

Exhibit No: _____
Issue: **Class Cost of Service and Rate Design**
Witness: **Timothy S. Lyons**
Type of Exhibit: **Rebuttal Testimony**
Sponsoring Party: **Spire Missouri, Inc.**
Case No.: **GR-2021-0108**
Testimony Date: **June 17, 2021**

SPIRE MISSOURI, INC.
CASE NO. GR-2021-0108
REBUTTAL TESTIMONY
CLASS COST OF SERVICE
OF
TIMOTHY S. LYONS

June 17, 2021

TABLE OF CONTENTS

REBUTTAL TESTIMONY OF TIMOTHY S. LYONS 2

I. PURPOSE AND OVERVIEW OF TESTIMONY 2

II. REVENUE TARGETS 7

III. RESIDENTIAL CUSTOMER CHARGES..... 16

IV. SUMMER INCLINING BLOCK RATE STRUCTURE 17

V. SPIRE WEST SGS AND LGS RATE STRUCTURE 18

VI. BREAKPOINT BETWEEN RNA BLOCK 1 AND BLOCK 2 22

SCHEDULES:

- Schedule TSL-R1 - Spire Missouri Inc. (East) Lead-Lag Study Cash Working Capital Requirement Rebuttal Testimony Summary**
- Schedule TSL-R2 - Spire Missouri Inc. (West)Lead-Lag Study Cash Working Capital Requirement Rebuttal Testimony Summary**

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

REBUTTAL TESTIMONY OF TIMOTHY S. LYONS

Q. PLEASE STATE YOUR NAME, OCCUPATION AND BUSINESS ADDRESS.

A. My name is Timothy S. Lyons. I am a Partner at ScottMadden, Inc. My business address is 1900 West Park Drive, Suite 250, Westborough, Massachusetts 01581.

Q. ARE YOU THE SAME TIMOTHY S. LYONS WHO PREVIOUSLY SPONSORED DIRECT TESTIMONY RELATED TO CASH WORKING CAPITAL IN THIS PROCEEDING?

A. Yes, I am. I provided direct testimony (“Direct Testimony”) before the Missouri Public Service Commission (the “Commission”) on behalf of Spire Missouri, Inc. (“Spire” or the “Company”) regarding the Company’s cash working capital requirement.

I. PURPOSE AND OVERVIEW OF TESTIMONY

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. The purpose of this rebuttal testimony (“Rebuttal Testimony”) is to propose five changes to the Staff of the Missouri Public Service Commission’s (“Staff”) recommendations in their Class Cost of Service Report (“Staff CCOS Report”).

Q. HAVE YOU PREPARED SCHEDULES SUPPORTING YOUR TESTIMONY?

A. No.

Q. PLEASE SUMMARIZE STAFF’S RECOMMENDATIONS ADDRESSED IN YOUR TESTIMONY.

A. Staff’s recommendations addressed in this testimony are summarized below.

- 1 1. Staff recommends a revenue increase for Spire East’s Residential, Small
2 General Service (“SGS”) and Large General Service (“LGS”) classes of 1.17
3 percent, 25.36 percent, and 9.19 percent, respectively, based on the results of
4 its Class Cost of Service (“CCOS”) study.¹ Staff also recommends a revenue
5 increase for Spire West’s Residential, SGS and LGS classes of 25.26 percent,
6 25.55 percent, and 25.55 percent, respectively.²
- 7 2. Staff recommends retaining Spire East and Spire West’s current residential
8 customer charges of \$22.00 and \$20.00, respectively.³
- 9 3. Staff recommends retaining Spire East and Spire West’s summer inclining rate
10 block for the residential class.⁴
- 11 4. Staff recommends for Spire West’s SGS and LGS classes inclining rate blocks
12 to address concerns with the current alignment of their rate structure.
- 13 5. Staff recommends for Spire East and Spire West’s proposed Revenue
14 Normalization Adjustment (“RNA”) breakpoints between Block 1 and Block 2
15 of 50 CCF for the residential class. Staff also recommends for Spire East and
16 Spire West’s RNA breakpoints between Block 1 and Block 2 in the range of
17 300 to 500 CCF per month for the SGS class.⁵

18 **Q. WHAT IS THE COMPANY’S RESPONSE TO THESE**
19 **RECOMMENDATIONS?**

¹ Corrected Direct Testimony of Staff Witness Robin Kliethermes, p. 3-4.

² Id.

³ Staff CCOS Report, page 6.

⁴ Id.

⁵ Id., pages 38-42

1 A. As an initial matter, the Company generally agrees with Staff regarding the goals
2 and methodologies used to develop Spire East and Spire West’s proposed rate
3 design. The Company supports, for example, the general principles that the rate
4 design should reflect fair and equitable rates, minimizing inter- and intra-class
5 inequities to the extent possible; and rate changes should be tempered by rate
6 continuity concerns.

7 However, the Company has a few concerns regarding Staff’s recommendations and
8 proposes the following changes.

9 1. The Company recommends replacing Staff’s mains allocator used in its CCOS
10 study with the Company’s mains allocator recommended in this rebuttal
11 testimony. The Company’s mains allocator reflects first classification of mains
12 into customer- and demand-related costs and then allocation of mains across the
13 Company’s rate classes. The Company’s recommendation is consistent with its
14 previously filed CCOS studies, is based on methods recognized by NARUC
15 and other utility rate design authorities, better reflects the planning of facility
16 investments, and better reflects the underlying cost of service.

17 The Company’s mains allocator, when incorporated into Staff’s CCOS study
18 and revenue setting methodology for Spire East, results in a substantially lower
19 revenue increase for the SGS class.

20 2. The Company recommends for Spire East and Spire West residential customer
21 charges of \$22.50 per month. The proposed customer charges better reflect the
22 customer costs in serving residential customers – as well as better support the

1 Company's proposed movement toward rate consolidation for Spire East and
2 Spire West's residential classes.

3 3. The Company recommends for Spire East and Spire West's residential classes
4 single volumetric rates during the summer months of May through October,
5 rather than the current inclining rate blocks. While the Company recognizes
6 the potential benefits of inclining rate blocks, the Company believes residential
7 customers would be better served with a single volumetric rate during the
8 summer months.

9 4. The Company continues to support single volumetric rates for Spire West's
10 SGS and LGS classes rather than Staff's proposed inclining rate blocks. The
11 Company appreciates Staff's recommendation to implement inclining rate
12 blocks to address concerns with the current alignment of the SGS and LGS rate
13 schedules. However, the Company believes its recommended changes to Spire
14 West's CCOS study and revenue setting methodology as discussed below will
15 address those concerns.

