

**Exhibit No:**  
**Issue:** Revenue and Adjustments;  
**Witness:** Keri E. Feldman  
**Type of Exhibit:** Rebuttal Testimony  
**Sponsoring Party:** Laclede Gas Company (LAC)  
Missouri Gas Energy (MGE)  
**Case No.:** GR-2017-0215  
GR-2017-0216  
**Date Prepared:** October 17, 2017

**MISSOURI PUBLIC SERVICE COMMISSION**

**LACLEDE GAS COMPANY  
MISSOURI GAS ENERGY**

**GR-2017-0215  
GR-2017-0216**

**REBUTTAL TESTIMONY**

**OF**

**KERI E. FELDMAN**

**OCTOBER 2017**

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1 **Q. WOULD YOU PLEASE STATE YOUR NAME AND BUSINESS**  
2 **ADDRESS?**

3 A. My name is Keri E. Feldman, and my business address is 700 Market Street, St.  
4 Louis, Missouri 63101.

5 **Q. ARE YOU THE SAME KERI E. FELDMAN WHO PREVIOUSLY FILED**  
6 **DIRECT TESTIMONY IN THIS PROCEEDING?**

7 A. Yes, I submitted direct testimony on behalf of both Laclede Gas Company (“LAC”)  
8 in Case No. GR-2017-0215 and Missouri Gas Energy (“MGE”) in Case No. GR-  
9 2017-0216.

10 **Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY IN THIS**  
11 **PROCEEDING?**

12 A. The purpose of my rebuttal testimony is to respond to direct testimony from Staff  
13 witnesses Bocklage, McClellan, Won, and Murray as they relate to operating  
14 revenue adjustments, including but not limited to weather factors, customer  
15 annualization, and the landlord customer switches between MGE’s Residential and  
16 Small General Service customer class.

17 **WEATHER NORMALIZATION AND USAGE**

18 **Q. PLEASE DESCRIBE THE ISSUE AS IT RELATES TO DIFFERENCES IN**  
19 **WEATHER ASSUMPTIONS BETWEEN COMPANY AND STAFF**

20 A. The major differences in weather assumptions were primarily on the LAC side.  
21 Although the total degree days between Company and Staff only differ by 68, or  
22 2%, the individual monthly variances are driving the significant usage differentials,  
23 especially in the shoulder months. The significantly different methods of  
24 calculating normal heating degree days between Company and Staff resulted in a

1           \$1.7M volumetric margin variance in Residential and General service customer  
2           classes, with staffs being higher. The Company utilizes a simple approach,  
3           compiling daily temperature data from National Oceanic and Atmospheric  
4           Administration (NOAA), and totaling each individual day's heating degree day for  
5           the calendar month. These monthly degree days are summarized for each fiscal  
6           year and tracked historically. The Company compared 10-year and 30-year  
7           averages of these monthly historical degree data, and determined the best approach  
8           was to use the 10-year average as the test year normal heating degree day level of  
9           4,377 for purposes of calculating weather normalization. Staff took a much more  
10          cumbersome approach in the form of a complex and statistical ranking  
11          methodology on monthly daily temperature series for an historical time period, in  
12          this case 30 years ended December 2016. These ranking results ultimately led to its  
13          recommended normal heating degree days for the test year of 4,444.

14                 For predictive measures, the Company still believes using more recent  
15          weather patterns and temperatures are more indicative of how the future will unfold.  
16          The now widely accepted theory of a global warming trend means that, by  
17          definition, more recent years are generally more representative of expected weather  
18          than more distant years. Under these circumstances, Staff's insistence on using  
19          historical data stretching over 30 years, rather than data from a more recent 10-year  
20          period, is confounding, and for LAC results in an assumed 2% increase in colder  
21          weather.

