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LACLEDE GAS COMPANY  
MISSOURI GAS ENERGY

GR-2017-0215  
GR-2017-0216

DIRECT TESTIMONY

OF

TIMOTHY S. LYONS

APRIL 2017

Laclede Exhibit No 010  
Date 12-15-17 Reporter A.F.  
File No GR-2017-0215, GR-2017-0216

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1 **DIRECT TESTIMONY OF TIMOTHY S. LYONS**

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

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

5 **Q. ON WHOSE BEHALF ARE YOU SUBMITTING THIS TESTIMONY?**

6 A. I am submitting this testimony on behalf of Laclede Gas (“LAC”) and Missouri Gas  
7 Energy (“MGE”), both of which are operating units of Laclede Gas Company (“Laclede”  
8 or the “Company”).

9 **Q. PLEASE DESCRIBE YOUR PROFESSIONAL EXPERIENCE.**

10 A. I have more than 30 years of experience in the energy industry. I started my career in  
11 1985 at Boston Gas Company, eventually becoming Director of Rates and Revenue  
12 Analysis. In 1993, I moved to Providence Gas Company, eventually becoming Vice  
13 President of Marketing and Regulatory Affairs. Starting in 2001, I held several  
14 management consulting positions in the energy industry, first at KEMA and then at  
15 Quantec, LLC. In 2005, I became Vice President of Sales and Marketing at Vermont Gas  
16 Systems, Inc. before joining Sussex Economic Advisors, LLC (“Sussex”) in 2013.  
17 Sussex was acquired by ScottMadden in 2016.

18 **Q. WHAT IS YOUR EDUCATIONAL BACKGROUND?**

19 A. I hold a Bachelor’s degree from St. Anselm College, a Master’s degree in Economics  
20 from Penn State, and a Master’s degree in Business Administration from Babson College.

21 **Q. HAS THIS TESTIMONY BEEN PREPARED BY YOU OR UNDER YOUR  
22 DIRECTION?**

23 A. Yes, it has.

1 Q. HAVE YOU PREVIOUSLY PROVIDED TESTIMONY BEFORE A  
2 REGULATORY COMMISSION?

3 A. Yes. Schedule TSL-D1 to my direct testimony contains a list of regulatory proceedings  
4 in which I have sponsored testimony.

5 I. PURPOSE OF TESTIMONY

6 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

7 A. The purpose of this testimony is to describe the approach used to design the proposed  
8 delivery rates for LAC and MGE. The testimony includes: (a) a description of the current  
9 and proposed rate classes for LAC and MGE; (b) development of the allocated Cost of  
10 Service Studies (“COSS”) for LAC and MGE; and (c) development of the proposed  
11 revenue targets, rate design, and bill impact analysis for each rate class for LAC and  
12 MGE.

13 II. OVERVIEW AND CURRENT RATE STRUCTURE

14 Q. PLEASE DESCRIBE LAC’S CUSTOMER BASE.

15 A. LAC is an operating unit of Laclede Gas Company which, in turn, is a wholly-owned  
16 subsidiary of Spire Inc. LAC provides service to communities in the St. Louis  
17 metropolitan area as well as to communities located in surrounding counties throughout  
18 eastern Missouri. It is headquartered in St. Louis, and presently serves 646,754  
19 customers: 605,635 (93.6 percent) are residential. Customers are presently served under  
20 one of ten rate classes based on type of service and load characteristics. Eight of the ten  
21 rate classes are shown in Figure 1. The two remaining rate classes, Street Lighting and  
22 Propane, were not evaluated as part of the COSS study given their unique characteristics



1 and minimal impact on the overall cost of service. However, the revenues generated by  
2 those rate classes were credited to the cost of service based on current margins.

3 **Q. PLEASE DESCRIBE LAC'S CURRENT RATE STRUCTURE.**

4 A. LAC's current rate structure consists of both delivery rates and Purchase Gas Adjustment  
5 ("PGA") rates for gas sales. LAC's current delivery rates were approved by the  
6 Commission in July 2013.<sup>1</sup> The delivery rates consist of a monthly customer charge and  
7 consumption charges, as shown in Figure 1. The consumption charges generally consists  
8 of declining step rates (or block rates) and seasonal rates; i.e., the rates are lower in the  
9 off-peak period (May through October) than in the peak period (November through  
10 April). LAC's current rates were designed to recover all peak period revenues through  
11 the customer charge and the first block (or head block) rate. This was done to help  
12 mitigate the impact of weather on customer bills and LAC revenues. The current  
13 delivery rates also include demand charges for the largest General Service ("GS") or  
14 Commercial and Industrial ("C&I") customers.

15 The PGA rate recovers the cost of natural gas supplies purchased to meet the needs of its  
16 sales customers.

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<sup>1</sup> Case GR-2013-0171, In the Matter of Laclede Gas Company's Filing of Revised Tariffs to Increase its Annual Revenues for Natural Gas

1

**Figure 1: Current Major LAC Rate Classes**

Residential ("RS")	Available to any residential customer	Customer charge: \$19.50 Consumption charge (Nov-Apr) 1 <sup>st</sup> 30 therms: \$0.91686 Over 30 therms: \$0.00000 Consumption charge (May-Oct) 1 <sup>st</sup> 30 therms: \$0.31290 Over 30 therms: \$0.15297
C&I Class 1 ("C1")	Available to any C&I customer having annual usage less than 5,000 therms	Customer charge: \$25.50 Consumption charge (Nov-Apr) 1 <sup>st</sup> 50 therms: \$0.87711 Over 50 therms: \$0.00000 Consumption charge (May-Oct) 1 <sup>st</sup> 50 therms: \$0.33832 Over 50 therms: \$0.11492
C&I Class 2 ("C2")	Available to any C&I customer having annual usage between 5,000 and 50,000 therms	Customer charge: \$44.29 Consumption charge (Nov-Apr) 1 <sup>st</sup> 500 therms: \$0.61244 Over 500 therms: \$0.00000 Consumption charge (May-Oct) 1 <sup>st</sup> 500 therms: \$0.15306 Over 500 therms: \$0.12421
C&I Class 3 ("C3")	Available to any C&I customer having annual usage more than 50,000 therms	Customer charge: \$88.57 Consumption charge (Nov-Apr) 1 <sup>st</sup> 3000 therms: \$0.85663 Over 3000 therms: \$0.00000 Consumption charge (May-Oct) 1 <sup>st</sup> 3000 therms: \$0.15444 Over 3000 therms: \$0.12457
Large Volume ("LV")	Available to any C&I customer having daily billing demand of at least 250 therms and annual usage more than 60,000 therms	Customer charge: \$847.78 Consumption charge 1 <sup>st</sup> 36,000 therms: \$0.02502 Over 36,000 therms: \$0.00701 Demand charge: \$0.95000
Interruptible ("IN")	Available to any C&I customer that agrees to be subject to interruption.	Customer charge: \$776.36 Consumption charge 1 <sup>st</sup> 100,000 therms: \$0.10440 Over 100,000 therms: \$0.08083
Vehicular Fuel ("VF")	Available to any station that sells natural gas for vehicle fuel use	Customer charge: \$22.09 All therms: \$0.05332
Transportation ("TR")	Available to any C&I customer with a Billing Demand of at least 1500 therms, and annual usage in excess of 300,000 therms that purchases natural gas from third-party supplier	Customer charge: \$2,069.94 Consumption charge 1 <sup>st</sup> 36,000 therms: \$0.02502 Over 36,000 therms: \$0.00701 Reservation charge: \$0.60000

2

3 **Q. HOW DOES THE CURRENT RATE DESIGN MITIGATE THE IMPACT OF**  
4 **WEATHER ON CUSTOMER BILLS AND LAC REVENUES?**

<sup>2</sup> The customer charges in Figure 1 excludes the Infrastructure System Replacement Surcharge ("ISRS").

1 A. A significant portion of LAC's cost of service is recovered on the basis of customer  
2 usage (or per therm) charges that reflect usage at the time rate are established (i.e., rates  
3 are based on the level of usage in the historic test year, adjusted for normal weather).  
4 Thus, to the extent that actual usage is significantly lower than the level assumed in rates,  
5 then LAC's rates recover less than the approved cost of service. Conversely, to the  
6 extent that actual usage is significantly higher than the amount assumed in rates, then  
7 LAC's rates recover more than the approved cost of service.

8 There are many causes for variations in usage, including the impact of weather, energy  
9 conservation and installation of energy efficiency measures. For gas utilities, the impact  
10 of weather is generally the cause for significant variations in usage. In colder-than-  
11 normal weather, for example, customer usage generally increases, resulting in higher  
12 customer bills and higher utility revenues. In warmer-than-normal weather, customer  
13 usage generally decreases, resulting in lower customer bills and lower utility revenues.

14 LAC's current rates were designed such that most of the weather sensitive usage, such as  
15 heating usage, is billed at the second step or tail block rate. Conversely, most of the non-  
16 weather sensitive usage, such as cooking or water heating usage, is billed at the first step  
17 or head block rate. By recovering peak period revenues through the customer charge and  
18 the first block (or head block) rates, changes in customer usage due to variations in  
19 weather would have the least amount of impact on LAC revenues.

20 **Q. WHY IS IT IMPORTANT TO MITIGATE THE IMPACT OF WEATHER ON**  
21 **CUSTOMER BILLS AND LAC REVENUES??**

22 A. It is important to mitigate the impact of weather on customer bills and LAC revenues to  
23 reduce volatility in customer bills and utility revenues. The source of the volatility is that

1 changes in revenues do not match changes in cost. Natural gas distribution costs are  
2 largely fixed and change very little in the short run as usage levels change. However,  
3 distribution rates generally have a significant variable or usage-based component that  
4 changes revenues substantially as usage levels change. This is the case when weather is  
5 colder- or warmer-than-normal. For example, warmer-than-normal temperatures in the  
6 winter generally lead to lower customer bills and lower utility revenues without a  
7 corresponding decrease in delivery costs. Conversely, colder-than-normal winter  
8 temperatures generally lead to higher customer bills and higher utility revenues without a  
9 corresponding increase in delivery costs. Consequently, changes in weather tend to result  
10 in fluctuations in both customer bills and company revenue. Since the marginal  
11 components of the rate structure are not equal to cost, the changes in revenue are not  
12 matched with changes in cost. This is a common concern in the natural gas industry, and  
13 is not unique to LAC and MGE.

14 **Q. WHAT IS THE SOLUTION?**

15 A. There are several approaches in the industry that have been used to address this issue.  
16 One approach has been to increase customer charges. This approach improves fixed cost  
17 recovery through a better alignment of rates and costs. The concern with this approach is  
18 adverse customer bill impacts, particularly for low-use customers. Another approach has  
19 been to implement revenue decoupling mechanisms. Revenue decoupling separates or  
20 “decouples” the relationship between the amount of natural gas delivered by a utility and  
21 the revenues it receives from such delivery. Revenue decoupling has generally been  
22 considered by gas utilities in the context of stabilizing customer bills and utility revenues

1 in response to weather fluctuations as well as reductions in customer usage due to  
2 customer conservation and installation of energy efficiency measures.<sup>3</sup>

3 A third approach has been to implement creative rate designs, such as LAC's block rate  
4 structure. LAC's rate design mitigates the impact of weather on customer bills and utility  
5 revenues by recovering peak period distribution revenues in the customer charge and  
6 head block.

7 **Q. WHAT ARE THE COMPANY'S CONCERNS REGARDING LAC'S CURRENT**  
8 **RATE DESIGN?**

9 A. The Company believes that LAC's current rate design is largely based on the objective of  
10 stabilizing the impact of weather on customer bills and utility revenues, with somewhat  
11 less emphasis on other rate design objectives, such as bill continuity and simplicity. To  
12 meet the stabilization objective, LAC has established customer charges that are relatively  
13 high compared to the rest of the industry as well as developed a complex rate design that  
14 does not recover peak period distribution costs in the tail block and a PGA that varies  
15 between head block and tail block consumption. Regarding the latter feature, I am not  
16 aware of another gas utility in the country that has such a blocked PGA rate structure. As  
17 a result, the Company is concerned that the current rate design produces adverse  
18 customer bill impacts, particularly on low-use customers and is complicated to  
19 administer.

20 **Q. WHAT ARE THE PROBLEMS THAT ARISE FROM LAC'S CURRENT RATE**  
21 **DESIGN?**

22 A. There are several problems that arise from LAC's current rate design, including:

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<sup>3</sup> "Decoupling and Natural Gas Utilities", American Gas Association, July 2009.  
<https://library.cee1.org/system/files/library/3988/2009JulAGADecouplingFactSheet.pdf>

- 1 • Non-gas portion of customer bills that vary with weather and/or other changes in
- 2 use;
- 3 • Utility revenues that vary with customer use and remain dependent on weather
- 4 (despite LAC's attempts to cure it);
- 5 • Low-use customers that pay relatively large bills;
- 6 • LAC's financial disincentive to promote energy efficiency measures;
- 7 • Costs recovered through LAC's PGA may be higher or lower than cost recovered
- 8 through a more traditional PGA; and
- 9 • Rate design that is highly complex, not easily understood and difficult to
- 10 administer.

11 **Q. IN WHAT WAY DOES LAC'S PGA DIFFER FROM MORE TRADITIONAL**  
12 **PGA'S?**

13 A. LAC's PGA varies by head block and tail block consumption. Specifically, the PGA rate  
14 is lower in the head block and higher in the tail block. This unique structure was put in  
15 place to help mitigate customer bill impacts due to higher head block charges that recover  
16 a substantial portion of peak period distribution revenues. However, the block break  
17 structure in the PGA has an impact on the recovery of gas supply-related costs, especially  
18 fixed costs such as pipeline and storage related demand charges. Since a higher  
19 proportion of the PGA costs are recovered in the tail block under the block break  
20 structure, variations in customer usage in the tail block create a higher proportion of  
21 under-recovery of costs when weather is warmer-than-normal and over-recovery when  
22 weather is colder-than-normal. While this is an issue that is common among most PGA's  
23 – i.e., under-recovery of costs in warmer weather and over-recovery in colder weather –

1 the issue is magnified with LAC since most gas utilities have a single PGA that is billed  
2 to all consumption. In addition, the higher rate in the tail block reflects the customer  
3 class's most sensitive consumption.

4 **Q. WHAT IS THE COMPANY'S PROPOSAL TO ADDRESS THESE PROBLEMS?**

5 A. As discussed in the testimony of Laclede witnesses Lobser and Weitzel, LAC proposes to  
6 address these problems through its proposed Revenue Stabilization Mechanism (RSM),  
7 which is a form of revenue decoupling. The RSM decouples the relationship between  
8 customer usage and the revenue LAC ultimately receives from such usage. The proposed  
9 RSM would apply to only Residential and Small General Service rate classes for LAC  
10 and MGE. The proposed RSM enables the Company to better balance its rate design  
11 objectives, including moderating customer bill impacts on low use customers and  
12 adopting a simpler rate design.

13 Revenue decoupling mechanisms in general will stabilize the impact of weather on  
14 customer bills and LAC revenues as well as stabilize the impact of customer conservation  
15 and installation of energy efficiency measures on the Company while still providing a  
16 meaningful incentive to the customer pursuing energy efficiency measures. Specifically,  
17 revenue decoupling mechanisms have been adopted throughout the country to address a  
18 utility's financial disincentive in promoting conservation and energy efficiency measures  
19 due to the adverse impact that such measures have on utility revenues (since revenues are  
20 tied to customer use). Revenue decoupling mechanisms remove such disincentives by  
21 decoupling utility revenues from customer use. The proposed RSM is not unique.  
22 According to The American Council for an Energy-Efficiency Economy (ACEEE) 2016  
23 Scorecard, twenty-three states have implemented revenue decoupling mechanisms for gas.



1 utilities with another eight states having a form of partial decoupling know as a “Lost  
2 Revenue Adjustment Mechanism (LRAM)”.<sup>4</sup>

3 **Q. IS THE COMPANY PROPOSING ANY SPECIFIC CHANGES TO LAC’S**  
4 **EXISTING RATE CLASSES?**

5 A. Yes, as discussed in the testimony of Laclede witness Weitzel, the Company believes that  
6 LAC’s existing C&I rate classes could be improved through consolidation of several C&I  
7 rate classes in a manner that maintains the underlying cost differences in serving different  
8 types of customers.

9 **Q. WHAT IS THE COMPANY’S PROPOSAL REGARDING LAC’S NEW C&I**  
10 **RATE CLASSES?**

11 A. LAC proposes to create two C&I rate classes, consistent with MGE’s C&I rate classes:  
12 Small General Service (SGS) and Large General Service (LGS). The SGS rate class  
13 includes those customers with annual usage of 10,000 therms or less while the LGS  
14 includes those customers with annual usage greater than 10,000 therms. The Company  
15 believes that the proposed changes will simplify LAC’s rate structure, while meeting the  
16 Company’s objective of providing more consistent rate treatment across the LAC and  
17 MGE systems to minimize customer confusion. Importantly, the proposed changes  
18 maintain underlying cost differences in serving different types of customers.

19 **Q. PLEASE DESCRIBE LAC’S USAGE PROFILES FOR EACH RATE CLASS.**

20 A. Figure 2 provides a breakdown of test year customers and usage by rate class. The test  
21 year is based on the period January 1, 2016 through December 31, 2016. The usage has  
22 been normalized for weather. Figure 2 shows that the Residential class consists of  
23 605,635 customers using approximately 488.2 million therms annually.

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<sup>4</sup> Berg et. al., *The 2016 State Energy Efficiency Scorecard* (2016), pg. 45, <http://aceee.org/research-report/ul606>.



1

**Figure 2: LAC Test Year Customers and Normalized Use**

Laclede Gas Company					
Test Year	Number of	% of	Annual	% of	Use per
Customers and Usage	Customers	Customers	Use	Use	Customer
Residential	605,635	93.6%	488,185,483	54.1%	806
Small General Service	37,040	5.7%	77,590,502	8.6%	2,095
Large General Service	3,720	0.6%	132,304,153	14.7%	35,562
Large Volume	68	0.0%	10,059,571	1.1%	147,573
Interruptibles	21	0.0%	7,107,794	0.8%	342,544
Vehicular Fuel	8	0.0%	3,193,198	0.4%	403,351
Transportation	142	0.0%	183,302,053	20.3%	1,293,897
Propane	36	0.0%	16,336	0.0%	452
Gas Light	84	0.0%	153,621	0.0%	1,828
<b>Total</b>	<b>646,754</b>	<b>100.0%</b>	<b>901,912,711</b>	<b>100.0%</b>	<b>1,395</b>

2

3

Figure 2 shows wide variation in annual use per customer among the rate classes.

4

Residential customers use on average 806 therms per year, while Transportation

5

customers use on average 1,293,897 therms per year.

6

Figure 3 shows seasonal variation among LAC's five largest customer classes, which

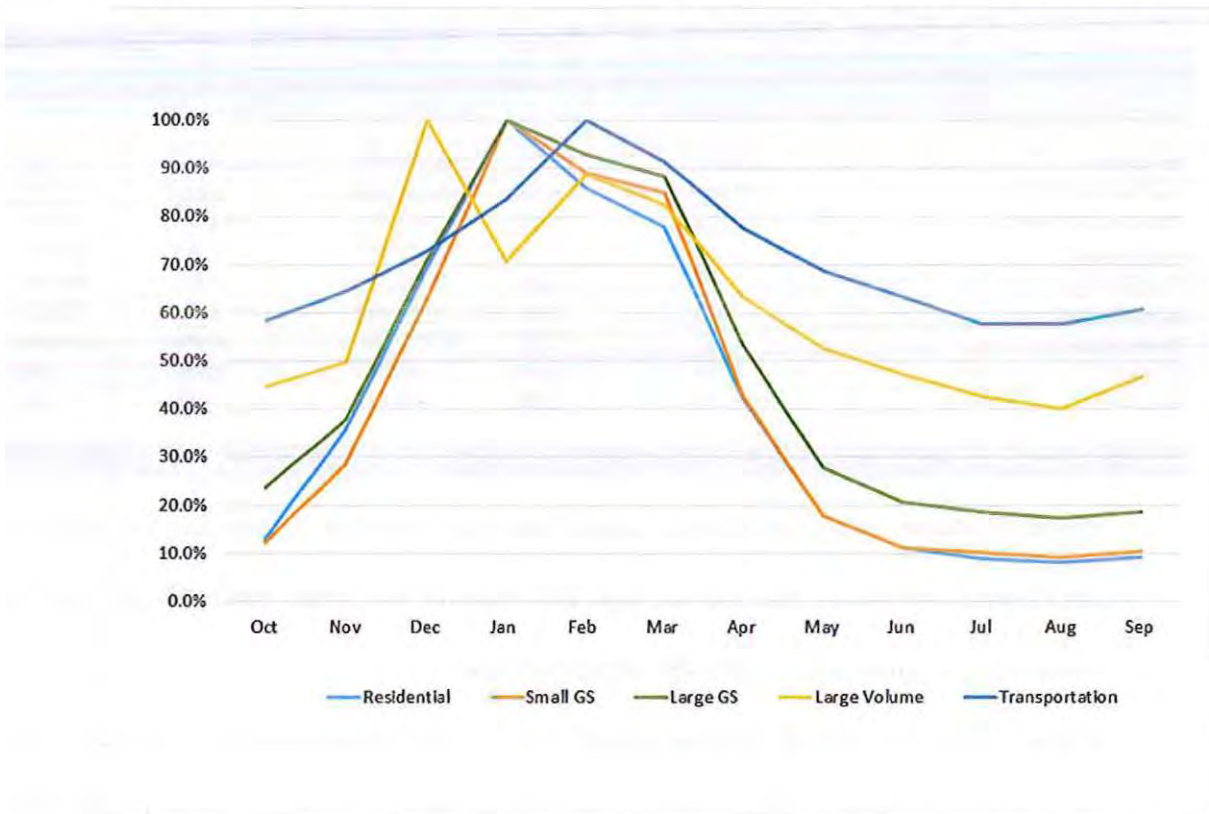
7

comprise approximately 99.0 percent of total throughput. Seasonal variation is calculated

8

as monthly use divided by peak month use.

1 **Figure 3: Monthly Use as a Percentage of Peak Month Use (LAC Rate Classes)**



2

3 Most LAC rate classes demonstrate a seasonal load pattern, with monthly consumption  
 4 increasing during the heating season and decreasing during the non-heating season. The  
 5 LV and Transportation rate classes, in contrast, demonstrate a flatter, less seasonal load  
 6 pattern during the year and a much higher overall utilization factor. As discussed below,  
 7 these differences in load patterns have implications on the cost of service.

8

9 **Q. PLEASE DESCRIBE MISSOURI GAS ENERGY’S CUSTOMER BASE.**

10 MGE is an operating unit of Laclede Gas Company and serves more than 500,000  
 11 residential, commercial and industrial customers in communities in the Kansas City  
 12 metropolitan area and western Missouri. MGE presently serves 501,758 customers:

1 468,460 (93.4 percent) are residential. Customers are served under one of five rate  
2 classes based on type of service and load characteristics. Four of the five rate classes are  
3 shown in Figure 4. The remaining rate class, Street Lighting, was not evaluated as part of  
4 the COSS study given its unique characteristics and minimal impact on the overall cost of  
5 service. However, the revenues generated by the Street Lighting rate class were credited  
6 to the cost of service based on current margins.

7  
8 **Q. PLEASE DESCRIBE MISSOURI GAS ENERGY'S CURRENT RATE**  
9 **STRUCTURE.**

10 MGE's current rate structure consists of delivery rates and PGA rates. MGE's current  
11 delivery rates were approved by the Commission in May 2014.<sup>5</sup> The delivery rates  
12 consist of customer charges and consumption charges, as shown on Figure 4. For MGE's  
13 largest C&I customers, the consumption charges consist of declining step rates and  
14 seasonal rates that are lower in the off-peak period (April through October) than the peak  
15 period (November through March).

16 As noted previously, the PGA rates recover the cost of natural gas supplies purchased to  
17 the meet the needs of its sales customers.

---

<sup>5</sup> Case GR-2014-0007, In the Matter of Missouri Gas Energy's Filing of Revised Tariffs to Increase its Annual Revenues for Natural Gas

1

**Figure 4: Current Major MGE Rate Classes<sup>6</sup>**

Residential	Available to any residential customer	Customer charge: \$23.00 Consumption charge: All therms: \$0.07380
Small General Service	Available to any C&I customer having annual usage less than 10,000 CCF	Customer charge: \$34.00 Consumption charge: All therms: \$0.05430
Large General Service	Available to any C&I customer having annual usage greater than 10,000 CCF, but monthly usage less than 30,000 CCF	Customer charge: \$115.40 Consumption charge (Nov-Mar): All therms: \$0.13268 Consumption charge (Apr-Oct): All therms: \$0.07647
Large Volume	Available to any C&I customer whose usage exceeds 15,000 CCF in at least one month per year	Customer charge: \$904.56 Consumption charge (Nov-Mar): 1 <sup>st</sup> 30,000 therms: \$0.05636 Over 30 therms: \$0.04424 Consumption charge (Apr-Oct): 1 <sup>st</sup> 30,000 therms: \$0.03565 Over 30 therms: \$0.02352

2

3 **Q. DOES THE PROPOSED RSM APPLY TO MGE AS WELL?**

4 A. Yes. The proposed RSM described above would also apply to MGE’s Residential and  
5 Small General Service rate classes.

6 **Q. IS THE COMPANY PROPOSING ANY CHANGES TO MGE’S EXISTING RATE  
7 CLASSES?**

8 A. Yes. As discussed in the testimony of Laclede witnesses Lobser and Weitzel, the  
9 Company proposes to standardize how landlords in LAC and MGE’s service area are  
10 charged when the rental unit is vacant. In LAC’s service area, landlords continue to be  
11 billed at the Residential rates – including both customer charge and consumption charges  
12 – when the rental unit is vacant. In MGE’s service area, landlords are billed at the SGS  
13 rates – which are higher than the residential rates – when the rental unit is vacant. This  
14 approach has caused dissatisfaction among MGE’s landlords, who believe it is unfair. In

<sup>6</sup> For MGE, the Street Lighting rate class is not included in the Cost of Service Study and Rate Design.

<sup>7</sup> The customer charges in Figure 4 excludes the Infrastructure System Replacement Surcharge (“ISRS”).



1 response, the Company proposes to move test year bills and usage associated with  
 2 MGE's landlords from the SGS rate class to the Residential rate class. Accordingly,  
 3 MGE's test year bills and usage related to landlords are included in the Residential rate  
 4 class.

5 **Q. PLEASE DESCRIBE MGE's USAGE PROFILES.**

6 A. Figure 5 provides a breakdown of test year customers and usage by rate class. The test  
 7 year is based on the period January 1, 2016 through December 31, 2016. The usage has  
 8 been normalized for weather. The Figure shows that the Residential rate class consists of  
 9 468,460 customers using approximately 366.1 million therms annually.

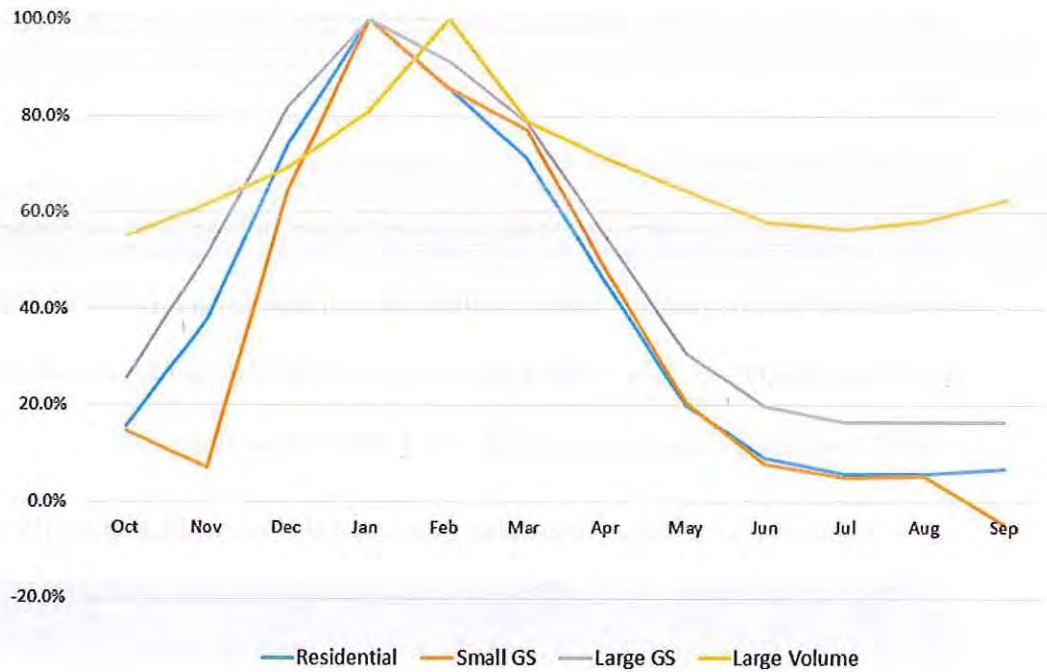
10 **Figure 5: Test Year Customers and Annual Usage (MGE Rate Classes)**

Missouri Gas Energy						
Test Year Customers and Usage	Number of Customers	% of Customers	Annual Use	% of Use	Use per Customer	
Residential	468,460	93.4%	366,148,361	48.0%	782	
Small General Service	29,637	5.9%	56,239,220	7.4%	1,898	
Large General Service	3,263	0.7%	74,357,619	9.7%	22,788	
Large Volume	395	0.1%	266,738,665	34.9%	674,522	
Gas Light	3	0.0%				
<b>Total</b>	<b>501,758</b>	<b>100.0%</b>	<b>763,483,865</b>	<b>100.0%</b>	<b>699,989</b>	

11  
 12 Figure 5 shows variation in annual use per customer among the rate classes. The Figure  
 13 shows that Residential customers use on average 782 therms per year, while Large  
 14 Volume customers use on average 674,522 therms per year.

15 Figure 6 shows seasonal variation of MGE's customer classes. Seasonal variation is  
 16 calculated as monthly use divided by peak month use.

