

Exhibit No.: _____
Issue: Class Cost of Service and Rate Design
Witness: Timothy S. Lyons
Type of Exhibit: Surrebuttal Testimony
Sponsoring Party: Confluence Rivers Utility
Operating Company, Inc.
Case No.: WR-2023-0006 / SR-2023-0007
Date: July 21, 2023

**Before the Public Service Commission
of the State of Missouri**

Surrebuttal Testimony

of

Timothy S. Lyons

on behalf of

Confluence Rivers Utility Operating Company, Inc.

July 21, 2023

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CONFLUENCE RIVERS UTILITY OPERATING COMPANY, INC.
BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION
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1 **I. INTRODUCTION**

2 **Q. Please state your name and business address.**

3 A. My name is Timothy S. Lyons. My business address is 3 Speen Street, Framingham,
4 Massachusetts, 01701.

5 **Q. Are you the same Timothy S. Lyons who filed direct and rebuttal testimonies in this**
6 **proceeding?**

7 A. Yes. I filed direct testimony (“Direct Testimony”) and rebuttal testimony (“Rebuttal
8 Testimony”) on behalf of Confluence Rivers Utility Operating Company (“Confluence
9 Rivers” or the “Company”) in this proceeding.

10 **Q. What is the purpose of your Surrebuttal Testimony?**

11 A. The purpose of my Surrebuttal Testimony is to address recommendations made by
12 Missouri Public Service Commission Staff (“Staff”) witness Keri Roth regarding the
13 Company’s billing determinants; specifically, the water usage to be assumed for
14 developing the proposed water rates. I also address concerns raised by Staff Witness Roth
15 related to “rate shock” under the Company’s proposed single-tariff pricing (“STP”) as
16 compared to the Staff’s proposed consolidated districts.

17 **II. STAFF’S ESTIMATION OF CUSTOMER WATER USAGE**

18 **Q. What was Staff’s approach to estimate water usage for the Company’s rate design?**

19 A. As described on page 2 of Ms. Roth’s rebuttal testimony, Staff’s approach to estimate water
20 usage for the Company’s rate design was based on an assumption the Company’s

1 customers use on average 5,000 gallons per month. Staff’s approach was in response to
2 concerns regarding data quality issues that Staff Witness Gateley discussed in his direct
3 testimony.¹ Specifically, Staff states, “Due to the quality of Confluence’s water sales data,
4 Staff has utilized an estimate of 5,000 gallons per customer per month.”²

5 Staff uses in its rate design 5,000 gallons per customer per month, “...based on its
6 experience with customer usage among various water systems in the state.”³

7 **Q. Does the Company have concerns with Staff’s approach?**

8 A. Yes. The Company has concerns with Staff’s approach to estimate water usage based on
9 5,000 gallons per customer per month. In short, Staff’s approach is not consistent with the
10 Company’s recorded customer usage by service area, as shown in Figure 1 (below).

¹ Direct Testimony of Curt B. Gateley, p. 1-5

² Direct Testimony of Keri Roth, p. 6

³ Id.

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Figure 1: Average Customer Usage by Service Area⁴