22          **Q. PLEASE FURTHER DESCRIBE THE POSITION OF STAFF REGARDING**  
23          **THE ESTABLISHMENT OF A WEATHER "NORMAL" FOR PURPOSES**

1 **OF ESTABLISHING A LEVEL OF WEATHER SENSITIVE CUSTOMER**  
2 **USAGE AND REVENUE IN THE COMPANY’S TEST YEAR.**

3 A. Staff states that according to NOAA, a climate “normal” is defined as the arithmetic  
4 mean of a climatological element computed over three consecutive decades. Staff  
5 relied upon the serially-complete monthly temperature data series, which focuses  
6 on monthly maximum and minimum temperatures published in July 2011 by the  
7 National Climatic Data Center (“NCDC”) of NOAA. For the purposes of  
8 normalizing the test year gas usage and revenues in these proceedings, Staff used  
9 the adjusted maximum and minimum temperature series for the 30-year period of  
10 January 1, 1987 through December 31, 2016 at St. Louis Lambert International  
11 Airport and Kansas City International Airport. Staff states that these series are  
12 consistent with NOAA’s serially-complete monthly temperature data series during  
13 the most recent NOAA 30-year normal period ending in 2010.

14 **Q. WHAT IS THE COMPANY’S POSITION ON NOAA’S TRADITIONAL 30-**  
15 **YEAR NORMAL?**

16 A. The traditional 30-year normal as published by NOAA is not intended to predict  
17 future weather experience. NOAA’s 30-year “normals” are published to provide a  
18 baseline predicated on past history to which current experience can be compared.  
19 They are simply intended to show where we have been and are not intended to be  
20 an indicator of future conditions. Therefore, 30-year normals are not appropriate  
21 benchmarks to establish rates for the future. The normal used in ratemaking should  
22 be the number of heating degree days most likely to result in a leveling out of  
23 natural weather variations so as not to impact severely either the Company or the  
24 customer over a relatively near-term span of years.

1 **Q. IN RECENT HISTORY, HAS NOAA BEGAN CALCULATING SO-**  
2 **CALLED ALTERNATIVE WEATHER “NORMALS” BASED ON**  
3 **PERIODS SHORTER THAN 30 YEARS?**

4 A. Yes, NOAA’s National Centers for Environmental Information (“NCEI”), formerly  
5 the NCDC, does in fact provide several alternative “normals” which are accessible  
6 to the public through its website. The NCEI explains that traditionally NOAA  
7 defines a climate “normal” as a 30-year average. However, NOAA recognizes that  
8 alternative ways of defining “normal” may work better than the 30-year average  
9 given observed global warming. The NCEI then provides monthly temperature  
10 normals for many station locations, including St. Louis Lambert International  
11 Airport and Downtown Kansas City for periods of 20, 15, 10, and 5 year periods,  
12 in addition to a 30-year look<sup>1</sup>.

13 **Q. DOES THE NCEI PROVIDE LINKS TO OTHER ORGANIZATIONS**  
14 **THAT SUPPORT CONSTRUCTING ALTERNATIVE WEATHER**  
15 **“NORMALS?”**

16 A. Yes, in addition to the tabular information described above, the NCEI also provides  
17 links to bulletins of the American Meteorological Society (“AMS”) describing  
18 efforts by the AMS to encourage NOAA to develop alternatives to its traditional  
19 climate normals by reporting averages of the most recent 10, 15, and 20 year  
20 periods along with optimal climate normals. As stated by the AMS bulletins  
21 provided by the NCEI, “an abundance of anecdotal evidence suggests that the U.S.  
22 energy industry, particularly with respect to load forecasting by utilities and rate

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<sup>1</sup> <https://www.ncdc.noaa.gov/normalsPDFaccess/>

1 setting by state agencies, is moving to shorter-term averages for determining  
2 normal weather, and that it is not uncommon for industry representatives to utilize  
3 a 10, 15, and/or 20 year normal.”<sup>2</sup>

4 **Q. IS IT REASONABLE FOR THE COMPANY TO UTILIZE A TEN-YEAR**  
5 **WEATHER NORMAL IN THESE PROCEEDINGS FOR THE PURPOSES**  
6 **OF NORMALIZING ITS TEST YEAR GAS USAGE AND REVENUES?**

7 A. Yes, based upon the evidence I have provided it is clear that NOAA and other  
8 leading weather organizations no longer rely solely upon the traditional 30-year  
9 weather data in deriving weather “normals.” It is also clear from the information  
10 provided by the AMS that the U.S. Energy Industry has increasingly moved  
11 towards the use of periods shorter than 30-years for establishing “normal”  
12 weather.”