1 **Figure 6: Monthly Use as a Percentage of Peak Month Use (MGE Rate Classes)**



2

3 Most MGE rate classes demonstrate a season load pattern, with monthly consumption  
4 increasing during the heating season and decreasing during the non-heating season. The  
5 Large Volume rate class, in contrast, demonstrates a flatter, less seasonal load pattern and  
6 a much higher overall utilization factor. As discussed below the difference in load  
7 pattern has implications on the cost of service.

8

### III. ALLOCATED COST OF SERVICE STUDY

9

Q. PLEASE DESCRIBE THE PURPOSE OF AN ALLOCATED COST OF SERVICE STUDY (“COSS”).

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11

A. A COSS allocates a company’s overall cost of service to each rate class in a manner that reflects the underlying cost drivers. The COSS sponsored in this testimony was

12

1 developed by identifying the relationship between the service requirements for each rate  
2 class and the cost drivers for those requirements. This approach is well established in  
3 industry literature<sup>8</sup> and is consistent with past cost of service studies filed by the  
4 Company.<sup>9</sup> Specifically, the cost of service studies sponsored in this testimony were  
5 generally based on the methodology filed in Case No. GR-2009-0355.

6 **Q. PLEASE DESCRIBE THE APPROACH USED TO DEVELOP THE COSS.**

7 A. The approach used to develop the COSS in this testimony consisted of three steps: (1)  
8 functionalization, or cost assignment into functional categories, largely related to  
9 production, transmission and distribution; (2) classification, or cost assignment according  
10 to whether costs are related to serving peak demands, customer service requirements, or  
11 energy demands; and (3) allocation, or cost assignment to rate classes consistent with the  
12 functionalization and classification steps described above.

13 **Q. HOW DOES THE FUNCTIONALIZATION STEP OF THIS PROCESS WORK?**

14 A. The functionalization process involves separating rate base and expense items into  
15 operational components that include production, storage, transmission and distribution.  
16 Gas costs, which include production, pipeline and storage charges and related costs, as  
17 well as commodity costs, are generally recovered through the Companies' PGA and  
18 therefore not a component of the cost of service study.<sup>10</sup>

19 **Q. HOW DOES THE CLASSIFICATION STEP OF THE PROCESS WORK?**

20 A. The classification process involves separating rate base and expense items into  
21 classifications that relate to cost drivers. Distribution-related costs are generally

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<sup>8</sup> See Principles of Public Utility Rates by James C. Bonbright

<sup>9</sup> Case No. GR-2009-0355, In the Matter of Missouri Gas Energy and Its Tariff Filing to Implement a General Rate Increase for Natural Gas Service

<sup>10</sup> Certain LAC production and storage and facility costs are recovered in LAC's base rates.



1 classified as demand-related or customer-related. Demand-related costs are driven by the  
2 requirement to serve customer peak demands, while customer-related costs are driven by  
3 the requirement to connect and provide customer-related services, such as metering and  
4 billing services.

5 **Q. WHAT HAPPENS IN THE ALLOCATION STEP OF THE PROCESS?**

6 A. The final allocation involves assigning rate base and expense items to individual rate  
7 classes based on cost drivers to provide service to those customer classes.

8

9 **Q. WHAT TOOLS DID YOU USE TO PERFORM THE COSS?**

10 The COSS for the two operating units were developed utilizing a model developed by  
11 ScottMadden for this rate case proceeding. Each rate base and expense item in the COSS  
12 was assigned to each rate class based on the three-step process described above. The rate  
13 classes used in the cost of service studies are shown in Figure 7:

14

**Figure 7: LAC and MGE Customer Classes**

Laclede Gas Company	Missouri Gas Energy
Residential (RS)	Residential (RS)
Small General Service (SGS)	Small General Service (SGS)
Large General Service (LGS)	Large General Service (LGS)
Large Volume Service (LV)	Large Volume Service (LV)
Vehicular Fuel (VF)	
Interruptible (IN)	
Transportation (TR)	

15

16 As previously noted, the Street Lighting and Propane rate classes were not evaluated as  
17 part of this study given their unique characteristics and minimal impact on the overall



1 cost of service. The revenues generated by the classes were credited to the cost of service  
2 based on current margins.

3 **Q. PLEASE DESCRIBE THE OVERALL RESULTS OF LAC'S COST OF SERVICE**  
4 **STUDY.**

5 A. The results of the COSS for LAC are shown in Figure 8 and Schedule TSL-D3. Figure 8  
6 shows the calculated Rate of Return ("ROR") for each customer class as compared to the  
7 overall or system ROR based on current rates.

8 **Figure 8: LAC Class ROR vs. Overall ROR at Current Delivery Service Rates**



9  
10 Figure 8 shows that the Residential, and Small General Service customer classes earn a  
11 ROR lower than LAC's system ROR. Specifically, the Residential and Small General  
12 Service classes earn a ROR of 4.2 percent and 3.4 percent, respectively, all of which are  
13 below the system ROR of 4.9 percent. The Large General Service, Large Volume,  
14 Interruptible, Vehicular Fuel, and Transportation rate classes earn a ROR of 9.7 percent,

1 18.8 percent, 90.5 percent, 17.6 percent, and 14.3 percent, respectively, all of which are  
2 above the system ROR of 4.9 percent.

3 It is important to note that the COSS produces a significantly higher rate of return for  
4 customers in the Interruptible rate class, which is attributable to significantly less  
5 demand-related costs allocated to the Interruptible rate class because of LAC's ability to  
6 interrupt these customers on the design day. Since LAC is not obligated to meet the  
7 design day needs of Interruptible customers, demand-related costs are not allocated to  
8 this rate class.

9 **Q. WHAT DOES IT MEAN WHEN A CLASS IS EARNING A HIGHER OR LOWER**  
10 **ROR THAN THE SYSTEM ROR?**

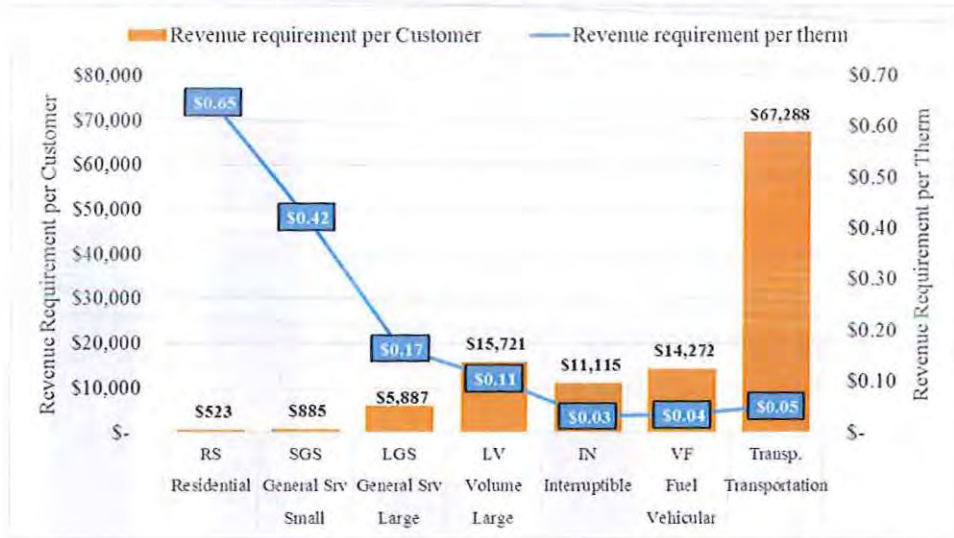
11 A. If the ROR earned by the rate class is lower than the system ROR it means that the class  
12 at existing rates is not recovering its fully allocated share of the utility's cost of service.  
13 Conversely, if a rate class is earning a higher ROR than the system ROR, it means that  
14 the class, at existing rates, is recovering more than its fully allocated share of such costs.  
15 As discussed below, the results of the COSS were used as a guide to establish revenue  
16 targets that move LAC's rates in aggregate closer to equalized rates of return and help to  
17 improve equity across customer classes.

18 **Q. IS THERE VARIATION IN THE COST OF SERVICE ACROSS LAC'S RATE**  
19 **CLASSES?**

20 A. Yes, there is significant variation in the cost of service across LAC's rate classes. Figure  
21 9 shows variation in unit revenue requirements on a per customer and per therm basis.

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**Figure 9: LAC Revenue Requirement by Rate Class**



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The revenue requirement for the Residential rate class is \$523 per customer, while the revenue requirement for the Transportation class is \$67,288 per customer. In comparison, the revenue requirement per natural gas usage for the Residential class is \$0.65 per therm, while the revenue requirement per natural gas usage for the Transportation class is \$0.05 per therm.

8

**Q. PLEASE DESCRIBE THE OVERALL RESULTS OF MGE'S COST OF SERVICE STUDY.**

9

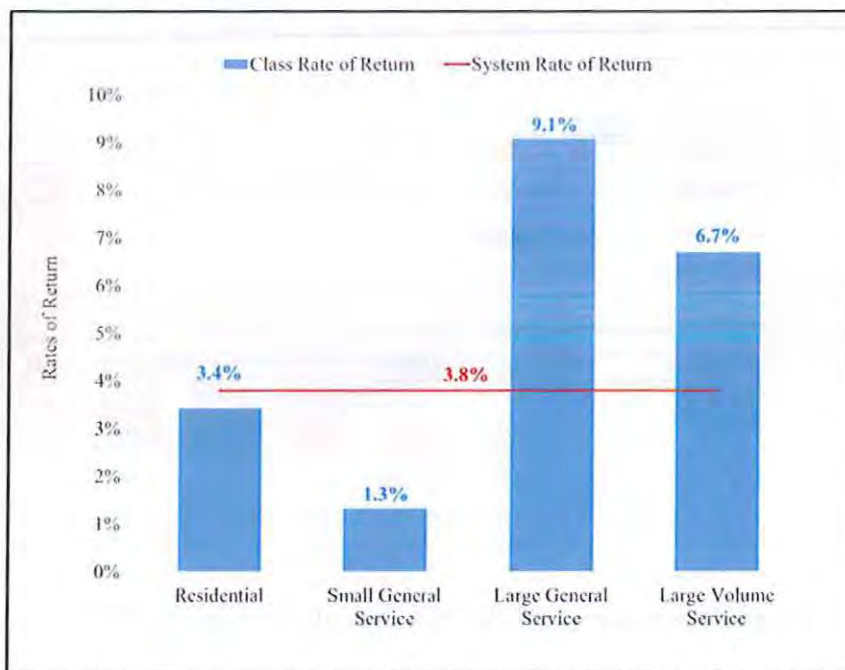
10

A. The results of MGE's COSS are shown in Figure 10 and in Schedule TSL-D3. Figure 10 shows the calculated ROR for each customer class as compared to the overall or system ROR based on current rates.

11

12

1 **Figure 10: MGE Class ROR vs. Overall ROR at Current Delivery Service Rates**



2

3 Figure 10 shows that the LGS and LVS rate classes earn a ROR higher than MGE's  
4 system ROR. Specifically, the LGS and LVS rate classes earn a ROR of 9.1 percent and  
5 6.7 percent, respectively, all of which are above the system ROR of 3.8 percent. The  
6 Residential and SGS rate classes earn a ROR of 3.4 percent and 1.3 percent, respectively,  
7 all of which are below the system ROR of 3.8 percent. The results of the COSS were  
8 used as a guide to establish revenue targets that move MGE's rates in aggregate closer to  
9 equalized rates of return and help to improve equity across customer classes.

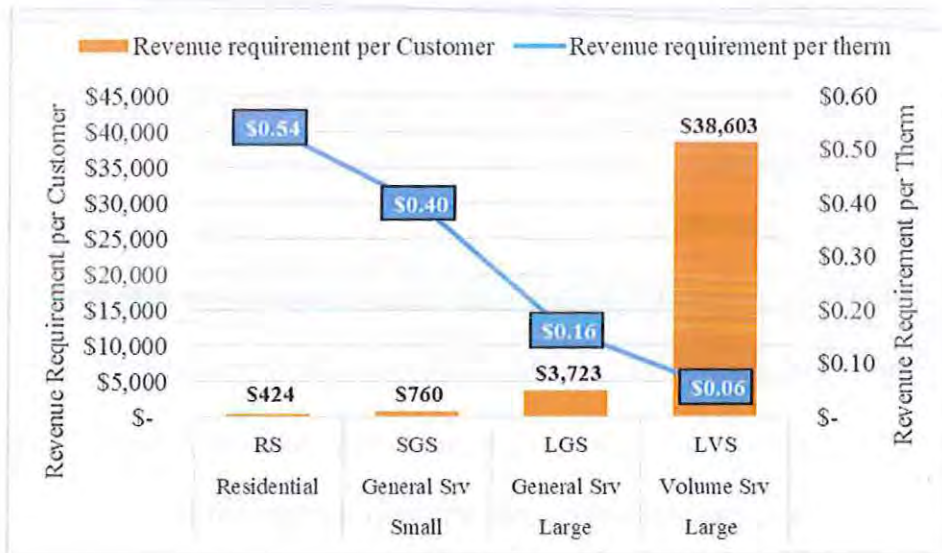
10 **Q. DO MGE'S COSS RESULTS VARY ACROSS RATE CLASSES?**

11 A. Yes, there is variation in the cost of service across MGE's rate classes. Figure 11 shows  
12 the variation in unit revenue requirements on a per customer and per therm basis. The  
13 Figure shows variation in unit revenue requirements on a per customer and per therm  
14 basis.



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**Figure 11: MGE Revenue Requirement by Rate Class**



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Figure 11 shows the revenue requirement for the Residential class is \$424 per customer, while the revenue requirement for the LVS class is \$38,603 per customer. In comparison, the revenue requirement per therm of natural gas usage for the Residential class is \$0.54 per therm, while the revenue requirement per therm natural gas usage for the LVS class is \$0.06 per therm.

8

**Q. PLEASE DESCRIBE THE DATA USED TO PREPARE THE COSS.**

9

A. The COSS is based on financial data from the Test Year. The analysis also includes the number of customers, sales and revenues by rate class from the same period. Sales and revenues have been adjusted to reflect the impact of normal weather. It also includes rate base items, including intangible plant, production, underground storage, transmission, distribution and general plant-in-service as well as (a) additions to plant-in-service, including materials and supplies, gas storage, prepaid expenses, cash working capital, and other regulatory assets, and (b) reductions to plant-in-service, including other regulatory liabilities, accumulated deferred income taxes, customer deposits, and customer

16

1 advances. Finally, the financial data includes expense items, including production,  
2 storage, distribution, customer service, customer account, sales, and administrative and  
3 general expenses as well as taxes other than income, such as payroll and property taxes,  
4 and income taxes.

5 **Q. PLEASE DESCRIBE IN GREATER DETAIL THE FUNCTIONALIZATION**  
6 **PROCESS IN DEVELOPING THE COST OF SERVICE STUDY.**

7 A. The cost of service is functionalized into one of the following categories:

- 8 • Production – costs associated with the gas supply, interstate pipeline  
9 transportation capacity, and upstream storage facilities;
- 10 • Storage – costs associated with on-system storage facilities;
- 11 • Transmission – costs associated with high pressure facilities that deliver gas to  
12 distribution facilities;
- 13 • Distribution – costs associated with delivering natural gas to customers, including  
14 distribution main facilities and services, meters and regulators.

15 Production costs are generally recovered through the PGA while the transmission and  
16 distribution costs are recovered through the base rates.

17 **Q. PLEASE DESCRIBE IN GREATER DETAIL THE CLASSIFICATION PROCESS**  
18 **IN DEVELOPING THE COST OF SERVICE STUDY.**

19 A. The cost of service is classified into one of the following categories:

- 20 • Customer-related – costs associated with providing customer access to the natural  
21 gas system as well as providing on-going customer services, including meter  
22 reading and billing services.



1 theoretical main of zero-inch diameter to the customer function,  
2 and allocate the remaining costs associated with mains to  
3 demand”<sup>13</sup>  
4

5 The zero-intercept method as applied to the electric system is described in the NARUC  
6 electric manual.<sup>14</sup>

7 “The minimum-intercept method seeks to identify that portion of plant  
8 related to a hypothetical no-load or zero-intercept situation....The  
9 technique is related to installed cost to current carrying capacity or  
10 demand rating, creating a curve for various sizes of the equipment  
11 involved, using regression techniques, and extend the curve to a no-load  
12 intercept. The cost related to the zero-intercept is the customer  
13 component.”<sup>15</sup>  
14

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

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

21 A. The estimated cost of a zero-inch main was determined by using a zero value for the size  
22 variable in the regression equation. Multiplying the estimated cost of a zero-inch main by  
23 the actual number of feet in the system yields the theoretical cost of a system comprised  
24 of zero-inch mains. The customer-related portion of distribution mains was calculated as  
25 the ratio of the cost of a zero-inch mains system to the total cost of the mains system.

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

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<sup>13</sup> NARUC Gas Distribution Rate Design Manual. Pg. 22-23

<sup>14</sup> NARUC Electric Utility Cost Allocation Manual. Pg. 92.

<sup>15</sup> Id. Pg. 92.



1 A. The results of the zero-inch analysis show that the customer-related portion of the mains  
 2 investment is 37.94 percent and 35.42 percent, respectively, for LAC and MGE as shown  
 3 on Schedule TSL-D7. Therefore, the demand-related portion of the mains investment is  
 4 62.06 percent and 64.58 percent, respectively, for LAC and MGE.

5 **Q. PLEASE DISCUSS THE CLASSIFICATION OF OTHER RATE BASE ITEMS.**

6 A. Other rate base items were similarly classified based on their underlying cost drivers. For  
 7 example, meter cost, meter installation, service cost, and house regulator investments  
 8 were classified as customer-related since they provide customer access to the natural gas  
 9 system. Rate base items not directly associated with one of the classification categories,  
 10 such as general plant, were classified based on the related costs through a composite  
 11 classifier. Schedule TSL-4 provides a full description of rate base classifications.

12 **Q. PLEASE DISCUSS THE CLASSIFICATION OF OPERATIONS AND  
 13 MAINTENANCE EXPENSES.**

14 A. Operations and maintenance expenses were classified in a manner similar to their  
 15 respective plant items, as shown in Figure 12. For example, Maintenance of Services  
 16 (Account 892) was allocated based on the allocation of Service (Account 380).

17 **Figure 12: O&M Expenses and Corresponding Rate Base Items**

Acct.	Description	Corresponding Plant Accounts
874	Mains & Services Expenses	Mains (376) and Services (380) combined
875	Distribution Reg. Station Expense	Measuring & Reg. Station Exp.-General (378)
877	Measuring & Reg. Station Exp.-City Gate	Measuring & Reg. Station Exp.-City Gate (379)
878	Meter & House Regulator Exp.	Meters (381) and Regulators (383 and 385) combined
887	Maintenance of Mains	Distribution Mains (376)

889	Main. of Measuring & Reg. Station Exp.- General	Measuring & Reg. Station Exp.- General (378)
891	Main. of Measuring & Reg. Station Exp.- City Gate	Measuring & Reg. Station Exp.- City Gate (379)
892	Maintenance of Services	Services (380)
893	Mains of Meters & House Regulators	Meters (381) and House Regulators (383) combined

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O&M expense items not directly associated with one of the classification categories, such as administrative and general expenses, were classified based on related costs through a composite classifier. Schedule TSL-D4 provides a full description of O&M expense classifications.

**Q. PLEASE DESCRIBE IN GREATER DETAIL THE ALLOCATION PROCESS USED IN DEVELOPING THE COST OF SERVICE STUDY.**

A. Costs were allocated to each rate class based on each class's responsibility for the costs that are incurred to serve that class. In short, cost allocation follows cost causation. This approach is well established in industry literature and is consistent with past cost of service studies approved by the Commission.<sup>16</sup> The approach requires development of cost allocators that reflect the design of the natural gas system.

**Q. WHAT ALLOCATORS WERE USED IN YOUR COSS?**

A. The COSS sponsored in this testimony was developed based on three types of allocators

1. Class determinants – class characteristics, such as number of customers, consumption and revenues by rate class;
2. Special studies – detailed analysis of specific plant or expense items, such as meters and uncollectible expenses; and

<sup>16</sup> *Re: MGE*, Case No. GR-2009-0355

1           3. Internal – composite of how other costs are allocated, such as general plant.

2           Schedule TSL-D4 contains a description of each allocator used in the COSS, including  
3           what costs are allocated, how each allocator was derived, and the rationale for utilizing  
4           the allocator. For example, the ‘customers’ allocator is used to allocate meter reading  
5           expenses based on the number of customers in each rate class. The rationale is that meter  
6           reading expenses are driven by the number of customer meters that are read monthly.

7   **Q. PLEASE DESCRIBE THE PROCESS TO DEVELOP THE DEMAND**  
8   **ALLOCATOR.**

9   A. The demand allocator is based on the Coincident Demand or Peak Responsibility method.  
10   It is one of the methods recognized by NARUC in allocating demand costs.<sup>17</sup> The  
11   allocator reflects each rate classes’ responsibility to the peak day demands of the system.  
12   This approach to developing the demand allocator is consistent with the approach  
13   followed in Case No. GR-2009-0355, MGE’s recent rate case proceeding.

14           The derivation of the allocator is included in Schedule TSL-D8 and consists of  
15           four steps. First, heat use per degree day per customer was derived based on the results  
16           of a regression analysis for each rate class of heat use per degree day per customer as a  
17           function of billing heating degree days. The regression analysis produced a strong R-  
18           squared, which measures how much variation in a dependent variable (in this case heat  
19           use per customer) can be explained by an independent variable (in this case heating  
20           degree days). Data for the heat use per customer variable was calculated as the difference  
21           between actual use per customer and base use per customer, where base use per customer  
22           was the lowest average use of two consecutive months during July through September.

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<sup>17</sup> NARUC Gas Distribution Rate Design Manual. Pg. 27

1           The second involved applying heat use per degree per customer to the design day  
2 degree days of 73 and 78 for LAC and MGE, respectively, to derive design day heating  
3 use per customer. For the third step, the design day heating use per customer derived in  
4 the previous step is added to base use per customer to calculate total design day use per  
5 customer. The final step was to multiply the number of customers for each class in the  
6 month of the design day by the design day use per customer for each class to calculate  
7 total design day use by class. The results are shown on Schedule TSL-D8.

8 **Q. PLEASE DESCRIBE THE PROCESS USED TO DEVELOP THE SPECIAL**  
9 **STUDY ALLOCATORS.**

10 A. There were five special studies developed to allocate meter investments, meter  
11 installations, service investments, regulators, and industrial customer investments. In  
12 aggregate, these investments account for 46 percent and 36 percent of total utility plant  
13 for LAC and MGE, respectively.

14       • Meter investment was allocated based on estimated current or replacement cost of  
15 meters by customer in each rate class weighted by the estimated number of  
16 customers. Current costs were used since historic records of such costs are not  
17 maintained by individual meter, customer or rate class. The calculation  
18 recognizes there are certain types of meter costs specific to each rate class and  
19 establishes a weighting based on current records.

20       • Meter installation was allocated based on the estimated current or replacement  
21 cost of meter installations by customer in each rate class weighted by the  
22 estimated number of customers. Current costs were used for the same reason  
23 previously noted. The calculation recognizes there are certain types of meter

1 installation costs specific to each rate class and establishes a weighting based on  
2 current records.

3 • Service investment was allocated based on the estimated current or replacement  
4 cost of service installations by customer in each rate class weighted by the  
5 estimated number of customers. Current costs were used for the same reason  
6 previously noted. The calculation recognizes there are certain types of service  
7 installation costs specific to each rate class and establishes a weighting based on  
8 current records.

9 • Regulators were allocated based on the estimated current or replacement cost of  
10 regulators by customer in each rate class weighted by the estimated number of  
11 customers. Current costs were used for the same reason previously noted. The  
12 calculation recognizes there are certain types of regulator costs specific to each  
13 rate class and establishes a weighting based on current records.

14 • Industrial customer investment was allocated based on the investment in services,  
15 meters and regulators to serve the largest customers on the system.

16 The derivation of the meter, meter installation, service investment and regulator allocator  
17 is shown in Schedule TSL-D9.

18 **Q. PLEASE DESCRIBE THE PROCESS USED TO DEVELOP THE COMPOSITE**  
19 **ALLOCATORS.**

20 A. There are several composite allocators developed internally based on the allocation of  
21 various plant investments and expenses. These are used to allocate cost items that cannot  
22 be readily categorized as either customer-, demand-, or commodity-related. For example,  
23 general plant is classified and allocated based on the composite allocation of all

1 production, transmission, storage, and distribution plant. This approach is well  
2 established in industry literature<sup>18</sup> and is consistent with the COSS methodology filed in  
3 Case No. GR-2009-0355.

4 **Q. PLEASE DESCRIBE THE PROCESS USED TO ALLOCATE RATE BASE**  
5 **ITEMS TO THE CUSTOMER CLASSES.**

6 A. The process used to allocate rate base to customer classes is included in Schedules TSL-  
7 D5 and TSL-D6 and consists of the following four steps. First, gross plant investment by  
8 individual FERC account is allocated to each rate class based on an allocator that most  
9 closely reflects the underlying cost driver. Second, accumulated depreciation by  
10 individual FERC account is allocated to each rate class based on the same allocator as the  
11 gross plant investment for that account. Third, net plant investment by individual FERC  
12 account is calculated as the difference between gross plant investment and accumulated  
13 depreciation by individual FERC account. Lastly, additions and deletions to net plant  
14 investment are allocated to each rate class on the basis of an allocator that most closely  
15 reflects the underlying cost driver to form rate base. Total rate base is shown on  
16 Schedules TSL-D5 and TSL-D6.

17 In general, gross plant investment that is designed to meet the demands of the  
18 Company's customers was allocated to each rate class based on the demand allocator.  
19 Gross plant investment that is designed to connect customers to the system and meet their  
20 service requirements was allocated to each rate class based on various allocators that are  
21 related to numbers of customers.

22 **Q. PLEASE DESCRIBE THE ALLOCATION OF O&M EXPENSES TO THE**  
23 **CUSTOMER CLASSES.**

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<sup>18</sup> NARUC Gas Distribution Rate Design Manual. Pg. 26

1 A. The process used to allocate O&M expenses to customer classes is included in Schedules  
2 TSL-D5 and TSL-D6. As discussed earlier, special studies were conducted to develop  
3 allocators that are based on actual assignment of data to customer classes.

4 • Customer Accounts and Collections Expense (Account 903) is separated into  
5 customer service- and collections-related expenses. The customer service-related  
6 expenses were allocated based on the number of customer bills, while collections-  
7 related expenses were allocated based on the uncollectible expense allocator  
8 described below.

9 • Uncollectible Expense (Account 904) is based on a direct assignment of net write-  
10 offs by class.

11 • Demonstrating and Selling (Account 912) expense is based on a direct assignment  
12 of actual expenses by class.

13 • Interest on Customer Deposits is based on a direct assignment of actual deposits  
14 to the residential and C&I classes.

15 **IV. OVERVIEW OF RATE DESIGN**

16 **Q. PLEASE DESCRIBE THE PRINCIPLES USED TO GUIDE THE PROPOSED**  
17 **RATE DESIGN.**

18 A. The proposed rate design was guided by several principles common throughout the  
19 industry, including: (a) rates should recover the overall cost of providing service; (b) rates  
20 should be fair, minimizing inter- and intra-class inequities, to the extent possible; and (c)  
21 rate changes should be tempered by rate continuity concerns.<sup>19</sup> In addition, the proposed  
22 rate design was guided by several Company-specific objectives, including: (a) movement

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<sup>19</sup> See Bonbright, James, Danielsen, Albert, and Kamerschen, David. "Principles of Public Utility Rates." Public Utilities Reports, Inc. pp. 377-407 (2<sup>nd</sup> Ed. 1988).

1 to a more simplified rate design; (b) alignment with the proposed RSM; and (b) increased  
2 consistency in rate design between LAC and MGE.

3 Because these principles can conflict, the rate design process also includes a level of  
4 judgment to balance these principles.

5 **Q. HOW WERE THESE PRINCIPLES APPLIED IN THIS PROCEEDING?**

6 A. First, rates were designed to recover the overall cost of service. This was done by  
7 developing customer and consumption charges based on test year bills and usage. In  
8 addition, rates were designed to be fair and equitable. This was done by setting revenue  
9 targets at a level in aggregate closer to the system ROR. As discussed earlier, the results  
10 of the COSS show that some rate classes earn less than the overall ROR. The proposed  
11 rate design reduces that deficiency. Another rate design objective is to maintain pricing  
12 stability by minimizing the impact of changes in rates on customers. This objective was  
13 considered during both the setting of revenue targets, and again in reviewing the impact  
14 of proposed rates on customers' bills at various usage levels within customer classes.

15 **Q. PLEASE DESCRIBE HOW THE PROPOSED RATE DESIGN ALIGNS WITH**  
16 **THE COMPANY'S RSM PROPOSAL?**

17 A. The proposed rate design aligns with the RSM proposal through a meaningful reduction  
18 in Residential and SGS customer charges, as well as elimination of LAC's complicated  
19 block break structure for both base rates and PGA.

20 **Q. PLEASE DESCRIBE HOW THE PROPOSED RATE DESIGN INCREASES**  
21 **CONSISTENCY BETWEEN LAC AND MGE RATE STRUCTURES.**

22 A. The proposed rate design increases consistency between LAC and MGE's rate structures  
23 in the following ways:



- 1           • Similarity in residential customer charges;
- 2           • Similarity in residential consumption charges (\$ per therm for all customer
- 3           usage);
- 4           • Consistent treatment of landlords; and
- 5           • Similarity in General Service classifications.

6           In addition, the Company proposes to assess MGE consumption on a “per therm” basis  
7           rather than the current “per ccf” basis, as discussed by Laclede witness Weitzel.

8   **Q. PLEASE SUMMARIZE THE STEPS TAKEN TO DERIVE THE PROPOSED**  
9   **RATES.**

10 A. The first step to derive the proposed rates was to establish the overall revenue  
11 requirement to be recovered from base rates. The next step was to set revenue targets for  
12 each rate class based on the results of the COSS, as shown on Schedule TSL-D10. Rates  
13 within each customer class were then designed to recover the revenue requirements based  
14 on test year customer and usage data.