16 5. The Company recommends for Spire East and Spire West's RNA breakpoints
17 between Block 1 and Block 2 of 30 CCF for the residential class. The Company
18 also recommends for Spire East and Spire West's RNA breakpoints between
19 Block 1 and Block 2 of 100 CCF for the SGS class. The Company's
20 recommended breakpoints are more consistent with the goals of the RNA in
21 insulating the Company from sales variances due to weather and conservation.

22 **Q. WHAT IS THE IMPACT OF THE COMPANY'S RECOMMENDATIONS?**

1 A. The impact of the Company’s recommendations is presented in Figures 1 and 2
2 (below). The Figures compare the Company and Staff’s recommended revenue
3 targets for each rate class. The Company’s recommended revenue targets are based
4 on a CCOS study prepared specifically for this rebuttal testimony. The CCOS study
5 prepared for this rebuttal testimony was based on the following assumptions: (1)
6 Staff’s revenue requirements; (2) Staff’s CCOS methodology, except the mains
7 allocator as explained below; and (3) Staff’s revenue setting methodology for each
8 rate class. The revenue target comparison was meant to provide an illustrative,
9 apples-to-apples comparison between the Company’s and Staff’s recommended
10 revenue targets and is not meant to represent the Company’s position regarding
11 Staff’s revenue requirements.

12 **Figure 1: Comparison of Spire East Revenue Targets (\$Millions)**

Spire East: Revenue Target Comparison	Spire Revenue Targets	Current Revenues	Spire Target Increase	Spire Target Increase (%)	Staff Revenue Targets	Staff Target Increase	Staff Target Increase (%)
Residential	\$ 283.3	\$ 274.9	\$ 8.4	3.06%	\$ 278.1	\$ 3.2	1.17%
SGS	31.1	28.7	2.4	8.19%	36.0	7.3	25.36%
LGS	28.7	26.5	2.2	8.19%	29.0	2.4	9.19%
LV	1.0	1.0	-	0.00%	1.0	-	0.00%
LV Transport	14.8	14.8	-	0.00%	14.8	-	0.00%
Interruptible	0.5	0.5	-	0.00%	0.5	-	0.00%
General LP	0.0	0.0	0.0	8.48%	0.0	0.0	25.36%
Gas Lights	0.0	0.0	-	0.00%	0.0	0.0	17.60%
Vehicular Fuel	0.0	0.0	-	0.00%	0.0	-	0.00%
Total	\$ 359.6	\$ 346.6	\$ 12.9	3.73%	\$ 359.6	\$ 12.9	3.74%

13
14 Figure 1 shows that the Company recommends for Spire East a substantially lower
15 revenue increase for the SGS rate class from \$7.3 million (or 25.36 percent) to \$2.4
16 million (or 9.19 percent). In addition, the Company recommends a lower revenue
17 increase for the LGS and General LP classes and no revenue increase for the Gas
18 Lights class. Offsetting the lower revenue increases, the Company recommends a
19 higher revenue increase for the residential class from \$3.2 million (or 1.17 percent)

1 to \$8.4 million (or 3.06 percent). The residential class increase remains below the
 2 overall increase of 3.73 percent.

3 **Figure 2: Comparison of Spire West Revenue Targets (\$Millions)**

Spire West: Revenue Target Comparison	Spire Revenue Targets	Current Revenues	Spire Target Increase	Spire Target Increase (%)	Staff Revenue Targets	Staff Target Increase	Staff Target Increase (%)
Residential	\$ 214.8	\$ 173.1	\$ 41.7	24.08%	\$ 216.9	\$ 43.7	25.26%
SGS	23.3	17.1	6.2	36.31%	21.5	4.4	25.55%
LGS	17.1	13.4	3.7	27.77%	16.8	3.4	25.55%
LV	0.2	0.2	-	0.00%	0.3	0.1	25.55%
Transport	19.1	18.7	0.5	2.46%	19.2	0.5	2.68%
Gas Lights	0.0	0.0	-	0.00%	0.0	0.0	25.55%
Total	\$ 274.7	\$ 222.6	\$ 52.1	23.41%	\$ 274.7	\$ 52.1	23.41%

4
 5 Figure 2 shows that the Company recommends for Spire West a lower revenue
 6 increase for the residential class from \$43.7 million (25.26 percent) to \$41.7 million
 7 (24.08 percent). The Figure also shows a higher revenue increase for the SGS rate
 8 class from \$4.4 million (or 25.55 percent) to \$6.2 million (or 36.31 percent). In
 9 addition, the Company recommends a slightly higher revenue increase for the LGS
 10 class.

11 The Company’s revenue targets are based on the results of the CCOS study
 12 prepared specifically for this rebuttal testimony, as described above.

13 **II. REVENUE TARGETS**

14 **Q. WHAT IS STAFF’S RECOMMENDATION REGARDING REVENUE**
 15 **INCREASES FOR SPIRE EAST AND SPIRE WEST’S RESIDENTIAL, SGS**
 16 **AND LGS CLASSES?**

17 **A.** Staff recommends revenue increases for Spire East’s Residential, SGS and LGS
 18 classes of 1.17 percent, 25.36 percent, and 9.19 percent, respectively. Staff also
 19 recommends revenue increases for Spire West’s Residential, SGS and LGS classes

1 of 25.26 percent, 25.55 percent, and 25.55 percent, respectively. The
2 recommendations are based on the results of Staff's CCOS study.

3 **Q. WHAT IS THE PURPOSE OF A CCOS STUDY?**

4 A. The purpose of a CCOS study is to allocate a utility's overall cost of service to each
5 rate class in a manner that reflects its underlying cost of service. A CCOS study
6 identifies the relationship between the service requirements for each rate class and
7 their respective cost drivers. The approach is well established and widely accepted
8 in the utility industry.⁶

9 **Q. DOES THE COMPANY RECOMMEND CHANGES TO STAFF'S CCOS**
10 **STUDY?**

11 A. Yes, the Company recommends incorporating the Company's classification and
12 allocation of mains into Staff's CCOS study.⁷ The Company's classification and
13 allocation of mains are consistent with previously filed CCOS studies, are based on
14 methods recognized by NARUC and other utility rate design authorities, better
15 reflect the planning of facility investments, and better reflect the underlying cost of
16 service.

⁶ See "Principles of Public Utility Rates" by James C. Bonbright.

⁷ The Company's recommendations do not necessarily reflect agreement with all of the other CCOS study methodologies.

1 The Company's classification and allocation of mains when incorporated into
2 Staff's CCOS study and revenue setting methodology result in a substantially lower
3 revenue increase for Spire East's SGS class.

4 **Q. WHAT IS THE COMPANY'S RATIONALE FOR CHANGING THE**
5 **CLASSIFICATION AND ALLOCATION OF MAINS IN THE CCOS**
6 **STUDY?**

7 A. The Company believes that its classification and allocation of mains better reflects
8 the underlying cost of service to each rate class.

