

**Exhibit No.:**  
**Issue(s)**  
**Witness/Type of Exhibit:**  
**Sponsoring Party:**  
**Case No.:**

\_\_\_\_\_  
WNAR/Tariff Sheet  
Mantle/Direct  
Public Counsel  
GR-2021-0108

**CLASS COST OF SERVICE  
DIRECT TESTIMONY**

**OF**

**LENA M. MANTLE**

Submitted on Behalf of the Office of the Public Counsel

**SPIRE MISSOURI, INC.**

CASE NO. GR-2021-0108

May 26, 2021

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

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

**AFFIDAVIT OF LENA M. MANTLE**

STATE OF MISSOURI    )  
  )    ss  
COUNTY OF COLE    )

Lena M. Mantle, of lawful age and being first duly sworn, deposes and states:

1. My name is Lena M. Mantle. I am a Senior Analyst for the Office of the Public Counsel.
2. Attached hereto and made a part hereof for all purposes is my class cost of service direct testimony.
3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.

  
Lena M. Mantle  
Senior Analyst

Subscribed and sworn to me this 26<sup>th</sup> day of May 2021.



TIFFANY HILDEBRAND  
My Commission Expires  
August 8, 2023  
Cole County  
Commission #15637121

  
Tiffany Hildebrand  
Notary Public

My Commission expires August 8, 2023.

**CLASS COST OF SERVICE  
DIRECT TESTIMONY**

**OF**

**LENA M. MANTLE**

**SPIRE MISSOURI, INC.**

**d/b/a SPIRE MISSOURI EAST & SPIRE MISSOURI WEST**

**CASE NO. GR-2021-0108**

1 **Q. Would you state your name and business address?**

2 A. My name is Lena M. Mantle and my business address is P.O. Box 2230, Jefferson  
3 City, Missouri 65102. I am a Senior Analyst for the Office of the Public Counsel  
4 (“OPC”).

5 **Q. Are you the same Lena M. Mantle that filed revenue requirement direct  
6 testimony in this case?**

7 A. Yes.

8 **Q. What is the purpose of your class cost of service direct testimony?**

9 A. In my revenue requirement direct testimony, I recommended that if Spire provided  
10 information that the Commission believes justifies the imposition of an interim rate  
11 mechanism on its smallest customers, certain modifications should be made to its  
12 current weather normalization adjustment rider (“WNAR”). In this class cost-of-  
13 service direct testimony, I provide tariff language, as provided in the attached  
14 schedule LMM-D-3, for the modified WNAR that I recommended in my revenue  
15 requirement direct testimony.

1 **Q. How is this tariff language different from the tariff sheets that describe the**  
2 **current WNAR?**

3 A. One of Spire’s “issues” with the current WNAR was that it was more complicated  
4 than it needed to be.<sup>1</sup> When I reviewed the current WNAR tariff sheets, I found  
5 them to be more complicated than they needed to be, so I determined to simplify the  
6 tariff language describing the WNAR. A redline/strikeout comparison of my  
7 proposed tariff language and the current tariff language is attached to this testimony  
8 as Schedule LMM-D-4. The current tariff sheets are attached to this testimony as  
9 Schedule LMM-D-5.

10 **Q. There is a lot of redline/strikeout on Schedule LMM-D-4. Would you**  
11 **summarize the changes you made to make the WNAR tariff sheets less**  
12 **complicated?**

13 A. The first thing I did to make the tariff language more understandable was to make  
14 the font consistent throughout the WNAR tariff sheets. I moved some of the  
15 components of the current tariff language to make it clearer. For example, I moved  
16 the timing of the filing of new WNAR rates near the beginning. Some of the  
17 language was not necessary such as the phrase “until such time as it may  
18 discontinued or modified by order of the Commission in a general rate case.” This  
19 is statutory and therefore not needed in the tariff sheet. Where the tariff language  
20 states a component is set in the general rate case, *i.e.* would not change until the  
21 next rate case, I propose that the value set in the rate case be on the tariff sheet.  
22 Additional explanations for why certain changes were made are included as  
23 comments on Schedule LMM-D-4.

24 Finally, I completely replaced the rate computation with a table that is  
25 limited to:

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<sup>1</sup> Spire response to OPC data request 8000.

- 1           1. The sum of the monthly weather normalization revenue adjustments
- 2            ("ARA");
- 3           2. The interest on the monthly weather normalization adjustments;
- 4           3. The true-up amount ("TA");
- 5           4. The interest on the true-up amount;
- 6           5. The annual volumetric billing determinants; and
- 7           6. The WNAR rate.

