

*Exhibit No.:*  
*Issue(s):* Revenues  
*Witness:* Nancy L. Harris  
*Sponsoring Party:* MoPSC Staff  
*Type of Exhibit:* Direct Testimony  
*Case Nos.:* GR-2022-0179  
*Date Testimony Prepared:* August 31, 2022

**MISSOURI PUBLIC SERVICE COMMISSION**

**INDUSTRY ANALYSIS DIVISION**

**TARIFF AND RATE DESIGN DEPARTMENT**

**DIRECT TESTIMONY  
Revenue Requirement**

**OF**

**NANCY L. HARRIS**

**SPIRE MISSOURI, INC., d/b/a Spire**

**Case No. GR-2022-0179**

*Jefferson City, Missouri  
August 2022*

**TABLE OF CONTENTS OF  
DIRECT TESTIMONY OF  
NANCY L. HARRIS  
SPIRE MISSOURI, INC., d/b/a Spire.  
Case No. GR-2022-0179**

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12

EXECUTIVE SUMMARY .....1

NON-GAS OPERATING REVENUES .....2

    a.) Weather Normalization ..... 5

    b.) Customer Growth ..... 5

    c.) Rate Switchers ..... 6

    d.) Rate Change Annualization ..... 7

    e.) Large Customer Adjustments ..... 7



1           A.     The purpose of this testimony is to describe how Staff determined the amount  
2 of Spire East and Spire West adjusted non-gas operating revenues. Since the largest component  
3 of non-gas operating revenues is a result of rates charged to Spire East and Spire West retail  
4 customers, a comparison of non-gas operating revenues with the cost of service is  
5 fundamentally a test of the adequacy of the currently effective retail natural gas rates to meet  
6 Spire East and Spire West current costs of providing utility service.

7           One of the major tasks in a rate case is to determine the magnitude of any deficiency  
8 (or excess) between a company's cost of service and its operating revenues. Test year revenues  
9 need to be appropriately normalized and annualized in order to accurately measure the amount  
10 of any deficiency (or excess) in the current level of operating revenues. Once determined, the  
11 deficiency (or excess) can only be made up (or otherwise addressed) by adjusting retail rates  
12 (i.e., rate revenue) prospectively.

13          Q.     Through this testimony, do you provide any adjustments to be applied to the  
14 level of current revenues, and billing determinants?

15          A.     Yes. Detail on five main adjustments to billing determinants is explained in  
16 this testimony.

17          Q.     Through this testimony, do you describe the development of a work product  
18 which you provided to another Staff witness for the development of an issue?

19          A.     Yes. Development of final revenue billing determinants is the result of the  
20 process described in this testimony which will be used in the class cost of service process by  
21 Staff witnesses Francisco Del Pozo and Sarah L.K. Lange.

22           **NON-GAS OPERATING REVENUES**

23          Q.     Please define non-gas operating revenues.

1 A. Non-gas operating Revenues are composed of two components: (1) Rate  
2 Revenue and (2) Other Operating Revenue. The definitions of these components are as follows:

3 Rate Revenue: Test year rate revenues consist solely of the revenues derived from Spire  
4 East and Spire West authorized Commission approved rates for providing natural gas service  
5 to their retail customers. Spire East and Spire West variable charges are determined by the  
6 amount of each customer's usage and the (per unit) rates that are applied to that usage. Each  
7 customer also pays a flat monthly customer charge dependent upon each customer's rate class.  
8 The Spire East rate classes include residential, small general, large general, large volume,  
9 unmetered gaslight, interruptible, general large power, vehicular fuel rate, and transportation  
10 customer classifications.<sup>1</sup> The Spire West rates classes include residential, small general, large  
11 general, large volume, unmetered gaslight, and transportation customer classifications. The  
12 tables below are Spire East and Spire West ending rate revenue by class.

13

<u>Rate Class</u>	<u>Total MO Normalized Revenue</u>
Residential Service	\$ 292,346,855
Small General Service	\$ 32,987,447
Large General Service	\$ 28,013,131
Large Volume Service	\$ 1,201,516
Unmetered Gaslight	\$ 44,291
Interruptible	\$ -
General LP	\$ 10,768
Vehicular	\$ -
Large Volume Transportation	\$ 15,079,519
<b>EAST Total</b>	<b>\$ 369,683,528</b>

14  
15

---

<sup>1</sup> Spire East interruptible and vehicular fuel rate classes were eliminated in January 2022 and moved to the large general service rate class.