9 Distribution mains typically represents the largest plant investment for a gas utility.
10 For Spire East and Spire West, distribution mains comprise 40.2 percent and 36.9
11 percent of their plant investment, respectively.

12 The classification of distribution mains reflects two cost drivers. The first driver is
13 the number of customers. Distribution mains are designed to provide customer
14 access to the natural gas system. The second driver is peak or design day demand.
15 Distribution mains are designed to meet customer demands on the design day.⁸

16 The classification of distribution mains between customer- and demand-related
17 components was determined by the Company through a zero-inch or zero-intercept
18 analysis. It is one of the methods recognized by NARUC in classifying distribution
19 main costs.⁹ NARUC states,

20 "One argument for inclusion of distribution related items in the
21 customer cost classification is the 'zero or minimize size main
22 theory.' This theory assumes that there is a zero or minimum size
23 main necessary to connect the customer to the system and thus

⁸ Design day demand is the highest estimated gas demand for a 24-hour period and is used as a basis for designing the capacity of the transmission and distribution system.

⁹ National Association of Regulatory Utility Commissioners ("NARUC"), Staff Subcommittee on Gas "Gas Distribution Rate Design Manual" June 1989. Pg. 22-23.

1 affords the customer an opportunity to take service as he so
2 desires...The zero-inch main method would allocate the cost of a
3 theoretical main of zero-inch diameter to the customer function, and
4 allocate the remaining costs associated with mains to demand”¹⁰
5

6 The classification of distribution mains was based on a regression analysis that
7 measures the relationship between the cost per foot of mains in the system and the
8 size of the mains. The analysis was based on historical cost data of various sizes
9 and compositions of distribution mains, adjusted to current costs utilizing the
10 Handy-Whitman Index of Public Utility Construction Costs (“Handy-Whitman”).

11 **Q. HOW WAS THE ESTIMATED COST OF A ZERO-INCH MAIN**
12 **DETERMINED?**

13 A. The estimated cost of a zero-inch main was determined by using a zero value for
14 the size variable in the regression equation. Multiplying the estimated cost of a
15 zero-inch main by the actual number of feet in the system yields the theoretical cost
16 of a system comprised of zero-inch mains. The customer-related portion of
17 distribution mains was calculated as the ratio of the cost of a zero-inch mains
18 system to the total cost of the mains system.

19 **Q. PLEASE DISCUSS THE RESULTS OF THE ZERO-INCH ANALYSES.**

20 A. The results of the zero-inch analysis show that the customer-related portion of the
21 mains investment is 35.27 percent for Spire East and 35.09 percent for Spire West.
22 Therefore, the demand-related portion of the mains investment is 64.73 percent for
23 Spire East and 64.91 percent for Spire West.

24 **Q. PLEASE DESCRIBE THE COMPANY’S APPROACH TO ALLOCATION**
25 **OF DISTRIBUTION MAINS.**

¹⁰ NARUC Gas Distribution Rate Design Manual. Pg. 22-23

1 A. The customer-related portion of mains investment was allocated to each rate class
2 based on the number of customers while the demand-related portion was allocated
3 to each rate class based on a peak demand allocator.

4 **Q. PLEASE DESCRIBE THE PROCESS TO DEVELOP THE DEMAND**
5 **ALLOCATOR.**

6 A. For purposes of simplicity, we used Staff’s peak demand allocator that was used in
7 their Direct filed study.

8 We note Staff filed corrected testimony on June 9, 2021 that included an update to
9 the Demand Allocator. Due to time limitations, the Company was unable to
10 sufficiently evaluate Staff’s changes to the allocator. The Company plans to provide
11 an updated response in Surrebuttal Testimony.

12 **Q. WHAT ARE THE KEY DIFFERENCES BETWEEN THE COMPANY AND**
13 **STAFF’S APPROACH TO ALLOCATION OF MAINS?**

14 A. Staff’s approach to the allocation of distribution mains was based on a Stand Alone/
15 Integrated System allocator. The Stand Alone component reflects the cost to extend
16 a main from one customer to the next.¹¹ The Integrated System component reflects
17 the cost of serving peak day demands.

18 There are several important differences between the Company and Staff’s
19 approaches. First, the Stand Alone/ Integrated System allocator assumes varying
20 lengths of mains across rate classes to extend service to a customer. The allocator,
21 for example, assumes that extending service to a LGS customer requires main
22 extensions of greater lengths than extending service to a residential customer.

¹¹ Staff CCOS Report, page 9.

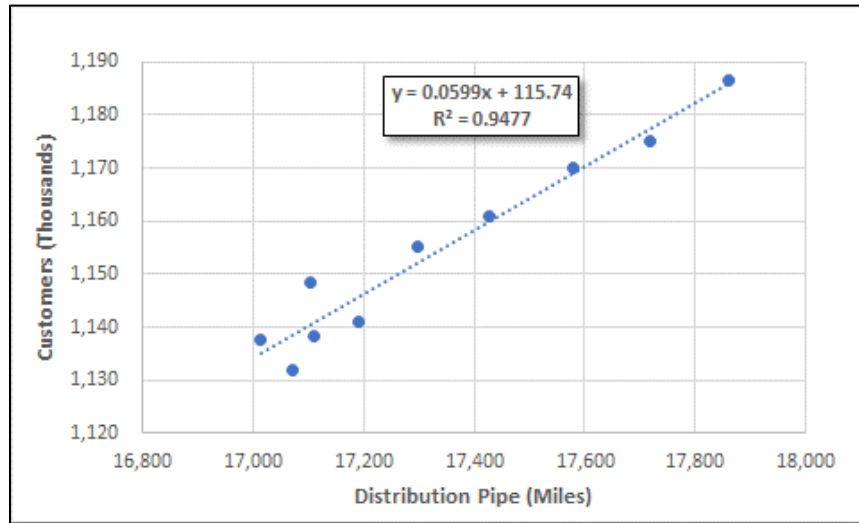
1 Second, the Stand Alone/ Integrated System allocator assumes varying diameters
2 of mains across rate classes to extend service to a customer. The approach, for
3 example, assumes that extending service to a LGS customer requires main
4 extensions of higher diameters than extending service to a residential customer.
5 Finally, the Stand Alone/ Integrated System allocator utilizes 58.3 heating degree
6 days (“HDD”) to determine class design day demands.

7 **Q. WHAT ARE THE COMPANY’S CONCERNS WITH THE STAND ALONE/
8 INTEGRATED SYSTEM ALLOCATOR USED IN STAFF’S APPROACH?**

9 A. Overall, the Company’s concern is that the Stand Alone/ Integrated System
10 Allocator does not reflect the actual design and costs associated with the
11 Company’s investment in its distribution mains. Specifically, the Company has
12 three concerns with the Stand Alone/ Integrated System allocator. First, the
13 allocator does not reflect the relationship between the number of customers and
14 miles of distribution main. Specifically, the allocator does not reflect the strong
15 statistical relationship between the number of customers and miles of main installed
16 over time, as shown in Figure 3 (below).