8           This table is a simple, concise description of the WNAR described in words and  
9           equations in the previous language. The table also clearly states the accumulation  
10           period (Sum of Weather Revenue Adjustments for June 20XX through May 20XX  
11           (ARA)). The title above the table also clearly states the billing months that the  
12           WNAR will be charged to customers (Applicable for the billing months of  
13           September 20XX through August 20XX).

14   **Q.    Would this tariff language be the same for both Spire East and Spire West?**

15   A.    The verbiage should be the same for both. However, the weather response is  
16           different for Spire East and Spire West meaning the beta coefficient ( $\beta$ ) is different  
17           for Spire East and Spire West. In the current tariffs, the  $\beta$  coefficient for Spire East  
18           is 0.1493772 meaning that for every 100 heating degree days of adjustment, the  
19           difference in usage was 14.9 therms. Using the common conversion of therms to  
20           Ccf, this would be 15.5 Ccf for 100 heating degree days. For Spire West, the  $\beta$   
21           coefficient is 0.1291586 signifying that 100 heating degree day adjustment would  
22           change usage by 12.9 Ccf, approximately 17% less than Spire East.

23           In addition, the weather is different for Spire East than it is for Spire West.  
24           This means the weather adjustment is also different.

25           Finally, it is OPC's position that Spire East and Spire West rates be specific  
26           to each district and the number of customers with usage in the last block would be  
27           different between the two districts. This means the weighted residential variable  
28           rate (WRVR) would be different for Spire East and Spire West.

1                   Therefore, while the majority of the tariff language would be the same, there  
2                   should be different values in the WNAR tariff language for Spire East and Spire  
3                   West. There could be one set of tariff sheets but the sheets would have to specify  
4                   different values for these variables. In addition, there would need to be different  
5                   tables showing the calculation of the WNAR rate for Spire East and Spire West.

6   **Q.    Does this conclude your direct testimony?**

7   **A.    Yes, it does.**

## WEATHER NORMALIZATION ADJUSTMENT RIDER WNAR

### APPLICABILITY

The Weather Normalization Adjustment Rider (“WNAR”) is applicable to each therm of gas delivered under the terms of the residential rate schedule throughout the entire service area of Spire East. The Rider will be applied as a separate line item on a customer’s bill.

The Company will make an annual rate filing with by July 1 to adjust the WNA Rider with an effect date that coincides with the read date of the first September billing cycle. Staff will file its recommendation to the Commission regarding the filing by August 1.

The WNAR rate will remain in effect for the twelve (12) billing months beginning with the September billing month.

### CALCULATION OF ADJUSTMENT

The Weather Adjustment to Usage (“WAU”) will be calculated for each billing cycle and billing month as follows:

$$WAU_i = \sum_{j=1}^{18} ((NDD_{ij} - ADD_{ij}) * C_{ij}) * \beta$$

Where:

- i = the applicable billing month
- WAU<sub>i</sub> = Weather Adjustment to usage for the billing month in therms
- j = the billing cycle
- NDD<sub>ij</sub> = the total normal heating degree days for billing cycle j in billing month i based upon Staff’s daily normal weather as determined in the most recent rate case
- ADD<sub>ij</sub> = the total actual heating degree days, base 65° at St. Louis Lambert International Airport Weather Station for billing cycle j in billing month i
- C<sub>ij</sub> = the total number of customer charges charged in billing cycle j and billing month i
- β = the coefficient of 0.BBBBB for Spire East

The revenue adjustment (“RA”) for each billing month shall be calculated as follows

$$RA_i = WAU_i \times WRVR_i$$

Where

WRVR = the Weighted Residential Variable Rate applicable to the billing month. For the winter billing months (November through April), the WRVR shall be equal to the Residential Winter Charge for Gas Used of \$0.XXXXX. The WRVR for each of the summer billing months (May through October) is the average of the volumetric rates weighted by the number of customers whose usage ends in that block as normalized in the last general rate case. The WRVR for each billing month is reflected in the table below:

May	June	July	August	September	October
\$0.XXXXX	\$0.XXXXX	\$0.XXXXX	\$0.XXXXX	\$0.XXXXX	\$0.XXXXX

### CALCULATION OF WNAR RATE

The WNAR rate is the Total Recovery Amount (“TRA”) divided by ZZZZZZ which is the annual volumetric billing determinants set for the residential rate class in the most recent general rate case.