Confluence Rivers Utility Operating Company, Inc.				Number of	Total	Average
Service Area	Original Entity	Customer Type	Meter Type	Bills	Water Usage	Usage (Gallons)
Eugene	Confluence Rivers	Residential	3/4"	518	1,991	3,846
Eugene	Confluence Rivers	Commercial	3/4"	73	153	2,104
Evergreen	Confluence Rivers	Residential	3/4"	797	3,127	3,921
Evergreen	Confluence Rivers	Commercial	3/4"	12	-	-
Fawn Lake	Confluence Rivers	Residential	3/4"	348	1,172	3,367
Gladlo	Confluence Rivers	Residential	3/4"	842	3,203	3,805
Hillcrest	Hillcrest	Residential	3/4"	2,750	9,932	3,611
Hillcrest	Hillcrest	Multifamily	3/4"	185	454	2,447
Hillcrest	Hillcrest	Commercial	3/4"	38	113	2,975
Indian Hills	Indian Hills	Residential	3/4"	7,797	15,218	1,952
Indian Hills	Indian Hills	Commercial	3/4"	48	43	902
Majestic Lakes	Confluence Rivers	Residential	3/4"	654	2,626	4,017
Osage	Osage	Residential	5/8"	4,509	5,208	1,155
Port Perry	Confluence Rivers	Residential	5/8"	220	326	1,482
Port Perry	Confluence Rivers	Residential	3/4"	822	989	1,203
Port Perry	Confluence Rivers	Residential	1 1/2"	2,921	4,075	1,395
Port Perry	Confluence Rivers	Residential	1"	12	7	577
Port Perry	Confluence Rivers	Commercial	5/8"	49	137	2,775
Port Perry	Confluence Rivers	Commercial	3/4"	69	58	836
Port Perry	Confluence Rivers	Commercial	1 1/2"	854	293	343
Port Perry	Confluence Rivers	Commercial	2"	22	3	133
Roy L	Confluence Rivers	Residential	3/4"	399	679	1,702
Terre Du Lac	Confluence Rivers	Residential	5/8"	16,132	58,381	3,619
Terre Du Lac	Confluence Rivers	Residential	3/4"	12	71	6,126
Terre Du Lac	Confluence Rivers	Residential	1"	14	0	7
Terre Du Lac	Confluence Rivers	Commercial	5/8"	207	1,110	5,355
Terre Du Lac	Confluence Rivers	Commercial	1"	36	347	9,620
Terre Du Lac	Confluence Rivers	Commercial	2"	6	1,846	330,823
Total				40,345	111,561	2,765

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Q. What is the practical effect of using Staff's estimate of water usage?

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A. The practical effect is Staff's rate design will be based on an inflated estimate of water usage which means the Company's rates will not recover the Commission-authorized revenue requirement.

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⁴ 'Total Water Usage' column reflects water usage in thousand gallons.

1 **Q. How did the Company develop its proposed billing determinants?**

2 A. The Company's billing determinants were developed based on the Company's test year
3 number of bills and usage.

4 **Q. How did the Company ensure that the billing determinants could be relied upon for**
5 **the development of proposed rates?**

6 A. The Company conducted a "revenue proof" test to determine if the billing determinants
7 align with the Company's current test year revenues. This is an important step in rate
8 design. If the billing determinants are found to be aligned with current test year revenues,
9 these can be relied upon to develop proposed rates that would reliably recover
10 Commission-authorized revenues.

11 **Q. How was the revenue proof analysis conducted?**

12 A. The Company developed a "revenue proof" that compares (1) "calculated" revenues,
13 derived by applying the Company's rates to its number of bills and usage, to (2) the
14 Company's billed revenues. The revenue proof was based on the following steps:

- 15 a) Identify number of bills and usage from customer billing data.
16 b) Apply current rates to number of bills and usage to derive "calculated" revenues.
17 c) Compare "calculated" revenues to the Company's actual billed revenues.

18 **Q. What were the results of the Company's revenue proof?**

19 A. The results of the Company's revenue proof show calculated revenues are within 2.00
20 percent of the Company's billed revenues, as shown in Figure 2 (below). The Company
21 believes such results show the number of customers and usage are accurate and can be
22 relied upon to establish the proposed rates in this proceeding.

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Figure 2: Revenue Proof Analysis Results

Revenue Proof Summary		
Metered		
Base Charge	\$	1,100,351
Usage Charges	\$	444,844
Total Metered	\$	1,545,195
Unmetered		
Base Charge	\$	626,582
Total Calculated Revenues	\$	2,171,777
Billed Revenues	\$	2,131,963
Difference (\$)	\$	39,814
Difference (%)		1.87%

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3 **Q. What is the Company’s recommendation regarding water usage?**

4 A. The Company recommends utilizing test year billing data, as shown in Figure 1 (above).

5 **Q. Does the Company have additional concerns regarding Staff’s approach to estimated**
6 **water usage?**

7 A. Yes. Staff’s approach includes unmetered bills in its approach to estimate water usage. In
8 other words, Staff derives its estimate of water usage for Rate District 2 and 3 based on
9 metered and unmetered bills rather than metered bills only, as shown in Figure 3 (below).