15 **Q. WHAT IS THE TOTAL REVENUE REQUIREMENT THAT YOU USED AS A**  
16 **STARTING POINT?**

17 A. To determine the total revenue requirement for each operating unit, I relied on  
18 information from the overall cost of service presented in the testimony and accounting  
19 schedules of Laclede witness Noack. As shown on Schedule TSL-D5, LAC’s total  
20 revenue requirement was then reduced by revenues related to the Street Lighting and  
21 Propane customer classes and other revenues to calculate revenue requirements. Schedule  
22 TSL-D6 shows MGE’s total revenue requirement was reduced by the revenues related to

1 Street Lighting customer class and other revenues to calculate revenue requirements for  
2 the MGE rate classes.

3 **Q. PLEASE DESCRIBE THE PROCESS USED TO SET THE REVENUE**  
4 **REQUIREMENT TARGETS FOR EACH RATE CLASS.**

5 A. Since each rate class presently earns a ROR that is different than the overall system ROR  
6 (as shown in Figure 8 and Figure 10), the starting point for setting the revenue targets for  
7 each rate class was based on their revenues at equalized rates of return.

8 **Q. IN GENERAL, HOW DID YOU DETERMINE THE APPROPRIATE RATE**  
9 **DESIGN WITHIN EACH RATE CLASS?**

10 A. The proposed rates were designed to recover 100 percent of the proposed revenue  
11 requirement. Specifically, rates were designed by first reviewing the customer charge to  
12 evaluate what level of fixed cost is reasonable to be recovered through customer charges  
13 consistent with rate design objectives identified above. This step included evaluating the  
14 existing customer and ISRS charges, as well as the results of the COSS. As discussed  
15 earlier, the customer charges were designed to be meaningfully lower in alignment with  
16 the Company's RSM proposal. The charges were also designed to increase consistency  
17 between LAC's and MGE's Residential and SGS rate classes, respectively.

18 Once customer charge levels were established, the remaining revenue requirement for  
19 each class was recovered via the consumption charges, as shown in Schedules TSL-D11  
20 for LAC and TSL-D12 for MGE. As discussed earlier, the objective in setting customer  
21 charges for LAC's Residential, SGS, and LGS rate classes was to increase consistency  
22 with MGE's corresponding rate classes. The process to set consumption charges was  
23 iterative and balanced several rate design considerations, including revenue recovery,

1 fairness, bill continuity, and to increase the consistency between LAC and MGE. The  
2 proposed RSM enabled the Company to by and large eliminate the current blocked rate  
3 structure, including the PGA structure at LAC. The rate design for each rate class of  
4 LAC and MGE are discussed in Section VI and Section VII.

5 **V. LAC RATE DESIGN AND BILL IMPACT ANALYSES**

6 **Q. PLEASE DESCRIBE THE PROCESS USED TO SET THE REVENUE**  
7 **REQUIREMENT TARGETS FOR EACH RATE CLASS.**

8 A. First, the process began with those LAC rate classes that are earning below their  
9 equalized rates of return; i.e., the Residential and SGS rate classes:

- 10 • The Residential class presently generates revenues equal to only 81 percent of what is  
11 needed to achieve the system rate of return. Based on this deficiency, the revenue target  
12 for the Residential class was set based on approximately 40 percent movement toward  
13 revenues needed to achieve the system rate of return.
- 14 • The SGS class presently generates revenues equal to only 78 percent of what is needed to  
15 achieve the system rate of return. Based on this deficiency, the revenue target for the  
16 SGS class was set based on a 40 percent movement toward revenues needed to achieve  
17 the system rate of return.
- 18 • The revenue targets for the other rate classes were based on the revenues needed to  
19 achieve the system rate of return, adjusted for the revenue shortfall from the Residential  
20 and SGS rate classes as discussed above. The revenue shortfall was allocated to the other  
21 rate classes in a manner to produce no revenue increase over the current revenues,  
22 inclusive of ISRS revenues.

- 1 • The Interruptible class generates a rate of return of approximately 90 percent, well above  
2 the system average and all other rate classes. The reason for their high rate of return is  
3 that the COSS allocates significantly less demand related costs to this rate class than  
4 other rate classes because LAC has the ability to curtail Interruptible customers on the  
5 design day, thus system planners do not need to take the customer demands of this class  
6 into account when constructing new mains. At the same time, there is recognition that  
7 existing facilities are utilized by Interruptible customers. These considerations, together  
8 with the rate design principle of gradualism, lead LAC to conclude that the proposed  
9 revenue targets should reflect the current revenues, inclusive of ISRS revenues.

10 **IN GENERAL, HOW DID YOU DETERMINE THE APPROPRIATE RATE**  
11 **DESIGN WITHIN EACH OF LAC'S RATE CLASSES?**

- 12 A. Rates were designed by first examining the customer charge for a given customer class to  
13 determine what level of fixed costs may be recovered through customer charges  
14 consistent with rate design objectives identified above, including increased consistency  
15 between LAC and MGE. This involved evaluating the existing customer charges by rate  
16 class, current ISRS charges, and comparing those amounts to the results of the COSS.  
17 LAC proposes to moderate the impact of its customer charges on low-use customers by  
18 reducing customer charges. The current customer charges were designed to recover  
19 customer-related costs as well as mitigate the impact of weather on customer bills and  
20 utility revenues. However, with adoption of the RSM, such customer charge levels are  
21 less necessary to mitigate the impact of weather, enabling LAC to adopt a lower customer  
22 charge.

1 Once customer charge levels were set, the remaining revenue requirements for each class  
2 were recovered via the consumption charges, as shown in Schedule TSL-D11. The  
3 Company proposes to simplify LAC's consumption charges by eliminating the current  
4 seasonal and block break structures. The current block rate consumption charges were  
5 designed to mitigate the impact of weather on customer bills and utility revenues.  
6 However, with adoption of the RSM such complex rate design is less necessary enabling  
7 the Company to adopt a more simplified rate design.

8 The rate design process was an iterative process that balanced several rate design  
9 considerations, including revenue recovery, fairness, and bill continuity.

10 **Q. WERE THERE ANY TIMING CONSIDERATIONS RELATED TO THE**  
11 **PROPOSED RESIDENTIAL RATE DESIGN CHANGES?**

12 A. Yes. The proposed Residential rate design changes effectively shift cost recovery from  
13 customer-related charges to consumption-related charges. The Company is concerned  
14 that such shift could result in an under-recovery of costs within the fiscal year of the shift.  
15 Revenues from customer-related charges are evenly distributed throughout the year;  
16 whereas, revenues from consumption-related charges are proportionately higher in the  
17 winter months and lower in the summer months. The shift from customer-related  
18 revenues to consumption-related revenues hinders LAC's ability to recover its cost of  
19 service within the fiscal year of the shift since the proposed rate design changes will  
20 occur during the summer months. To address this under-recovery of costs, LAC  
21 proposes to implement the Residential customer charge decrease in October 2018. In  
22 effect, LAC is proposing two sets of residential rate designs: (a) a transitional rate design  
23 prior to October 2018 that reflects customer charges at the current level plus ISRS

1 charges; and (b) the new rate design beginning October 2018 that reflects a lower  
2 customer charge and correspondingly higher consumption charges. October 2018 also  
3 reflects when the RSM would be implemented.

4 **Q. PLEASE DESCRIBE THE PROPOSED RATE DESIGN FOR EACH RATE**  
5 **CLASS.**

6 A. The proposed rate design for each rate class is described below.

7 Residential

8 The proposed rates were based on a revenue requirement target of \$308.8 million, annual  
9 customer bills of 7,267,620 and annual usage of 488,185,483 therms. LAC proposes to  
10 increase the monthly customer charge from \$19.50 to \$23.50 for the transition period  
11 ending in September 2018. The proposed customer charge is based on the current  
12 customer charge, adjusted for the ISRS charge. Beginning in October 2018, the  
13 Company proposes to reduce LAC's Residential customer charge to \$17.00, while  
14 correspondingly increasing the consumption charge to recover the remaining class  
15 revenue requirement. It is important to note that the proposed reduction in the  
16 Residential customer charge is made possible through implementation of the RSM.  
17 Absent the RSM or a similar mechanism that mitigates the impact of weather on  
18 customer bills and utility revenues, the Company would not propose to reduce  
19 Residential customer charges.

20 The revenue requirement not recovered through the customer charge is then recovered  
21 through a single volumetric charge of \$0.28286 per therm during the transition period  
22 ending in September 2018. The proposed consumption charge has been simplified to be  
23 a single charge for all consumption. This approach is consistent with MGE's residential



1 consumption charge. Beginning in October 2018, the Company proposes to increase  
2 LAC's consumption charge to \$0.37962 per therm concurrent with the reduction in  
3 LAC's Residential customer charge. The proposed rate design and bill impact analysis  
4 are included in Schedule TSL-D11.

5 Small General Service

6 The proposed rates were based on a revenue requirement target of \$31.3 million, annual  
7 customer bills of 444,484 and annual usage of 77,590,502 therms. As discussed earlier,  
8 the proposed SGS class includes customers presently in the C1 rate class and C2 rate  
9 class, for those who consume 10,000 therms or less per year. The proposed SGS  
10 availability of 10,000 therms or less per year is consistent with MGE's current SGS rate  
11 class. The Company proposes a customer charge of \$35.00, representing a change in the  
12 current C1 and C2 customer charge of \$25.50 and \$44.29, respectively.

13 It is important to note that the proposed SGS customer charge reflects implementation of  
14 the RSM, which address the impact of weather on customer bills and utility revenues.  
15 Absent the RSM or a similar mechanism that mitigates the impact of weather on  
16 customer bills and utility revenues, the Company would propose higher SGS customer  
17 charges.

18 The revenue requirement not recovered through the customer charge is then recovered  
19 through a single consumption charge of \$0.20318 per therm. The proposed consumption  
20 charge has been simplified to be a single charge for all consumption. This approach is  
21 consistent with MGE's SGS consumption charge. The proposed rate design and bill  
22 impact analysis are included in Schedule TSL-D11.

23 Large General Service

1 The proposed rates were based on a revenue requirement target of \$24.9 million, annual  
2 customer bills of 44,644 and annual usage of 132,304,153 therms. As discussed earlier,  
3 the proposed LGS class includes customers presently in the C3 rate class and C2 rate  
4 class, for those who consume more than 10,000 therms per year. The proposed LGS  
5 availability of more than 10,000 therms per year is generally consistent with MGE's  
6 current LGS rate class. The Company proposes a customer charge of 125.00 per month,  
7 representing a change in the current C2 and C3 customer charges of \$44.29 and \$88.57,  
8 respectively. The revenue requirement not recovered through the customer charge is then  
9 recovered through a single consumption charge of \$0.14625 per therm. The proposed  
10 consumption charge has been simplified to be a single charge for all consumption. The  
11 proposed rate design and bill impact analysis are included in Schedule TSL-D11.

#### 12 Large Volume Service

13 The proposed rates were based on a revenue requirement target of \$1.9 million, annual  
14 customer bills of 818 and annual usage of 10,059,571 therms. The Company proposes to  
15 increase the monthly customer charge from \$874.78 to \$1,000.00 for the LV class to  
16 recover a larger portion of the revenue requirements through fixed charges. The revenue  
17 requirement not recovered through the customer charge is then recovered through a single  
18 volumetric charge of \$0.02641 per therm. The proposed consumption charge has been  
19 simplified to be a single charge for all consumption. The proposed demand charge is  
20 \$1.00635 per therm. The consumption and demand charges were designed to recover the  
21 same percentage of the non-customer charge revenues as the current rates. The proposed  
22 rate design and bill impact analysis are included in Schedule TSL-D11.

#### 23 Interruptible Service

1 The proposed rates were based on a revenue requirement target of \$0.9 million, annual  
2 customer bills of 249 and annual usage of 7,107,794 therms. The Company proposes to  
3 increase the monthly customer charge from \$776.36 to \$935.00 to recover a larger  
4 portion of the revenue requirements through fixed charges. The revenue requirement not  
5 recovered through the customer charge is then recovered through a single volumetric  
6 charge of \$0.1042 per therm. The proposed consumption charge has been simplified to  
7 be a single charge for all consumption. The proposed rate design and bill impact analysis  
8 are included in Schedule TSL-D11.

9 Vehicular Fuel

10 The proposed rates were based on a revenue requirement target of \$0.2 million, annual  
11 customer bills of 95 and annual usage of 3,193,198 therms. LAC proposes to increase the  
12 monthly customer charge from \$22.09 to \$50.00 to recover a larger portion of the  
13 revenue requirements through fixed charges. The revenue requirement not recovered  
14 through the customer charge is then recovered through a volumetric charge of \$0.05295  
15 per therm. The proposed rate design and bill impact analysis are included in Schedule  
16 TSL-D11.

17 Transportation

18 The proposed rates were based on a revenue requirement target of \$14.1 million, annual  
19 customer bills of 1,700 and annual usage of 183,302,053 therms. LAC proposes to  
20 increase the monthly customer charge from \$2,069.94 to \$2,500.00 to recover a larger  
21 portion of the revenue requirements. The revenue requirement not recovered through the  
22 customer charge is then recovered through volumetric charges of \$0.02533 per therm for  
23 the first 100,000 therms usage and \$0.01060 per therm for all additional usage. The

1 volumetric charges were designed to recover the same percentage of first block/ second  
2 block revenues as the current rates. The proposed reservation charge for Transportation  
3 customers is \$0.60575 per therm. The proposed rate design and bill impact analysis are  
4 included in Schedule TSL-D11.

5 **Q. HAVE YOU EXAMINED THE IMPACT OF YOUR PROPOSED CHANGE IN**  
6 **RATES ON CUSTOMERS WITHIN EACH RATE CLASS?**

7 A. Yes. As shown in Schedule TSL-D11, the Company evaluated the bill impacts of the  
8 proposed changes on customers based on a range of annual usage within each rate class.  
9 The range of annual usage represents a distribution across the rate classes. The proposed  
10 annual bill is based on the proposed base rates. The current annual bill is based on the  
11 current base rates plus the current ISRS rates. The bill impact analysis was calculated  
12 using two approaches: (a) without a PGA charge, to evaluate only the change in the  
13 delivery portion of the customer bill; and (b) with a PGA charge, to evaluate the change  
14 in the total customer bill.

15 **Q. DOES THE COMPANY HAVE ANY CONCERNS RELATED TO THE**  
16 **PROPOSED LAC RATE DESIGN?**

17 A. Yes. The Company's concern is related to the impact on weather. As discussed earlier,  
18 the proposed rate design assumes adoption of the RSM, which addresses the Company's  
19 concerns related to the impact of weather on customer bills and utility revenues. To the  
20 extent that the RSM is not adopted, then the Company would need to revise the proposed  
21 rate design in a manner that mitigates the impact of weather on customer bills and utility  
22 revenues, consistent with the current rate design. Such revision would include higher  
23 customer charges and continuation of the seasonal and blocked rate structure.

1                   **VI. MGE RATE DESIGN AND BILL IMPACT ANALYSES**

2   **Q. PLEASE DESCRIBE THE PROCESS USED TO SET THE REVENUE**  
3   **REQUIREMENT TARGETS FOR EACH RATE CLASS.**

4   A. First, MGE began with those rate classes that are earning below their equalized rates of  
5   return; i.e., the Residential and SGS rate classes.

- 6   • The Residential class presently generates revenues equal to 78 percent of what is needed  
7   to achieve the system rate of return. Based on this deficiency, the revenue target for the  
8   Residential class was set based on the revenues needed to achieve the system rate of  
9   return.

- 10   • The SGS class presently generates revenues equal to only 67 percent of what is needed to  
11   achieve the system rate of return. Based on this deficiency, the revenue target for the  
12   SGS class was set based on a 50 percent movement toward revenues needed to achieve  
13   the system rate of return.

- 14   • The revenue targets for the other rate classes were based on the revenues need to achieve  
15   the system rate of return, adjusted for the revenue shortfall from the SGS class as  
16   discussed above. The revenue shortfall was allocated to the other rate classes to achieve  
17   a uniform increase over the current revenues.

18   **Q. IN GENERAL, HOW DID YOU DETERMINE THE APPROPRIATE RATE**  
19   **DESIGN WITHIN EACH OF MGE'S RATE CLASSES?**

20   A. Consistent with the approach taken to design LAC's rates, MGE's rates were designed by  
21   first examining the customer charge for a given customer class to determine what level of  
22   fixed costs may be recovered through customer charges consistent with rate design  
23   objectives identified above, including increased consistency between LAC and MGE.

1 This involved evaluating the existing customer charges by rate class, current ISRS  
2 charges, and comparing those amounts to the results of the COSS.

3 The Company proposes to moderate the impact of its customer charges on low-use  
4 customers by reducing customer charges. The current customer charges were designed  
5 recover customer-related costs as well as mitigate the impact of weather on customer bills  
6 and utility revenues. However, with adoption of the RSM, such customer charges are  
7 less necessary enabling the Company to adopt lower customer charges.

8 Once customer charge levels were set, the remaining revenue requirements for each class  
9 were recovered via the consumption charges, as shown in Schedule TSL-D12.

10 **Q. WERE THERE ANY TIMING CONCERNS RELATED TO THE PROPOSED**  
11 **RESIDENTIAL RATE DESIGN CHANGES?**

12 A. Yes. As discussed earlier, the proposed residential rate design effectively shifts cost  
13 recovery from customer-related charges to consumption-related charges. The Company's  
14 proposed solution is to implement two sets of residential rate designs: (a) a transitional  
15 rate design prior to October 2018 that reflects customer charges at the current level plus  
16 ISRS charges; and (b) a new rate design beginning October 2018 that reflects lower  
17 customer charges. October 2018 also reflects when the RSM would be implemented.

18 Once customer charge levels were set, the remaining revenue requirements for each class  
19 were recovered via the consumption charges, as shown in Schedule TSL-D12. The rate  
20 design process was an iterative process that balanced several rate design considerations,  
21 including revenue recovery, fairness, and bill continuity. Below is a description of the  
22 rate design for each rate class.

23 Residential



1 The proposed rates were based on a revenue requirement target of \$198.6 million, annual  
2 customer bills of 5,621,516 and annual usage of 366,148,361therms. The Company  
3 proposes to increase the monthly customer charge from \$23.00 to \$25.50 for the  
4 transition period ending in September 2018. The proposed customer charge is based on  
5 the current customer charge, adjusted for the current ISRS charge. Beginning in October  
6 2018, the Company proposes to reduce MGE's residential customer charge to \$20.00,  
7 while correspondingly adjusting the consumption charge to recover the Residential class  
8 revenue requirement. It is important to note that the proposed reduction in the residential  
9 customer charge is made possible through implementation of the RSM, which addresses  
10 the impact of weather on customer bills and utility revenues. Absent the RSM or a  
11 similar mechanism that mitigates the impact of weather on customer bills and utility  
12 revenues, the Company would not propose such reduction in residential customer  
13 charges.

14 The revenue requirement not recovered through the customer charge is then recovered  
15 through a single consumption charge of \$0.15055 per therm during the transition period  
16 ending in September 2018. Beginning in October 2018, the Company proposed to  
17 increase MGE's consumption charge to \$0.23500 per therm concurrent with the reduction  
18 in MGE's residential customer charge. The proposed rate design and bill impact analysis  
19 are included in Schedule TSL-D12.

#### 20 Small General Service

21 The proposed rates were based on a revenue requirement target of \$20.7 million, annual  
22 customer bills of 355,642 and annual usage of 56,239,220 therms. The Company

1 proposes to increase the monthly customer charge from \$34.00 to \$40.00 to recover a  
2 larger portion of the revenue requirements through fixed charges.

3 It is important to note that the proposed SGS customer charge reflects implementation of  
4 the RSM, which addresses the impact of weather on customer bills and utility revenues.  
5 Absent the RSM or a similar mechanism that mitigates the impact of weather on  
6 customer bills and utility revenues, the Company would propose higher SGS customer  
7 charges.

8 The revenue requirement not recovered through the customer charge is then recovered  
9 through a single consumption charge of \$0.11169 per therm. The proposed rate design  
10 and bill impact analysis are included in Schedule TSL-D12.

11 Large General Service

12 The proposed rates were based on a revenue requirement target of \$14.0 million, annual  
13 customer bills of 39,157 and annual usage of 74,357,619 therms. MGE proposes to  
14 increase the monthly customer charge from \$115.40 to 125.00 to recover a larger portion  
15 of the revenue requirements through fixed charges. The revenue requirement not  
16 recovered through the customer charge is then recovered through a consumption charge  
17 \$0.14819 per therm for peak winter period (November to March), and through a  
18 consumption charge of \$0.08541 per therm for off-peak summer period (April to  
19 October). The consumption charges were designed to recover the same percentage of  
20 consumption revenues in the peak and off-peak periods as the current rates. The  
21 proposed rate design and bill impact analysis are included in Schedule TSL-D12.

22 Large Volume Service

1 The proposed rates were based on a revenue requirement target of \$15.3 million, annual  
2 customer bills of 4,745 and annual usage of 266,738,665 therms. MGE proposes to  
3 increase the monthly customer charge from \$904.56 to \$1,275.00 to recover a larger  
4 portion of the revenue requirements through fixed charges. The revenue requirement not  
5 recovered through the customer charge is then recovered through consumption charges in  
6 the peak period of \$0.04485 per therm for the first 30,000 therms usage and \$0.03520 per  
7 therm for all additional usage, and in the off-peak period of \$0.02837 per therm for the  
8 first 30,000 therms usage and \$0.01872 per therm for all additional usage. The  
9 consumption charges were designed to recover the same percentage of revenues in the  
10 peak and off-peak periods, and head block and tail block rates, respectively, as the  
11 current rates. The proposed rate design and bill impact analysis are included in Schedule  
12 TSL-D12.

13 **Q. HAVE YOU EXAMINED THE IMPACT OF THE PROPOSED CHANGE IN**  
14 **RATES ON CUSTOMERS WITHIN EACH RATE CLASS?**

15 A. Yes. As shown in Schedule TSL-D12, the Company evaluated the bill impacts of the  
16 proposed changes on customers based on a range of annual usage within each rate class.  
17 The range of annual usage represents a distribution across the rate classes. The proposed  
18 rates were based on the rate design discussed above. The current annual bill is based on  
19 the current base rates plus the current ISRS rates. The bill impact analysis was calculated  
20 using two approaches: (a) without a PGA charge, to evaluate the change in the delivery  
21 portion of the customer bill; and (b) with a PGA charge, to evaluate the change in the  
22 total customer bill.

1 **Q. DOES THE COMPANY HAVE ANY CONCERNS RELATED TO THE**  
2 **PROPOSED MGE RATE DESIGN?**

3 A. Yes. The Company has two concerns. The first concern is related to the impact of  
4 weather on customer bills and utility revenues. As discussed earlier, the proposed rate  
5 design assumes adoption of the RSM, which addresses the Company's concerns related  
6 to the impact of weather on customer bills and utility revenues. To the extent that the  
7 RSM is not adopted, then the Company would need to revise the proposed rate design in  
8 a manner that mitigates the impact of weather on customer bills and utility revenues,  
9 consistent with the current rate design. Such revision would include higher customer  
10 charges. The Company believes that the proposed RSM or some form of revenue  
11 decoupling is a much better alternative.

12 **Q. WHAT IS THE COMPANY'S SECOND CONCERN RELATED TO MGE'S**  
13 **PROPOSED RATE DESIGN?**

14 A. The Company is concerned about potential revenue erosion related to the relationship  
15 between the current LGS and LV tariffs. Presently, certain customers are eligible for  
16 both tariffs and as a result may decide to migrate from one rate class to another  
17 depending on which class offers the lowest rates. Such migration could lead to a  
18 significant loss in revenues. While such migration is possible today, the Company is  
19 concerned that the proposed rate design changes may increase the incentive for customers  
20 to migrate in the future. There are several possible solutions to address the potential  
21 revenue erosion from such possible migration, including (a) a restriction on the  
22 availability of each tariff, (b) modifications to the proposed customer charges, and/or (c)  
23 development of a rider to track and recover such revenue erosion. The Company

1 recognizes the potential customer impacts associated with each of these solutions as well  
2 as other alternatives. Rather than make a specific proposal in this filing, the Company  
3 proposes to establish a process with the parties in this proceeding on approaches that  
4 would best meet customer needs.

5 **Q. HOW DOES THE PROPOSED RATE DESIGN ADDRESS THE PROBLEMS**  
6 **THAT ARISE FROM THE CURRENT RATE DESIGN?**

7 A. The proposed rate design addresses the problems that arise from the current rate design  
8 because it:

- 9 • Stabilizes the non-gas portion of customer bills, minimizing variations with  
10 weather and/or other changes in use;
- 11 • Provides the Company with a more stable stream of revenues and helps prevent  
12 an over-collection and under-collection of costs as actual use varies from test year  
13 use due to weather and/other changes in customer use;
- 14 • Helps ensure recovery of fixed costs;
- 15 • Addresses the relative large bills paid by low-use customers;
- 16 • Eliminates the Company's financial disincentive to promote energy efficiency  
17 measures; and
- 18 • Simplifies the PGA rate by eliminating the head block/ tail block rate design,  
19 helping to reduce the over/ under collection of gas costs based on variations in  
20 usage.

21 **Q. DOES THIS COMPLETE YOUR DIRECT TESTIMONY?**

22 A. Yes.

## Testimony Experience

Timothy S. Lyons  
ScottMadden, Inc.

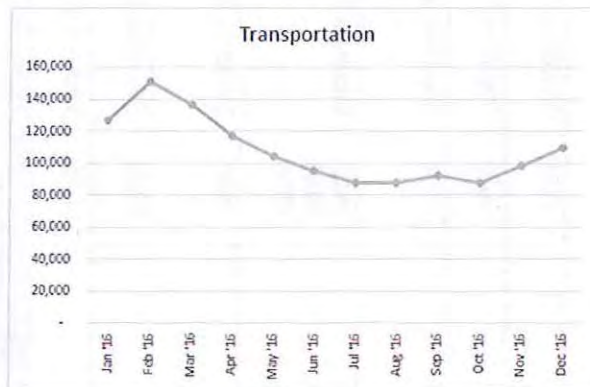
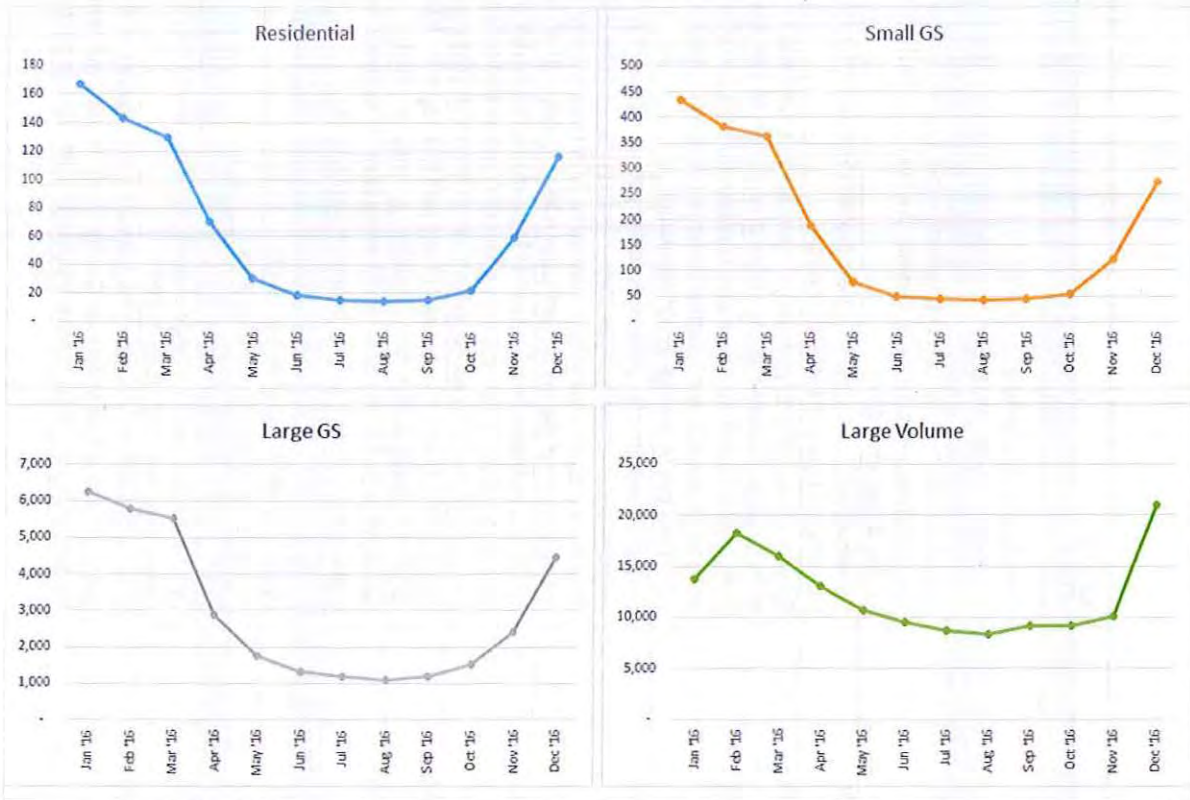
<b>Sponsor</b>	<b>Date</b>	<b>Docket No.</b>	<b>Subject</b>
<b>Regulatory Commission of Alaska</b>			
ENSTAR Natural Gas Company	06/16	Docket No. U-16-066	Adopted testimony and sponsored lead-lag study.
<b>Connecticut Public Utilities Regulatory Authority</b>			
Yankee Gas Company	07/14	Docket No. 13-06-02	Sponsored report and testimony for review and evaluation of gas expansion policies, procedures and analysis.
<b>Illinois Commerce Commission</b>			
Liberty Utilities (Midstates Natural Gas)	07/15	Docket No. 16-0401	Sponsored testimony for cost of service, rate design and bill impact studies for a general rate case proceeding. The testimony includes proposal for new commercial classes and a decoupling mechanism.
<b>Iowa Utilities Board</b>			
Liberty Utilities (Midstates Natural Gas)	07/15	Docket No. RPU-2016-0003	Sponsored testimony for cost of service, rate design and bill impact studies for a general rate case proceeding. The testimony includes proposal for new commercial classes.
<b>Maine Public Utilities Commission</b>			
Northern Utilities, Inc. d/b/a Unitil Gas Limited	06/15	Case No. 2015-00146	Sponsored testimony for proposed gas expansion program, including a zone area surcharge.
<b>Maryland Public Service Commission</b>			
Sandpiper Energy, Inc.	12/15	Case No. 9410	Sponsored testimony for cost of service, rate design and bill impact studies for a general rate case proceeding. The testimony includes proposal for new residential and commercial classes.
<b>Massachusetts Department of Public Utilities</b>			
Boston Gas	03/88	Docket No. DPU 88-67-II	Sponsored testimony for rate reclassification of commercial and industrial customers for rate design proceeding.
Boston Gas	03/90	DPU 90-55	Sponsored testimony for weather and other cost of service adjustments, rate design and customer bill impact studies for general rate case proceeding.
Boston Gas	10/93	DPU 92-230	Sponsored testimony describing the Company's position regarding rate treatment of vehicular natural gas investments and expenses.
<b>New Hampshire Public Utilities Commission</b>			
Liberty Utilities d/b/a Granite State Electric Company	04/16	Docket No. DE 16-383	Adopted testimony and sponsored lead-lag study.