1

Figure 3: Relationship between Number of Customers and Miles of Main



2

3 Figure 3 shows a direct relationship between the number of customers and miles
4 of main over the past 10 years. The Figure also shows a strong statistical
5 relationship between the number of customers and miles of main, having an R-
6 square of 94.77 percent.

7 Figure 3 supports the Company's mains allocator that main extensions vary by the
8 number of customers (regardless of rate class) rather than Staff's allocator that
9 suggests main extensions vary by the number of customers, adjusted to reflect the
10 varying main extension footage by rate class.

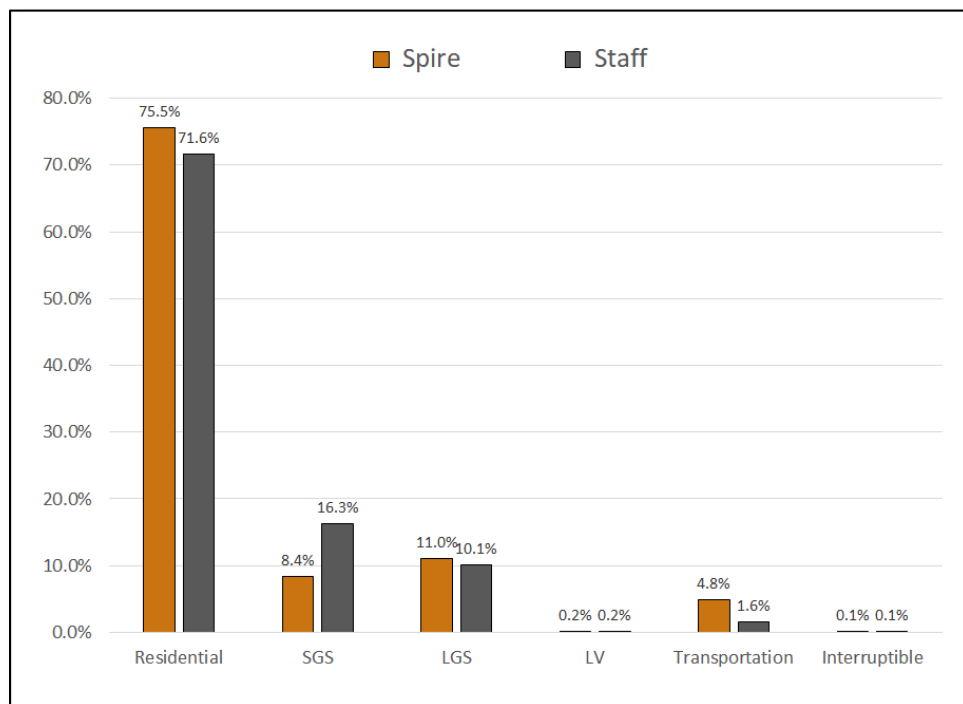
11 Second, the Stand Alone/ Integrated System allocator double-counts that portion of
12 mains designed to serve customer peak demands. For example, General Service
13 customers are allocated higher diameter mains in the Stand Alone portion of the
14 allocator and then allocated costs based on their peak demands in the Integrated
15 System portion of the allocator.

1 Finally, the Stand Alone/ Integrated System allocator utilizes 58.3 HDD to
2 determine its design day demands. This does not reflect how the Company designs
3 its mains. The Company utilizes 72.0 HDD to determine its design day demand in
4 designing its distribution system.

5 **Q. WHAT IS THE IMPACT OF THE METHODOLOGY DIFFERENCES ON**
6 **THE MAINS ALLOCATOR?**

7 A. The impact of the methodology differences on the mains allocator is summarized
8 in Figures 4 and 5 (below).

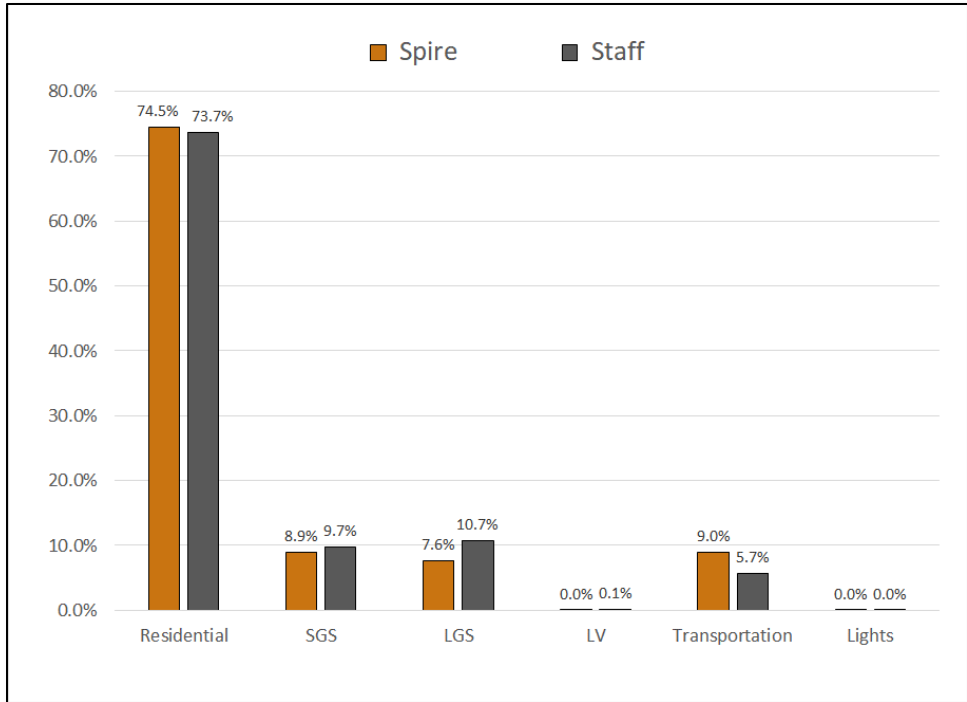
9 **Figure 4: Comparison of Mains Allocator (Spire East)**



10
11 Figure 4 compares the mains allocators for Spire East. Specifically, the Company's
12 mains allocator assigns 75.5 percent of distribution mains to the residential class,
13 as compared to Staff's mains allocator which assigns 71.6 percent. In addition, the

1 Company's mains allocator assigns 8.4 percent of distribution mains investment to
2 the SGS class, while Staff's mains allocator assigns 16.3 percent.

