Exhibit No.:

Issue(s): Revenue

Weather Normalization

Witness: Michelle A. Bocklage

Sponsoring Party: MoPSC Staff

Type of Exhibit: Surrebuttal Testimony Case No.: GR-2017-0215 and

GR-2017-0216

Date Testimony Prepared: November 21, 2017

MISSOURI PUBLIC SERVICE COMMISSION COMMISSION STAFF DIVISION TARIFF AND RATE DESIGN UNIT OPERATIONS ANALYSIS DEPARTMETN

SURREBUTTAL TESTIMONY
OF

MICHELLE A. BOCKLAGE

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

CASE NO. GR-2017-0215 and GR-2017-0216

Jefferson City, Missouri Month 2017

1		SURREBUTTAL TESTIMONY
2		\mathbf{OF}
3		MICHELLE A. BOCKLAGE
4		SPIRE MISSOURI, INC., d/b/a SPIRE
5		CASE NO. GR-2017-0215 and GR-2017-0216
6	Q. Pleas	e state your name and business address.
7	A.	Michelle A. Bocklage, 200 Madison Street, Jefferson City, MO 65102.
8	Q.	By whom are you employed and in what capacity?
9	A.	I am employed by the Missouri Public Service Commission ("Commission")
10	as a Rate and	Tariff Examiner III of the Tariff and Rate Design Unit, of the Operation
11	Analysis divi	sion of the Commission Staff.
12	Q.	Are you the same Michelle Bocklage who has previously filed testimony in
13	Staff's Reve	nue Requirement Cost of Service Report and Rebuttal testimony in this
14	case?	
15	A.	Yes.
16	EXECUTIV	E SUMMARY
17	Q.	What is the purpose of your surrebuttal testimony?
18	A.	The purpose of my surrebuttal testimony is to address issues with the weather
19	normalizatio	n that Laclede Gas Company ("LAC") witness Ms. Keri E. Feldman addressed in
20	her rebuttal to	estimony.
21	Q.	What aspects of the weather normalization calculation addressed in Ms.
22	Feldman's r	ebuttal testimony are you going to address?
	II .	

A. I am going to address the differences in the results of the calculation of usage per customer for the residential class.

RESPONSE TO WITNESS KERI E. FELDMAN REGARDING LAC'S

ADJUSTMENT FOR WEATHER NORMALIZATION

Q. Why is October 2016 specifically a subject of disagreement between Staff and LAC?

A. Ms. Feldman states in her rebuttal testimony¹ that Staff's weather normalized usage per customer for the month of October is too high; specifically Staff's usage billed in the first block. In her testimony, Ms. Feldman compares Staff's weather normalized usage per customer for the month of October to LAC's 6 year average of actual usage for the month of October. In order for the comparison to be more accurate, Ms. Feldman should review a weather normalized level of usage for October, rather than an average of actual usage.

LAC workpaper labeled "LAC Monthly Usage RES" illustrates the actual usage per bill LAC used to determine a normalized use per bill for the month of October.

	Month	Block 1 Use/Bill	Total Use/Bill	Actual Bcdd
2011	Oct	19.53	23.30	97.76
2012	Oct	21.76	28.21	115.81
2013	Oct	16.98	20.36	66.78
2014	Oct	19.32	23.77	90.33
2015	Oct	17.39	20.37	59.83
2016	Oct	14.92	16.80	34.64

Q. Did LAC use the same weather normalization method for both the winter and non-winter months, including the month of October?

¹ Rebuttal Testimony of Keri E. Feldman, p 5 ll. 20 – 21 and p 6 ll. 1 - 7

RESPONSE TO WITNESS KERI E. FELDMAN REGARDING LAC'S ADJUSTMENT FOR WEATHER NORMALIZATION

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Q. Did LAC use the same weather normalization method for both the winter and non-winter months, including the month of October?

A. No. LAC performed individual monthly regressions and then used what LAC refers to as a 10 year Billing Cycle Degree Day (BCDD) Normal to develop a normalized use per customer for the winter months. LAC's 10 year BCDD are provided below.

