSION**
19 **PREVIOUSLY UNINTENTIONALLY MISAPPLIED OR MISINTERPRETED**
20 **THE COMMISSION'S 2008 RATE CASE ORDER AS CONCERNING THE**
21 **ESTABLISHMENT OF AN UNACCOUNTED-FOR WATER LOSS**
22 **PERCENTAGE FOR THE COMPANY, WOULD SUCH A MISTAKE**

¹⁹ *Novak Pre-filed* at 10-11.

1 **CONSTITUTE A SOUND REASON TO CONTINUE APPLYING A NRW**
2 **STANDARD?**

3 A. Certainly not. While I speculate here, I do reasonably suppose that if a mistake at issue was
4 made in favor of the Company, the CAD would likely be making the same argument that
5 the Company is making here – a mistake in the past is no good reason to continue a mistake
6 in the future.

7 **Q. IS THE COMPANY ASKING THE COMMISSION TO UNDO THE**
8 **APPLICATION OF THE NRW STANDARD IN PREVIOUS PCOP**
9 **PROCEEDINGS IN LIGHT OF THE EVIDENTIARY RECORD AND**
10 **COMMISSION DECISION IN TPUC DOCKET NO. 08-00039?**

11 A. No. TAWC is only asking the Commission to apply the unaccounted-for water loss
12 percentage adopted by the Commission in the *2008 Rate Case Order* in this proceeding
13 and going forward.

14 **Q. WHAT DO YOU RECOMMEND WITH REGARD TO THIS PETITION?**

15 A. I recommend that the Petition be approved and a PCOP Deferred Amount of \$2,742,339
16 be approved resulting in a PCOP percentage of 3.85%.

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

18 A. Yes.

Tennessee American Water
2024 PCOP Reconciliation

#N/A

Workbook Information: This workbook calculates the PCOP surcharge percentage based on the reconciliation of PCOP related costs for the year December 2023 - November 2024.

Worksheet Name	Description / Purpose of Worksheet
1. Link In	1. Links in from each expense, authorized expense and sales from last rate case, current sales and system delivery and over-under collection.
2. PCOP Calc Exhibit	2. Calculation of the current PCOP rate.
3. Support Workpaper	3. Current expenses adjusted for Non-Revenue Water compared to authorized expenses from the last rate case.
4. Usage&Sysdel	4. Usage and system delivery for the 12 months ending November 2024.
5. Jasper Highlands Workpaper	5. Jasper Highlands adjustment calculation for each expense, water sales, and revenues included in calculation of PCOP.
6.	6.
7.	7.
8.	8.
9.	9.
10.	10.
11.	11.
12.	12.
13.	13.
14.	14.
15.	15.
16.	16.
17.	17.
18.	18.
19.	19.
20.	20.

There are three (3) other worksheets that are left blank intentionally and are used to identify and separate the Other Support, Exhibit and Workpaper worksheets.

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Description	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Total
Purchased Water	9,048	9,872	7,249	8,561	9,972	13,665	33,855	23,877	32,461	26,494	27,523	12,464	215,041
Purchased Power	216,921	257,662	224,871	227,322	210,860	217,333	255,217	274,751	283,423	277,106	257,459	201,019	2,903,942
Chemicals	184,550	221,820	199,434	184,064	173,708	213,179	9,088	435,193	232,844	214,263	219,890	180,733	2,468,765
Waste Disposal	90,164	29,985	11,179	133,854	75,335	61,094	23,234	39,306	131,621	23,646	31,055	137,557	788,031
TRA Inspection Fee (Amortized in 16530000)	22,047	22,047	22,047	22,047	22,047	22,047	22,047	22,047	22,047	22,047	22,047	22,047	264,561
Total	522,730	541,385	464,780	575,848	491,922	527,317	343,441	795,174	702,395	563,556	557,974	553,819	6,640,340

Amounts Approved in Docket 12-00049

Total	
Purchased Power	2,678,772 From Docket 12-00049 Files - 'CAPD Exhibits for Revenue Requirement in TAWC Rate Case 12-00049-SETTLEMENT6.xlsx
Chemicals	986,930
Purchased Water	51,331
TRA Inspection Fee	131,826
Waste Disposal	213,308

Authorized Sales in 100 Gallons 100,578,654 From Docket 12-00049

Projection of Annual Revenues from Last Rate Order: 47,073,724 From Docket 12-00049

	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Total
System Delivery	10,348,999	11,853,394	10,337,237	11,000,349	10,659,443	11,294,702	11,985,749	12,758,952	13,026,001	12,241,213	12,259,950	10,806,248	138,572,236
Water Sales	7,710,381	8,232,685	7,411,494	7,411,494	7,596,482	7,335,289	8,666,364	10,416,644	9,540,929	10,579,466	9,512,259	8,580,837	102,994,325
													2,415,671
													2.40%
2024 Under Refund	(436,223)												