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Figure 3: Staff Calculation of Customer Water Usage

Staff Calculation of Water Usage	Number of Bills	Staff Proposed (5,000 Gallons / Month)	Corrected (5,000 Gallons / Month)
Rate District 1			
Metered Bills	348	1,740,000	1,740,000
Unmetered Bills	7,068	-	
Total Rate District 1	7,416	1,740,000	1,740,000
Rate District 2			
Metered Bills	8,340	41,700,000	41,700,000
Unmetered Bills	1,704	8,520,000	
Total Rate District 2	10,044	50,220,000	41,700,000
Rate District 3			
Metered Bills	31,200	156,000,000	156,000,000
Unmetered Bills	7,620	38,100,000	
Total Rate District 3	38,820	194,100,000	156,000,000
Total Water Usage		246,060,000	199,440,000
Difference			(46,620,000)
Difference (%)			-18.9%

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The Figure shows Staff’s estimate of water usage overestimates water usage by applying estimated monthly usage to unmetered bills. Specifically, Staff overestimates water usage by 46.6 million gallons (or 18.9 percent).

The Figure also shows Staff’s estimate of water usage for Rate District 1 is correct – it is based only on metered bills.

Q. What is the impact on the proposed rate design of applying estimated monthly usage to unmetered bills?

A. Applying estimated monthly usage to unmetered bills would overstate the water usage in the rate design which means the Company’s rates will not recover the Commission-authorized revenue requirement.

1 **Q. What is the Company’s recommendation?**

2 A. The Company recommends applying estimated monthly usage to metered bills only. In
 3 addition, as discussed earlier, the Company recommends utilizing test year billing data. A
 4 comparison of the Company’s proposal, if applied on Staff’s proposed rate districts, is
 5 presented in Figure 4 (below).

6 **Figure 4: Company Proposed Customer Water Usage**

Company Proposed Water Usage	Number of Bills	Staff Proposed (5,000 Gallons / Month)	Company Proposed (Test Year Data)
Rate District 1			
Metered Bills	348	1,740,000	1,172,000
Unmetered Bills	7,068	-	
Total Rate District 1	7,416	1,740,000	1,172,000
Rate District 2			
Metered Bills	8,340	41,700,000	16,386,000
Unmetered Bills	1,704	8,520,000	
Total Rate District 2	10,044	50,220,000	16,386,000
Rate District 3			
Metered Bills	31,200	156,000,000	94,003,000
Unmetered Bills	7,620	38,100,000	
Total Rate District 3	38,820	194,100,000	94,003,000
Total Water Usage		246,060,000	111,561,000
Difference			(134,499,000)
Difference (%)			-54.7%

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 8 The Figure reflects the Company’s two proposed corrections to the calculation of water
 9 usage: 1) calculation based on metered bills only, and 2) calculation based on test year
 10 billing data.

11 The Figure shows that Company’s proposed corrections result in a reduction of
 12 water usage compared to Staff proposal of 134.5 million gallons (or 54.7 percent).

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1 **III. STAFF’S CONCERNS ON RATE SHOCK UNDER SINGLE-TARIFF PRICING**

2 **Q. What are Staff’s concerns regarding “rate shock” under the Company’s proposed**
3 **single-tariff pricing?**

4 A. Staff Witness Roth highlights a few service areas where there would be substantial rate
5 increases under the Company’s proposed STP as compared to Staff’s proposed multiple
6 district consolidation proposal. Specifically, Staff compares the following service areas:

7 – Missing Wells and Prairie Heights water systems

8 ○ Under Staff’s consolidation approach and its cost of service, rates increase from
9 \$20.00 per month to \$58.78 per month.

10 ○ Under STP and the Company’s cost of service, rates increase from \$20.00 per
11 month to \$82.62 per month.

12 – Hillcrest and Port Perry water systems

13 ○ Under Staff’s consolidation approach and cost of service, proposed rates
14 include a fixed charge of \$21.28 per month and the usage charge of \$2.66 per
15 1,000 gallons.

16 ○ Under STP and the Company’s cost of service, proposed rates include a fixed
17 charge of \$29.19 per month and the usage charge of \$9.54 per 1,000 gallons.