<b>Sponsor</b>	<b>Date</b>	<b>Docket No.</b>	<b>Subject</b>
<b>New Jersey Board of Public Utilities</b>			
Pivotal Utility Holdings, Inc. d/b/a Elizabethtown Gas Company	8/16	GR16090826	Sponsored testimony for lead-lag study
<b>Rhode Island Public Utilities Commission</b>			
Providence Gas Company	01/96	Docket No. 2076	Sponsored testimony for rate reclassification of customers into new rate classes, rate design (including introduction of demand charges), and customer bill impact studies for rate design proceeding.
Providence Gas Company	11/92	Docket No. 2025	Sponsored testimony supporting the Integrated Resource Plan filing, including a performance-based incentive mechanism.
Providence Gas Company	02/96	Docket No. 2374	Sponsored testimony for rate design, customer bill impact studies and retail access tariffs for largest commercial and industrial customers for rate design proceeding.
Providence Gas Company	04/97	Docket No. 2552	Sponsored testimony for rate design, customer bill impact studies and retail access tariffs for commercial and industrial customers, including redesign of cost of gas adjustment clause, for rate design proceeding.
Providence Gas Company	08/01 09/00 08/96	Docket No. 1673	Sponsored testimony for changes in cost of gas adjustment factor related to projected under-recovery of gas costs; Filed testimony and witness for pilot hedging program to mitigate price risks to customers; Filed testimony and witness for changes in cost of gas adjustment factor related to extension of rate plan.
Providence Gas Company	06/97	Docket No. 2581	Sponsored testimony for rate plan that fixed rates for three-year period; included funding for critical infrastructure investments in accelerated replacement of mains and services, digitized records system, and economic development projects.
Providence Gas Company	08/00	Docket No. 2581	Sponsored testimony for extension of rate plan that began in 1997 and included certain modifications, including a weather normalization clause.
Providence Gas Company	03/00	Docket No. 3100	Sponsored testimony for de-tariff and deregulation of appliance repair service, enabling the Company to have needed pricing flexibility.
<b>Railroad Commission of Texas</b>			
CenterPoint Energy – Texas Gulf Division	11/16	GUD No. 10567	Sponsored testimony for lead-lag study.
Atmos Pipeline – Texas	01/17	GUD No. 10580	Sponsored testimony for lead-lag study.
<b>Vermont Public Service Board</b>			
Vermont Gas Systems	02/11	Docket No. 7712	Sponsored testimony for market evaluation and analysis to support establishment of system expansion and reliability fund.
Vermont Gas Systems	12/12	Docket No. 7970	Sponsored testimony describing the customers to be served by a \$90 million natural gas expansion project to Addison County, Vermont; also describing the benefits of the project as well as the Company's programs and service offerings.

## LACLEDE GAS COMPANY

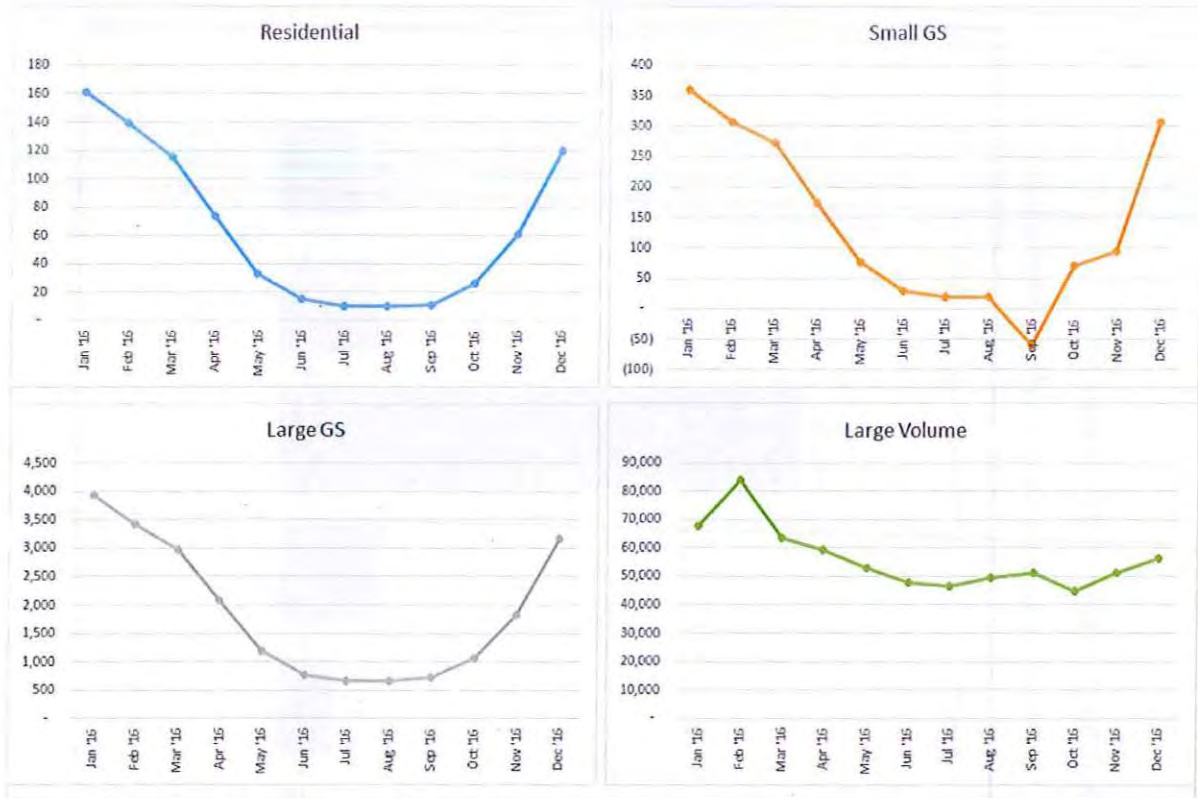
### Analysis of Use per Customer





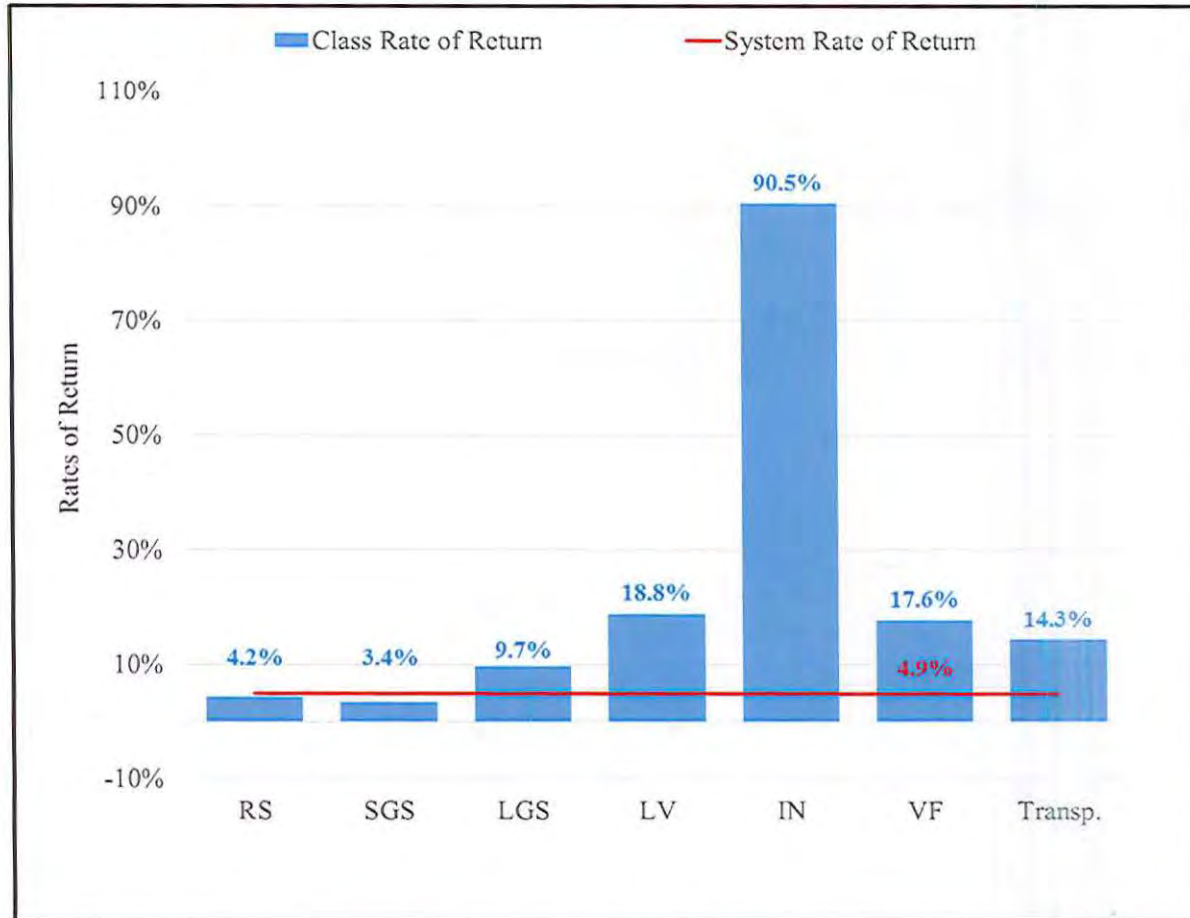
## MISSOURI GAS ENERGY

### Analysis of Use per Customer



### COSS Results (Laclede Gas Company)

Class Rates of Return vs. Overall Rate of Return at Current Delivery Service Rates



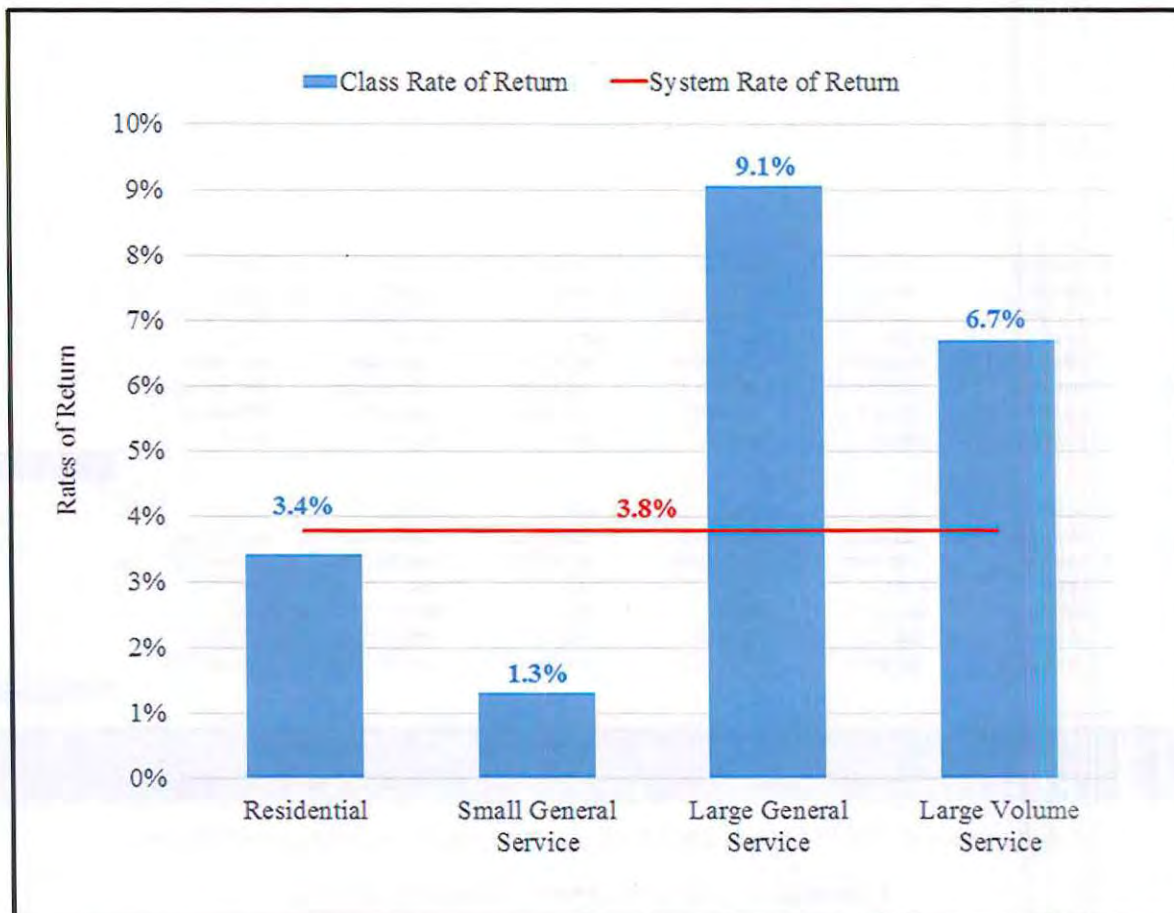
### COSS Results (Laclede Gas Company)

Class Rates of Return vs. Overall Rate of Return at Current Delivery Service Rates

Laclede Gas Company COSS Summary	Total Company	Residential RS	Small General Srv SGS	Large General Srv LGS	Large Volume LV	Interruptible IN	Vehicular Fuel VF	Transportation Transp.
<b>Current Delivery Service Rates</b>								
Rate base	1,231,687,251	1,009,181,043	100,315,016	80,645,759	3,920,909	520,426	374,289	36,729,811
Net operating income	59,911,031	42,115,812	3,428,861	7,850,121	735,922	471,209	65,989	5,243,117
Rate of return	4.86%	4.17%	3.42%	9.73%	18.77%	90.54%	17.63%	14.27%
Relative rate of return	100%	86%	70%	200%	386%	1861%	962%	293%
Revenues	\$ 329,345,163	\$ 261,790,821	\$ 26,114,152	\$ 24,882,692	\$ 1,801,067	\$ 944,654	\$ 175,717	\$ 13,636,058
Test Period Usage (therms)	901,742,754	488,185,483	77,590,502	132,304,153	10,059,571	7,107,794	3,193,198	183,302,053
Revenue per therm	\$ 0.3652	\$ 0.5363	\$ 0.3366	\$ 0.1881	\$ 0.1790	\$ 0.1329	\$ 0.0550	\$ 0.0744
<b>Revenues at Equalized Rates of Return</b>								
Rate of return	7.700%	7.700%	7.700%	7.700%	7.700%	7.700%	7.700%	7.700%
Return requirement	94,839,918	77,706,940	7,724,256	6,209,723	301,910	40,073	28,820	2,828,195
Revenue required	387,402,507	320,687,969	33,202,907	22,298,766	1,100,510	245,752	115,797	9,750,807
Revenue deficiency	58,057,344	58,897,147	7,088,755	(2,583,927)	(700,558)	(698,902)	(59,920)	(3,885,252)
Percent increase required	17.6%	22.5%	27.1%	-10.4%	-38.9%	-74.0%	-34.1%	-28.5%
Test Period Usage (therms)	901,742,754	488,185,483	77,590,502	132,304,153	10,059,571	7,107,794	3,193,198	183,302,053
Revenue Required per therm	\$ 0.4296	\$ 0.6569	\$ 0.4279	\$ 0.1685	\$ 0.1094	\$ 0.0346	\$ 0.0363	\$ 0.0532
Revenue Deficiency per therm	\$ 0.0644	\$ 0.1206	\$ 0.0914	\$ (0.0195)	\$ (0.0696)	\$ (0.0983)	\$ (0.0188)	\$ (0.0212)

### COSS Results (Missouri Gas Energy)

Class Rates of Return vs. Overall Rate of Return at Current Delivery Service Rates





**COSS Results (Missouri Gas Energy)**

Class Rates of Return vs. Overall Rate of Return at Current Delivery Service Rates

Missouri Gas Energy COSS Summary	Total Company	Residential RS	Small General Srv SGS	Large General Srv LGS	Large Volume Srv LVS
<b>Current Delivery Service Rates</b>					
Rate base	792,519,685	618,157,423	72,784,240	45,186,472	56,391,550
Net operating income	30,045,198	21,210,088	962,616	4,096,123	3,776,371
Rate of return	3.79%	3.43%	1.32%	9.06%	6.70%
Relative rate of return	100%	91%	35%	239%	177%
Revenues	\$ 199,714,711	\$ 156,916,485	\$ 15,096,494	\$ 13,248,104	\$ 14,453,629
Test Period Usage (therms)	763,483,865	366,148,361	56,239,220	74,357,619	266,738,665
Revenue per therm	\$ 0.2616	\$ 0.4286	\$ 0.2684	\$ 0.1782	\$ 0.0542
<b>Revenues at Equalized Rates of Return</b>					
Rate of return	7.70%	7.70%	7.70%	7.70%	7.70%
Return requirement	61,024,016	47,598,122	5,604,386	3,479,358	4,342,149
Revenue required	250,115,780	199,842,228	22,641,317	12,252,925	15,379,312
Revenue deficiency	50,401,069	42,925,743	7,544,823	(995,179)	925,683
Percent increase required	25.2%	27.4%	50.0%	-7.5%	6.4%
Test Period Usage (therms)	763,483,865	366,148,361	56,239,220	74,357,619	266,738,665
Revenue Required per therm	\$ 0.3276	\$ 0.5458	\$ 0.4026	\$ 0.1648	\$ 0.0577
Revenue Deficiency per therm	\$ 0.0660	\$ 0.1172	\$ 0.1342	\$ (0.0134)	\$ 0.0035



**Summary of Classifiers**  
 External Classifiers

Classifier	Classification of:	Classifier Derivation	Rationale
Customer Factor (CUS)	<p><b>Rate Base:</b>                      Account 380: Services                      Account 381 - Meters                      Account 382 - Meter Installations<sup>1</sup>                      Account 383 - House Regulators                      Account 385 - Commercial &amp; Industrial Measuring and Regulating Equipment                      Account 386 - Other Property - Customer Premises                      Account 387 - Other Equipment                      Account 397 - Communication Equipment                      Customer Deposits</p> <p><b>Cost of Service:</b>                      Account 876 - Measuring and Regulating Station Expense-Industrial                      Account 878 - Meter and House Regulator Expense                      Account 879 - Customer Installation Expenses                      Account 890 - Maintenance of Measuring and Regulating Equipment-Industrial                      Account 892 - Maintenance of Services                      Account 893 - Maintenance of Meters and House Regulators                      Accounts 901 through 916 - Customer Account, Customer Services, and Sales and Advertising Expenses                      Account 928 – Regulatory Commission Expense</p>	Customer-related costs.	<p>Costs related to providing natural gas service to customers.</p> <p>This is generally consistent with the approach taken in the most recent cost of service study.</p>

<sup>1</sup> Account 382 Meter Installations is included in Account 381 Meters for Laclede Gas Company (“LAC”)

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Classifier	Classification of:	Classifier Derivation	Rationale
Demand Factor (DEM)	<p><b>Rate Base:</b><sup>2</sup>                      Accounts 304 through 311 - Production Plant                      Accounts 350 through 357 - Underground Storage Plant                      Accounts 360 through 363 - Other Storage Equipment                      Accounts 365 through 371 - Transmission Plant                      Accounts 378 and 379 – Measuring and Regulating Station Equipment                      Gas Inventory – Volumes and Prices</p> <p><b>Cost of Service:</b><sup>3</sup>                      Accounts 710 through 717, and Accounts 735 through 742 - Manufactured Gas Production expenses                      Accounts 814 through 843 – Natural Gas Storage expenses except Accounts 819, 823, 825, and 842.1.                      Account 875 - Distributing Regulating Station                      Account 877 - Measuring and Regulating Station Expenses - City Gate                      Accounts 889 and 891 - Maintenance of Measuring and Regulating Equipment – General and City Gate</p>	Demand-related costs.	<p>Costs related to serving peak day requirements.</p> <p>This is generally consistent with the approach taken in the most recent cost of service study.</p>

<sup>2</sup> There are no Production Plant, Underground Storage Plant, Other Storage Equipment, and Transmission Plant for Missouri Gas Energy (“MGE”)

<sup>3</sup> There are no Manufactured Gas Production and Natural Gas Storage expenses for MGE



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Classifier	Classification of:	Classifier Derivation	Rationale
Commodity Factor (COM)	<b>Cost of Service:</b> <sup>4</sup> Account 723 - Fuel for LPG Process Account 728 - LPG Accounts 804 through 812 - Purchased Gas expense Account 819 - Compressor Station Fuel & Power Account 823 - Gas Losses Account 825 - Storage Well Royalties Account 842.1 - Fuel Account 871 - Distribution and Load Dispatching Odorant Expenses	Commodity-related costs.	Costs related to providing supply service.
Non-Intangible Plant Factor (NINTPLT)	<b>Rate Base:</b> Account 301 through 303 - Intangible Plant Construction Work in Progress	Composite classification factor based on the classification of total non-intangible plant.	This is generally consistent with the approach taken in the most recent cost of service study.
Accounts 376-379 Factor (DIS376-379)	<b>Rate Base:</b> Account 374 - Land & Land Rights Account 375 - Structures & Improvements	Composite classification factor based on the total classification of Accounts 376 through 379.	This is generally consistent with the approach taken in the most recent cost of service study.
Distribution Plant Factor (DISPLT) <sup>5</sup> [MGE Only]	<b>Rate Base:</b> Accounts 389 through 396, Account 397.0, and Account 398 - General Plant  <b>Cost of Service:</b> Account 931 Rents	Composite classification factor based on the classification of total Distribution Plant.	This is generally consistent with the approach taken in the most recent cost of service study.

<sup>4</sup> There are no Production and Storage Expenses for MGE

<sup>5</sup> The DISPLT classifier is developed for MGE only. MGE does not have Production, Transmission, or Storage plant investments.

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Classifier	Classification of:	Classifier Derivation	Rationale
General Plant Factor (GENPLT)	<b>Cost of Service:</b> Account 932 - Maintenance of general plant	Composite classification factor based on the classification of total General Plant.	This is generally consistent with the approach taken in the most recent cost of service study.
Production, Transmission, and Distribution Plant Factor (PTD PLANT) <sup>6</sup> [LAC Only]	<b>Rate Base:</b> Accounts 389 through 396, and Account 398 - General Plant <b>Cost of Service:</b> Account 931 Rents	Composite classification factor based on the classification of total Transmission, Production, and Distribution Plant.	Investments in General Plant generally follow the classification of total other plant i.e. Production, Transmission, and Distribution Plant for LAC.
Mains and Services Factor (MAINSVC)	<b>Rate Base:</b> Customer Advances <b>Cost of Service:</b> Account 874 - Mains and Service Expenses	Composite classification factor based on the total classification of Accounts 376 and 380.	Investments and costs that generally follow the classification of Account 376 Mains and Account 380 Services. This is generally consistent with the approach taken in the most recent cost of service study.
Total Plant in Service Factor (TOTPLT)	<b>Rate Base:</b> Materials and Supplies Accumulated Deferred Income Taxes Other Regulatory Liabilities <b>Cost of Service:</b> Account 924 - Property insurance Property Taxes	Composite classification factor based on the classification of total plant.	Plant Investments and Costs that are classified based on total plant. This is generally consistent with the approach taken in the prior cost of service study.

<sup>6</sup> The PTD PLANT classifier is developed for LAC only as LAC has Distribution, Production, Transmission, and Storage plant investments



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Classifier	Classification of:	Classifier Derivation	Rationale
Operating Expense (without TOTI) Factor (NONTOTOIPEXP)	<b>Rate Base:</b> Prepaid Expenses Insulation Financing / Energy Wise Cash Working Capital Other Regulatory Assets (MGE Only)  <b>Cost of Service:</b> Payroll Taxes	Composite classification factor based on the classification of total Operating Expenses excluding taxes.	Plant Investments and Costs that generally operating expenses excluding taxes. This is generally consistent with the approach taken in the most recent cost of service study.
Accounts 871-879 Factor (DIS871-879)	<b>Cost of Service:</b> Account 880 - Other Expenses Account 881 – Rents	Composite classification factor based on the classification of major Distribution Operations expenses.	Costs that generally follow Distribution Operations expenses. This is generally consistent with the approach taken in the most recent cost of service study.
Accounts 871-880 Factor (DIS871-880)	<b>Cost of Service:</b> Account 870 – Operation, Supervision and Engineering	Composite classification factor based on the classification of major Distribution Operations expenses.	Costs that generally Distribution Operations expenses. This is generally consistent with the approach taken in the most recent cost of service study.
Accounts 887-893 Factor (DIS887-893)	<b>Cost of Service:</b> Account 885 - Maintenance Supervision and Engineering Account 886 - Maintenance of Structures and Improvements Account 894 - Maintenance of Other Equipment	Composite classification factor based on the classification of major Distribution Maintenance expenses.	Costs that generally Distribution Maintenance expenses. This is generally consistent with the approach taken in the most recent cost of service study.

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Classifier	Classification of:	Classifier Derivation	Rationale
Non-A&G Op. Exp. (without TOTI) Factor (NONAGOPEXP)	<b>Rate Base:</b> Other Regulatory Assets  <b>Cost of Service:</b> Account 920 - A&G Salaries Account 921 - Office supplies Account 922 - Administrative Expense Transfer Account 923 - Outside services employed Account 925 - Injuries and damages Account 926 - Employed pensions & benefits Account 930 - Misc. General Expenses	Composite classification factor based on the classification of total operating expenses excluding administrative and general expenses.	Costs that generally follow other Operation and Maintenance Expenses. This is generally consistent with the approach taken in the most recent cost of service study.
Mains Factor (PLT376MAINS)	<b>Cost of Service:</b> Account 887 - Maintenance of Mains	Classification factor based on the classification Account 376 Mains	Costs that generally follow Mains or related expenses. This is generally consistent with the approach taken in the most recent cost of service study
Accounts 871-880 Factor (EXP871-880)	<b>Cost of Service:</b> Account 870 - Operation, Supervision and Engineering	Composite classification factor based on the classification of major Distribution Operations expenses.	Costs that generally follow Distribution Operations expenses. This is generally consistent with the approach taken in the most recent cost of service study.



**Summary of Classifiers**  
**Internal Classifiers**

Classifier	Classification of:	Classifier Derivation	Rationale
Distribution Mains Factor (DISMAIN)	Account 376 - Mains	<p>Mains classifier developed through zero-intercept analyses. The analyses included regression analyses to measure the relationship between cost per foot of mains in the system and the size of the mains.</p> <p>The estimated cost of a zero-inch main was determined by using a zero value for the size variable(s) in the regression equation. Multiplying the estimated cost of a zero-inch main by the actual number of feet in the system yields the theoretical cost of a zero-inch mains system. The customer-related portion percentage of the mains investment is the ratio of the cost of the zero-inch mains system to the total cost of the mains investment, based on actual footage and main sizes.</p>	<p>The classification of distribution mains reflects two cost components: a) minimum cost to provide service to customer2, and b) cost to meet peak demand requirements.</p> <p>The zero intercept study ascertains the theoretical cost of zero inch main that would be necessary to provide cost to the customer regardless of demand needs. Zero-intercept is one of the methods recognized by NARUC in classifying distribution main costs.</p>



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**Summary of Allocators**  
 External Allocators

Allocator	Allocation of:	Allocator Derivation	Rationale
C1_customers	Customer-related portion of Account 376 Mains, Account 386 Other Property - Customer Premises, and related Account 887 Maintenance of Mains expense  Customer-related expenses including: Account 901 - Supervision Account 902 - Meter reading Account 903 - Customer Records and collections Account 909 - Information and Institutional Advertising Account 913 - Advertising	Allocator is derived based on the percentage of customers within each rate class.	Costs are generally related to the number of customers. This is consistent with the approach taken in the most recent cost of service study.
C2_depcus	Customer Deposits	Allocator is derived based on the direct assignment of customer deposits to residential, and assignment of Commercial and Industrial customer deposits based on percentage of customers within SGS, LGS, and LV customer classes.	Customer deposits are directly assigned to customer classes based on actual MGE and LAC customer deposits data.

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Allocator	Allocation of:	Allocator Derivation	Rationale
C3_meters <sup>7</sup>	Account 381 - Meters	Allocator is derived based on the number of meters by type in each rate class and by the current cost of each meter by type.	Costs are generally related to the number of meters and the cost of each meter. This is generally consistent with the approach taken in the most recent cost of service study.
C4_metincus	Account 382 – Meter Installations <sup>8</sup> Account 879 - Customer Installation Expenses	Allocator is derived based on the number of meters by type in each rate class and by the current meter installation cost of each meter by type.	Costs are generally related to the number of meters and the meter installation costs for each customer class. This is generally consistent with the approach taken in the most recent cost of service study.
C5_Regcus	Account 383 - House Regulators	Allocator is derived based on the number of meters by type in each rate class and by the current regulator cost of each meter by type.	Costs are generally related to the number of regulators and the cost of each regulator for each customer class. This is generally consistent with the approach taken in the most recent cost of service study.
C6_services	Account 380 - Services Account 892 - Maintenance of services expenses	Allocator is derived based on the number of services installed in each rate class and by the cost of each service installed.	Costs are generally related to the number of services and the cost of services for each customer class. This is generally consistent with the approach taken in the most recent cost of service study.

<sup>7</sup> For LAC, the meter allocator (C3\_meters) also includes costs of meter installation as Account 381 meters includes Account 382 meter installations.