Whitwell Adjustment

	Purchased Water 11/30/2024	Fuel & Power 11/30/2024	Chemicals 11/30/2024	Waste 11/30/2024	Total 11/30/2024	
Actual expenses included in this filing	\$160	\$ 122,153	\$ 98,221	\$ 340,196	\$560,729	<---Use to allocate base year total to each category for Workpaper
Settled upon base year expense from 21-00006	\$ 176,147					
Settled upon base year usage from 21-00006	1,527,738					
Base Revenues from 6/30/12 Whitwell Audited Financials	\$ 1,242,200					

Jasper Highlands

Actual expenses included in this filing	\$ 164,262	\$ 36,130		\$ 200,391	<---Use to allocate base year total to each category for Workpaper
---	------------	-----------	--	------------	--

	2017	2018	2019	2020	2021	2022	2023
Base Revenues from Jasper Highlands Audited Financials	\$ 178,650	\$ 258,971	\$ 316,873				
Normalized Actual Annual JH Revenues from TAWC Unaudited Financials					\$ 334,939	\$ 463,271	
Normalized Actual Annual JH PCOP Expenses from TAWC Unaudited Financials					106,481	107,001	
Actual Annual Water Sales from Jasper Highlands		86,255	98,969				
Normalized Actual Annual JH Water Sales from TAWC Unaudited Financials					140,642	197,613	

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Tennessee American Water Company
Docket No. 25-000XX

Calculation of Production Costs and Other Pass-Throughs ("PCOP") Including Non-Revenue Water
To Determine PCOP Tariff Rider
Actuals for the Year Ending November 30, 2024

Line Number	Description	Amount
<u>I. Calculation of the Base Rate Cost of Production Costs and Other Pass-Throughs as authorized in the Base Rate case (*):</u>		
1	Pro Forma Production Costs and Other Pass-Throughs	\$4,382,511
2	Pro Forma Water Sales (WS) in 100 Gallons	102,423,491
3	Base Rate Cost per 100 Gallons WS (Line 1 / Line 2)	<u>\$0.04279</u>
<u>II. Deferral calculation - Actual Non-Revenue Water Cost Production Costs and Other Pass-Throughs (adjusted for 15% NRW) vs. the Base Rate Cost (**):</u>		
4	Actual Production Costs and Other Pass-Throughs	\$6,640,340
5	Over-Under Collection Adjustment	436,223
6	Review Period PCOP Costs Adjusted for Over-Under Collections	7,076,564
7	Actual Water Sales (100 Gallons)	<u>102,994,325</u>
8	Actual Rate Cost Production Costs and Other Pass-Throughs per 100 Gallons WS (Line 6 / Line 7)	\$0.06871
9	Base Rate Cost per 100 Gallons WS (Line 3)	<u>0.04279</u>
10	Incremental Change in Production Costs and Other Pass-Throughs per 100 Gallons WS (Line 9 - Line 8)	\$0.02592
11	Base Rate Case Water Sales 100 Gallons (Line 2)	<u>102,423,491</u>
12	Deferral Amount (Line 10 * Line 11)	<u>\$2,654,831</u>
<u>III. Calculation of Production Costs and Other Pass-Throughs ("PCOP") Tariff Rider</u>		
		As Filed
13	Total Deferred Amount (Line 12)	\$2,654,831
14	Total Deferred Amount Grossed Up for revenue taxes (Line 13 / (1.0-.03191) (***)	2,742,339
15	Projected Annual Base Rate Revenue subject to PCOP (****)	<u>71,148,607</u>
16	PCOP % (Line 14 / Line 15)	<u>3.85%</u>

(*) The numbers are taken from the settlement agreement in Docket No. 12-00049 and include the Whitwell adjustment from Docket No. 21-00006, as well as a proposed adjustment for Jasper Highlands. The Projected Annual Base Rate Revenue subject to PCOP on Line 15 includes revenues from Docket No. 12-00049, as well as proposed adjustments to include Whitwell and Jasper Highlands base revenues.

(**) The numbers are actuals for the year ended November 30, 2024 including Non-Revenue Water for Purchased Power and Chemicals.

(****) Assumes Gross Receipts Tax @ 3.0%, Uncollectibles @ 1.0571%, and Forfeited Discount Rate @ -0.8661%.