¹ Rebuttal Testimony of Keri E. Feldman, p 5 ll. 20 – 21 and p 6 ll. 1 - 7

² LAC's winter months are the months of November through April.

	LAC Normal
Month	Bcdd
201601	1019
201602	908
201603	749
201604	397
201605	150
201606	37
201607	0
201608	0
201609	3
201610	95
201611	335
201612	683
	4376

From this table, LAC recognizes that on a 10 year BCDD normal there are 95 heating degree days (HDD) in the month of October. However, rather than using the 10 year normal for the months of May through October, LAC simply performed a six year average that included four years where the BCDD fell below LAC's determined normal level.

Q. Did LAC follow the same weather normalization methodology for MGE?

A. No. As I discussed in my rebuttal testimony the regression methodology used for MGE is very similar to Staff's methodology and studies the relationship of average usage per customer and HDD per month for the 12-months of the test year.

Q. What is Staff's normal level of HDD per month?

A. On a calendar month basis Staff calculated that approximately 231 HDD are in the month of October; however, on a billing month basis it is approximately 130 HDD. Based on the 6 years of actuals provided by LAC, this value is closest to the 2012 actual of 115 BCDD with a use per bill of 28.21 therms and block one usage per customer of 21.7 therms. Based on

this finding, Staff's usage per bill of 29.3 and first block usage of 23.6 is consistent with the relationship between HDD and usage.

0. Is Staff's weather normalization adjustment reasonable?

Α. Yes. All of Staff's adjustments are based on actual usage during the test year and adjusted for 30 year normal weather. Staff applied a consistent methodology across each month in the test year, including October 2016, to adjust HDDs and therms for weather normalization purposes. Staff also applied a consistent methodology in performing regression analysis for all rate classes and seasons for both the MGE and LAC divisions. Spire Missouri did not utilize consistent methodologies for MGE and LAC, and even used different methods for calculating the usage and adjustments between summer and winter seasons.

Staff witness Mr. Michael L. Stahlman also included a graph³ illustrating the accuracy of Staff's determination of normal annual natural gas usage and normal weather. In addition, LAC workpaper "LAC BCDD CY16 normal-actual" also illustrates that the 10 year normal of BCDD for October was 95 and the 30 year normal BCDD was 113. When reviewing the usage per bill and BCDD solely for the month of October from FY12 – FY17 within the LAC workpaper titled "LAC Weather Master File," the range of usage per bill varies from 16.80 therms to 28.21 therms, and the actual BCDD fluctuates from 34.64 to 115.81 for the month of October for FY12 - FY17. Once the normal weather factor was applied, the HDDs increased from 91.50 to 231.90, and the normal therms per customer increased from 16.80 to 29.8. The HDDs and therms per customer are not out of line with historical usage per customer.

What is your recommendation? 0.

³ Surrebuttal Testimony of Michael L. Stahlman, p. 4

- A. Staff recommends that the Commission accept Staff's weather normalization as the most accurate calculation and disregard LAC's weather normalization calculation in this case.
 - Q. Does this conclude your surrebuttal testimony?
 - A. Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Laclede Gas Company's Request to Increase Its Revenues for Gas Service)	Case No. GR-2017-0215					
In the Matter of Laclede Gas Company d/b/a Missouri Gas Energy's Request to Increase Its Revenues for Gas Service))	Case No. GR-2017-0216					
AFFIDAVIT OF MICHELLE A. BOCKLAGE							
STATE OF MISSOURI) COUNTY OF COLE)							
COMES NOW MICHELLE A. BOCKLAGE and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing Surrebuttal Testimony; and that the same is true and correct according to her best knowledge and belief.							
Further the Affiant sayeth not.	MICHE	kelle A Bocklage					
j.	URAT						
Subscribed and sworn before me, a duly for the County of Cole, State of Missouri, at day of November, 2017.		\mathcal{A}					

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: December 12, 2020
Commission Number: 12412070

Notary Public