<sup>8</sup> MGE only as LAC Account 382 is included in Account 381



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Allocator	Allocation of:	Allocator Derivation	Rationale
C7_metregcus <sup>9</sup>	Account 878 - Meter and House Regulator Expense Account 893 - Maintenance of Meters and House Regulators	Allocator is derived based on the total cost of meters and regulators installed in each rate class.	Costs are generally related to meter and house regulators costs for each customer class. This is generally consistent with the approach taken in the most recent cost of service study.
C8_Nonlvacus <sup>10</sup>	Account 397.1 - Communications equip - AMR	Allocator is derived based on the percentage of customers within each rate class other than LV rate class.	Costs are generally related to non-large volume customers.
C9_Residcus	Account 908 - Customer Assistance Expense	Allocator is derived to allocate plant investment or cost only to residential customers.	Costs are generally related to residential customers only.
C10_lvacus (MGE Only)	Account 890 - Maintenance of Measuring and Regulating Equipment - Industrial	Allocator is derived to allocate plant investment or cost only to LV customers.	Costs are generally related to large volume customers only.
C10_lglvacus (LAC Only)	Account 876 - Measuring and Regulating Station Expense – Industrial	Allocator is derived to allocate plant investment or cost to LGS and LV customers.	Costs are generally related to large general service, and large volume customers only.
C11_903cus	Account 903 - Customer records and collections	Allocator derived by allocating customer records expenses based on number of bills, and collection expenses based on uncollectible expenses.	Customer records and collections are directly assigned to customer classes based on actual MGE and LAC data.

<sup>9</sup> For LAC, the meter regulator allocator (C7\_metregcus) also includes costs of meter installation as Account 381 meters includes Account 382 meter installations.

<sup>10</sup> The C8\_Nonlvacus allocator is required only for MGE

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Allocator	Allocation of:	Allocator Derivation	Rationale
C12_904cus	Account 904 - Uncollectible expense	Allocator derived on the basis of three-year average bad debts of each customer class.	Uncollectibles are directly assigned to customer classes based on actual MGE and LAC data.
C13_912cus	Account 912 - Demonstration and selling	Allocator derived by directly assigning demonstration and selling expenses to their respective customer classes, and assigning other demonstration and selling expenses on the basis of percentage of customers in each rate class.	Demonstration and Selling expenses are directly assigned to customer classes based on actual MGE and LAC data.
C14_385cus <sup>11</sup> [LAC Only]	Account 385 - Commercial & Industrial Measuring and Regulating Equipment	Allocator is derived based on the total industrial meters installation costs for each rate class other than residential class.	Account 385 is directly assigned to customer classes based on actual LAC data.
C15_intcus [For MGE: C14_intcus]	Interests on Customer Deposits	Allocator is derived based on the direct assignment of interests on customer deposits to residential, and assignment of Commercial and Industrial interest on customer deposits based on percentage of customers within SGS, LGS, and LV customer classes.	Interests from Customer Deposits is directly assigned to customer classes based on actual MGE and LAC data.
D1_Sales	Odorant Expenses	Allocator is derived based on percentage of sales volumes within each rate class.	Costs are assigned based on throughput. This is consistent with the approach taken in the prior cost of service study.

<sup>11</sup> C15\_385cus allocator developed only for LAC, as LAC's account 385 is used for large meter installation costs



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Allocator	Allocation of:	Allocator Derivation	Rationale
D2_demand	Major Transmission and Distribution Plant demand-related investments  Major Distribution Plant demand-related O&M expenses	Allocator is based on customers' contribution to design day demands.	Costs are generally related to peak or design day usage. This is consistent with the approach taken in the prior cost of service study.
D3_totalrevenues	Gross Receipt Taxes	Allocator is derived based on percentage of revenues within each rate class.	Costs are generally related to total revenues. This is generally consistent with the approach taken in the prior cost of service study.
D4_nonTranspSales <sup>12</sup> [LAC Only]	Account 723 - Fuel for LPG Process  Account 728 - LPG  Accounts 804 through 812 - Purchased Gas Expenses  Accounts 819, 823, and 825 – Natural Gas Storage Expenses	Allocator is derived based on percentage of sales volumes within each rate class excluding transport customers.	Costs are assigned based on throughput of non-transport customers.
D4_nonTranspDem <sup>13</sup> [LAC Only]	Gas Inventory	Allocator is based on non-transport customers' contribution to winter demands.	Costs are assigned based on winter demands of non-transport customers.

<sup>12</sup> D4\_nonTranspSales allocator is derived for LAC only as MGE does not have any Production and Storage expenses

<sup>13</sup> D4\_nonTranspDem allocator is derived for LAC only as MGE does not have any Production and Storage expenses

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Allocator	Allocation of:	Allocator Derivation	Rationale
Plant GasInvDem	Gas Inventory Accounts 304 through 363 - Demand-related production plant, storage plant, and other storage equipment. Manufactured Gas Production expenses excluding Accounts 723 and 728 Natural Gas Storage expenses excluding Accounts 819, 823, and 825.	Allocator based on non-transport customers' contribution to winter usage i.e. November-April for LAC, and November-March for MGE	Costs are assigned based on winter usage of non-transport customers.

**Summary of Allocators**  
 Internal Allocators

Allocator	Allocator for:	Allocator Derivation	Rationale
Plant_Total	Materials and Supplies Other Regulatory Assets Accumulated Deferred Income Taxes Account 924 – Property Insurance Property Taxes	Allocator is derived based on total plant.	Costs are generally related to total plant costs. This is consistent with the approach taken in the prior cost of service study.
Plant_376-379	Accounts 374 and 375 - Land and Land Rights, Structures and Improvements	Allocator based on distribution plant, FERC accounts 376-379.	Costs are generally related to Mains and related equipment costs. This is consistent with the approach taken in the prior cost of service study.
Plant_374-386	Accounts 387 – Other Equipment	Allocator based on distribution plant, FERC accounts 374-386.	Costs are generally related to distribution plant related costs. This is consistent with the approach taken in the prior cost of service study.
Plant_Gen	Account 932 - Maintenance of general plant	Allocator is derived based on total General Plant.	Costs are generally related to general plants costs. This is consistent with the approach taken in the prior cost of service study.



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Allocator	Allocator for:	Allocator Derivation	Rationale
Plant Dist <sup>14</sup> (MGE Only)	Accounts 389 through 398 – General Plant Construction Work in Progress Account 931 - Rents	Allocator is derived based on total Distribution Plant.	Costs are generally related to distribution plants costs. This is consistent with the approach taken in the prior cost of service study.
PTD Plant (LAC Only)	Accounts 389 through 396, and Account 398 - General Plant Account 931 Rents	Allocator is derived based on total Production, Storage, Transmission and Distribution Plant.	Costs are generally related to other plant costs except general plant. This is consistent with the approach taken in the prior cost of service study.
Plant Nonint	Accounts 301 and 302 - Intangible Plant	Allocator is derived based on total plant excluding intangible plant.	Costs are generally allocated based on total plant excluding intangible plant. This is consistent with the approach taken in the prior cost of service study.
Plant_MainsSrv	Account 387 - Other Equipment Customer Advances Account 874 - Mains and Service Expenses	Allocator is based on Account 376 Mains and Account 380 Services.	Costs are generally related to Mains and Service plant costs. This is consistent with the approach taken in the prior cost of service study.
Rate Base	Interest Expense	Allocator is derived based on total Rate Base.	Costs are generally related to the rate base. This is consistent with the approach taken in the prior cost of service study.
OPEXP	Prepayments Insulation Financing / Energy Wise Cash Working Capital	Allocators are derived based on total demand-related and customer-related operating expenses.	Costs are generally related to operating expenses. This is consistent with the approach taken in the prior cost of service study.

<sup>14</sup> The 'Plant Dist' allocator is developed for MGE only as MGE does not have Production, Transmission, or Storage plant investments.

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Allocator	Allocator for:	Allocator Derivation	Rationale
EXP_871-879	Account 880 – Other Expenses	Allocator based on distribution expenses, FERC accounts 871-879.	Costs are generally related to distribution operations expense accounts.
EXP_871-880	Account 870 - Operation, Supervision and Engineering	Allocator based on distribution expenses, FERC accounts 871-880.	Costs are generally related to distribution operations expense accounts.
EXP_887-893	Account 885 - Maintenance Supervision and Engineering Account 886 - Maintenance of Structures and Improvements Account 894 – Maintenance of Other Equipment	Allocator based on distribution expenses, FERC accounts 887-893.	Costs are generally related to distribution maintenance expense accounts.
EXP_902-904	Account 905 - Miscellaneous Customer Service	Allocator based on distribution expenses, FERC accounts 902-904.	Costs are generally related to customer service expense accounts.
EXP_912-913	Account 911 - Supervision	Allocator based on distribution expenses, FERC accounts 912-913.	Costs are generally related to sales and advertising expense accounts.
EXP_Non-A&G	Account 920 through 930 - Administrative and General Expenses excluding Account 928, 924 Other Regulatory Assets	Allocator based on total operation and maintenance expenses excluding administrative and general expenses.	Costs are generally related to operating expenses excluding administrative and general expenses.
EXP_TTotal	Payroll Taxes Other Taxes	Allocator based on total expenses.	Costs are generally related to expenses.



Laclede Gas Company  
Cost of Service Study  
12 Months Ending December 31, 2016

	A	C	D	E	F	G	H	I	J
1	Laclede Gas Company								
2	COSS Summary		Total	Residential	Small	Large	Large	Vehicle	Transportation
3		Company	RS	General Srv	General Srv	Volume	interruptible	Fuel	Transp.
4				SGS	LGS	LV	IN	VF	
5	Current Delivery Service Rates								
6	Rate base	1,231,687,251	1,009,181,043	100,315,016	80,645,759	3,920,909	520,426	374,289	36,729,811
7	Net operating income	59,911,031	42,115,812	3,428,861	7,850,121	735,922	471,209	65,989	5,243,117
8	Rate of return	4.86%	4.17%	3.42%	9.73%	18.77%	90.54%	17.63%	14.27%
9	Relative rate of return	100%	86%	70%	200%	386%	1861%	362%	293%
10	Revenues	\$ 329,345,163	\$ 261,790,821	\$ 26,114,152	\$ 24,882,692	\$ 1,801,067	\$ 944,654	\$ 175,717	\$ 13,636,058
11	Test Period Usage (therms)	901,742,754	488,185,483	77,590,502	132,304,153	10,059,571	7,107,794	3,193,198	183,302,053
12	Revenue per therm	\$ 0.3652	\$ 0.5363	\$ 0.3366	\$ 0.1881	\$ 0.1790	\$ 0.1329	\$ 0.0550	\$ 0.0744
13									
14	Revenues at Equalized Rates of Return								
15	Rate of return	7.700%	7.700%	7.700%	7.700%	7.700%	7.700%	7.700%	7.700%
16	Return requirement	94,839,918	77,706,940	7,724,256	6,209,723	301,910	40,073	28,820	2,828,195
17	Revenue required	387,402,507	320,687,969	33,202,907	22,298,766	1,100,510	245,752	115,797	9,750,807
18	Revenue deficiency	58,057,344	58,897,147	7,088,755	(2,583,927)	(700,558)	(698,902)	(59,920)	(3,885,252)
19	Percent increase required	17.6%	22.5%	27.1%	-10.4%	-38.9%	-74.0%	-34.1%	-28.5%
20	Test Period Usage (therms)	901,742,754	488,185,483	77,590,502	132,304,153	10,059,571	7,107,794	3,193,198	183,302,053
21	Revenue Required per therm	\$ 0.4296	\$ 0.6569	\$ 0.4279	\$ 0.1685	\$ 0.1094	\$ 0.0346	\$ 0.0363	\$ 0.0532
22	Revenue Deficiency per therm	\$ 0.0644	\$ 0.1206	\$ 0.0914	\$ (0.0195)	\$ (0.0696)	\$ (0.0983)	\$ (0.0188)	\$ (0.0212)
23									
24	Revenue Requirements								
25	Rate Class	Class ROR	Overall ROR						
26									
27	RS	4.17%	4.86%						
28	SGS	3.42%	4.86%						
29	LGS	9.73%	4.86%						
30	LV	18.77%	4.86%						
31	IN	90.54%	4.86%						
32	VF	17.63%	4.86%						
33	Transp.	14.27%	4.86%						
34									

Laclede Gas Company  
Cost of Service Study  
12 Months Ending December 31, 2016

	A	C	D	E	F	G	H	I	J
35	Laclede Gas Company			Small	Large	Large		Vehicular	
36	COSS Summary	Total	Residential	General Srv	General Srv	Volume	Interruptible	Fuel	Transportation
37		Company	RS	SGS	LGS	LV	IN	VF	Transp.
38									
39	Current Rate of Return	4.86%	4.17%	3.42%	9.73%	18.77%	90.54%	17.63%	14.27%
40	Proposed Rate of Return	7.70%	7.70%	7.70%	7.70%	7.70%	7.70%	7.70%	7.70%
41									
42	EROR Revenues	\$ 387,402,507	\$ 320,687,969	\$ 33,202,907	\$ 22,298,766	\$ 1,100,510	\$ 245,752	\$ 115,797	\$ 9,750,807
43	Current Revenues	329,345,163	261,790,821	26,114,152	24,882,692	1,801,067	944,654	175,717	13,636,058
44									
45	Difference	\$ 58,057,344	\$ 58,897,147	\$ 7,088,755	\$ (2,583,927)	\$ (700,558)	\$ (698,902)	\$ (59,920)	\$ (3,885,252)
46	% Difference	17.63%	22.50%	27.15%	-10.38%	-38.90%	-73.98%	-34.10%	-28.49%
47									
48	Derivation of Delivery Revenues								
49	Current Total Revenues	\$ 329,345,163	261,790,821	26,114,152	24,882,692	1,801,067	944,654	175,717	13,636,058
50	Less: Street Lamps, LPG	54,773	43,538	4,343	4,138	300	157	29	2,268
51	Less: Other Revenues	5,217,736	4,147,489	413,720	394,210	28,534	14,966	2,784	216,033
52									
53	Current Delivery Revenues	\$ 324,072,654	\$ 257,599,794	\$ 25,696,089	\$ 24,484,344	\$ 1,772,234	\$ 929,531	\$ 172,904	\$ 13,417,758
54									
55	Total Revenues at EROR	\$ 387,402,507	320,687,969	33,202,907	22,298,766	1,100,510	245,752	115,797	9,750,807
56	Less: Other Revenues	54,773	43,538	4,343	4,138	300	157	29	2,268
57	Less: Other Revenues	5,217,736	4,147,489	413,720	394,210	28,534	14,966	2,784	216,033
58									
59	Delivery Revenues at EROR	\$ 382,129,998	\$ 316,496,941	\$ 32,784,844	\$ 21,900,417	\$ 1,071,676	\$ 230,629	\$ 112,984	\$ 9,532,506



Laclede Gas Company  
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	A	B	C	D	E	F	G	H	I	J
1	Laclede Gas Company									
2	Development of Rate of Return									
3		Total	Residential	Small	Large	Large		Interruptible	Vehicular	Transportation
4		Company	RS	General Srv	General Srv	Volume		IN	Fuel	Transp.
5	Rate Base			SGS	LGS	LV			VF	
6	Gas Plant in Service									
7	- Demand	558,139,389	366,846,965	56,921,641	80,232,395	4,145,443		5,745	380,002	49,607,198
8	- Customer	1,242,565,722	1,121,492,857	82,689,189	30,762,967	1,395,998		683,237	169,903	5,371,572
9	- Commodity	-	-	-	-	-		-	-	-
10	Total	1,800,705,111	1,488,339,822	139,610,830	110,995,362	5,541,441		688,982	549,905	54,978,769
11										
12	less: Depreciation & Amortization									
13	- Demand	(201,624,995)	(134,365,751)	(20,875,323)	(29,226,594)	(1,439,549)		(5,102)	(119,950)	(15,592,726)
14	- Customer	(463,727,884)	(419,164,448)	(29,931,094)	(11,719,765)	(547,179)		(262,375)	(65,677)	(2,037,347)
15	- Commodity	-	-	-	-	-		-	-	-
16	Total	(665,352,880)	(553,530,199)	(50,806,417)	(40,946,358)	(1,986,729)		(267,477)	(185,627)	(17,630,073)
17										
18	Add: CWIP									
19	- Demand	10,508,959	6,841,292	1,060,578	1,501,974	80,124		-	7,774	1,017,217
20	- Customer	23,395,719	21,116,092	1,556,918	579,222	26,285		12,864	3,199	101,139
21	- Commodity	-	-	-	-	-		-	-	-
22	Total	33,904,678	27,957,384	2,617,496	2,081,196	106,409		12,864	10,973	1,118,356
23										
24	Net Utility Plant in Service									
25	- Demand	367,023,353	239,322,505	37,106,896	52,507,775	2,786,018		643	267,826	35,031,689
26	- Customer	802,233,557	723,444,501	54,315,014	19,622,425	875,103		433,726	107,425	3,435,364
27	- Commodity	-	-	-	-	-		-	-	-
28	Total	1,169,256,909	962,767,006	91,421,910	72,130,200	3,661,121		434,369	375,251	38,467,053
29										
30	Additions to Rate Base									
31	- Demand	104,755,546	73,853,675	11,531,399	15,717,723	620,834		9,287	24,341	2,998,288
32	- Customer	168,354,706	146,669,087	14,528,720	5,511,235	264,470		144,794	33,095	1,203,305
33	- Commodity	1,552,069	777,605	123,555	210,288	15,945		11,194	5,039	408,443
34	Total	274,662,320	221,300,367	26,183,674	21,439,246	901,249		165,274	62,474	4,610,035
35										
36	Reductions to Rate Base									
37	- Demand	(64,437,632)	(42,350,756)	(6,571,307)	(9,262,628)	(478,658)		(660)	(43,890)	(5,729,733)
38	- Customer	(147,794,346)	(132,535,574)	(10,719,262)	(3,661,060)	(162,803)		(78,558)	(19,546)	(617,544)
39	- Commodity	-	-	-	-	-		-	-	-
40	Total	(212,231,978)	(174,886,330)	(17,290,568)	(12,923,687)	(641,461)		(79,218)	(63,436)	(6,347,277)
41										
42	Rate Base									
43	- Demand	407,341,266	270,825,424	42,066,988	58,962,871	2,928,194		9,270	248,276	32,300,243
44	- Customer	822,793,916	737,578,014	58,124,472	21,472,600	976,770		499,962	120,973	4,021,125
45	- Commodity	1,552,069	777,605	123,555	210,288	15,945		11,194	5,039	408,443
46	Total	1,231,687,251	1,009,181,043	100,315,016	80,645,759	3,920,909		520,426	374,289	36,729,811
47										

Laclede Gas Company  
Cost of Service Study  
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	A	B	C	D	E	F	G	H	I	J
1	Laclede Gas Company				Small	Large	Large		Vehicular	
2	Development of Rate of Return	Total	Residential	General Srv	General Srv	Volume	Interruptible		Fuel	Transportation
3		Company	RS	SGS	LGS	LV	IN		VF	Transp.
4										
48	Return Calculation									
49	Customer sales	324,072,654	257,599,794	25,696,089	24,484,344	1,772,234	929,531	172,904	13,417,758	
50	Add: Street Lamps, LPG	54,773	43,538	4,343	4,138	300	157	29	2,268	
51	Add: Other revenues	5,217,736	4,147,489	413,720	394,210	28,534	14,966	2,784	216,033	
52										
53	Total	329,345,163	261,747,283	26,109,809	24,878,554	1,800,768	944,497	175,688	13,633,791	
54										
55	less:									
56	O&M Expense									
57	- Demand	29,183,408	19,405,225	3,014,223	4,224,618	209,714	668	17,766	2,311,194	
58	- Customer	149,861,435	129,256,272	13,678,297	5,260,167	258,258	143,825	32,212	1,232,403	
59	- Commodity	1,777,315	890,456	141,487	240,806	18,259	12,818	5,770	467,719	
60	Total	180,822,158	149,551,953	16,834,007	9,725,592	486,231	157,311	55,748	4,011,316	
61										
62	Depreciation and Amortization Expense									
63	- Demand	12,026,210	7,897,731	1,225,351	1,727,881	89,533	113	8,251	1,077,351	
64	- Customer	42,843,652	38,746,206	2,784,578	1,059,037	47,322	22,724	5,758	178,027	
65	- Commodity	-	-	-	-	-	-	-	-	
66	Total	54,869,862	46,643,937	4,009,929	2,786,918	136,854	22,836	14,009	1,255,378	
67										
68	Taxes other than income									
69	- Demand	6,036,126	3,972,508	616,466	868,371	44,670	71	4,061	529,979	
70	- Customer	15,835,187	14,151,541	1,140,186	428,803	19,906	10,146	2,441	82,164	
71	- Commodity	42,200	21,142	3,359	5,718	434	304	137	11,105	
72	Total	21,913,512	18,145,191	1,760,012	1,302,892	65,009	10,521	6,639	623,248	
73										
74	Interest on customer deposits	114,944	80,593	31,164	3,130	57	-	-	-	
75										
76	Income taxes	11,713,656	5,253,336	50,180	3,214,039	376,993	282,777	33,332	2,502,999	
77	Total Operating Expenses	269,434,132	219,675,010	22,685,291	17,032,571	1,065,146	473,445	109,728	8,392,941	
78										
79	Net Operating Income	59,911,031	42,072,273	3,424,518	7,845,983	735,622	471,052	65,960	5,240,849	
80										
81										
82	After Tax Rate of return	4.86%	4.17%	3.41%	9.73%	18.76%	90.51%	17.62%	14.27%	
83	Relative rate of return	1.000	0.857	0.702	2.000	3.857	18.608	3.623	2.933	
84										



Laclede Gas Company  
Cost of Service Study  
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	A	B	C	D	E	F	G	H	I	J
1	<b>Laclede Gas Company</b>									
2	<b>Summary of Rate of Return</b>									
3		Total	Residential	Small	Large	Large		Interruptible	Vehicular	Transportation
4		Company	RS	General Srv	General Srv	Volume		IN	Fuel	Transp.
5	<b>Rate Base</b>									
6		1,800,705,111	1,488,339,822	139,610,830	110,995,362	5,541,441		688,982	549,905	54,978,769
7		(665,352,880)	(553,530,199)	(50,806,417)	(40,946,358)	(1,986,729)		(267,477)	(185,627)	(17,630,073)
8		33,904,678	27,957,384	2,617,496	2,081,196	106,409		12,864	10,973	1,118,356
9		1,169,256,909	962,767,006	91,421,910	72,130,200	3,661,121		434,369	375,251	38,467,053
10										
11	<b>Add:</b>									
12		4,422,930	3,655,692	342,915	272,629	13,611		1,692	1,351	135,040
13		68,077,170	49,538,844	7,755,618	10,417,892	354,931		8,569	1,316	-
14		11,259,456	9,291,708	1,050,342	619,618	30,884		9,492	3,453	253,959
15		1,865,806	1,539,730	174,052	102,677	5,118		1,573	572	42,084
16		21,659,955	17,874,575	2,020,556	1,191,966	59,412		18,261	6,642	488,543
17		167,377,003	139,399,818	14,840,191	8,834,464	437,294		125,687	49,140	3,690,410
18		274,662,320	221,300,367	26,183,674	21,439,246	901,249		165,274	62,474	4,610,035
19										
20	<b>Less:</b>									
21		(206,856,327)	(170,973,307)	(16,037,820)	(12,750,612)	(636,574)		(79,147)	(63,170)	(6,315,696)
22		(4,354,823)	(3,053,380)	(1,180,682)	(118,588)	(2,173)		-	-	-
23		(1,020,828)	(859,643)	(72,067)	(54,487)	(2,714)		(71)	(266)	(31,581)
24		(212,231,978)	(174,886,330)	(17,290,568)	(12,923,687)	(641,461)		(79,218)	(63,436)	(6,347,277)
25										
26		1,231,687,251	1,009,181,043	100,315,016	80,645,759	3,920,909		520,426	374,289	36,729,811
27										
28	<b>Return Calculation</b>									
29		324,072,654	257,599,794	25,696,089	24,484,344	1,772,234		929,531	172,904	13,417,758
30		54,773	43,538	4,343	4,138	300		157	29	2,268
31		5,217,736	4,147,489	413,720	394,210	28,534		14,966	2,784	216,033
32		329,345,163	261,790,821	26,114,152	24,882,692	1,801,067		944,654	175,717	13,636,058
33										
34	<b>less:</b>									
35		180,822,158	149,551,953	16,834,007	9,725,592	486,231		157,311	55,748	4,011,316
36		54,869,862	46,643,937	4,009,929	2,786,918	136,854		22,836	14,009	1,255,378
37		21,913,512	18,145,191	1,760,012	1,302,892	65,009		10,521	6,539	623,248
38		114,944	80,593	31,164	3,130	57		-	-	-
39		11,713,656	5,253,336	50,180	3,214,039	376,993		282,777	33,332	2,502,999
40		269,434,132	219,675,010	22,685,291	17,032,571	1,065,146		473,445	109,728	8,392,941
41										
42		59,911,031	42,115,812	3,428,861	7,850,121	735,922		471,209	65,989	5,243,117
43										
44		4.864%	4.173%	3.418%	9.734%	18.769%		90.543%	17.631%	14.275%
45		1.000	0.858	0.703	2.001	3.859		18.614	3.625	2.935



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	A	B	C	D	E	F	G	H	I	J
1	<b>Laclede Gas Company</b>									
2	<b>Summary of Rate of Return</b>		<b>Total</b>	<b>Residential</b>	<b>Small</b>	<b>Large</b>	<b>Large</b>	<b>Interruption</b>	<b>Vehicle</b>	<b>Transportation</b>
3			<b>Company</b>	<b>RS</b>	<b>General Srv</b>	<b>General Srv</b>	<b>Volume</b>	<b>IN</b>	<b>Fuel</b>	<b>Transp.</b>
4					<b>SGS</b>	<b>LGS</b>	<b>LV</b>		<b>VF</b>	<b>Transp.</b>
46										
47	<b>Derivation of Required Revenues</b>									
48			\$ 94,839,918	\$ 77,706,940	\$ 7,724,256	\$ 6,209,723	\$ 301,910	\$ 40,073	\$ 28,820	\$ 2,828,195
49			34,842,112	28,547,831	2,837,723	2,281,317	110,915	14,722	10,588	1,039,017
50			\$ 129,682,031	\$ 106,254,771	\$ 10,561,979	\$ 8,491,040	\$ 412,825	\$ 54,795	\$ 39,408	\$ 3,867,213
51										
52			180,822,158	149,551,953	16,834,007	9,725,592	486,231	157,311	55,748	4,011,316
53			54,869,862	46,643,937	4,009,929	2,786,918	136,854	22,836	14,009	1,255,378
54			21,913,512	18,145,191	1,760,012	1,302,892	65,009	10,521	6,639	623,248
55			114,944	80,593	31,164	3,130	57	-	-	-
56			386,037,507	319,558,035	33,085,918	22,220,197	1,096,632	244,886	115,389	9,716,450
57										
58			1,365,000	1,129,934	116,989	78,569	3,878	866	408	34,357
59			\$ 387,402,507	\$ 320,687,969	\$ 33,202,907	\$ 22,298,766	\$ 1,100,510	\$ 245,752	\$ 115,797	\$ 9,750,807
60										
61	<b>Demand-Related</b>									
62			\$ 407,341,266	\$ 270,825,424	\$ 42,066,988	\$ 58,962,871	\$ 2,928,194	\$ 9,270	\$ 248,276	\$ 32,300,243
63			31,365,277	20,853,558	3,239,158	4,540,141	225,471	714	19,117	2,487,119
64			11,522,917	7,661,141	1,189,996	1,667,949	82,833	262	7,023	913,713
65			\$ 42,888,195	\$ 28,514,699	\$ 4,429,154	\$ 6,208,090	\$ 308,304	\$ 976	\$ 26,141	\$ 3,400,832
66										
67			29,183,408	19,405,225	3,014,223	4,224,618	209,714	668	17,766	2,311,194
68			12,026,210	7,897,731	1,225,351	1,727,881	89,533	113	8,251	1,077,351
69			6,036,126	3,972,508	616,466	868,371	44,670	71	4,061	529,979
70										
71										
72			\$ 90,133,939	\$ 59,790,162	\$ 9,285,195	\$ 13,028,960	\$ 652,220	\$ 1,827	\$ 56,218	\$ 7,319,356
73										
74										
75			<b>Total</b>	<b>Residential</b>	<b>Small</b>	<b>Large</b>	<b>Large</b>	<b>Interruption</b>	<b>Vehicle</b>	<b>Transportation</b>
76			<b>Company</b>	<b>RS</b>	<b>General Srv</b>	<b>General Srv</b>	<b>Volume</b>	<b>IN</b>	<b>Fuel</b>	<b>Transp.</b>
77					<b>SGS</b>	<b>LGS</b>	<b>LV</b>		<b>VF</b>	<b>Transp.</b>
78	<b>Fully Allocated Customer Costs</b>									
79			\$ 822,793,916	\$ 737,578,014	\$ 58,124,472	\$ 21,472,600	\$ 976,770	\$ 499,962	\$ 120,973	\$ 4,021,125
80			63,355,132	56,793,507	4,475,584	1,653,390	75,211	38,497	9,315	309,627
81			23,275,290	20,864,693	1,644,232	607,419	27,631	14,143	3,422	113,750
82			\$ 86,630,422	\$ 77,658,200	\$ 6,119,816	\$ 2,260,810	\$ 102,842	\$ 52,640	\$ 12,737	\$ 423,377
83										
84			149,861,435	129,256,272	13,678,297	5,260,167	258,258	143,825	32,212	1,232,403
85			42,843,652	38,746,206	2,784,578	1,059,037	47,322	22,724	5,758	178,027
86			15,835,187	14,151,541	1,140,186	428,803	19,906	10,146	2,441	82,164
87			114,944	80,593	31,164	3,130	57	-	-	-
88										
89			\$ 295,285,639	\$ 259,892,812	\$ 23,754,041	\$ 9,011,947	\$ 428,385	\$ 229,335	\$ 53,148	\$ 1,915,971
90										
91			646,634	605,635	37,040	3,720	68	21	8	142
92			\$ 38.05	\$ 35.76	\$ 53.44	\$ 201.86	\$ 523.70	\$ 921.02	\$ 559.45	\$ 1,127.04
93										
94			385,419,578	319,682,974	33,039,236	22,040,907	1,080,606	231,162	109,367	9,235,327
95										