3 **Figure 5: Comparison of Mains Allocator (Spire West)**



4
5 Figure 5 compares the mains allocators for Spire West . Specifically, the
6 Company's mains allocator assigns 74.5 percent of distribution mains to the
7 residential class as compared to Staff's mains allocator, which assigns 73.7 percent.
8 In addition, the Company's mains allocator assigns 8.9 percent of distribution
9 mains investment to the SGS class, while Staff's mains allocator assigns 9.7
10 percent.

11 **Q. WHAT IS THE IMPACT OF THE COMPANY'S MAINS ALLOCATOR ON**
12 **THE CCOS STUDIES AND CLASS REVENUES TARGETS?**

13 A. The impact of the Company's main allocator on the CCOS studies and class
14 revenue targets results in a substantially lower revenue increase to the SGS class,

1 offset by a slightly higher increase to the residential class, as discussed earlier and
2 shown in Figures 4 and 5 (above).

3 **III. RESIDENTIAL CUSTOMER CHARGES**

4 **Q. WHAT IS STAFF'S RECOMMENDATION REGARDING SPIRE EAST**
5 **AND SPIRE WEST'S RESIDENTIAL CUSTOMER CHARGES?**

6 A. Staff recommends retaining Spire East and Spire West's current residential
7 customer charges of \$22.00 and \$20.00, respectively. Staff's recommendation is
8 based on its recommended revenue requirement increases, various customer bill
9 impacts, including ISRS, the fully allocated functionalized customer cost on a per
10 customer basis, the potential for excess fixed revenue recovery to contribute to
11 overearnings at Spire West, concern for additional attrition at Spire East, and Staff's
12 recommendation for a residential retention rate.

13 **Q. WHAT IS THE COMPANY'S RECOMMENDATION REGARDING SPIRE**
14 **EAST AND WEST'S RESIDENTIAL CUSTOMER CHARGES?**

15 A. The Company recommends increasing Spire East and Spire West's residential
16 customer charge to \$22.50 per month.

17 The Company's recommendation is based on the results of its CCOS study prepared
18 specifically for this rebuttal testimony, as described earlier.¹² The CCOS study
19 shows Spire East and Spire West's customer cost per month exceeds \$22.50, as
20 shown in Figure 6 (below).

¹² The CCOS study prepared for this rebuttal testimony is based on Staff's CCOS study, adjusted to incorporate the Company's allocation of mains.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21

Figure 6: Residential Customer Charge Analysis

Customer Charge Analysis	Proposed Charge	Current Charge	Customer Cost Per Month
Spire East	\$ 22.50	\$ 22.00	\$ 33.08
Spire West	\$ 22.50	\$ 20.00	\$ 28.49

The Figure shows Spire East and Spire West’s residential customer cost per month is \$33.08 and \$28.49, respectively.

The customer cost per month is based on costs classified as customer-related in the CCOS study, such as meter and services-related expenses, customer account expenses, and customer services and sales expenses. The customer cost per month also includes the customer portion of the Company’s investment in distribution mains, as described earlier.

IV. SUMMER INCLINING BLOCK RATE STRUCTURE

Q. PLEASE SUMMARIZE STAFF’S RECOMMENDATION REGARDING SUMMER INCLINING BLOCK RATES.

A. Staff recommends retaining Spire East and Spire West’s summer inclining block rates for the residential class. Staff’s recommendation is based on the Commission’s orders in the Company’s most recent rate case proceeding in GR-2017-0215 and GR-2017-0216.

Q. PLEASE SUMMARIZE THE COMPANY’S RECOMMENDATION REGARDING SUMMER INCLINING BLOCK RATES.

A. The Company recommends eliminating the summer inclining block rates for the residential class and instead using a single volumetric charge. The Company’s recommendation is consistent with its goal of simplifying its rate structure.

1 The summer inclining block rates were ordered by the Commission in the
2 Company's most recent rate case proceeding in GR-2017-0215 and GR-2017-0216.
3 In its order, the Commission stated, "An inclining block rate in the summer will
4 incentivize conservation when the customers have the most control over usage not
5 necessary to heat their homes."¹³

6 The Company's recommendation to eliminate the inclining block rates is based on
7 three observations over the past two summers of operating with inclining block
8 rates.

9 First, the summer months of May through October reflect some customer usage to
10 heat their homes. Approximately 8 percent of Spire East and 9 percent of Spire
11 West's HDDs are included in the summer months.

12 Second, inclining block rates have led to some customer confusion. Customers
13 seeking to add equipment during the summer month, for example, pay a higher
14 billing rate, creating some confusion for customers.

15 Third, the amount billed at the second block rate is minimal. Summer usage billed
16 at the second block for Spire East represents 8.4 percent of summer usage and 1.2
17 percent of annual usage. Simply put, the second block rate is rarely utilized and
18 has a minimal impact on conservation given the low natural gas usage during the
19 summer months.

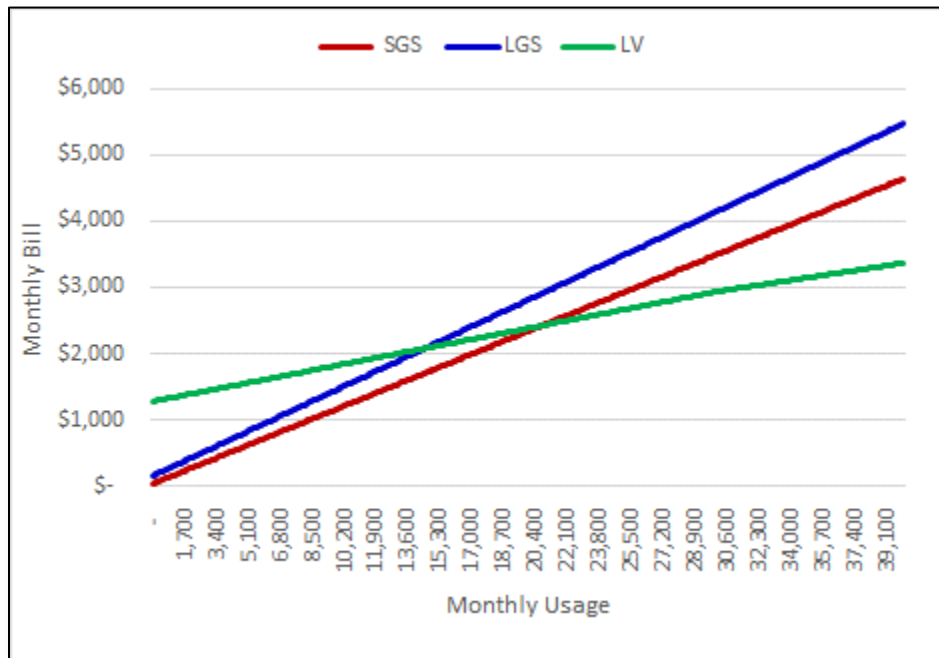
20 **V. SPIRE WEST SGS AND LGS RATE STRUCTURE**

21 **Q. PLEASE SUMMARIZE STAFF'S RECOMMENDATION REGARDING**
22 **SPIRE WEST'S SGS AND LGS RATE STRUCTURE AND DESIGN.**

¹³ Amended Report and Order, Case No. GR-2017-0215 and GR-2017-0216, page 91. (EFIS 594)

1 A. Staff recommends for Spire West’s SGS and LGS rate classes inclining block rates
2 to address concerns with alignment of the current rate structure and design.
3 Specifically, Staff notes that monthly bills under current SGS rates are less than
4 monthly bills under current LGS rates at all levels of usage, as shown in Figure 7
5 (below).