The Total Recovery Amount (“TRA”) is the sum of the Annual Revenue Adjustment (“ARA”) and the True-up Amount (“TA”).

The Annual Revenue Adjustment (“ARA”) is the sum of the billing month revenue adjustment (“RA”) for each of 12 billing months ending with the May billing month.

The True-up Amount (“TA”) will be the difference between the revenue billed through the WNAR and the ordered TRA for the recovery period. The revenue billed shall be the actual WNAR revenue billed for the billing months of September through May. The WNAR revenue billed for the billing months of June, July, and August shall be estimated using the volumetric billing determinates for those months as set in the last general rate case. These billing determinants are reflected in the table below:

June	July	August
DDDDDD	DDDDD	DDDDD

#### OTHER TERMS

There shall be a limit of \$0.05 per therm on upward adjustments for the WNAR rate and no limit on downward adjustment. Any TRA not recovered due to this cap of \$0.05 per therm will be deferred for recovery from customers in the next recovery period.

Each month, interest at Spire’s short-term borrowing rate shall be applied to the Company’s average beginning and ending monthly TRA balances. Corresponding interest income and expense amounts shall be recorded on a net cumulative basis for the WNA deferral period.



WEATHER NORMALIZATION ADJUSTMENT RIDER  
Currently Effective WNAR

Applicable for the billing months of September 20XX through August 20XX

Sum of Weather Revenue Adjustments for June 20XX through May 20XX (ARA)	\$ XXX,XXX.xx
Interest on Weather Revenue Adjustments ( $I_{RA}$ )	\$ X,XXX.xx
True-Up Amount for September 20XX through August 20XX (TA)	\$ X,XXX.xx
Interest on True-Up Amount ( $I_{TA}$ )	\$ XX.xx
Total Recovery Amount ( $TRA = ARA + I_{RA} + TA + I_{TA}$ )	\$ XXX,XXX.xx
Annual Volumetric Billing Determinants	ZZ,ZZZ,ZZZ
Weather Normalization Adjustment Rider Rate (WNAR Rate)	\$0.00000/Ccf
( $TRA \div$ Annual Volumetric Billing Determinants)	

**WEATHER NORMALIZATION ADJUSTMENT RIDER  
WNAR**

**APPLICABILITY**

The Weather Normalization Adjustment (~~WNA~~) Rider (~~WNAR~~) is applicable to each term of gas delivered under the terms of the residential rate schedule throughout the entire service area of Spire East ~~until such time as it may be discontinued or modified by order of the Commission in a general rate case.~~ The Rider will be applied as a separate line item on a customer's bill.

**Commented [ML1]:** Not needed. When it is discontinued, there will no longer be a tariff sheet. If it is modified, the tariff sheet will be changed.

~~The Company will make an semiannual rate filing with the Commission 30 days prior to the first effective day referenced in the CSWNA table by July 1 to adjust the WNA Rider with an effect date that coincides with the read date of the first September billing cycle. Staff will file its recommendation to the Commission regarding the filing by August 1.~~

~~The WNAR rate Each CSWNA and SRR will remain in effect for the twelve (12) billing months beginning with the September billing month. The total WNA Rider rate shall be the sum of all effective CSWNAs and SRRs.~~

**CALCULATION OF ADJUSTMENT**

The ~~WNA Factor~~ **Weather Adjustment to Usage ("WAU")** will be calculated for each billing cycle and billing month as follows:

**Commented [ML2]:** This isn't a factor. It is usage in therms. Came up with another abbreviation to lessen confusion.

$$WAU_i = \sum_{j=1}^{18} ((NDD_{ij} - ADD_{ij}) * C_{ij}) * \beta$$

Where:

- $i$  = the applicable billing cycle month
- $WNAU_i$  = ~~Weather Normalization Adjustment to usage for the billing month in therms~~
- $j$  = the billing cycle
- $NDD_{ij}$  = the total normal heating degree days ~~for billing cycle j in billing month i~~ based upon Staff's daily normal weather as determined in the most recent rate case.
- $ADD_{ij}$  = the total actual heating degree days, base 65° at St. Louis Lambert International Airport ~~Weather Station for billing cycle j in billing month i~~
- $C_{ij}$  = the total number of customer charges charged in billing cycle j and billing month i
- $\beta$  = the coefficient of 0. ~~BBBBB1493772~~ for Spire East

**Commented [ML3]:** There is no such thing as a "billing cycle month." Referred to as billing month in the rest of the tariff sheets.