1

<u>Rate Class</u>	<u>Total MO Normalized Revenue</u>
Residential Service	\$ 219,753,104
Small General Service	\$ 23,465,258
Large General Service	\$ 16,294,919
Large Volume Service	\$ 1,123,988
Unmetered Gaslight	\$ 1,575
Large Vol Transport	\$ 15,796,793
Large Gen Service Transport	\$ 2,033,854
<b>WEST Total</b>	<b>\$ 278,469,492</b>

2

3

4

Other Operating Revenue: Other operating revenue includes late payment charges, collection trip charges, special meter reading charges and disconnection/reconnection of service charges. Each of these charges is also established by the Commission, and all of these revenue items are taken into account in setting retail rates for Spire East and Spire West gas service to customers. Staff Witness Lisa M. Ferguson discusses this further in her direct testimony.

8

9

Q. Please briefly describe the revenue development in this case.

10

A. To determine the level of Spire East and Spire West revenue, Staff applied standard ratemaking adjustments to test year (historical) volumes and customer levels. Staff makes these adjustments in order to determine the level of revenue that Spire East and Spire West would collect on an annual basis, under normal weather or climatic conditions, natural gas usage and customer levels, based on information that is “known and measurable” as of the end of the update period. In this direct testimony, the results include billing determinants from GR-2021-0108 with known and measurable changes, updated through the end of May 2022 with the adjustments described below. These results will be revisited in Staff’s true-up and will be updated for known and measurable changes through the end of September 2022.

18

1 Revenue was developed and summarized by rate class. This testimony describes five major  
2 adjustments Staff made to test year billed rate revenues:

- 3 a) weather normalization
- 4 b) customer growth
- 5 c) rate switchers
- 6 d) rate change annualization
- 7 e) large customer adjustment

8 Q. Please provide further detail on each of these five adjustments.

9 A. The following are descriptions of the above adjustments:

10 **a.) Weather Normalization**

11 Staff witness, Hari Poudel provided the weather normalization factor for each month for  
12 each class. Staff applied the weather normalization factor to each class' monthly usage<sup>2</sup>  
13 to determine the weather normalization revenue adjustment for customers' monthly usage.  
14 Mr. Poudel explains the weather normalization adjustment further in his direct testimony.

15 **b.) Customer Growth**

16 Natural gas customers tend to fluctuate seasonally over a 12-month period, with some  
17 customers leaving the system during the spring and summer months and then rejoining the  
18 system during the fall and winter months. This seasonal sensitivity in customer numbers makes  
19 it impractical to base a customer growth adjustment on one period-ending customer number  
20 value as is normally done for electric utilities.

---

<sup>2</sup> The weather normalization factor was applied to Residential, SGS, and LGS only.

1           The annualization of customer revenues contains two components, the base charge  
2 and the commodity charge. The base charge is the minimum monthly customer charge that  
3 Spire East and Spire West assess to a customer for supplying gas service. The monthly base  
4 charge revenue is calculated by multiplying the base charge by Staff's annualized level of  
5 customers on a monthly basis. The commodity charge is for actual customer gas usage  
6 calculated by usage unit (Ccf) multiplied by rates.

7           Staff calculated twelve months ending May 2022 for the Residential, SGS, and LGS  
8 rate classes for Spire East and Spire West, which includes the Company's growth since the  
9 last rate case GR-2021-0108. Staff has submitted DR 0337 to obtain the customer charge counts  
10 for December 2020 through September 2022 for Spire East and Spire West. Staff will  
11 review customer charge counts for Residential, SGS and LGS for the time period of  
12 November 2019-September 2022 and make any necessary growth adjustments in the true-up  
13 filing on November 4, 2022.

14           **c.)     Rate Switchers**

15           Q.     Please explain what rate switcher means.

16           A.     Rate switching is when customers switch which rate schedule they will be served  
17 on during the test year or update period. If a customer was in a rate class at the beginning of the  
18 test year, then transferred to a different rate class during the test year, the customer's billing  
19 determinants and associated revenues in the original class were removed from that class' total  
20 and then added to the new rate class. The customer's billing determinants were then "priced  
21 out" using the tariffs of the class to which the customer switched, and those determinants and  
22 revenues were added to the totals in the new class.



1 Q. Did Staff make any rate switcher adjustments?

2 A. Yes. In December 2021, several customers switched from Large Volume (LV)  
3 to Large General Service (LGS) . Staff removed those customers from LV and added them to  
4 the LGS class.

5 **d.) Rate Change Annualization**

6 Q. Did Staff make an adjustment for the rate change that occurred on  
7 December 23, 2021?

8 A. Yes. Staff calculated the revenues by applying the currently effective rates to  
9 the adjusted billing determinants.