6 **Figure 7: Monthly Winter Bills (Current Rates)**

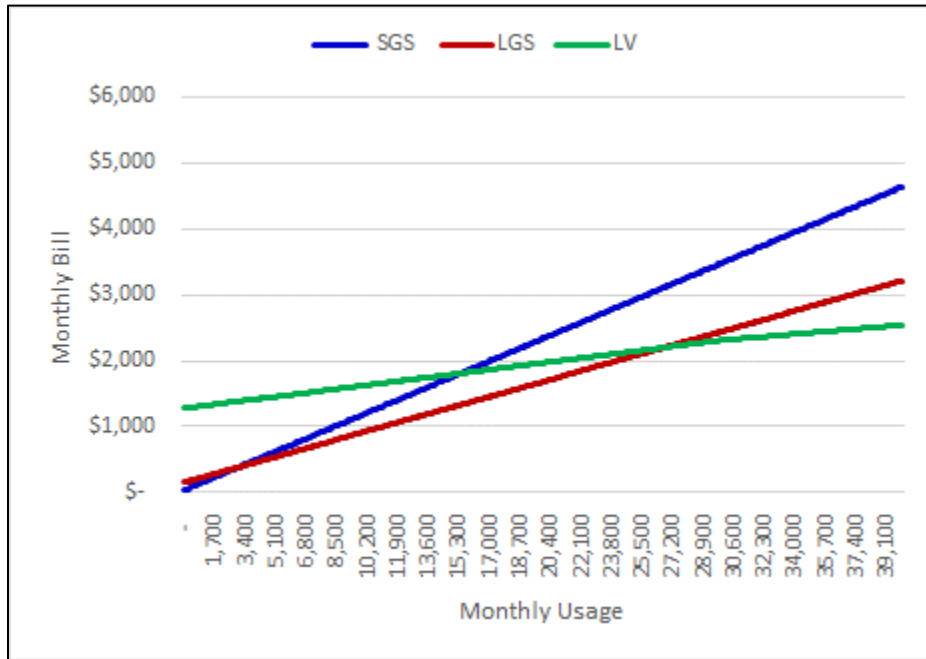


7
8 The Figure shows that monthly winter bills under current SGS rates are less than
9 monthly winter bills under current LGS rates at all levels of usage. For comparison,
10 the average SGS and LGS customers use 167 CCF and 1,601 CCF per month,
11 respectively.

12 We note the concern is largely related to the monthly winter bills as the
13 relationship among summers bills under the current SGS, LGS and LV rates are
14 generally in alignment, as shown in Figure 8 (below).

1

Figure 8: Monthly Summer Bills (Current Rates)



2

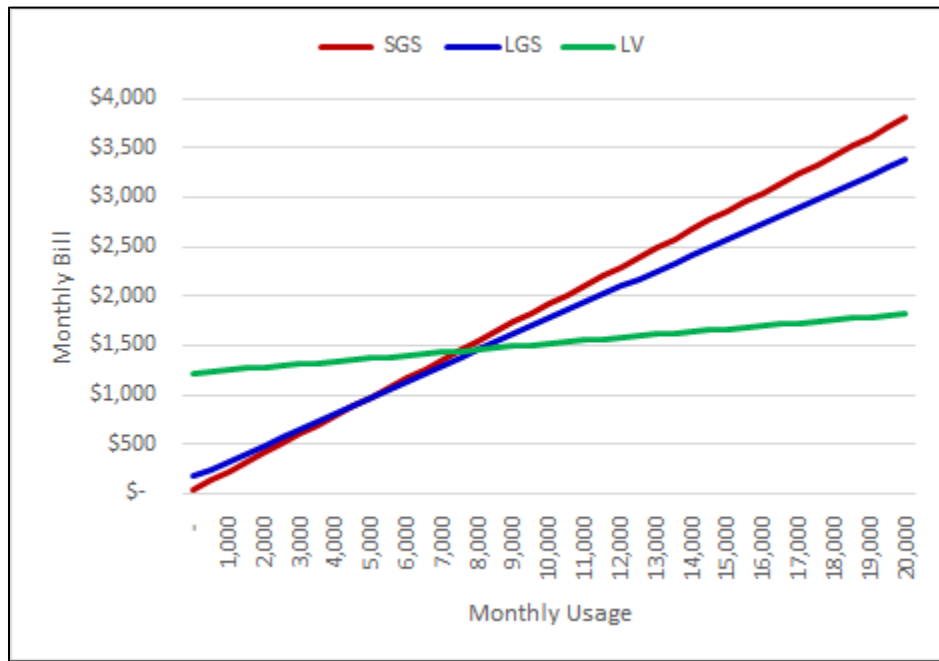
3 **Q. PLEASE SUMMARIZE THE COMPANY’S RECOMMENDATION**
 4 **REGARDING SPIRE WEST’S SGS AND LGS RATE STRUCTURE AND**
 5 **DESIGN.**

6 A. First, the Company agrees with Staff’s concern regarding the current rate structure
 7 and design. Monthly bills under the LGS rates should be less than monthly bills
 8 under SGS rates at certain levels of usage, consistent with the results of the
 9 Company’s CCOS study prepared specifically for this rebuttal testimony.

10 The Company’s recommendation to address this concern is to set the revenue
 11 targets for the LGS and SGS classes closer to their cost of service. The Company’s
 12 recommendation results in monthly bills for the SGS, LGS and LV classes that are
 13 generally in alignment, as shown in Figures 9 and 10 (below).