13 **Q. PLEASE STATE ANY OTHER ITEMS TO NOTE REGARDING**  
14 **WEATHER NORMALIZATION FOR LAC.**

15 Under LAC’s current rate design, weather plays a major role and can result in usage  
16 variations that drive significant margin changes, higher when its colder than  
17 normal, and lower when its warmer than normal. Since LAC is proposing a  
18 deviation from the existing weather mitigated rate design, when coupled with an  
19 RSM, annualized LAC revenues were reviewed more heavily in total when  
20 comparing Company and Staff witness Bocklage’s workpapers. We have serious  
21 concerns with the 5.6 million therm difference in the Residential customer class,  
22 with staff calculating higher total usage per bill and overall therm levels. The

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<sup>2</sup><http://journals.ametsoc.org/doi/pdf/10.1175/BAMS-D-12-00155.1>  
<http://journals.ametsoc.org/doi/pdf/10.1175/2010BAMS2955.1>

1 biggest difference is in the month of October. The Company does not agree that  
2 the October usage levels calculated by Staff are a good representation of a normal  
3 residential customer's bill in that time period. Based on the Company's historical  
4 data, the October 10-year residential average block 1 use per bill equals 18.6  
5 therms, proving that the average is well under the Staff's position of 23.7 therms  
6 for this same month. This variance in usage accounts for 3.1 million of the total  
7 5.6 million therms, which equates to around \$1 million in delivery charges.

8 LAC's Commercial and Industrial general service classes were combined  
9 and reviewed in total. There are some small concerns with this combined group, as  
10 Staff again has a higher total usage compared to Company. In relative terms,  
11 however the difference is not as material as the Residential class.

12

13 **Q. ARE THERE SPECIFIC CONCERNS WITH MGE USAGE AND**  
14 **WEATHER ASSUMPTIONS?**

15 A. For the MGE operating unit, Company and Staff calculated very similar annualized  
16 Residential CCF's per customer with very little distribution margin variance.  
17 However, for the general service commercial rate classes, the Company calculated  
18 higher normalized volumes than Staff. In addition, adjusted MGE Residential  
19 customers and landlord/tenant Small General Service customers are significantly  
20 different, which will be discussed in more detail in the following section.

21

**CUSTOMER ANNUALIZATION**

22 **Q. PLEASE DESCRIBE THE ISSUE AS IT RELATES TO DIFFERENCES IN**  
23 **CUSTOMER ANNUALIZATION ASSUMPTIONS BETWEEN COMPANY**  
24 **AND STAFF**



1 A. The biggest concerns as it relates to Customer Annualization is the handling of  
2 MGE landlord customers and the adjustments to the Residential and Small  
3 General Service rate classes. Company does not agree with how the normalized  
4 customers were calculated by Staff

5 **Q. WHAT IS THE PROBLEM WITH STAFF'S ADJUSTMENT?**

6 A. Staff witness McMellen included the adjustment for landlord/ tenants in the most  
7 recent 12 months in her analysis of historical customer levels, thereby skewing the  
8 growth numbers when annualizing customers. In effect, her incorporation of this  
9 one-time shift in customer bills gives a misleading impression of growth that is not  
10 occurring. That landlord customer adjustment needs to be made independently and  
11 layered on top of her annualization adjustment. The same correction needs to be  
12 made to the Customer annualization adjustment for the Small General service class.

13 **Q. WHEN STAFF COMPLETED THE LANDLORD ADJUSTMENT, DID**  
14 **THEY ADD THE SAME AMOUNT OF CUSTOMERS TO THE**  
15 **RESIDENTIAL RATE CLASS AS REMOVED FROM THE SMALL**  
16 **GENERAL SERVICE CLASS?**

17 A. Based on workpapers supplied, it does not appear that Staff has added the same  
18 number of landlord customers to the Residential class that has been removed from  
19 the Small General service class.