The revenue adjustment ("RA") for each billing month shall be calculated as follows

$$1. \text{ Monthly } WNA RA_i = WNAU_i \times \text{Weighted Residential Volumetric Rate ("WRVR")}$$

**Commented [ML4]:** Consistent with weather normalization in rate case. Does not change between rate cases. 5 decimal places to be consistent with rates.

**Commented [ML5]:** While the language will be the same for Spire West, the numbers will be different.

Where

~~2. The WRVR = the Weighted Residential Variable Ratea applicable to the billing each month, shall be derived using the billing determinants and residential volumetric rates from the Company's then most recent rate case.~~ For the winter

billing months (November through April), the WRVR shall be equal to the Residential Winter Charge for Gas Used ~~established at the conclusion of each general rate case. For Case No. GR 2017-0215 the amount is of \$0.23330XXXXX.~~ The WRVR for each of the summer billing months (May through October) ~~shall be determined at the conclusion of each general rate case as is the percentage of total residential customers whose usage ends in the first rate block multiplied by the volumetric rate of that block plus the percentage of total residential customers whose usage ends in the second rate block multiplied by the volumetric rate of that block. Currently effective summer average of the~~

**Commented [ML6]:** Not necessary

**Commented [ML7]:** Not needed

**Commented [ML8]:** Can be simplified



volumetric rates weighted by the number of customers whose usage ends in that block as normalized in the last general rate case. The WRVR's for each billing month is are reflected in the table below:

May	June	July	August	September	October
\$0.XXXXX2 1368	\$0.XXXXX0- 21406	\$0.XXXXX0- 21044	\$0.XXXXX0- 21029	\$0.XXXXX0- 21054	\$0.XXXXX0-210 96

Commented [ML9]: Does not change between rate cases. Will need to be calculated after billing determinants and rates have been set.

**CALCULATION OF WNAR RATE**

The WNAR rate is the Total Recovery Amount ("TRA") divided by ZZZZZZ which is the annual volumetric billing determinants set for the residential rate class in the most recent general rate case.

Commented [ML10]: Does not change between rate cases

The Total Recovery Amount ("TRA") is the sum of the Annual Revenue Adjustment ("ARA") and the True-up Amount ("TA").

3. The Annual Revenue Adjustment ("ARA") Current Semiannual-WNA ("CSWNA") shall be the sum of the billing cycle-WNA month revenue adjustment ("RA") for each of 12 billing months ending with the May billing month, the six Monthly-WNA for the billing months in the applicable six month period divided by the annual volumetric billing determinants set for the residential rate class in the most recent rate case.

Commented [ML11]: The font should be consistent across the tariff language

The 4. Semiannual Reconciliation True-up Rate Amount ("SRTAR")—Two (2) months prior to the end of the twelve (12) months of billing of each CSWNA, the over- or under-billing of the numerator of the CSWNA shall be calculated based on ten (10) months actual sales and two (2) months projected sales. The amount of over- or under-billing shall be adjusted as ordered by the Commission, if applicable. The resulting amount shall be divided by the annual volumetric billing determinants set for the residential rate class in the most recent rate case. Two (2) months prior to the end of the twelve (12) months of billing of each SRR, the over- or under-billing of the SRR shall be calculated based on ten (10) months actual sales and two (2) months projected sales. Any remaining over- or under-billing from the SRR shall be applied to the next SRR. The two (2) months projected sales associated with each CSWNA and SSR shall be true-up with actuals upon calculation of the next applicable SSR. will be the difference between the revenue billed through the WNAR and the ordered TRA for the recovery period. The revenue billed shall be the actual WNAR revenue billed for the billing months of September through May. The WNAR revenue billed for the billing months of June, July, and August shall be estimated using the volumetric billing determinants for those months as set in the last general rate case. These billing determinants are reflected in the table below:

Commented [ML12]: Consistent with statutory language

June	July	August
DDDDDD	DDDDDD	DDDDDD

5. The Company will make a semiannual rate filing with the Commission 30 days prior to the first effective day referenced in the CSWNA table to adjust the WNA Rider. Each CSWNA and SRR will remain in effect for twelve (12) months. The total WNA Rider rate shall be the sum of all effective CSWNAe and SRRs.

**OTHER TERMS**

6. There shall be a limit of \$0.05 per therm on upward adjustments for the WNAR rate and no limit on downward adjustment. Any WNA adjustments amounts TRA not recovered, in excess due to this cap of \$0.05 per therm will be deferred for recovery from customers in the next WNA adjustment recovery period, and applicable to part a. below.