18 – Deer Run, DeGuire, and Missing Well sewer systems

19 ○ Under Staff’s consolidation approach and cost of service, rates increase from
20 \$20.00 per month to \$60.64 per month.

21 ○ Under STP and the Company’s cost of service, rates increase from \$20.00 per
22 month to \$82.96 per month.

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1 **Q. Does the Company agree with Staff's comparison?**

2 A. No. The rate comparison is not an apples-to-apples comparison. Specifically, Staff's rates
3 are based on Staff's proposed cost of service, while the Company's rates are based on the
4 Company's proposed cost of service, which is higher than Staff. As such, it does not isolate
5 the impact of the varying consolidation approaches as Staff implies.

6 **Q. What is the rate comparison under an apples-to-apple comparison?**

7 A. If the Company's proposed STP is applied to Staff's cost of service, the resulting sewer
8 rates for Deer Run, DeGuire, and Missing Well, for example, would be \$59.79 per month,
9 which is comparable to Staff's proposal of \$60.64.⁵

10 **Q. Are there service areas where the Company's proposed STP results in a lower rate
11 increase than Staff's proposed consolidation approach?**

12 A. Yes. In Terre Du Lac, for example, which represents a large portion of the Company's
13 customers, Staff proposes a rate increase from \$23.85 to \$93.99. By comparison, the
14 Company proposes a rate increase from \$23.85 to \$72.51.⁶

15 **Q. How do the Company and Staff's proposed rate changes vary in those service areas
16 with among the highest current rates?**

17 A. In Indian Hills, for example, which represents 13.0 percent of Company's customers, Staff
18 proposes a rate increase from \$89.40 to \$93.99 per month. By comparison, the Company
19 proposes a rate decrease from \$89.40 to \$72.51 per month.⁷

⁵ Rebuttal Testimony of Timothy S. Lyons, p. 13 (Figure 3). For comparison purposes, the charges are based on Staff's proposed revenue requirements and billing determinants.

⁶ Rebuttal Testimony of Timothy S. Lyons, p. 7 (Figure 2). For comparison purposes, the charges are based on Staff's proposed revenue requirements and billing determinants.

⁷ Rebuttal Testimony of Timothy S. Lyons, p. 7 (Figure 2). For comparison purposes, the charges are based on Staff's proposed revenue requirements and billing determinants.

1 **Q. Does the Company agree that in certain areas its proposed rate increases are**
2 **substantially higher than Staff's proposed rate increases?**

3 A. Yes. The Company agrees that in certain areas its proposed rate increases are substantially
4 higher than Staff's proposed rate increases, such as Port Perry. The Company notes,
5 however, that the primary driver for the substantial increase in Port Perry rates is due to
6 the absence of a rate change over the past 30 years.

7 **Q. Does the Company's proposed single tariff consolidation help address rate shock in**
8 **the long run?**

9 A. Yes. The Company's proposal for single tariff consolidation spreads system costs across
10 a larger number of customers, helping to mitigate large rate increases – or rate shocks – by
11 spreading the costs across a larger number of customers.

12 **Q. Does this conclude your surrebuttal testimony?**

13 A. Yes, it does.

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

In the Matter of Confluence Rivers Utility)
Operating Company, Inc.'s Request for Authority)
to Implement a General Rate Increase for Water) **File No. WR-2023-0006**
Service and Sewer Service Provided in Missouri)
Service Areas.)

VERIFICATION OF TIMOTHY S. LYONS

STATE OF VERMONT)
)
COUNTY OF CHITTENDON)

I, Timothy S. Lyons, of lawful age, under penalty of perjury, and pursuant to Section 509.030, RSMo, state as follows:

1. My name is Timothy S. Lyons. I am associated by ScottMadden, Inc. as a Partner. I have been retained by Confluence Rivers Utility Operating Company, Inc. to provide testimony in this case.
2. My Surrebuttal Testimony on behalf of Confluence Rivers Utility Operating Company, Inc. is attached to this verification.
3. My answers to each question in the attached surrebuttal testimony are true and correct to the best of my knowledge, information, and belief.

/s/ Timothy S. Lyons
Ned W. Allis

July 21, 2023
Date