20 Aside from any adjustment relating to the landlord issue, customer annualization  
21 for the MGE residential customer class varies significantly between Company and  
22 Staff because of differing methodology. Staff is calculating a 3-year historical  
23 percentage and applying it to the update period customers to get a total test year  
24 average; whereas Company uses a point in time customer growth or decline factor

1 and applies this growth (or loss) to the test year. Pre-Landlord adjustment, the  
2 difference accounts for around 37 thousand bills, or over \$800,000. The  
3 Company's approach is straight-forward and gives a more realistic result when  
4 assessing MGE growth percentages. The Company's point in time year over year  
5 approach results in 0.54% growth, or approximately 29 thousand bills over the test  
6 year base level. Both current and historical trends will reveal a similar growth rate.  
7 However, Staff's approach results in 1.24% growth, or an increase of 66 thousand  
8 bills over the entire test year. The total number of residential bills Staff is  
9 calculating, disregarding the landlord adjustment, is significantly higher than any  
10 realistic, normalized level of bills that the Company will experience. For these  
11 reasons, the Company disputes the appropriateness of this approach and the validity  
12 of its end result.

13 **Q. PLEASE DESCRIBE ANY CONCERNS WITH LAC'S CUSTOMER**  
14 **ANNUALIZATION LEVELS**

15 **A.** LAC's customer levels are more aligned but still vary between Company and Staff  
16 due to difference in methodology as noted above. LAC's customers are much more  
17 stable year over year as opposed to MGE bill counts; therefore, there is not a large  
18 difference when comparing the recommended customer levels

19 **MGE LARGE VOLUME ADJUSTMENT**

20 **Q. PLEASE DESCRIBE CONCERNS AS IT RELATES TO THE LARGE**  
21 **VOLUME GENERAL LEDGER ADJUSTMENT**

22 **A.** It has been noticed that an "adjustment to G/L" of \$700K was made to MGE's  
23 Large Volume rate class. After reviewing B. Murray's workpapers, it appears this  
24 adjustment is a normalization exercise, in addition to weather and rate switching;



1 detail outside of the general ledger. The detail is instead contained in the CC&B  
2 subledger, the system of record, and operating the G/L as the thin client. Cost  
3 elements are utilized to differentiate billed and unbilled revenue and gas costs, with  
4 the detailed revenue reports being relied upon to report and analyze billing  
5 determinants, such as ISRS, PGA, customer charge, GRT, and volumetric delivery  
6 charges. Accounting validates cycle revenue extracts with this detail to the general  
7 ledger daily, as well as monthly for closing validation. The detailed reports used  
8 in balancing the billing determinants to the general ledger are subject to strict  
9 controls, which is why they are relied upon so heavily in our reporting  
10 environment. To make the suggested change, reconfiguration and testing of the  
11 billing system will be needed. The Company sees no value added in burdening the  
12 G/L, with this additional unnecessary detail.

13

14 **Q. DOES THAT CONCLUDE YOUR REBUTTAL TESTIMONY?**

15 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 ) File No. GR-2017-0215  
Service )

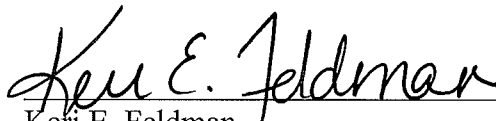
In the Matter of Laclede Gas Company )  
d/b/a Missouri Gas Energy's Request to ) File No. GR-2017-0216  
Increase its Revenues for Gas Service )

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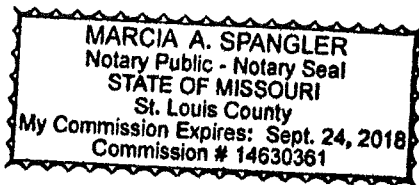
STATE OF MISSOURI )  
 ) SS.  
CITY OF ST. LOUIS )

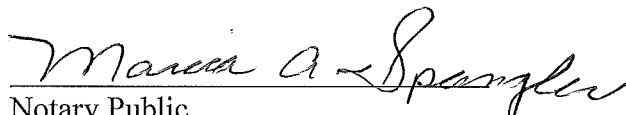
Keri E. Feldman, of lawful age, being first duly sworn, deposes and states:

1. My name is Keri E. Feldman. I am Manager, Operations Accounting for Laclede Gas Company. My business address is 700 Market St., St Louis, Missouri, 63101.
2. Attached hereto and made a part hereof for all purposes is my rebuttal testimony on behalf of Laclede Gas Company and MGE.
3. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct to the best of my knowledge and belief.

  
Keri E. Feldman

Subscribed and sworn to before me this 16<sup>th</sup> day of OCTOBER 2017.



  
Notary Public