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Tennessee American Water Company
Docket No. 25-000XX
For the Twelve Months Ending November 30, 2024
PCOP Actual Expenses

Line #	Description	A	B	C	D	E	F	G	H
		For the 12 Months Ending 11/30/2024	**NRW Limited 12 Mos Ending 11/2023 (Column A, Lines 2 and 3 x Line 18 Recoverable %)	Authorized Amount Per Docket 12-00049	Whitwell Adjustment as Settled per Docket 21-00006	Jasper Highlands Proposed Adjustment	B - (C + D + E) Difference NRW Limited from Authorized Docket 12-00049	Adjust Difference for TRA Fee Recovered Via SEC, EDI, or QIIP 12 Months Ending 11/30/2024	F - G Adjusted Difference
1	Purchased Water Including Wheeling Charges	\$215,041	\$215,041	\$51,331	\$50	\$109,215	\$54,444	\$0	\$54,444
2	Purchased Power**	2,903,942	2,903,942	2,678,772	38,373	34,982	\$151,815		151,815
3	Chemicals**	2,468,765	2,468,765	986,930	30,855		\$1,450,980		1,450,980
4	Waste Disposal	788,031	788,031	213,308	106,869		\$467,854		467,854
5	TRA Inspection Fee	264,561	264,561	131,826	0		\$132,735		132,735
6									
7	Total	\$6,640,340	\$6,640,340	\$4,062,167	\$176,147	\$144,197	\$2,257,829	\$0	\$2,257,829
8									
9									
10	Water Sales in 100 Gallons	102,994,325	102,994,325	100,578,654	1,527,738	317,099		102,994,325	
11									
12	Cost per 100 Gallons (Line 7 / Line 10)	\$0.06447	\$0.06447	\$0.04039	\$0.11530	\$0.45474	\$0.02408	\$0.00000	\$0.02408
Recoverable % for Production Costs		For the 12 Months Ending 11/30/2024							
13	Water System Delliveries	102,994,325							
14	Unaccounted for Water	138,572,236							
15	Non-Revenue-Unaccounted for Water % [1 - (Line 13 / Line 14)]	0.0%							
16	Non-Revenue-Unaccounted for Water % Authorized	15.0%							
17	Variance (If Line 15 > Line 16 then Line 15 - Line 16)								
18	Recoverable % (1 - Line 17)	100.0%							

**Non-Revenue Unaccounted for Water is only applied to purchased power and chemicals.

Tennessee American Water Company
Docket No. 25-000XX
For the Twelve Months Ending November 30, 2024
Usage

	Water Usage	System Delivery	NRW %
2023 Dec	7,710,381	10,348,999	25.50%
2024 Jan	8,232,685	11,853,394	30.55%
2024 Feb	7,411,494	10,337,237	28.30%
2024 Mar	7,411,494	11,000,349	32.62%
2024 Apr	7,596,482	10,659,443	28.73%
2024 May	7,335,289	11,294,702	35.06%
2024 Jun	8,666,364	11,985,749	27.69%
2024 Jul	10,416,644	12,758,952	18.36%
2024 Aug	9,540,929	13,026,001	26.75%
2024 Sep	10,579,466	12,241,213	13.58%
2024 Oct	9,512,259	12,259,950	22.41%
2024 Nov	8,580,837	10,806,248	20.59%
	102,994,325	138,572,236	25.67%

Tennessee American Water Company
Docket No. 25-000XX
For the Twelve Months Ending November 30, 2024
Jasper Highlands Acquisition Adjustment Calc

	Year	Billed Usage	Water Sales Revenue	Purchased Water	Purchased Power	Total PCOP	Customer Count	Customer Count Source:	Yearly Purchased Water per Customer	Yearly Purchased Power per Customer	Yearly PCOP per Customer
A/	2017	3,379,792	\$ 178,650	\$ 16,362	\$ 5,241	\$ 21,603	70	C/	\$ 234	\$ 75	\$ 309
B/	2024		\$ 670,723	\$ 164,262	\$ 36,130	\$ 200,391	467	D/			
					\$ 109,215						
					\$ 34,982						
					<u>\$ 144,197</u>						

A/ 20-00011 - REVISED CONFIDENTIAL Exhibit DB-3 - Jasper Highlands Water System - Financial Statements 2017.xlsx
B/ CO. Exh, tab Jasper Workpaper
C/ 20-00011, Confidential attachment Dr 1-13
D/ Tab "JH Bill Anaylsis"

**BEFORE THE TENNESSEE PUBLIC UTILITY COMMISSION
NASHVILLE, TENNESSEE**

**PETITION OF TENNESSEE-
AMERICAN WATER COMPANY
REGARDING THE 2025 PRODUCTION
COSTS AND OTHER PASS-
THROUGHS RIDER**

)
)
)
)
)

DOCKET NO. 25-00002

VERIFICATION

STATE OF Tennessee)
COUNTY OF Hamilton)

I, ROBERT C. LANE, 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.

ROBERT C. LANE

Sworn to and subscribed before me
this 22nd day of April, 2025.

Notary Public

My Commission Expires: 2-28-28



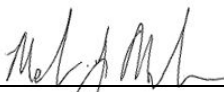
CERTIFICATE OF SERVICE

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

Vance L. Broemel, Esq.
Senior Assistant Attorney General
Office of the Tennessee Attorney General
Consumer Advocate Division
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This the 22nd day of April 2025.



Melvin J. Malone