Laclede Gas Company  
Cost of Service Study  
12 Months Ending December 31, 2016

	A	B	C	D	E	F	G	H	I	J
1	Laclede Gas Company									
2	Summary of Rate of Return									
3		Total	Residential	Small	Large	Large		Interruptible	Vehicular	
4		Company	RS	General Srv	General Srv	Volume		IN	Fuel	Transportation
96	Basic Customer Costs									
97		Total	Residential	Small	Large	Large		Interruptible	Vehicular	
98		Company	RS	General Srv	General Srv	Volume		IN	VF	Transp.
99										
100	Basic Customer Costs									
101	Plant									
102	376.1 - Mains - Steel	87,536,489	81,986,329	5,014,243	503,631	9,228		2,809	1,072	19,178
103	376.2 - Mains - Cast Iron	8,177,699	7,659,201	468,433	47,049	862		262	100	1,792
104	376.3 - Mains - Plastic	171,442,578	160,572,439	9,820,530	986,375	18,073		5,501	2,099	37,560
105	380.1 - Services - Steel	38,730,897	35,912,898	2,185,615	572,719	18,797		4,970	2,000	33,898
106	380.2 - Services - Plastic	645,762,615	598,777,948	36,440,892	9,548,972	313,408		82,862	33,343	565,191
107	381 - Meters	129,541,012	108,212,959	15,325,374	4,754,757	157,061		104,954	23,407	962,499
108	383 - House Regulators	25,568,099	18,642,965	2,414,255	3,346,994	248,925		109,135	25,220	780,606
109	385 - Commercial & Ind Meas & Reg Eq	14,480,417	-	3,006,920	8,123,773	500,035		309,437	66,891	2,473,362
110	Total	1,121,239,806	1,011,764,739	74,676,261	27,884,268	1,266,389		619,931	154,132	4,874,086
111										
112	Accumulated Depreciation									
113	376.1 - Mains - Steel	(52,422,907)	(49,099,087)	(3,002,876)	(301,609)	(5,526)		(1,682)	(642)	(11,485)
114	376.2 - Mains - Cast Iron	(745,873)	(698,582)	(42,725)	(4,291)	(79)		(24)	(9)	(163)
115	376.3 - Mains - Plastic	(29,657,825)	(27,777,401)	(1,698,852)	(170,633)	(3,126)		(952)	(363)	(6,498)
116	380.1 - Services - Steel	(36,075,778)	(33,450,962)	(2,035,785)	(533,457)	(17,509)		(4,629)	(1,863)	(31,575)
117	380.2 - Services - Plastic	(245,081,235)	(227,249,512)	(13,830,127)	(3,624,046)	(118,945)		(31,448)	(12,654)	(214,503)
118	381 - Meters	(30,286,296)	(25,299,862)	(3,583,026)	(1,111,648)	(36,720)		(24,538)	(5,473)	(225,029)
119	383 - House Regulators	(11,032,284)	(8,044,183)	(1,041,718)	(1,444,182)	(107,408)		(47,090)	(10,882)	(336,821)
120	385 - Commercial & Ind Meas & Reg Eq	(5,778,276)	-	(1,199,883)	(3,241,716)	(199,534)		(123,478)	(26,692)	(986,972)
121	Total	(411,080,474)	(371,619,589)	(26,434,991)	(10,431,582)	(488,848)		(233,841)	(58,578)	(1,813,045)
122										
123	Net Income before taxes & interest									
124	Net Plant	710,159,332	640,145,150	48,241,270	17,452,686	777,541		386,090	95,554	3,061,041
125	Net Income after taxes	54,682,269	\$ 49,291,177	\$ 3,714,578	\$ 1,343,857	\$ 59,871		\$ 29,729	\$ 7,358	\$ 235,700
126	Add: Income Taxes	20,089,070	18,108,501	1,364,655	493,704	21,995		10,922	2,703	86,591
127	Net Income before taxes & interest	\$ 74,771,338	\$ 67,399,677	\$ 5,079,232	\$ 1,837,560	\$ 81,866		\$ 40,651	\$ 10,061	\$ 322,291
128										
129	O&M Expenses									
130	874 - Mains and Service Expenses	6,658,916	6,191,911	377,359	81,579	2,522		675	270	4,602
131	876 - Measuring and Reg Station Exp-Ind	155,837	-	32,360	87,427	5,381		3,330	720	26,618
132	878 - Meter and House Regulator Exp.	14,896,146	10,446,990	2,503,486	1,446,325	75,527		43,426	9,469	370,922
133	879 - Customer Installation Expenses	2,371,255	1,666,490	267,306	316,645	18,032		11,157	2,436	89,188
134	880 - Other Expenses	1,676,190	1,274,110	221,373	134,471	7,062		4,078	898	34,198
135	902 - Meter reading expense	3,680,331	8,129,963	497,224	49,941	915		279	106	1,902
136	903 - Customer records & collections	19,065,392	17,831,316	1,150,236	78,789	1,444		439	168	3,000
137	909 - Info & Inst Advertising	98,614	92,361	5,649	567	10		3	1	22
138	913 - Advertising	138,699	129,905	7,945	798	15		4	2	30
139	916 - Misc Sales Expense	-	-	-	-	-		-	-	-
140	Total	53,741,378	45,763,047	5,062,938	2,196,543	110,907		63,392	14,069	530,481
141										

Laclede Gas Company  
Cost of Service Study  
12 Months Ending December 31, 2016

	A	B	C	D	E	F	G	H	I	J
1	Laclede Gas Company									
2	Summary of Rate of Return									
3		Total	Residential	Small	Large	Large		Interruptible	Vehicular	Transportation
4		Company	RS	General Srv	General Srv	Volume		IN	Fuel	Transp.
5				SGS	LGS	LV			VF	
142	Depreciation Expense									
143	380.1 - Services - Steel	2,025,626	1,878,245	114,308	29,953	983		260	105	1,773
144	380.2 - Services - Plastic	24,216,098	22,454,173	1,366,533	358,086	11,753		3,107	1,250	21,195
145	381 - Meters	3,070,122	2,564,647	363,211	112,688	3,722		2,487	555	22,811
146	383 - House Regulators	511,362	372,859	48,285	66,940	4,978		2,183	504	15,612
147	385 - Commercial & Ind Meas & Reg Eq	470,614	-	97,725	264,023	16,251		10,057	2,174	80,384
148	Total	30,293,821	27,269,924	1,990,062	831,690	37,688		18,094	4,588	141,775
149										
150	Basic customer-related costs	158,806,538	\$ 140,432,648	\$ 12,132,233	\$ 4,865,794	\$ 230,461	\$	122,136	\$ 28,718	\$ 994,548
151	Number of customers	646,634	605,635	37,040	3,720	68		21	8	142
152	Monthly basic cost per customer	\$ 20.47	\$ 19.32	\$ 27.30	\$ 108.99	\$ 281.74	\$	490.51	\$ 302.30	\$ 585.03
153										



Laclede Gas Company  
Cost of Service Study  
12 Months Ending December 31, 2016

	A	B	C	D	E	F	G	H	I	J	K
1	Laclede Gas Company										
2	Allocation of Gross Plant	Allocation Factor	Total Company	Residential RS	Small General Srv SGS	Large General Srv LGS	Large Volume LV	Interruptible IN	Vehicular Fuel VF	Transportation Transp.	Classification Factor
3											
4											
5	Intangible Plant										
6	301 - Organization Costs		2,501								NINTPLT
7	- Demand	Plant NonInt_D	775	505	78	111	6	0	1	74	31%
8	- Customer	Plant NonInt_C	1,726	1,558	115	43	2	1	0	7	69%
9	- Commodity		-	-	-	-	-	-	-	-	0%
10	Total		2,501	2,063	193	154	8	1	1	82	
11											
12	302 - Franchise and Consents		8,484								NINTPLT
13	- Demand	Plant NonInt_D	2,630	1,714	266	376	20	0	2	252	31%
14	- Customer	Plant NonInt_C	5,855	5,284	390	145	7	3	1	25	69%
15	- Commodity		-	-	-	-	-	-	-	-	0%
16	Total		8,484	6,998	655	521	27	3	3	278	
17											
18	303 - Misc. Intangible Plant		-								
19	- Demand		-	-	-	-	-	-	-	-	
20	- Customer		-	-	-	-	-	-	-	-	
21	- Commodity		-	-	-	-	-	-	-	-	
22	Total		-	-	-	-	-	-	-	-	
23											
24	Total Intangible Plant		10,986								
25	- Demand		3,405	2,219	344	487	26	0	2	327	
26	- Customer		7,581	6,842	504	188	9	4	1	33	
27	- Commodity		-	-	-	-	-	-	-	-	
28	Total		10,986	9,061	848	675	34	4	4	360	
29											
30	Production Plant										
31	304 - Land & Land Rights-Mfg Gas		119,929								DEM
32	- Demand	Plant GasInvDem	119,929	87,271	13,663	18,353	625	15	2	-	100%
33	- Customer		-	-	-	-	-	-	-	-	0%
34	- Commodity		-	-	-	-	-	-	-	-	0%
35	Total		119,929	87,271	13,663	18,353	625	15	2	-	
36											
37	305 - Structures & Improvements-Mfg Gas		1,869,054								DEM
38	- Demand	Plant GasInvDem	1,869,054	1,360,086	212,930	286,023	9,745	235	36	-	100%
39	- Customer		-	-	-	-	-	-	-	-	0%
40	- Commodity		-	-	-	-	-	-	-	-	0%
41	Total		1,869,054	1,360,086	212,930	286,023	9,745	235	36	-	
42											
43	307 - Other Power Equipment		159,016								DEM
44	- Demand	Plant GasInvDem	159,016	115,713	18,116	24,334	829	20	3	-	100%
45	- Customer		-	-	-	-	-	-	-	-	0%
46	- Commodity		-	-	-	-	-	-	-	-	0%
47	Total		159,016	115,713	18,116	24,334	829	20	3	-	
48											
49	311 - Propane Equipment-Gas Ops		4,749,845								DEM
50	- Demand	Plant GasInvDem	4,749,845	3,456,399	541,121	726,872	24,764	598	92	-	100%
51	- Customer		-	-	-	-	-	-	-	-	0%
52	- Commodity		-	-	-	-	-	-	-	-	0%
53	Total		4,749,845	3,456,399	541,121	726,872	24,764	598	92	-	
54											



	A	B	C	D	E	F	G	H	I	J	K
	Laclede Gas Company		Small	Large	Large				Vehicular		
	Allocation of Gross Plant	Allocation	General Srv	General Srv	Volume	Interruptible		Fuel	Transportation	Classification	
		Factor	SGS	LGS	LV	IN		VF	Transp.	Factor	
			Company	RS							
55	311.1 - Propane Storage Cavern-Gas Ops		4,829,688								DEM
56	- Demand	Plant GasInvDem	4,829,688	3,514,500	550,217	739,090	25,180	608	93	-	100%
57	- Customer		-	-	-	-	-	-	-	-	0%
58	- Commodity		-	-	-	-	-	-	-	-	0%
59	Total		4,829,688	3,514,500	550,217	739,090	25,180	608	93	-	
61	Total Production Plant		11,727,532								
62	- Demand		11,727,532	8,533,968	1,336,046	1,794,672	61,143	1,476	227	-	
63	- Customer		-	-	-	-	-	-	-	-	
64	- Commodity		-	-	-	-	-	-	-	-	
65	Total		11,727,532	8,533,968	1,336,046	1,794,672	61,143	1,476	227	-	
67	Underground Storage Plant										
68	350.1 - Land		1,201,600								DEM
69	- Demand	Plant GasInvDem	1,201,600	874,388	136,891	183,882	6,265	151	23	-	100%
70	- Customer		-	-	-	-	-	-	-	-	0%
71	- Commodity		-	-	-	-	-	-	-	-	0%
72	Total		1,201,600	874,388	136,891	183,882	6,265	151	23	-	
74	350.2 - Rights of Way		778,418								DEM
75	- Demand	Plant GasInvDem	778,418	566,444	88,680	119,122	4,058	98	15	-	100%
76	- Customer		-	-	-	-	-	-	-	-	0%
77	- Commodity		-	-	-	-	-	-	-	-	0%
78	Total		778,418	566,444	88,680	119,122	4,058	98	15	-	
80	351.2 - Compression Station Structure		612,741								DEM
81	- Demand	Plant GasInvDem	612,741	445,884	69,806	93,768	3,195	77	12	-	100%
82	- Customer		-	-	-	-	-	-	-	-	0%
83	- Commodity		-	-	-	-	-	-	-	-	0%
84	Total		612,741	445,884	69,806	93,768	3,195	77	12	-	
86	351.4 - Other Structures		1,009,838								DEM
87	- Demand	Plant GasInvDem	1,009,838	734,846	115,045	154,536	5,265	127	20	-	100%
88	- Customer		-	-	-	-	-	-	-	-	0%
89	- Commodity		-	-	-	-	-	-	-	-	0%
90	Total		1,009,838	734,846	115,045	154,536	5,265	127	20	-	
92	352 - Wells		6,090,514								DEM
93	- Demand	Plant GasInvDem	6,090,514	4,431,985	693,855	932,035	31,754	767	118	-	100%
94	- Customer		-	-	-	-	-	-	-	-	0%
95	- Commodity		-	-	-	-	-	-	-	-	0%
96	Total		6,090,514	4,431,985	693,855	932,035	31,754	767	118	-	
98	352.1 - Storage Leaseholds & Rights		2,055,422								DEM
99	- Demand	Plant GasInvDem	2,055,422	1,495,703	234,162	314,542	10,716	259	40	-	100%
100	- Customer		-	-	-	-	-	-	-	-	0%
101	- Commodity		-	-	-	-	-	-	-	-	0%
102	Total		2,055,422	1,495,703	234,162	314,542	10,716	259	40	-	
104	352.2 - Reservoirs		245,023								DEM
105	- Demand	Plant GasInvDem	245,023	178,300	27,914	37,496	1,277	31	5	-	100%
106	- Customer		-	-	-	-	-	-	-	-	0%
107	- Commodity		-	-	-	-	-	-	-	-	0%
108	Total		245,023	178,300	27,914	37,496	1,277	31	5	-	

	A	B	C	D	E	F	G	H	I	J	K
1	Laclede Gas Company				Small	Large	Large		Vehicular		
2	Allocation of Gross Plant	Allocation	Total	Residential	General Srv	General Srv	Volume	Interruptible	Fuel	Transportation	Classification
3		Factor	Company	RS	SGS	LGS	LV	IN	VF	Transp.	Factor
4											
110	352.3 - Non-Recoverable Natural Gas		6,503,628								DEM
111	- Demand	Plant GasInvDem	6,503,628	4,732,603	740,919	995,254	33,908	819	126	-	100%
112	- Customer		-	-	-	-	-	-	-	-	0%
113	- Commodity		-	-	-	-	-	-	-	-	0%
114	Total		6,503,628	4,732,603	740,919	995,254	33,908	819	126	-	
115											
116	352.4 - Wells - Oil & Vent Gas		1,932,818								DEM
117	- Demand	Plant GasInvDem	1,932,818	1,406,486	220,194	295,780	10,077	243	37	-	100%
118	- Customer		-	-	-	-	-	-	-	-	0%
119	- Commodity		-	-	-	-	-	-	-	-	0%
120	Total		1,932,818	1,406,486	220,194	295,780	10,077	243	37	-	
121											
122	353 - Lines		2,876,382								DEM
123	- Demand	Plant GasInvDem	2,876,382	2,093,105	327,689	440,175	14,996	362	56	-	100%
124	- Customer		-	-	-	-	-	-	-	-	0%
125	- Commodity		-	-	-	-	-	-	-	-	0%
126	Total		2,876,382	2,093,105	327,689	440,175	14,996	362	56	-	
127											
128	354 - Compressor Station Equipment		2,747,710								DEM
129	- Demand	Plant GasInvDem	2,747,710	1,999,472	313,030	420,484	14,326	346	53	-	100%
130	- Customer		-	-	-	-	-	-	-	-	0%
131	- Commodity		-	-	-	-	-	-	-	-	0%
132	Total		2,747,710	1,999,472	313,030	420,484	14,326	346	53	-	
133											
134	355 - Measuring & Regulating Equipment		2,247,516								DEM
135	- Demand	Plant GasInvDem	2,247,516	1,635,488	256,046	343,939	11,718	283	43	-	100%
136	- Customer		-	-	-	-	-	-	-	-	0%
137	- Commodity		-	-	-	-	-	-	-	-	0%
138	Total		2,247,516	1,635,488	256,046	343,939	11,718	283	43	-	
139											
140	356 - Purification Equipment		233,042								DEM
141	- Demand	Plant GasInvDem	233,042	169,582	26,549	35,663	1,215	29	5	-	100%
142	- Customer		-	-	-	-	-	-	-	-	0%
143	- Commodity		-	-	-	-	-	-	-	-	0%
144	Total		233,042	169,582	26,549	35,663	1,215	29	5	-	
145											
146	357 - Other Equipment		66,896								DEM
147	- Demand	Plant GasInvDem	66,896	48,679	7,621	10,237	349	8	1	-	100%
148	- Customer		-	-	-	-	-	-	-	-	0%
149	- Commodity		-	-	-	-	-	-	-	-	0%
150	Total		66,896	48,679	7,621	10,237	349	8	1	-	
151											
152	Total Underground Storage Plant		28,601,549								
153	- Demand		28,601,549	20,812,964	3,258,400	4,376,913	149,119	3,600	553	-	
154	- Customer		-	-	-	-	-	-	-	-	
155	- Commodity		-	-	-	-	-	-	-	-	
156	Total		28,601,549	20,812,964	3,258,400	4,376,913	149,119	3,600	553	-	
157											



	A	B	C	D	E	F	G	H	I	J	K
1	Laclede Gas Company				Small	Large	Large				
2	Allocation of Gross Plant	Allocation	Total	Residential	General Srv	General Srv	Volume	Interruptible	Vehicular	Transportation	Classification
3		Factor	Company	RS	SGS	LGS	LV	IN	Fuel	Transp.	Factor
4									VF		
158	Other Storage Equipment										
159	360 - Land & Land Rights		50,654								DEM
160	- Demand	Plant GasInvDem	50,654	36,860	5,771	7,752	264	6	1	-	100%
161	- Customer		-	-	-	-	-	-	-	-	0%
162	- Commodity		-	-	-	-	-	-	-	-	0%
163	Total		50,654	36,860	5,771	7,752	264	6	1	-	
164											
165	361 - Structures & Improvements		107,233								DEM
166	- Demand	Plant GasInvDem	107,233	78,032	12,216	16,410	559	13	2	-	100%
167	- Customer		-	-	-	-	-	-	-	-	0%
168	- Commodity		-	-	-	-	-	-	-	-	0%
169	Total		107,233	78,032	12,216	16,410	559	13	2	-	
170											
171	362 - Gas Holders		659,027								DEM
172	- Demand	Plant GasInvDem	659,027	479,565	75,079	100,851	3,436	83	13	-	100%
173	- Customer		-	-	-	-	-	-	-	-	0%
174	- Commodity		-	-	-	-	-	-	-	-	0%
175	Total		659,027	479,565	75,079	100,851	3,436	83	13	-	
176											
177	363.3 - Compressor Equipment		338,616								DEM
178	- Demand	Plant GasInvDem	338,616	246,406	38,576	51,819	1,765	43	7	-	100%
179	- Customer		-	-	-	-	-	-	-	-	0%
180	- Commodity		-	-	-	-	-	-	-	-	0%
181	Total		338,616	246,406	38,576	51,819	1,765	43	7	-	
182											
183	Total Other Storage Equipment		1,155,529								
184	- Demand		1,155,529	840,863	131,642	176,831	6,025	145	22	-	
185	- Customer		-	-	-	-	-	-	-	-	
186	- Commodity		-	-	-	-	-	-	-	-	
187	Total		1,155,529	840,863	131,642	176,831	6,025	145	22	-	
188											
189	Transmission Plant										
190	365.2 - Rights-of-Way		41,153								DEM
191	- Demand	D2_Demand	41,153	26,790	4,153	5,882	314	-	30	3,983	100%
192	- Customer		-	-	-	-	-	-	-	-	0%
193	- Commodity		-	-	-	-	-	-	-	-	0%
194	Total		41,153	26,790	4,153	5,882	314	-	30	3,983	
195											
196	367 - Mains		2,013,840								DEM
197	- Demand	D2_Demand	2,013,840	1,311,002	203,239	287,824	15,354	-	1,490	194,930	100%
198	- Customer		-	-	-	-	-	-	-	-	0%
199	- Commodity		-	-	-	-	-	-	-	-	0%
200	Total		2,013,840	1,311,002	203,239	287,824	15,354	-	1,490	194,930	
201											
202	371 - Other equipment		9,654								DEM
203	- Demand	D2_Demand	9,654	6,285	974	1,380	74	-	7	934	100%
204	- Customer		-	-	-	-	-	-	-	-	0%
205	- Commodity		-	-	-	-	-	-	-	-	0%
206	Total		9,654	6,285	974	1,380	74	-	7	934	
207											
208	Total Transmission Plant		2,064,647								
209	- Demand		2,064,647	1,344,077	208,367	295,086	15,742	-	1,527	199,848	
210	- Customer		-	-	-	-	-	-	-	-	
211	- Commodity		-	-	-	-	-	-	-	-	
212	Total		2,064,647	1,344,077	208,367	295,086	15,742	-	1,527	199,848	

	A	B	C	D	E	F	G	H	I	J	K
1	Laclede Gas Company				Small	Large	Large		Vehicular		
2	Allocation of Gross Plant	Allocation	Total	Residential	General Srv	General Srv	Volume	Interruptible	Fuel	Transportation	Classification
3		Factor	Company	RS	SGS	LGS	LV	IN	VF	Transp.	Factor
4											
213											
214	<b>Distribution Plant</b>										
215	374 - Land & Land Rights		3,040,444								DIS376-379
216	- Demand	Plant_376-379_D	1,911,945	1,244,669	192,956	273,261	14,577	-	1,414	185,067	63%
217	- Customer	Plant_376-379_C	1,128,499	1,056,947	64,642	6,493	119	36	14	247	37%
218	- Commodity		-	-	-	-	-	-	-	-	0%
219	Total		3,040,444	2,301,616	257,598	279,754	14,696	36	1,428	185,314	
220											
221	375 - Structures & Improvements		14,624,886								DIS376-379
222	- Demand	Plant_376-379_D	9,196,678	5,987,001	928,141	1,314,418	70,119	-	6,803	890,195	63%
223	- Customer	Plant_376-379_C	5,428,209	5,084,039	310,937	31,231	572	174	66	1,189	37%
224	- Commodity		-	-	-	-	-	-	-	-	0%
225	Total		14,624,886	11,071,040	1,239,078	1,345,649	70,691	174	6,870	891,384	
226											
227	376.1 - Mains - Steel		230,736,646								DISMAIN
228	- Demand	D2_Demand	143,200,157	93,222,745	14,451,948	20,466,623	1,091,815	-	105,932	13,861,093	62%
229	- Customer	C1_customers	87,536,489	81,986,329	5,014,243	503,631	9,228	2,809	1,072	19,178	38%
230	- Commodity		-	-	-	-	-	-	-	-	0%
231	Total		230,736,646	175,209,075	19,466,191	20,970,254	1,101,043	2,809	107,004	13,880,271	
232											
233	376.2 - Mains - Cast Iron		21,555,524								DISMAIN
234	- Demand	D2_Demand	13,377,825	8,708,912	1,350,108	1,912,001	101,998	-	9,896	1,294,910	62%
235	- Customer	C1_customers	8,177,699	7,659,201	468,433	47,049	862	262	100	1,792	38%
236	- Commodity		-	-	-	-	-	-	-	-	0%
237	Total		21,555,524	16,368,113	1,818,541	1,959,051	102,860	262	9,996	1,296,701	
238											
239	376.3 - Mains - Plastic		451,903,950								DISMAIN
240	- Demand	D2_Demand	280,461,373	182,579,263	28,304,531	40,084,433	2,138,349	-	207,471	27,147,325	62%
241	- Customer	C1_customers	171,442,578	160,572,439	9,820,530	986,375	18,073	5,501	2,099	37,550	38%
242	- Commodity		-	-	-	-	-	-	-	-	0%
243	Total		451,903,950	343,151,703	38,125,061	41,070,808	2,156,422	5,501	209,570	27,184,885	
244											
245	378 - Meas. & Reg. Station - General		12,743,518								DEM
246	- Demand	D2_Demand	12,743,518	8,295,980	1,286,093	1,821,344	97,162	-	9,427	1,233,512	100%
247	- Customer		-	-	-	-	-	-	-	-	0%
248	- Commodity		-	-	-	-	-	-	-	-	0%
249	Total		12,743,518	8,295,980	1,286,093	1,821,344	97,162	-	9,427	1,233,512	
250											
251	379 - Meas. & Reg. Station - City Gate		2,844,287								DEM
252	- Demand	D2_Demand	2,844,287	1,851,620	287,049	406,515	21,686	-	2,104	275,313	100%
253	- Customer		-	-	-	-	-	-	-	-	0%
254	- Commodity		-	-	-	-	-	-	-	-	0%
255	Total		2,844,287	1,851,620	287,049	406,515	21,686	-	2,104	275,313	
256											
257	380.1 - Services - Steel		38,730,897								CUS
258	- Demand		-	-	-	-	-	-	-	-	0%
259	- Customer	C6_services	38,730,897	35,912,898	2,185,615	572,719	18,797	4,970	2,000	33,898	100%
260	- Commodity		-	-	-	-	-	-	-	-	0%
261	Total		38,730,897	35,912,898	2,185,615	572,719	18,797	4,970	2,000	33,898	
262											
263	380.2 - Services - Plastic		645,762,615								CUS
264	- Demand		-	-	-	-	-	-	-	-	0%
265	- Customer	C6_services	645,762,615	598,777,948	36,440,892	9,548,972	313,408	82,862	33,343	565,191	100%
266	- Commodity		-	-	-	-	-	-	-	-	0%
267	Total		645,762,615	598,777,948	36,440,892	9,548,972	313,408	82,862	33,343	565,191	



Laclede Gas Company  
Cost of Service Study  
12 Months Ending December 31, 2016

	A	B	C	D	E	F	G	H	I	J	K
1	Laclede Gas Company				Small	Large	Large		Vehicular		
2	Allocation of Gross Plant	Allocation	Total	Residential	General Srv	General Srv	Volume	Interruptible	Fuel	Transportation	Classification
3		Factor	Company	RS	SGS	LGS	LV	IN	VF	Transp.	Factor
4											
268											
269	381 - Meters		129,541,012								CUS
270	- Demand		-	-	-	-	-	-	-	-	0%
271	- Customer	C3_meters	129,541,012	108,212,959	15,325,374	4,754,757	157,061	104,954	23,407	962,499	100%
272	- Commodity		-	-	-	-	-	-	-	-	0%
273	Total		129,541,012	108,212,959	15,325,374	4,754,757	157,061	104,954	23,407	962,499	
274											
275	383 - House Regulators		25,568,099								CUS
276	- Demand		-	-	-	-	-	-	-	-	0%
277	- Customer	C5_Regcus	25,568,099	18,642,965	2,414,255	3,346,994	248,925	109,135	25,220	780,606	100%
278	- Commodity		-	-	-	-	-	-	-	-	0%
279	Total		25,568,099	18,642,965	2,414,255	3,346,994	248,925	109,135	25,220	780,606	
280											
281	385 - Commercial & Ind Meas & Reg Eq		14,480,417								CUS
282	- Demand		-	-	-	-	-	-	-	-	0%
283	- Customer	C14_385cus	14,480,417	-	3,006,920	8,123,773	500,035	309,437	66,891	2,473,362	100%
284	- Commodity		-	-	-	-	-	-	-	-	0%
285	Total		14,480,417	-	3,006,920	8,123,773	500,035	309,437	66,891	2,473,362	
286											
287	386 - Other Property - Customer Premises		22,975								CUS
288	- Demand		-	-	-	-	-	-	-	-	0%
289	- Customer	C1_customers	22,975	21,519	1,316	132	2	1	0	5	100%
290	- Commodity		-	-	-	-	-	-	-	-	0%
291	Total		22,975	21,519	1,316	132	2	1	0	5	
292											
293	387 - Other Equipment		406,070								CUS
294	- Demand		-	-	-	-	-	-	-	-	0%
295	- Customer	Plant_374-386_C	406,070	366,504	27,023	10,053	456	223	56	1,755	100%
296	- Commodity		-	-	-	-	-	-	-	-	0%
297	Total		406,070	366,504	27,023	10,053	456	223	56	1,755	
298											
299	Total Distribution Plant		1,591,961,341								
300	- Demand		463,735,782	301,890,191	46,800,826	66,278,596	3,535,706	-	343,049	44,887,414	
301	- Customer		1,128,225,559	1,018,293,747	75,080,179	27,932,177	1,267,539	620,365	154,268	4,877,283	
302	- Commodity		-	-	-	-	-	-	-	-	
303	Total		1,591,961,341	1,320,183,939	121,881,005	94,210,773	4,803,245	620,365	497,317	49,764,697	
304											
305	General Plant										
306	389 - Land		10,089								PTD PLANT
307	- Demand	PTD_D	3,129	2,057	319	450	23	0	2	278	31%
308	- Customer	PTD_C	6,960	6,281	463	172	8	4	1	30	69%
309	- Commodity		-	-	-	-	-	-	-	-	0%
310	Total		10,089	8,338	782	622	31	4	3	308	
311											
312	390 - Structures & Improvements		3,031,255								PTD PLANT
313	- Demand	PTD_D	940,202	617,964	95,886	135,154	6,983	10	640	83,565	31%
314	- Customer	PTD_C	2,091,053	1,887,306	139,154	51,769	2,349	1,150	286	9,040	69%
315	- Commodity		-	-	-	-	-	-	-	-	0%
316	Total		3,031,255	2,505,270	235,040	186,923	9,332	1,159	926	92,604	
317											
318	391 - Furniture & Fixtures		4,008,541								PTD PLANT
319	- Demand	PTD_D	1,243,326	817,198	126,800	178,728	9,234	13	847	110,506	31%
320	- Customer	PTD_C	2,765,215	2,495,779	184,017	68,460	3,107	1,520	378	11,954	69%
321	- Commodity		-	-	-	-	-	-	-	-	0%
322	Total		4,008,541	3,312,977	310,817	247,188	12,341	1,533	1,225	122,460	