1

Figure 9: Comparison of Proposed Rate Structure (Winter)

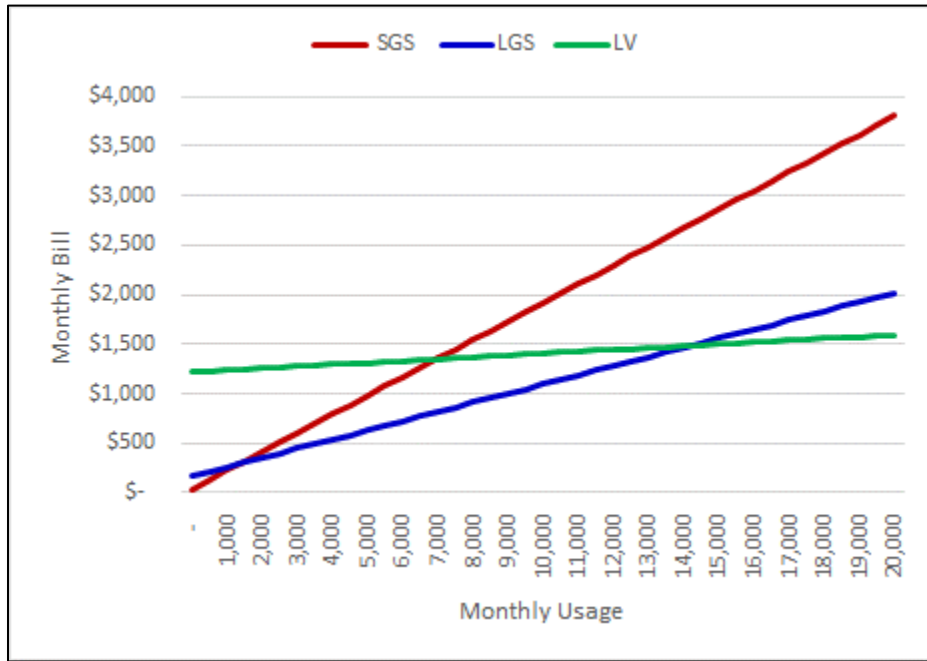


2

3 The Figure shows that monthly bills under the SGS rates are less than monthly bills
4 under the LGS rates until a breakeven point around 6,000 CCF. The breakeven
5 point reflects a level of usage when the monthly bill under one rate schedule is the
6 same as another rate schedule. The breakeven point between the LGS and LV class
7 is around 7,500 CCF. Monthly summer bills are similar, as shown in Figure 10
8 (below).

1

Figure 10: Comparison of Proposed Rate Structures (Summer)



2

3 The Figure shows that monthly bills under the SGS rates are less than monthly bills
 4 under the LGS rates until a breakeven point around 1,000 CCF. The breakeven
 5 point between the LGS and LV class is around 13,000 CCF.

6 **VI. BREAKPOINT BETWEEN RNA BLOCK 1 AND BLOCK 2**

7 **Q. PLEASE SUMMARIZE STAFF’S RECOMMENDATION ON THE**
 8 **BREAKPOINTS BETWEEN BLOCK 1 AND BLOCK 2 FOR THE RNA?**

9 **A.** Staff recommends adoption of the RNA as a replacement for the Company’s current
 10 Weather Normalization Adjustment Rider (“WNAR”). Staff’s recommendation is
 11 based on limitations of the WNAR, which insulates the Company from sales
 12 fluctuations only due to weather. In addition, the WNAR does not recognize
 13 conservation efforts initiated by the Company, such as promotion of energy
 14 efficiency measures, or by customers.

1 The RNA is designed to insulate the Company from sales fluctuations due to
2 weather and conservation by residential and SGS customers.

3 The RNA is designed as a two-block rate mechanism, with Block 1 representing
4 monthly customer usage up to a set threshold (“Breakpoint”) and Block 2
5 representing the remaining monthly customer usage. The RNA is designed to
6 expose the Company in Block 1 to the benefits or risks of variations between actual
7 and normal sales and insulate the Company in Block 2 to the benefits or risks of
8 variations between actual and normal sales.

9 According to Staff, the benefits of the RNA include (1) limit the degree to which
10 customers collectively under- or over-contribute to the Company’s cost of service;
11 and (2) pass along to customers the benefit (or detriment) or increases (or decreases)
12 in sales associated with customer growth. In addition, since the RNA identifies
13 changes between actual and normal sales, it eliminates the need to calculate
14 “deemed savings” for purposes of identifying customer savings related to
15 conservation efforts.

16 Staff recommends for Spire East and Spire West RNA a breakpoint of 50 CCF
17 between Block 1 and Block 2 for the residential class. Staff’s recommendation is
18 based on their review of residential customer bills exceeding 50 CCF per month.
19 Their review for Spire West shows approximately 93 percent of customer bills
20 exceeded 50 CCF in January 2020, 86 percent in March 2020 and 24 percent in
21 May 2020. In addition, their review shows 7 percent of customer bills exceeded 50
22 CCF in October 2019 and 73 percent in November 2019.

1 Staff also recommends for Spire East and Spire West RNA breakpoints in the range
2 of 300 to 500 CCF per month for the SGS class.¹⁴ Staff's recommendation is based
3 on their review of SGS customer bills exceeding 300 to 500 CCF per month. Their
4 review for Spire West shows approximately 58 percent of customer bills exceeded
5 300 CCF in January 2020, 51 percent in March 2020 and 25 percent in May 2020.
6 In addition, their review shows 31 percent of customer bills exceeded 300 CCF in
7 October 2019 and 43 percent in November 2019.

8 **Q. PLEASE SUMMARIZE THE COMPANY'S RECOMMENDATION ON**
9 **RNA BREAKPOINTS FOR THE RESIDENTIAL AND SGS CLASSES.**

10 A. The Company recommends for Spire East and Spire West a RNA breakpoint of 30
11 CCF for the residential class. The Company also recommends for Spire East and
12 Spire West a RNA breakpoint of 100 CCF per month for the SGS class.

13 The Company's recommendations are consistent with the purpose of the RNA,
14 which is to insulate the Company from sales fluctuations due to weather and
15 conservation by the residential and SGS classes.

16 The Company's recommendation is based on review of residential and SGS
17 monthly bills. Specifically, the Company's review notes that under Staff's
18 breakpoint proposal the Company's Block 1 sales would be subject to fluctuations
19 due to weather and conservation by the residential and SGS classes. By
20 comparison, the Company's breakpoint proposal minimizes the Block 1 sales that
21 would be subject to fluctuations due to weather and conservation by the residential
22 and SGS classes.

¹⁴ Ibid.

1 For Spire East, Staff's analysis shows there are 8 months (April through November)
2 where the percentage of customer bills exceeding 50 CCF is less than 90 percent.
3 April through November HDD represent approximately 26 percent of the
4 Company's normal HDD.

5 By comparison, there are only 6 months (May through October) where the
6 percentage of customer bills exceeding 30 CCF is less than 90 percent. May
7 through October HDD represent approximately 8 percent of the Company's normal
8 HDD.