10 Q. Were there any other adjustments or considerations during your analysis?

11 A. Yes. In Case No. GR-2021-0108, Spire was ordered to change Spire East  
12 volume measurement units from therms (British thermal unit) to Ccf (hundred cubic feet) in  
13 October 2021. An adjustment factor of 1.02 was applied to old tariff rates measured in therms  
14 where necessary. Revenue calculations performed for October through December 2021 utilized  
15 the tariff rate multiplied by 1.02 to account for usage measured in Ccf under an effective rate  
16 measured in therms.

17 **e.) Large Customer Adjustments**

18 Q. Were there any adjustments or considerations made specific to Large  
19 Volume customers?

20 A. Spire East provided monthly billing units and information for every customer  
21 who took service on the Large Volume Service (“LV”) and Interruptible Service (“IN”) rate  
22 schedules during the 12 months ending May 2022. Spire West provided monthly billing units

1 and information for every customer who took service on the LV rate schedule. Staff used these  
2 units as the basis of its analyses and adjustments. The following adjustments were made:

3 **Large Volume 365-Day Adjustment**

4 The 18 bill cycles representative of the 12 months ending May 31, 2022, may or may  
5 not include 365 days. Staff made adjustments to customers' monthly usage for customers  
6 whose test year does not include 365 days, either by adding the appropriate number of days of  
7 average usage when there were fewer than 365 days of usage, or by subtracting the appropriate  
8 number of days of average usage when there were more than 365 days of usage.

9 **Large Customer Rate Switching**

10 Q. Did Staff make any rate switching adjustments for the large volume customers?

11 A. The general intent of an annualization is to re-state the test year usage as if  
12 conditions known at the end of the update period had existed throughout the entire year. Rate  
13 switching<sup>3</sup> and annualization adjustments include adjustments for new customers, the exit of  
14 existing customers, and load growth or decline of specific existing customers.

15 This resulted in a full year of history for the customer in the rate class they were in at  
16 the end of the year. For new customers having no prior usage, an estimated level of usage was  
17 used in order to have 12 months of data.

18 **Large Customer Rate Change Annualization**

19 Q. Did Staff make an adjustment for the rate change that occurred on  
20 December 23, 2021?

---

<sup>3</sup> Rate switching is when customers switch which rate schedule they will be served on during the test year or update period.

Direct Testimony of  
Nancy L. Harris

1           A.     Yes. Staff calculated the revenues by applying the currently effective rates to  
2 the adjusted billing determinants.

3           Q.     Were there any other adjustments or considerations during your analysis?

4           A.     Yes. In Case No. GR-2021-0108, Spire was ordered to change Spire East  
5 volume measurement units from therms to Ccf in October 2021. An adjustment factor  
6 of 1.02 was applied to old tariff rates measured in therms where necessary. Revenue  
7 calculations performed for October through December 2021 utilized the tariff rate multiplied  
8 by 1.02 to account for usage measured in Ccf under an effective rate measured in therms.

9           Q.     Does this conclude your direct testimony?

10          A.     Yes it does.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

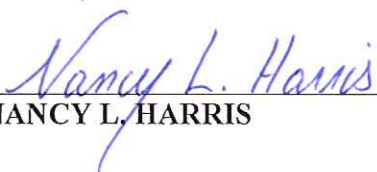
In the Matter of Spire Missouri, Inc. d/b/a )  
Spire's Request for Authority to Implement ) Case No. GR-2022-0179  
a General Rate Increase for Natural Gas )  
Service Provided in the Company's )  
Missouri Service Areas )

**AFFIDAVIT OF NANCY L. HARRIS**

STATE OF MISSOURI )  
 ) ss.  
COUNTY OF COLE )

**COMES NOW NANCY L. HARRIS** and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing *Direct Testimony of Nancy L. Harris*; and that the same is true and correct according to her best knowledge and belief.

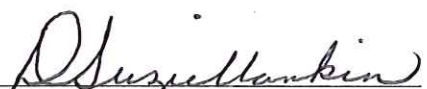
Further the Affiant sayeth not.

  
\_\_\_\_\_  
NANCY L. HARRIS

**JURAT**

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 30<sup>th</sup> day of August 2022.

D. SUZIE MANKIN  
Notary Public - Notary Seal  
State of Missouri  
Commissioned for Cole County  
My Commission Expires: April 04, 2025  
Commission Number: 12412070

  
\_\_\_\_\_  
Notary Public