	A	B	C	D	E	F	G	H	I	J	K
1	Laclede Gas Company										
2	Allocation of Cross Plant	Allocation	Total	Residential	Small	Large	Large	Interruptible	Vehicular	Transportation	Classification
3		Factor	Company	RS	General Srv	General Srv	Volume	IN	Fuel	Transp.	Factor
4					SGS	LGS	LV		VF		
323											
324	391.1 - Data Processing Systems		12,891,697								PTD PLANT
325	- Demand	PTD_D	3,998,608	2,628,156	407,797	574,799	29,699	41	2,722	355,394	31%
326	- Customer	PTD_C	8,893,089	8,026,566	591,810	220,172	9,991	4,890	1,216	38,445	69%
327	- Commodity		-	-	-	-	-	-	-	-	0%
328	Total		12,891,697	10,654,722	999,606	794,971	39,690	4,931	3,938	393,839	
329											
330	391.2 - Mechanical Office Equipment		30,559								PTD PLANT
331	- Demand	PTD_D	9,479	6,230	967	1,363	70	0	6	842	31%
332	- Customer	PTD_C	21,081	19,027	1,403	522	24	12	3	91	69%
333	- Commodity		-	-	-	-	-	-	-	-	0%
334	Total		30,559	25,257	2,370	1,884	94	12	9	934	
335											
336	391.3 - Data Processing Software		34,308,318								PTD PLANT
337	- Demand	PTD_D	10,641,384	6,994,238	1,085,258	1,529,696	79,036	110	7,245	945,801	31%
338	- Customer	PTD_C	23,666,934	21,360,880	1,574,967	585,937	26,589	13,013	3,236	102,311	69%
339	- Commodity		-	-	-	-	-	-	-	-	0%
340	Total		34,308,318	28,355,118	2,660,224	2,115,633	105,626	13,123	10,481	1,048,113	
341											
342	391.4 - Data Processing Systems		329,979								PTD PLANT
343	- Demand	PTD_D	102,349	67,271	10,438	14,713	760	1	70	9,097	31%
344	- Customer	PTD_C	227,630	205,450	15,148	5,636	256	125	31	984	69%
345	- Commodity		-	-	-	-	-	-	-	-	0%
346	Total		329,979	272,721	25,586	20,348	1,016	126	101	10,081	
347											
348	391.5 - Enterprise Software-EIMS		49,116,594								PTD PLANT
349	- Demand	PTD_D	15,234,455	10,013,115	1,553,680	2,189,949	113,150	157	10,372	1,354,031	31%
350	- Customer	PTD_C	33,882,138	30,580,737	2,254,759	838,841	38,066	18,630	4,633	146,471	69%
351	- Commodity		-	-	-	-	-	-	-	-	0%
352	Total		49,116,594	40,593,853	3,808,440	3,028,790	151,216	18,787	15,005	1,500,503	
353											
354	392.1 - Transportation Eq - Automobiles		2,932,261								PTD PLANT
355	- Demand	PTD_D	909,497	597,783	92,755	130,740	6,755	9	619	80,836	31%
356	- Customer	PTD_C	2,022,764	1,825,670	134,609	50,079	2,273	1,112	277	8,744	69%
357	- Commodity		-	-	-	-	-	-	-	-	0%
358	Total		2,932,261	2,423,453	227,364	180,819	9,028	1,122	896	89,580	
359											
360	392.2 - Transportation Eq - Trucks		16,547,461								PTD PLANT
361	- Demand	PTD_D	5,132,513	3,373,435	523,437	737,797	38,120	53	3,494	456,175	31%
362	- Customer	PTD_C	11,414,948	10,302,701	759,632	282,607	12,824	6,277	1,561	49,346	69%
363	- Commodity		-	-	-	-	-	-	-	-	0%
364	Total		16,547,461	13,676,136	1,283,070	1,020,404	50,945	6,329	5,055	505,522	
365											
366	393 - Stores Equipment		332,530								PTD PLANT
367	- Demand	PTD_D	103,141	67,791	10,519	14,826	766	1	70	9,167	31%
368	- Customer	PTD_C	229,390	207,038	15,265	5,679	258	126	31	992	69%
369	- Commodity		-	-	-	-	-	-	-	-	0%
370	Total		332,530	274,829	25,784	20,506	1,024	127	102	10,159	
371											
372	394 - Tools, Shop & Garage Equipment		14,615,834								PTD PLANT
373	- Demand	PTD_D	4,533,382	2,979,645	462,335	651,673	33,671	47	3,086	402,925	31%
374	- Customer	PTD_C	10,082,452	9,100,040	670,958	249,618	11,327	5,544	1,379	43,586	69%
375	- Commodity		-	-	-	-	-	-	-	-	0%
376	Total		14,615,834	12,079,686	1,133,294	901,290	44,998	5,591	4,465	446,511	
377											

	A	B	C	D	E	F	G	H	I	J	K
1	Laclede Gas Company										
2	Allocation of Gross Plant	Allocation Factor	Total Company	Residential RS	Small General Srv SGS	Large General Srv LGS	Large Volume LV	Interruptible IN	Vehicular Fuel VF	Transportation Transp.	Classification Factor
3											
4											
378	395 - Laboratory Equipment		306,723								PTD PLANT
379	- Demand	PTD_D	95,136	62,530	9,702	13,676	707	1	65	8,456	31%
380	- Customer	PTD_C	211,587	190,970	14,081	5,238	238	116	29	915	69%
381	- Commodity		-	-	-	-	-	-	-	-	0%
382	Total		306,723	253,500	23,783	18,914	944	117	94	9,370	
383											
384	396 - Power Operated Equipment		22,349,910								PTD PLANT
385	- Demand	PTD_D	6,932,254	4,556,347	706,983	996,510	51,488	71	4,720	616,136	31%
386	- Customer	PTD_C	15,417,656	13,915,394	1,026,001	381,704	17,321	8,478	2,108	66,650	69%
387	- Commodity		-	-	-	-	-	-	-	-	0%
388	Total		22,349,910	18,471,740	1,732,984	1,378,214	68,809	8,549	6,828	682,786	
389											
390	397.0 - Communication Equipment		1,237,715								CUS
391	- Demand		-	-	-	-	-	-	-	-	0%
392	- Customer	PTD_C	1,237,715	1,117,115	82,366	30,643	1,391	681	169	5,351	100%
393	- Commodity		-	-	-	-	-	-	-	-	0%
394	Total		1,237,715	1,117,115	82,366	30,643	1,391	681	169	5,351	
395											
396	398 - Miscellaneous Equipment		3,134,059								PTD PLANT
397	- Demand	PTD_D	972,089	638,922	99,138	139,738	7,220	10	662	86,399	31%
398	- Customer	PTD_C	2,161,970	1,951,313	143,873	53,525	2,429	1,189	296	9,346	69%
399	- Commodity		-	-	-	-	-	-	-	-	0%
400	Total		3,134,059	2,590,235	243,011	193,263	9,649	1,199	957	95,745	
401											
402	Total General Plant		165,183,526								
403	- Demand		50,850,943	33,422,682	5,186,015	7,309,810	377,683	523	34,621	4,519,609	
404	- Customer		114,332,582	103,192,268	7,608,506	2,830,602	128,450	62,867	15,633	494,256	
405	- Commodity		-	-	-	-	-	-	-	-	
406	Total		165,183,526	136,614,950	12,794,521	10,140,413	506,133	63,390	50,255	5,013,865	
407											
408	Total Utility Plant		1,800,705,111								
409	- Demand		558,139,389	366,846,965	56,921,641	80,232,395	4,145,443	5,745	380,002	49,607,198	
410	- Customer		1,242,565,722	1,121,492,857	82,689,189	30,762,967	1,395,998	683,237	169,903	5,371,572	
411	- Commodity		-	-	-	-	-	-	-	-	
412	Total		1,800,705,111	1,488,339,822	139,610,830	110,995,362	5,541,441	688,982	549,905	54,978,769	



	A	B	C	D	E	F	G	H	I	J	K
1	Laclede Gas Company				Small	Large	Large		Vehicular		
2	Allocation of Accumulated Depreciation	Allocation	Total	Residential	General Srv	General Srv	Volume	Interruptible	Fuel	Transportation	Classification
3		Factor	Company	RS	SGS	LGS	LV	IN	VF	Transp.	Factor
4											
5	<b>Intangible Plant</b>										
6	301 - Organization Costs		-								NINTPLT
7	- Demand	Plant Nonint_D	-	-	-	-	-	-	-	-	31%
8	- Customer	Plant Nonint_C	-	-	-	-	-	-	-	-	69%
9	- Commodity	-	-	-	-	-	-	-	-	-	0%
10	Total		-	-	-	-	-	-	-	-	
11											
12	302 - Franchise and Consents		-								NINTPLT
13	- Demand	Plant Nonint_D	-	-	-	-	-	-	-	-	31%
14	- Customer	Plant Nonint_C	-	-	-	-	-	-	-	-	69%
15	- Commodity	-	-	-	-	-	-	-	-	-	0%
16	Total		-	-	-	-	-	-	-	-	
17											
18	303 - Misc. Intangible Plant		-								
19	- Demand		-	-	-	-	-	-	-	-	
20	- Customer		-	-	-	-	-	-	-	-	
21	- Commodity		-	-	-	-	-	-	-	-	
22	Total		-	-	-	-	-	-	-	-	
23											
24	Total Intangible Plant		-								
25	- Demand		-	-	-	-	-	-	-	-	
26	- Customer		-	-	-	-	-	-	-	-	
27	- Commodity		-	-	-	-	-	-	-	-	
28	Total		-	-	-	-	-	-	-	-	
29											
30	<b>Production Plant</b>										
31	304 - Land & Land Rights-Mfg Gas		-								DEM
32	- Demand	Plant GasInvDem	-	-	-	-	-	-	-	-	100%
33	- Customer	-	-	-	-	-	-	-	-	-	0%
34	- Commodity	-	-	-	-	-	-	-	-	-	0%
35	Total		-	-	-	-	-	-	-	-	
36											
37	305 - Structures & Improvements-Mfg Gas		(912,862)								DEM
38	- Demand	Plant GasInvDem	(912,862)	(664,278)	(103,997)	(139,696)	(4,759)	(115)	(18)	-	100%
39	- Customer	-	-	-	-	-	-	-	-	-	0%
40	- Commodity	-	-	-	-	-	-	-	-	-	0%
41	Total		(912,862)	(664,278)	(103,997)	(139,696)	(4,759)	(115)	(18)	-	
42											
43	307 - Other Power Equipment		(175,292)								DEM
44	- Demand	Plant GasInvDem	(175,292)	(127,558)	(19,970)	(26,825)	(914)	(22)	(3)	-	100%
45	- Customer	-	-	-	-	-	-	-	-	-	0%
46	- Commodity	-	-	-	-	-	-	-	-	-	0%
47	Total		(175,292)	(127,558)	(19,970)	(26,825)	(914)	(22)	(3)	-	
48											
49	311 - Propane Equipment-Gas Ops		(3,302,598)								DEM
50	- Demand	Plant GasInvDem	(3,302,598)	(2,403,256)	(376,245)	(505,399)	(17,219)	(416)	(64)	-	100%
51	- Customer	-	-	-	-	-	-	-	-	-	0%
52	- Commodity	-	-	-	-	-	-	-	-	-	0%
53	Total		(3,302,598)	(2,403,256)	(376,245)	(505,399)	(17,219)	(416)	(64)	-	
54											



Laclede Gas Company  
Cost of Service Study  
12 Months Ending December 31, 2016

	A	B	C	D	E	F	G	H	I	J	K
1	Laclede Gas Company				Small	Large	Large		Vehicular		
2	Allocation of Accumulated Depreciation	Allocation	Total	Residential	General Srv.	General Srv.	Volume	Interruptible	Fuel	Transportation	Classification
3		Factor	Company	RS	SGS	LGS	LV	IN	VF	Transp.	Factor
4											
55	311.1 - Propane Storage Cavern-Gas Ops		(5,287,916)								DEM
56	- Demand	Plant GasInvDem	(5,287,916)	(3,847,946)	(602,420)	(809,213)	(27,569)	(666)	(102)	-	100%
57	- Customer	-	-	-	-	-	-	-	-	-	0%
58	- Commodity	-	-	-	-	-	-	-	-	-	0%
59	Total		(5,287,916)	(3,847,946)	(602,420)	(809,213)	(27,569)	(666)	(102)	-	
60											
61	Total Production Plant		(9,678,669)								
62	- Demand		(9,678,669)	(7,043,037)	(1,102,632)	(1,481,133)	(50,461)	(1,218)	(187)	-	
63	- Customer		-	-	-	-	-	-	-	-	
64	- Commodity		-	-	-	-	-	-	-	-	
65	Total		(9,678,669)	(7,043,037)	(1,102,632)	(1,481,133)	(50,461)	(1,218)	(187)	-	
66											
67	Underground Storage Plant										
68	350.1 - Land		-								DEM
69	- Demand	Plant GasInvDem	-	-	-	-	-	-	-	-	100%
70	- Customer	-	-	-	-	-	-	-	-	-	0%
71	- Commodity	-	-	-	-	-	-	-	-	-	0%
72	Total		-	-	-	-	-	-	-	-	
73											
74	350.2 - Rights of Way		(772,160)								DEM
75	- Demand	Plant GasInvDem	(772,160)	(561,891)	(87,968)	(118,164)	(4,026)	(97)	(15)	-	100%
76	- Customer	-	-	-	-	-	-	-	-	-	0%
77	- Commodity	-	-	-	-	-	-	-	-	-	0%
78	Total		(772,160)	(561,891)	(87,968)	(118,164)	(4,026)	(97)	(15)	-	
79											
80	351.2 - Compression Station Structure		(788,268)								DEM
81	- Demand	Plant GasInvDem	(788,268)	(573,612)	(89,803)	(120,629)	(4,110)	(99)	(15)	-	100%
82	- Customer	-	-	-	-	-	-	-	-	-	0%
83	- Commodity	-	-	-	-	-	-	-	-	-	0%
84	Total		(788,268)	(573,612)	(89,803)	(120,629)	(4,110)	(99)	(15)	-	
85											
86	351.4 - Other Structures		(993,167)								DEM
87	- Demand	Plant GasInvDem	(993,167)	(722,714)	(113,145)	(151,985)	(5,178)	(125)	(19)	-	100%
88	- Customer	-	-	-	-	-	-	-	-	-	0%
89	- Commodity	-	-	-	-	-	-	-	-	-	0%
90	Total		(993,167)	(722,714)	(113,145)	(151,985)	(5,178)	(125)	(19)	-	
91											
92	352 - Wells		(6,451,938)								DEM
93	- Demand	Plant GasInvDem	(6,451,938)	(4,694,989)	(735,030)	(987,344)	(33,638)	(812)	(125)	-	100%
94	- Customer	-	-	-	-	-	-	-	-	-	0%
95	- Commodity	-	-	-	-	-	-	-	-	-	0%
96	Total		(6,451,938)	(4,694,989)	(735,030)	(987,344)	(33,638)	(812)	(125)	-	
97											
98	352.1 - Storage Leaseholds & Rights		(2,050,552)								DEM
99	- Demand	Plant GasInvDem	(2,050,552)	(1,492,159)	(233,607)	(313,797)	(10,691)	(258)	(40)	-	100%
100	- Customer	-	-	-	-	-	-	-	-	-	0%
101	- Commodity	-	-	-	-	-	-	-	-	-	0%
102	Total		(2,050,552)	(1,492,159)	(233,607)	(313,797)	(10,691)	(258)	(40)	-	
103											
104	352.2 - Reservoirs		(203,408)								DEM
105	- Demand	Plant GasInvDem	(203,408)	(148,018)	(23,173)	(31,128)	(1,061)	(26)	(4)	-	100%
106	- Customer	-	-	-	-	-	-	-	-	-	0%
107	- Commodity	-	-	-	-	-	-	-	-	-	0%
108	Total		(203,408)	(148,018)	(23,173)	(31,128)	(1,061)	(26)	(4)	-	
109											

	A	B	C	D	E	F	G	H	I	J	K
1	Laclede Gas Company										
2	Allocation of Accumulated Depreciation	Allocation	Total	Residential	Small	Large	Large	Interruptible	Vehicular	Transportation	Classification
3		Factor	Company	RS	General Srv	General Srv	Volume	IN	Fuel	Transp.	Factor
4					SGS	LGS	LV		VF		
110	352.3 - Non-Recoverable Natural Gas		(2,852,233)								DEM
111	- Demand	Plant GasInvDem	(2,852,233)	(2,075,531)	(324,938)	(436,479)	(14,871)	(359)	(55)	-	100%
112	- Customer	-	-	-	-	-	-	-	-	-	0%
113	- Commodity	-	-	-	-	-	-	-	-	-	0%
114	Total		(2,852,233)	(2,075,531)	(324,938)	(436,479)	(14,871)	(359)	(55)	-	
115											
116	352.4 - Wells - Oil & Vent Gas		(572,923)								DEM
117	- Demand	Plant GasInvDem	(572,923)	(416,908)	(65,270)	(87,675)	(2,987)	(72)	(11)	-	100%
118	- Customer	-	-	-	-	-	-	-	-	-	0%
119	- Commodity	-	-	-	-	-	-	-	-	-	0%
120	Total		(572,923)	(416,908)	(65,270)	(87,675)	(2,987)	(72)	(11)	-	
121											
122	353 - Lines		(2,558,386)								DEM
123	- Demand	Plant GasInvDem	(2,558,386)	(1,861,703)	(291,461)	(391,511)	(13,339)	(322)	(49)	-	100%
124	- Customer	-	-	-	-	-	-	-	-	-	0%
125	- Commodity	-	-	-	-	-	-	-	-	-	0%
126	Total		(2,558,386)	(1,861,703)	(291,461)	(391,511)	(13,339)	(322)	(49)	-	
127											
128	354 - Compressor Station Equipment		(2,533,298)								DEM
129	- Demand	Plant GasInvDem	(2,533,298)	(1,843,447)	(288,603)	(387,672)	(13,208)	(319)	(49)	-	100%
130	- Customer	-	-	-	-	-	-	-	-	-	0%
131	- Commodity	-	-	-	-	-	-	-	-	-	0%
132	Total		(2,533,298)	(1,843,447)	(288,603)	(387,672)	(13,208)	(319)	(49)	-	
133											
134	355 - Measuring & Regulating Equipment		(2,209,556)								DEM
135	- Demand	Plant GasInvDem	(2,209,556)	(1,607,864)	(251,721)	(338,130)	(11,520)	(278)	(43)	-	100%
136	- Customer	-	-	-	-	-	-	-	-	-	0%
137	- Commodity	-	-	-	-	-	-	-	-	-	0%
138	Total		(2,209,556)	(1,607,864)	(251,721)	(338,130)	(11,520)	(278)	(43)	-	
139											
140	356 - Purification Equipment		(250,680)								DEM
141	- Demand	Plant GasInvDem	(250,680)	(182,416)	(28,558)	(38,362)	(1,307)	(32)	(5)	-	100%
142	- Customer	-	-	-	-	-	-	-	-	-	0%
143	- Commodity	-	-	-	-	-	-	-	-	-	0%
144	Total		(250,680)	(182,416)	(28,558)	(38,362)	(1,307)	(32)	(5)	-	
145											
146	357 - Other Equipment		(42,803)								DEM
147	- Demand	Plant GasInvDem	(42,803)	(31,147)	(4,876)	(6,550)	(223)	(5)	(1)	-	100%
148	- Customer	-	-	-	-	-	-	-	-	-	0%
149	- Commodity	-	-	-	-	-	-	-	-	-	0%
150	Total		(42,803)	(31,147)	(4,876)	(6,550)	(223)	(5)	(1)	-	
151											
152	Total Underground Storage Plant		(22,279,370)								
153	- Demand		(22,279,370)	(16,212,399)	(2,538,153)	(3,409,426)	(116,157)	(2,804)	(431)	-	
154	- Customer		-	-	-	-	-	-	-	-	
155	- Commodity		-	-	-	-	-	-	-	-	
156	Total		(22,279,370)	(16,212,399)	(2,538,153)	(3,409,426)	(116,157)	(2,804)	(431)	-	
157											



	A	B	C	D	E	F	G	H	I	J	K
1	Laclede Gas Company				Small	Large	Large		Vehicular		
2	Allocation of Accumulated Depreciation	Allocation	Total	Residential	General Srv	General Srv	Volume	Interruptible	Fuel	Transportation	Classification
3		Factor	Company	RS	SGS	LGS	LV	IN	VF	Transp.	Factor
4											
158	Other Storage Equipment										
159	360 - Land & Land Rights		-								DEM
160	- Demand	Plant GasInvDem	-	-	-	-	-	-	-	-	100%
161	- Customer	-	-	-	-	-	-	-	-	-	0%
162	- Commodity	-	-	-	-	-	-	-	-	-	0%
163	Total		-	-	-	-	-	-	-	-	
164											
165	361 - Structures & Improvements		(343,322)								DEM
166	- Demand	Plant GasInvDem	(343,322)	(249,831)	(39,113)	(52,539)	(1,790)	(43)	(7)	-	100%
167	- Customer	-	-	-	-	-	-	-	-	-	0%
168	- Commodity	-	-	-	-	-	-	-	-	-	0%
169	Total		(343,322)	(249,831)	(39,113)	(52,539)	(1,790)	(43)	(7)	-	
170											
171	362 - Gas Holders		(5,851,325)								DEM
172	- Demand	Plant GasInvDem	(5,851,325)	(4,257,931)	(666,606)	(895,432)	(30,507)	(737)	(113)	-	100%
173	- Customer	-	-	-	-	-	-	-	-	-	0%
174	- Commodity	-	-	-	-	-	-	-	-	-	0%
175	Total		(5,851,325)	(4,257,931)	(666,606)	(895,432)	(30,507)	(737)	(113)	-	
176											
177	363.3 - Compressor Equipment		(523,423)								DEM
178	- Demand	Plant GasInvDem	(523,423)	(380,888)	(59,630)	(80,100)	(2,729)	(66)	(10)	-	100%
179	- Customer	-	-	-	-	-	-	-	-	-	0%
180	- Commodity	-	-	-	-	-	-	-	-	-	0%
181	Total		(523,423)	(380,888)	(59,630)	(80,100)	(2,729)	(66)	(10)	-	
182											
183	Total Other Storage Equipment		(6,718,070)								
184	- Demand		(6,718,070)	(4,888,650)	(765,349)	(1,028,070)	(35,026)	(846)	(130)	-	
185	- Customer		-	-	-	-	-	-	-	-	
186	- Commodity		-	-	-	-	-	-	-	-	
187	Total		(6,718,070)								
188											
189	Transmission Plant										
190	365.2 - Rights-of-Way		-								DEM
191	- Demand	D2_Demand	-	-	-	-	-	-	-	-	100%
192	- Customer	-	-	-	-	-	-	-	-	-	0%
193	- Commodity	-	-	-	-	-	-	-	-	-	0%
194	Total		-	-	-	-	-	-	-	-	
195											
196	367 - Mains		(1,980,146)								DEM
197	- Demand	D2_Demand	(1,980,146)	(1,289,068)	(199,839)	(283,009)	(15,097)	-	(1,465)	(191,669)	100%
198	- Customer	-	-	-	-	-	-	-	-	-	0%
199	- Commodity	-	-	-	-	-	-	-	-	-	0%
200	Total		(1,980,146)	(1,289,068)	(199,839)	(283,009)	(15,097)	-	(1,465)	(191,669)	
201											
202	371 - Other equipment		64,156								DEM
203	- Demand	D2_Demand	64,156	41,765	6,475	9,169	489	-	47	6,210	100%
204	- Customer	-	-	-	-	-	-	-	-	-	0%
205	- Commodity	-	-	-	-	-	-	-	-	-	0%
206	Total		64,156	41,765	6,475	9,169	489	-	47	6,210	
207											
208	Total Transmission Plant		(1,915,991)								
209	- Demand		(1,915,991)	(1,247,303)	(193,364)	(273,840)	(14,608)	-	(1,417)	(185,459)	
210	- Customer		-	-	-	-	-	-	-	-	
211	- Commodity		-	-	-	-	-	-	-	-	
212	Total		(1,915,991)	(1,247,303)	(193,364)	(273,840)	(14,608)	-	(1,417)	(185,459)	

	A	B	C	D	E	F	G	H	I	J	K
1	Laclede Gas Company										
2	Allocation of Accumulated Depreciation										
3		Allocation Factor	Total Company	Residential RS	Small General Srv SGS	Large General Srv LGS	Large Volume LV	Interruptible IN	Vehicular Fuel VF	Transportation Transp.	Classification Factor
4											
213											
214	Distribution Plant										
215	374 - Land & Land Rights										
216		Plant_376-379_D	(19,361)								DIS376-379
217	- Demand		(12,175)	(7,926)	(1,229)	(1,740)	(93)	-	(9)	(1,178)	63%
218	- Customer	Plant_376-379_C	(7,186)	(6,730)	(412)	(41)	(1)	(0)	(0)	(2)	37%
219	- Commodity	-	-	-	-	-	-	-	-	-	0%
220	Total		(19,361)	(14,656)	(1,640)	(1,781)	(94)	(0)	(9)	(1,180)	
221	375 - Structures & Improvements										
222		Plant_376-379_D	(1,693,135)								DIS376-379
223	- Demand		(1,064,707)	(693,120)	(107,452)	(152,171)	(8,118)	-	(788)	(103,059)	63%
224	- Customer	Plant_376-379_C	(628,428)	(588,583)	(35,997)	(3,616)	(66)	(20)	(8)	(138)	37%
225	- Commodity	-	-	-	-	-	-	-	-	-	0%
226	Total		(1,693,135)	(1,281,703)	(143,449)	(155,787)	(8,184)	(20)	(795)	(103,196)	
227	376.1 - Mains - Steel										
228		D2_Demand	(138,181,069)								DISMAIN
229	- Demand		(85,758,162)	(55,828,230)	(8,654,827)	(12,256,830)	(653,854)	-	(63,440)	(8,300,981)	62%
230	- Customer	C1_customers	(52,422,907)	(49,099,087)	(3,002,876)	(301,609)	(5,526)	(1,682)	(642)	(11,485)	38%
231	- Commodity	-	-	-	-	-	-	-	-	-	0%
232	Total		(138,181,069)	(104,927,317)	(11,657,702)	(12,558,439)	(659,381)	(1,682)	(64,081)	(8,312,466)	
233	376.2 - Mains - Cast Iron										
234		D2_Demand	(1,966,041)								DISMAIN
235	- Demand		(1,220,167)	(794,324)	(123,141)	(174,390)	(9,303)	-	(903)	(118,106)	62%
236	- Customer	C1_customers	(745,873)	(698,582)	(42,725)	(4,291)	(79)	(24)	(9)	(163)	38%
237	- Commodity	-	-	-	-	-	-	-	-	-	0%
238	Total		(1,966,041)	(1,492,906)	(165,866)	(178,682)	(9,382)	(24)	(912)	(118,270)	
239	376.3 - Mains - Plastic										
240		D2_Demand	(78,174,794)								DISMAIN
241	- Demand		(48,516,969)	(31,584,358)	(4,896,396)	(6,934,200)	(369,913)	-	(35,890)	(4,696,211)	62%
242	- Customer	C1_customers	(29,657,825)	(27,777,401)	(1,698,852)	(170,633)	(3,126)	(952)	(363)	(6,498)	38%
243	- Commodity	-	-	-	-	-	-	-	-	-	0%
244	Total		(78,174,794)	(59,361,760)	(6,595,248)	(7,104,833)	(373,039)	(952)	(36,254)	(4,702,709)	
245	378 - Meas. & Reg. Station - General										
246		D2_Demand	(851,327)								DEM
247	- Demand		(851,327)	(554,211)	(85,917)	(121,674)	(6,491)	-	(630)	(82,404)	100%
248	- Customer	-	-	-	-	-	-	-	-	-	0%
249	- Commodity	-	-	-	-	-	-	-	-	-	0%
250	Total		(851,327)	(554,211)	(85,917)	(121,674)	(6,491)	-	(630)	(82,404)	
251	379 - Meas. & Reg. Station - City Gate										
252		D2_Demand	(876,089)								DEM
253	- Demand		(876,089)	(570,331)	(88,416)	(125,213)	(6,680)	-	(648)	(84,801)	100%
254	- Customer	-	-	-	-	-	-	-	-	-	0%
255	- Commodity	-	-	-	-	-	-	-	-	-	0%
256	Total		(876,089)	(570,331)	(88,416)	(125,213)	(6,680)	-	(648)	(84,801)	
257	380.1 - Services - Steel										
258		C6_services	(36,075,778)								CUS
259	- Demand		-	-	-	-	-	-	-	-	0%
260	- Customer		(36,075,778)	(33,450,962)	(2,035,785)	(533,457)	(17,509)	(4,629)	(1,863)	(31,575)	100%
261	- Commodity	-	-	-	-	-	-	-	-	-	0%
262	Total		(36,075,778)	(33,450,962)	(2,035,785)	(533,457)	(17,509)	(4,629)	(1,863)	(31,575)	
263	380.2 - Services - Plastic										
264		C6_services	(245,081,235)								CUS
265	- Demand		-	-	-	-	-	-	-	-	0%
266	- Customer		(245,081,235)	(227,249,512)	(13,830,127)	(3,624,046)	(118,945)	(31,448)	(12,654)	(214,503)	100%
267	- Commodity	-	-	-	-	-	-	-	-	-	0%
267	Total		(245,081,235)	(227,249,512)	(13,830,127)	(3,624,046)	(118,945)	(31,448)	(12,654)	(214,503)	