Each month, carrying costs, at a simple rate of interest equal to the prime bank lending rate (as published in The Wall Street Journal on the first business day of such month); interest at Spire's short-term

~~borrowing rate minus two percentage points~~, shall be applied to the Company's average beginning and ending monthly WNA-TRA balances. ~~In no event shall the carrying cost rate be less than 0%.~~ Corresponding interest income and expense amounts shall be recorded on a net cumulative basis for the WNA deferral period.

Commented [ML13]: Consistent with statute

**RATE:**

CSWNA Table:

Period	Rate-First Effective	Months	Rate-Ending-Effective	CSWNA (Semiannual)
2021-S1	4/1/2021	12	3/31/2022	\$0.00654
2020-S2	10/1/2020	12	9/30/2021	\$0.00325

SRR Table:

Period	Rate-First Effective	Months	Rate-Ending-Effective	CSWNA (Semiannual)
2021-S1	4/1/2021	12	3/31/2022	\$0.00009
2020-S2	10/1/2020	12	9/30/2021	\$0.00018

WNA Rider Rate:

Period	Rate-First Effective	Months	Rate-Ending-Effective	CSWNA (Semiannual)
2021-S1	4/1/2021	6	9/30/2022	\$0.01006

Commented [ML13]: Consistent with statute



**WEATHER NORMALIZATION ADJUSTMENT RIDER**  
**Currently Effective WNAR**

Applicable for the billing months of September 20XX through August 20XX

Sum of Weather Revenue Adjustments for June 20XX through May 20XX (ARA)	\$ XXX,XXX.xx
Interest on Weather Revenue Adjustments (I <sub>RA</sub> )	\$ X,XXX.xx
True-Up Amount for September 20XX through August 20XX (TA)	\$ X,XXX.xx
Interest on True-Up Amount (I <sub>TA</sub> )	\$ XX.xx
Total Recovery Amount (TRA = ARA + I <sub>RA</sub> + TA + I <sub>TA</sub> )	\$ XXX,XXX.xx
Annual Volumetric Billing Determinants	ZZ,ZZZ,ZZZ
Weather Normalization Adjustment Rider Rate (WNAR Rate) (TRA ÷ Annual Volumetric Billing Determinants)	\$0.00000 /Ccf

**Commented [ML14]:** This and the inputs change each year.

**Commented [ML15]:** Constant until next rate case

**Commented [ML16]:** Changes every year. Limit to 5 decimal places

Spire Missouri Inc. d/b/a/ Spire

For: Spire Missouri East

**WEATHER NORMALIZATION ADJUSTMENT RIDER**  
**WNAR**

**APPLICABILITY**

The Weather Normalization Adjustment (“WNA”) Rider is applicable to each therm of gas delivered under the terms of the residential rate schedule throughout the entire service area of Spire East until such time as it may be discontinued or modified by order of the Commission in a general rate case. The Rider will be applied as a separate line item on a customer’s bill.

**CALCULATION OF ADJUSTMENT**

The WNA Factor will be calculated for each billing cycle and billing month as follows:

$$WNA_i = \sum_{j=1}^{18} ((NDD_{ij} - ADD_{ij}) \cdot C_{ij}) \cdot \beta$$

Where:

- i = the applicable billing cycle month
- WNA<sub>i</sub> = Weather Normalization Adjustment
- j = the billing cycle
- NDD<sub>ij</sub> = the total normal heating degree days based upon Staff’s daily normal weather as determined in the most recent rate case.
- ADD<sub>ij</sub> = the total actual heating degree days, base 65° at St. Louis Lambert International Airport Weather Station
- C<sub>ij</sub> = the total number of customer charges charged in billing cycle j and billing month i
- β = the coefficient of 0.1493772 for Spire East

1. Monthly WNA<sub>i</sub> = WNA<sub>i</sub> × Weighted Residential Volumetric Rate (“WRVR”)<sub>i</sub>
2. The WRVR applicable to each month shall be derived using the billing determinants and residential volumetric rates from the Company’s then most-recent rate case. For the winter billing months (November through April) the WRVR shall be equal to the Residential Winter Charge for Gas Used established at the conclusion of each general rate case. For Case No. GR-2017-0215 the amount is \$0.23330. The WRVR for each of the summer billing months (May through October) shall be determined at the conclusion of each general rate case as the percentage of total residential customers whose usage ends in the first rate block multiplied by the volumetric rate of that block plus the percentage of total residential customers whose usage ends in the second rate block multiplied by the volumetric rate of that block. Currently effective summer WRVR’s are reflected in the table below:

May	June	July	August	September	October
\$0.21368	\$0.21106	\$0.21044	\$0.21029	\$0.21054	\$0.21096

DATE OF ISSUE: March 20, 2018

DATE EFFECTIVE: April 19, 2018

ISSUED BY: C. Eric Lobser, VP, Regulatory & Governmental Affairs  
Spire Missouri Inc., St. Louis, MO. 63101

**FILED**  
**Missouri Public**  
**Service Commission**  
**GR-2017-0215; YG-2018-0117**

LMM-D-5

Spire Missouri Inc. d/b/a/ Spire

For: Spire Missouri East

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**WEATHER NORMALIZATION ADJUSTMENT RIDER**  
**WNAR**

3. The Current Semiannual WNA ("CSWNA") shall be the sum of the billing cycle WNA for each of the six Monthly WNA<sub>i</sub> for the billing months in the applicable six month period divided by the annual volumetric billing determinants set for the residential rate class in the most recent rate case.

4. Semiannual Reconciliation Rate ("SRR"): Two (2) months prior to the end of the twelve (12) months of billing of each CSWNA, the over- or under-billing of the numerator of the CSWNA shall be calculated based on ten (10) months actual sales and two (2) months projected sales. The amount of over- or under-billing shall be adjusted as ordered by the Commission, if applicable. The resulting amount shall be divided by the annual volumetric billing determinates set for the residential rate class in the most recent rate case. Two (2) months prior to the end of the twelve (12) months of billing of each SRR, the over- or under-billing of the SRR shall be calculated based on ten (10) months actual sales and two (2) months projected sales. Any remaining over- or under-billing from the SRR shall be applied to the next SRR. The two (2) months projected sales associated with each CSWNA and SSR shall be trued-up with actuals upon calculation of the next applicable SSR.

5. The Company will make a semiannual rate filing with the Commission 30 days prior to the first effective day referenced in the CSWNA table to adjust the WNA Rider. Each CSWNA and SRR will remain in effect for twelve (12) months. The total WNA Rider rate shall be the sum of all effective CSWNAs and SRRs.

6. There shall be a limit of \$0.05 per therm on upward adjustments for the WNA and no limit on downward adjustment. Any WNA adjustments amounts in excess of \$0.05 per therm will be deferred for recovery from customers in the next WNA adjustment and applicable to part a. below.

a. Each month, carrying costs, at a simple rate of interest equal to the prime bank lending rate (as published in The Wall Street Journal on the first business day of such month), minus two percentage points, shall be applied to the Company's average beginning and ending monthly WNA balances. In no event shall the carrying cost rate be less than 0%. Corresponding interest income and expense amounts shall be recorded on a net cumulative basis for the WNA deferral period.

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DATE OF ISSUE: March 20, 2018

DATE EFFECTIVE: April 19, 2018

ISSUED BY: C. Eric Lobser, VP, Regulatory & Governmental Affairs  
Spire Missouri Inc., St. Louis, MO. 63101

FILED  
Missouri Public  
Service Commission  
GR-2017-0215; YG-2018-0117

LMM-D-5

Spire Missouri Inc. d/b/a/ Spire

For: Spire Missouri East

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**WEATHER NORMALIZATION ADJUSTMENT RIDER**  
**WNAR**

RATE:

CSWNA Table:

<u>Period</u>	<u>Rate First Effective</u>	<u>Months</u>	<u>Rate Ending Effective</u>	<u>CSWNA (Semiannual)</u>
2021 S1	4/1/2021	12	3/31/2022	\$0.00654
2020 S2	10/1/2020	12	9/30/2021	\$0.00325

SRR Table:

<u>Period</u>	<u>Rate First Effective</u>	<u>Months</u>	<u>Rate Ending Effective</u>	<u>SRR (Semiannual)</u>
2021 S1	4/1/2021	12	3/31/2022	\$0.00009
2020 S2	10/1/2020	12	9/30/2021	\$0.00018

WNA Rider Rate:

<u>Period</u>	<u>Rate First Effective</u>	<u>Months</u>	<u>Rate Ending Effective</u>	<u>Monthly WNA Rider Rate</u>
2021 S1	4/1/2021	6	9/30/2021	\$0.01006

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DATE OF ISSUE: March 2, 2021

DATE EFFECTIVE: April 1, 2021

ISSUED BY: Scott A. Weitzel, Managing Director, Regulatory & Legislative Affairs  
Spire Missouri Inc., St. Louis, MO. 63101