9 For Spire West, Staff's analysis shows there are 10 months (March through
10 December) where the percentage of customer bills exceeding 50 CCF is less than
11 90 percent and 8 months (April through November) where the percentage is less
12 than 80 percent. March through December HDD represent more than 61 percent of
13 the Company's normal HDD and April through November represent approximately
14 28 percent.

15 By comparison, there are only 7 months (April through October) where the
16 percentage of customer bills exceeding 30 CCF is less than 90 percent. April
17 through October HDD represent approximately 15 percent of the Company's
18 normal HDD.

19 **Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?**

20 A. Yes, it does.

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

In the Matter of Spire Missouri Inc.'s)
Request for Authority to Implement a)
General Rate Increase for Natural Gas) File No. GR-2021-0108
Service Provided in the Company's)
Missouri Service Areas)

AFFIDAVIT

STATE OF VERMONT)
COUNTY OF CHITTENDEN) SS.
)

Timothy S. Lyons, of lawful age, being first duly sworn, deposes and states:

1. My name is Timothy S. Lyons. I am a Partner at ScottMadden, Inc. My business address is 1900 West Park Drive, Suite 250, Westborough, Massachusetts 01581.
2. Attached hereto and made a part hereof for all purposes is my rebuttal testimony on behalf of Spire Missouri, Inc.
3. Under penalty of perjury, I declare that my answers to the questions contained in the foregoing rebuttal testimony are true and correct to the best of my knowledge and belief.

/s/ Timothy S. Lyons
Timothy S. Lyons

June 17, 2021
Date

REBUTTAL WORKPAPERS

Schedule TSL-R1
RebuttalSpire Missouri Inc. (East)
Lead-Lag Study
Cash Working Capital Requirement
Rebuttal Testimony Summary

Line	Description	Adjusted Test Year Expenses	Average Daily Amount	Revenue Lag	Expense (Lead)/Lag	Net (Lead)/Lag Days	Working Capital Requirement
	<u>Operation and Maintenance Expenses</u>						
1	Purchased Gas Costs	\$ 306,230,537	838,988	50.85	(38.45)	12.40	10,403,448
2	Purchased Gas Costs	(306,230,537)	(838,988)	50.85	(50.85)	0.00	-
3	Regular Payroll Expenses & Withholdings	65,705,738	180,016	50.85	(11.96)	38.89	7,000,811
4	Vacation Pay	4,361,079	11,948	50.85	(182.50)	(131.65)	(1,572,975)
5	Annual Performance Bonus	961,313	2,634	50.85	(258.50)	(207.65)	(546,895)
6	Pension	11,912,468	32,637	50.85	(91.44)	(40.59)	(1,324,732)
7	Benefits (Group Insurance)	10,599,617	29,040	50.85	(7.07)	43.78	1,271,373
8	Missouri PSC Assessment	2,120,427	5,809	50.85	32.75	83.60	485,665
9	Uncollectible Expense	6,377,984	17,474	50.85	(50.85)	0.00	-
10	Other O&M	35,006,579	95,908	50.85	(42.11)	8.74	838,240
	<u>Income Taxes</u>						
11	Federal Income Taxes	\$ 16,034,094	43,929	50.85	(38.00)	12.85	564,488
12	State Income Taxes	2,847,324	7,801	50.85	(38.00)	12.85	100,241
	<u>Taxes Other Than Income Taxes</u>						
13	FICA - Employer Portion	\$ 4,313,980	11,819	50.85	(11.96)	38.89	459,646
14	FUTA	39,773	109	50.85	(75.57)	(24.72)	(2,694)
15	SUTA	-	-	50.85	(75.54)	(24.69)	-
16	Property Taxes	22,411,521	61,401	50.85	(185.27)	(134.42)	(8,253,580)
17	Sales Tax	11,280,703	30,906	33.47	(12.22)	21.25	656,753
18	Use Tax	386,429	1,059	33.47	(61.29)	(27.82)	(29,453)
19	Gross Receipts Tax	36,620,782	100,331	33.47	(31.39)	2.08	208,688
20	Interest Payments	\$ 28,794,786	78,890	50.85	(72.95)	(22.10)	(1,743,465)
21	<u>Total</u>	\$ 259,774,597	711,711				\$ 8,515,560

REBUTTAL WORKPAPERS

Spire Missouri Inc. (West)
Lead-Lag Study
Cash Working Capital Requirement
Rebuttal Testimony Summary

Line	Description	Adjusted Test Year Expenses	Average Daily Amount	Revenue Lag	Ref.	Expense (Lead)/Lag	Ref.	Net (Lead)/Lag Days	Working Capital Requirement
<u>Operation and Maintenance Expenses</u>									
1	Purchased Gas Costs	\$ 208,693,749	571,764	47.86		(38.45)		9.41	5,380,296
2	Purchased Gas Costs	(208,693,749)	(571,764)	47.86		(47.86)		0.00	-
3	Regular Payroll Expenses & Withholdings	37,153,441	101,790	47.86		(11.96)		35.90	3,654,270
4	Vacation Pay	1,858,983	5,093	47.86		(182.50)		(134.64)	(685,736)
5	Annual Performance Bonus	563,826	1,545	47.86		(258.50)		(210.64)	(325,382)
6	Pension	3,614,006	9,901	47.86		(69.38)		(21.52)	(213,078)
7	Benefits (Group Insurance)	2,745,416	7,522	47.86		(7.07)		40.79	306,810
8	Missouri PSC Assessment	1,507,416	4,130	47.86		32.75		80.61	332,912
9	Uncollectible Expense	5,563,816	15,243	47.86		(47.86)		0.00	-
10	Other O&M	45,130,558	123,645	47.86		(42.11)		5.75	710,961
<u>Income Taxes</u>									
11	Federal Income Taxes	\$ 18,000,696	49,317	47.86		(38.00)		9.86	486,265
12	State Income Taxes	3,196,552	8,758	47.86		(38.00)		9.86	86,351
<u>Taxes Other Than Income Taxes</u>									
13	FICA - Employer Portion	\$ 2,305,178	6,316	47.86		(11.96)		35.90	226,728
14	FUTA	20,848	57	47.86		(75.57)		(27.71)	(1,583)
15	SUTA	-	-	47.86		(75.54)		(27.68)	-
16	Property Taxes	20,411,282	55,921	47.86		(185.27)		(137.41)	(7,684,149)
17	Sales Tax	6,913,979	18,942	30.48		(12.22)		18.26	345,888
18	Use Tax	236,844	649	30.48		(61.29)		(30.81)	(19,992)
19	Gross Receipts Tax	26,887,416	73,664	30.48		(42.21)		(11.73)	(864,081)
20	Interest Payments	\$ 21,548,623	59,037	47.86		(72.95)		(25.09)	(1,481,246)
21	<u>Total</u>	\$ 197,658,880	541,531						\$ 255,236