Laclede Gas Company  
Cost of Service Study  
12 Months Ending December 31, 2016

	A	B	C	D	E	F	G	H	I	J	K
1	Laclede Gas Company										
2	Allocation of Accumulated Depreciation	Allocation Factor	Total Company	Residential RS	Small General Srv SGS	Large General Srv LGS	Large Volume LV	Interruptible IN	Vehicular Fuel VF	Transportation Transp.	Classification Factor
3											
4											
266	381 - Meters		(30,286,296)								CUS
269	- Demand		-	-	-	-	-	-	-	-	0%
270	- Customer	C3_meters	(30,286,296)	(25,299,862)	(3,583,026)	(1,111,648)	(36,720)	(24,538)	(5,473)	(225,029)	100%
271	- Commodity		-	-	-	-	-	-	-	-	0%
272	Total		(30,286,296)	(25,299,862)	(3,583,026)	(1,111,648)	(36,720)	(24,538)	(5,473)	(225,029)	
273	383 - House Regulators		(11,032,284)								CUS
274	- Demand		-	-	-	-	-	-	-	-	0%
276	- Customer	C5_Regcus	(11,032,284)	(8,044,183)	(1,041,718)	(1,444,182)	(107,408)	(47,090)	(10,882)	(336,821)	100%
277	- Commodity		-	-	-	-	-	-	-	-	0%
278	Total		(11,032,284)	(8,044,183)	(1,041,718)	(1,444,182)	(107,408)	(47,090)	(10,882)	(336,821)	
279	385 - Commercial & Ind Meas & Reg Eq		(5,778,276)								CUS
280	- Demand		-	-	-	-	-	-	-	-	0%
281	- Customer	C14_385cus	(5,778,276)	-	(1,199,883)	(3,241,716)	(199,534)	(123,478)	(26,692)	(986,972)	100%
282	- Commodity		-	-	-	-	-	-	-	-	0%
283	Total		(5,778,276)	-	(1,199,883)	(3,241,716)	(199,534)	(123,478)	(26,692)	(986,972)	
284	386 - Other Property - Customer Premises		(166,416)								CUS
285	- Demand		-	-	-	-	-	-	-	-	0%
286	- Customer	C1_customers	(166,416)	(155,865)	(9,533)	(957)	(18)	(5)	(2)	(36)	100%
287	- Commodity		-	-	-	-	-	-	-	-	0%
288	Total		(166,416)	(155,865)	(9,533)	(957)	(18)	(5)	(2)	(36)	
289	387 - Other Equipment		(391,291)								CUS
290	- Demand		-	-	-	-	-	-	-	-	0%
291	- Customer	Plant_374-386_C	(391,291)	(353,164)	(26,039)	(9,687)	(440)	(215)	(54)	(1,692)	100%
292	- Commodity		-	-	-	-	-	-	-	-	0%
293	Total		(391,291)	(353,164)	(26,039)	(9,687)	(440)	(215)	(54)	(1,692)	
294	Total Distribution Plant		(550,573,392)								
295	- Demand		(138,299,597)	(90,032,500)	(13,957,377)	(19,766,219)	(1,054,451)	-	(102,307)	(13,386,742)	
296	- Customer		(412,273,795)	(372,723,932)	(26,506,972)	(10,445,884)	(489,372)	(234,082)	(58,642)	(1,814,912)	
297	- Commodity		-	-	-	-	-	-	-	-	
298	Total		(550,573,392)	(462,756,432)	(40,464,349)	(30,212,103)	(1,543,823)	(234,082)	(160,949)	(15,201,654)	
299	General Plant										
300	389 - Land		-								PTD PLANT
301	- Demand	PTD_D	-	-	-	-	-	-	-	-	31%
302	- Customer	PTD_C	-	-	-	-	-	-	-	-	69%
303	- Commodity		-	-	-	-	-	-	-	-	0%
304	Total		-	-	-	-	-	-	-	-	
305	390 - Structures & Improvements		(464,679)								PTD PLANT
306	- Demand	PTD_D	(144,129)	(94,731)	(14,699)	(20,719)	(1,070)	(1)	(98)	(12,810)	31%
307	- Customer	PTD_C	(320,550)	(289,316)	(21,332)	(7,936)	(360)	(176)	(44)	(1,386)	69%
308	- Commodity		-	-	-	-	-	-	-	-	0%
309	Total		(464,679)	(384,048)	(36,031)	(28,655)	(1,431)	(178)	(142)	(14,196)	
310	391 - Furniture & Fixtures		2,401,812								PTD PLANT
311	- Demand	PTD_D	744,968	489,644	75,975	107,089	5,533	8	507	66,212	31%
312	- Customer	PTD_C	1,656,844	1,495,405	110,258	41,020	1,861	911	227	7,162	69%
313	- Commodity		-	-	-	-	-	-	-	-	0%
314	Total		2,401,812	1,985,048	186,234	148,108	7,394	919	734	73,375	
315	322 Total		2,401,812	1,985,048	186,234	148,108	7,394	919	734	73,375	



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	A	B	C	D	E	F	G	H	I	J	K
1	Laclede Gas Company										
2	Allocation of Accumulated Depreciation										
3		Allocation Factor	Total Company	Residential RS	Small General Srv SGS	Large General Srv LGS	Large Volume LV	Interruptible IN	Vehicular Fuel VF	Transportation Transp.	Classification Factor
4											
323											
324	391.1 - Data Processing Systems		(11,644,788)								PTD PLANT
325	- Demand	PTD_D	(3,611,855)	(2,373,955)	(368,354)	(519,203)	(26,826)	(37)	(2,459)	(321,020)	31%
326	- Customer	PTD_C	(8,032,933)	(7,250,222)	(534,569)	(198,876)	(9,025)	(4,417)	(1,098)	(34,726)	69%
327	- Commodity		-	-	-	-	-	-	-	-	0%
328	Total		(11,644,788)	(9,624,177)	(902,922)	(718,079)	(35,851)	(4,454)	(3,557)	(355,746)	
329											
330	391.2 - Mechanical Office Equipment		241,580								PTD PLANT
331	- Demand	PTD_D	74,931	49,249	7,642	10,771	557	1	51	6,660	31%
332	- Customer	PTD_C	166,649	150,411	11,090	4,126	187	92	23	720	69%
333	- Commodity		-	-	-	-	-	-	-	-	0%
334	Total		241,580	199,661	18,732	14,897	744	92	74	7,380	
335											
336	391.3 - Data Processing Software		(27,947,380)								PTD PLANT
337	- Demand	PTD_D	(8,668,417)	(5,697,470)	(884,045)	(1,246,083)	(64,383)	(89)	(5,902)	(770,445)	31%
338	- Customer	PTD_C	(19,278,963)	(17,400,463)	(1,282,960)	(477,301)	(21,660)	(10,601)	(2,636)	(83,342)	69%
339	- Commodity		-	-	-	-	-	-	-	-	0%
340	Total		(27,947,380)	(23,097,934)	(2,167,005)	(1,723,384)	(86,042)	(10,690)	(8,538)	(853,787)	
341											
342	391.4 - Data Processing Systems		903,381								PTD PLANT
343	- Demand	PTD_D	280,201	184,167	28,576	40,279	2,081	3	191	24,904	31%
344	- Customer	PTD_C	623,180	562,458	41,471	15,428	700	343	85	2,694	69%
345	- Commodity		-	-	-	-	-	-	-	-	0%
346	Total		903,381	746,625	70,047	55,707	2,781	346	276	27,598	
347											
348	391.5 - Enterprise Software-EIMS		(11,890,202)								PTD PLANT
349	- Demand	PTD_D	(3,687,975)	(2,423,987)	(376,117)	(530,145)	(27,392)	(98)	(2,511)	(327,786)	31%
350	- Customer	PTD_C	(8,202,228)	(7,403,021)	(545,835)	(203,068)	(9,215)	(4,510)	(1,122)	(35,458)	69%
351	- Commodity		-	-	-	-	-	-	-	-	0%
352	Total		(11,890,202)	(9,827,007)	(921,952)	(733,213)	(36,607)	(4,548)	(3,632)	(363,243)	
353											
354	392.1 - Transportation Eq - Automobiles		(1,817,056)								PTD PLANT
355	- Demand	PTD_D	(563,595)	(370,433)	(57,478)	(81,017)	(4,186)	(6)	(384)	(50,092)	31%
356	- Customer	PTD_C	(1,253,461)	(1,131,327)	(83,414)	(31,033)	(1,408)	(689)	(171)	(5,419)	69%
357	- Commodity		-	-	-	-	-	-	-	-	0%
358	Total		(1,817,056)	(1,501,760)	(140,892)	(112,049)	(5,594)	(695)	(555)	(55,511)	
359											
360	392.2 - Transportation Eq - Trucks		(5,203,901)								PTD PLANT
361	- Demand	PTD_D	(1,614,090)	(1,060,889)	(164,612)	(232,025)	(11,988)	(17)	(1,099)	(143,460)	31%
362	- Customer	PTD_C	(3,589,811)	(3,240,028)	(238,892)	(88,875)	(4,033)	(1,974)	(491)	(15,519)	69%
363	- Commodity		-	-	-	-	-	-	-	-	0%
364	Total		(5,203,901)	(4,300,917)	(403,504)	(320,900)	(16,021)	(1,991)	(1,590)	(158,978)	
365											
366	393 - Stores Equipment		(260,864)								PTD PLANT
367	- Demand	PTD_D	(80,912)	(53,181)	(8,252)	(11,631)	(601)	(1)	(55)	(7,191)	31%
368	- Customer	PTD_C	(179,952)	(162,418)	(11,975)	(4,455)	(202)	(99)	(25)	(778)	69%
369	- Commodity		-	-	-	-	-	-	-	-	0%
370	Total		(260,864)	(215,598)	(20,227)	(16,086)	(803)	(100)	(80)	(7,969)	
371											
372	394 - Tools, Shop & Garage Equipment		(3,323,099)								PTD PLANT
373	- Demand	PTD_D	(1,030,723)	(677,461)	(105,118)	(148,166)	(7,655)	(11)	(702)	(91,610)	31%
374	- Customer	PTD_C	(2,292,376)	(2,069,012)	(152,551)	(56,754)	(2,575)	(1,260)	(313)	(9,910)	69%
375	- Commodity		-	-	-	-	-	-	-	-	0%
376	Total		(3,323,099)	(2,746,472)	(257,669)	(204,920)	(10,231)	(1,271)	(1,015)	(101,520)	
377											

Laclede Gas Company  
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	A	B	C	D	E	F	G	H	I	J	K
1	Laclede Gas Company				Small	Large	Large				
2	Allocation of Accumulated Depreciation	Allocation	Total	Residential	General Srv	General Srv	Volume	Interruptible	Vehicular	Transportation	Classification
3		Factor	Company	RS	SGS	LGS	LV	IN	Fuel	Transp.	Factor
4									VF		
378	395 - Laboratory Equipment		(150,649)								PTD PLANT
379	- Demand	PTD_D	(46,727)	(30,712)	(4,765)	(6,717)	(347)	(0)	(32)	(4,153)	31%
380	- Customer	PTD_C	(103,922)	(93,796)	(6,916)	(2,573)	(117)	(57)	(14)	(449)	69%
381	- Commodity	-	-	-	-	-	-	-	-	-	0%
382	Total		(150,649)	(124,508)	(11,681)	(9,290)	(464)	(58)	(46)	(4,602)	
383											
384	396 - Power Operated Equipment		(14,246,526)								PTD PLANT
385	- Demand	PTD_D	(4,418,834)	(2,904,357)	(450,653)	(635,206)	(32,820)	(45)	(3,009)	(392,744)	31%
386	- Customer	PTD_C	(9,827,693)	(8,870,104)	(654,005)	(243,310)	(11,041)	(5,404)	(1,344)	(42,485)	69%
387	- Commodity	-	-	-	-	-	-	-	-	-	0%
388	Total		(14,246,526)	(11,774,461)	(1,104,658)	(878,517)	(43,861)	(5,449)	(4,352)	(435,229)	
389											
390	397.0 - Communication Equipment		(894,175)								CUS
391	- Demand	-	-	-	-	-	-	-	-	-	0%
392	- Customer	PTD_C	(894,175)	(807,048)	(59,505)	(22,138)	(1,005)	(492)	(122)	(3,865)	100%
393	- Commodity	-	-	-	-	-	-	-	-	-	0%
394	Total		(894,175)	(807,048)	(59,505)	(22,138)	(1,005)	(492)	(122)	(3,865)	
395											
396	398 - Miscellaneous Equipment		109,158								PTD PLANT
397	- Demand	PTD_D	33,858	22,253	3,453	4,867	251	0	23	3,009	31%
398	- Customer	PTD_C	75,301	67,964	5,011	1,864	85	41	10	326	69%
399	- Commodity	-	-	-	-	-	-	-	-	-	0%
400	Total		109,158	90,217	8,464	6,731	336	42	33	3,335	
401											
402	Total General Plant		(74,187,388)								
403	- Demand		(22,733,299)	(14,941,863)	(2,318,447)	(3,267,906)	(168,846)	(234)	(15,478)	(2,020,525)	
404	- Customer		(51,454,089)	(46,440,516)	(3,424,122)	(1,273,881)	(57,808)	(28,293)	(7,036)	(222,434)	
405	- Commodity		-	-	-	-	-	-	-	-	
406	Total		(74,187,388)	(61,382,379)	(5,742,570)	(4,541,787)	(226,654)	(28,527)	(22,513)	(2,242,960)	
407											
408	Total Utility Plant		(665,352,880)								
409	- Demand		(201,624,995)	(134,365,751)	(20,875,323)	(29,226,594)	(1,439,549)	(5,102)	(119,950)	(15,592,726)	
410	- Customer		(463,727,884)	(419,164,448)	(29,931,094)	(11,719,765)	(547,179)	(262,375)	(65,677)	(2,037,347)	
411	- Commodity		-	-	-	-	-	-	-	-	
412	Total		(665,352,880)	(553,530,199)	(50,806,417)	(40,946,358)	(1,986,729)	(267,477)	(185,627)	(17,630,073)	



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	A	B	C	D	E	F	G	H	I	J	K
1	Laclede Gas Company										
2	Allocation of Rate Base	Allocation Factor	Total Company	Residential RS	Small General Srv SGS	Large General Srv LGS	Large Volume LV	Interruptible IN	Vehicular Fuel VF	Transportation Transp.	Classification Factor
3											
4											
5	Net Plant in Service										
6	Total Gas Utility Plant										
7	- Demand		558,139,389	366,846,965	56,921,641	80,232,395	4,145,443	5,745	380,002	49,607,198	
8	- Customer		1,242,565,722	1,121,492,857	82,689,189	30,762,967	1,395,998	683,237	169,903	5,371,572	
9	- Commodity		-	-	-	-	-	-	-	-	
10	Total		1,800,705,111	1,488,339,822	139,610,830	110,995,362	5,541,441	688,982	549,905	54,978,769	
11	Total Accumulated Depreciation										
13	- Demand		(201,624,995)	(134,365,751)	(20,875,323)	(29,226,594)	(1,439,549)	(5,102)	(119,950)	(15,592,726)	
14	- Customer		(463,727,884)	(419,164,448)	(29,931,094)	(11,719,765)	(547,179)	(262,375)	(65,677)	(2,037,347)	
15	- Commodity		-	-	-	-	-	-	-	-	
16	Total		(665,352,880)	(553,530,199)	(50,806,417)	(40,946,358)	(1,986,729)	(267,477)	(185,627)	(17,630,073)	
17	Net Plant in Service										
19	- Demand		356,514,393	232,481,214	36,046,318	51,005,801	2,705,893	643	260,052	34,014,472	
20	- Customer		778,837,838	702,328,409	52,758,096	19,043,202	848,818	420,862	104,226	3,334,225	
21	- Commodity		-	-	-	-	-	-	-	-	
22	Total		1,135,352,231	934,809,622	88,804,414	70,049,004	3,554,712	421,505	364,278	37,348,697	
23											
24	Construction Work in Progress										
25	Construction Work in Progress		33,904,678								NINTPLT
26	- Demand	D2_Demand	10,508,959	6,841,292	1,060,578	1,501,974	80,124	-	7,774	1,017,217	31%
27	- Customer	Plant Dist_C	23,395,719	21,116,092	1,556,918	579,222	26,285	12,864	3,199	101,139	69%
28	- Commodity		-	-	-	-	-	-	-	-	0%
29	Total		33,904,678	27,957,384	2,617,496	2,081,196	106,409	12,864	10,973	1,118,356	
30											
31	Net Plant in Service										
32	- Demand		367,023,353	239,322,505	37,106,896	52,507,775	2,786,018	643	267,826	35,031,689	
33	- Customer		802,233,557	723,444,501	54,315,014	19,622,425	875,103	433,726	107,425	3,435,364	
34	- Commodity		-	-	-	-	-	-	-	-	
35	Total		1,169,256,909	962,767,006	91,421,910	72,130,200	3,661,121	434,369	375,251	38,467,053	
36											
37	Additions to Utility Plant										
38	Materials and Supplies		4,422,930								TOTPLT
39	- Demand	Plant_Total_D	1,370,914	901,057	139,812	197,069	10,182	14	933	121,846	31%
40	- Customer	Plant_Total_C	3,052,016	2,754,635	203,103	75,561	3,429	1,678	417	13,194	69%
41	- Commodity		-	-	-	-	-	-	-	-	0%
42	Total		4,422,930	3,655,692	342,915	272,629	13,611	1,692	1,351	135,040	
43											
44	Gas Inventory - Volumes and Price		68,077,170								DEM
45	- Demand	Plant GasInvDem	68,077,170	49,538,844	7,755,618	10,417,892	354,931	8,569	1,316	-	100%
46	- Customer		-	-	-	-	-	-	-	-	0%
47	- Commodity		-	-	-	-	-	-	-	-	0%
48	Total		68,077,170	49,538,844	7,755,618	10,417,892	354,931	8,569	1,316	-	
49											
50	Prepayments		11,259,456								NONTOIPEXP
51	- Demand	OPEXPDEM	1,968,662	1,309,043	203,334	284,985	14,147	45	1,198	155,909	17%
52	- Customer	OPEXPCUS	9,205,888	7,940,127	840,249	323,129	15,865	8,835	1,979	75,706	82%
53	- Commodity	OPEXP COM	84,906	42,539	6,759	11,504	872	612	276	22,344	1%
54	Total		11,259,456	9,291,708	1,050,342	619,618	30,884	9,492	3,453	253,959	
55											

	A	B	C	D	E	F	G	H	I	J	K
1	Laclede Gas Company				Small	Large	Large		Vehicular		
2	Allocation of Rate Base	Allocation	Total	Residential	General Srv	General Srv	Volume	Interruptible	Fuel	Transportation	Classification
3		Factor	Company	RS	SGS	LGS	LV	IN	VF	Transp.	Factor
4											
56	Insulation Financing / Energy Wise		1,865,806								NONTOIPEXP
57	- Demand	OPEXPDEM	326,227	216,922	33,695	47,225	2,344	7	199	25,836	17%
58	- Customer	OPEXPBUS	1,525,509	1,315,759	139,238	53,546	2,629	1,464	328	12,545	82%
59	- Commodity	OPEXPDOM	14,070	7,049	1,120	1,906	145	101	46	3,703	1%
60	Total		1,865,806	1,539,730	174,052	102,677	5,118	1,573	572	42,084	
61	Cash Working Capital		21,659,955								NONTOIPEXP
62	- Demand	OPEXPDEM	3,787,139	2,518,222	391,157	548,230	27,215	87	2,305	299,924	17%
64	- Customer	OPEXPBUS	17,709,482	15,274,521	1,616,397	621,606	30,519	16,996	3,807	145,636	82%
65	- Commodity	OPEXPDOM	163,334	81,832	13,003	22,130	1,678	1,178	530	42,983	1%
66	Total		21,659,955	17,874,575	2,020,556	1,191,966	59,412	18,261	6,642	488,543	
67											
68	Other Regulatory Assets										
69											
70	Prepaid Pension / OPEB Assets		153,687,092								NONAGOPEXP
71	- Demand	EXP_Non-A&G_D	26,835,060	17,785,332	2,761,774	3,876,975	194,674	518	16,885	2,198,902	17%
72	- Customer	EXP_Non-A&G_C	125,667,763	109,619,520	10,770,349	4,074,456	194,687	106,347	24,392	878,014	82%
73	- Commodity	EXP_Non-A&G_E	1,184,269	593,333	94,276	160,455	12,167	8,541	3,845	311,653	1%
74	Total		153,687,092	127,998,185	13,626,399	8,111,885	401,527	115,407	45,121	3,388,568	
75											
76											NONAGOPEXP
77	- Demand	EXP_Non-A&G_D	-	-	-	-	-	-	-	-	17%
78	- Customer	EXP_Non-A&G_C	-	-	-	-	-	-	-	-	82%
79	- Commodity	EXP_Non-A&G_E	-	-	-	-	-	-	-	-	1%
80	Total		-	-	-	-	-	-	-	-	
81											
82	Leasehold Improvements		1,681,386								NONAGOPEXP
83	- Demand	EXP_Non-A&G_D	293,584	194,577	30,215	42,415	2,130	6	185	24,057	17%
84	- Customer	EXP_Non-A&G_C	1,374,845	1,199,272	117,831	44,576	2,130	1,163	267	9,606	82%
85	- Commodity	EXP_Non-A&G_E	12,956	6,491	1,031	1,755	133	93	42	3,410	1%
86	Total		1,681,386	1,400,341	149,077	88,747	4,393	1,263	494	37,072	
87											
88	Low Income Program Net of Amortization		40,333								NONAGOPEXP
89	- Demand	EXP_Non-A&G_D	7,043	4,668	725	1,017	51	0	4	577	17%
90	- Customer	EXP_Non-A&G_C	32,980	28,768	2,827	1,069	51	28	6	230	82%
91	- Commodity	EXP_Non-A&G_E	311	156	25	42	3	2	1	82	1%
92	Total		40,333	33,592	3,576	2,129	105	30	12	889	
93											
94	Red Tag Program		28,429								NONAGOPEXP
95	- Demand	EXP_Non-A&G_D	4,964	3,290	511	717	36	0	3	407	17%
96	- Customer	EXP_Non-A&G_C	23,246	20,278	1,992	754	36	20	5	162	82%
97	- Commodity	EXP_Non-A&G_E	219	110	17	30	2	2	1	58	1%
98	Total		28,429	23,677	2,521	1,501	74	21	8	627	
99											
100	Initial Energy Efficiency Asset Net of Amortization		300,667								NONAGOPEXP
101	- Demand	EXP_Non-A&G_D	52,499	34,794	5,403	7,585	381	1	33	4,302	17%
102	- Customer	EXP_Non-A&G_C	245,851	214,455	21,071	7,971	381	208	48	1,718	82%
103	- Commodity	EXP_Non-A&G_E	2,317	1,161	184	314	24	17	8	610	1%
104	Total		300,667	250,410	26,658	15,870	786	226	88	6,629	
105											



Laclede Gas Company  
Cost of Service Study  
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	A	B	C	D	E	F	G	H	I	J	K
1	Laclede Gas Company				Small	Large	Large		Vehicle		
2	Allocation of Rate Base	Allocation	Total	Residential	General Srv	General Srv	Volume	Interruptible	Fuel	Transportation	Classification
3		Factor	Company	RS	SGS	LGS	LV	IN	VF	Transp.	Factor
4											
106	Energy Efficiency Program		11,639,096								NONAGOPEXP
107	- Demand	EXP_Non-A&G_D	2,032,284	1,346,926	209,156	293,613	14,743	39	1,279	166,528	17%
108	- Customer	EXP_Non-A&G_C	9,517,125	8,301,752	815,665	308,568	14,744	8,054	1,847	66,494	82%
109	- Commodity	EXP_Non-A&G_E	89,688	44,935	7,140	12,152	921	647	291	23,602	1%
110	Total		11,639,096	9,693,613	1,031,960	614,333	30,409	8,740	3,417	256,624	
111											
112	Total Other Regulatory Assets										
113	- Demand		29,225,433	19,369,588	3,007,784	4,222,322	212,015	565	18,389	2,394,772	
114	- Customer		136,861,810	119,384,046	11,729,734	4,437,394	212,029	115,820	26,564	956,224	
115	- Commodity		1,289,759	646,185	102,674	174,748	13,250	9,302	4,187	339,413	
116	Total		167,377,003	139,399,818	14,840,191	8,834,464	437,294	125,687	49,140	3,690,410	
117											
118	Total Additions to Utility Plant										
119	- Demand		104,755,546	73,853,675	11,531,399	15,717,723	620,834	9,287	24,341	2,998,288	
120	- Customer		168,354,706	146,669,087	14,528,720	5,511,235	264,470	144,794	33,095	1,203,305	
121	- Commodity		1,552,069	777,605	123,555	210,288	15,945	11,194	5,039	408,443	
122	Total		274,662,320	221,300,367	26,183,674	21,439,246	901,249	165,274	62,474	4,610,035	
123											
124	Reductions to Utility Plant										
125	Accumulated Deferred Income Taxes		(206,856,327)								TOTPLT
126	- Demand	Plant_Total_D	(64,116,364)	(42,141,612)	(6,538,884)	(9,216,711)	(476,208)	(660)	(43,653)	(5,698,636)	31%
127	- Customer	Plant_Total_C	(142,739,963)	(128,831,696)	(9,498,936)	(3,533,901)	(160,365)	(78,487)	(19,518)	(617,060)	69%
128	- Commodity		-	-	-	-	-	-	-	-	0%
129	Total		(206,856,327)	(170,973,307)	(16,037,820)	(12,750,612)	(636,574)	(79,147)	(63,170)	(6,315,696)	
130											
131	Other Regulatory Liabilities										
132	- Demand		-	-	-	-	-	-	-	-	
133	- Customer		-	-	-	-	-	-	-	-	
134	- Commodity		-	-	-	-	-	-	-	-	
135	Total		-	-	-	-	-	-	-	-	
136											
137	Customer Deposits		(4,354,823)								CUS
138	- Demand		-	-	-	-	-	-	-	-	0%
139	- Customer	C2_depcus	(4,354,823)	(3,053,380)	(1,180,682)	(118,588)	(2,173)	-	-	-	100%
140	- Commodity		-	-	-	-	-	-	-	-	0%
141	Total		(4,354,823)	(3,053,380)	(1,180,682)	(118,588)	(2,173)	-	-	-	
142											
143	Customer Advances		(1,020,828)								MAINSVC
144	- Demand	D2_Demand	(321,268)	(209,145)	(32,423)	(45,917)	(2,449)	-	(238)	(31,097)	31%
145	- Customer	Plant_MainsSrv_C	(699,560)	(650,498)	(39,644)	(8,570)	(265)	(71)	(28)	(483)	69%
146	- Commodity		-	-	-	-	-	-	-	-	0%
147	Total		(1,020,828)	(859,643)	(72,067)	(54,487)	(2,714)	(71)	(266)	(31,581)	
148											
149	Total Deductions										
150	- Demand		(64,437,632)	(42,350,756)	(6,571,307)	(9,262,628)	(478,658)	(660)	(43,890)	(5,729,733)	
151	- Customer		(147,794,346)	(132,535,574)	(10,719,262)	(3,661,060)	(162,803)	(78,558)	(19,546)	(617,544)	
152	- Commodity		-	-	-	-	-	-	-	-	
153	Total		(212,231,978)	(174,886,330)	(17,290,568)	(12,923,687)	(641,461)	(79,218)	(63,436)	(6,347,277)	
154											
155	Total Rate Base										
156	- Demand		407,341,266	270,825,424	42,066,988	58,962,871	2,928,194	9,270	248,276	32,300,243	
157	- Customer		822,793,916	737,578,014	58,124,472	21,472,600	976,770	499,962	120,973	4,021,125	
158	- Commodity		1,552,069	777,605	123,555	210,288	15,945	11,194	5,039	408,443	
159	Total		1,231,687,251	1,009,181,043	100,315,016	80,645,759	3,920,909	520,426	374,289	36,729,811	



Laclede Gas Company  
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	A	B	C	D	E	F	G	H	I	J	K
	Laclede Gas Company	Allocation Factor	Total Company	Residential RS	Small General Srv SGS	Large General Srv LGS	Large Volume LV	Interruptible IN	Vehicular Fuel VF	Transportation Transp.	Classification Factor
5	Production Expense										
6	Manufactured Gas Production Expense										
7	710 - Operation Supervisor & Engine.		86,504								DEM
8	- Demand	Plant GasInvDem	86,504	62,948	9,855	13,238	451	11	2	-	100%
9	- Customer		-	-	-	-	-	-	-	-	0%
10	- Commodity		-	-	-	-	-	-	-	-	0%
11	Total		86,504	62,948	9,855	13,238	451	11	2	-	
12											
13	712 - Other Power Expenses		138								DEM
14	- Demand	Plant GasInvDem	138	100	16	21	1	0	0	-	100%
15	- Customer		-	-	-	-	-	-	-	-	0%
16	- Commodity		-	-	-	-	-	-	-	-	0%
17	Total		138	100	16	21	1	0	0	-	
18											
19	717 - LPG Expenses		2,927								DEM
20	- Demand	Plant GasInvDem	2,927	2,130	333	448	15	0	0	-	100%
21	- Customer		-	-	-	-	-	-	-	-	0%
22	- Commodity		-	-	-	-	-	-	-	-	0%
23	Total		2,927	2,130	333	448	15	0	0	-	
24											
25	723 - Fuel for LPG Process		1,276								COM
26	- Demand		-	-	-	-	-	-	-	-	0%
27	- Customer		-	-	-	-	-	-	-	-	0%
28	- Commodity	D4_NonTranspSales	1,276	867	138	235	18	13	6	-	100%
29	Total		1,276	867	138	235	18	13	6	-	
30											
31	728 - LPG		(111,248)								COM
32	- Demand		-	-	-	-	-	-	-	-	0%
33	- Customer		-	-	-	-	-	-	-	-	0%
34	- Commodity	D4_NonTranspSales	(111,248)	(75,594)	(12,015)	(20,487)	(1,558)	(1,101)	(494)	-	100%
35	Total		(111,248)	(75,594)	(12,015)	(20,487)	(1,558)	(1,101)	(494)	-	
36											
37	735 - Miscellaneous Production Expenses		80,275								DEM
38	- Demand	Plant GasInvDem	80,275	58,415	9,145	12,285	419	10	2	-	100%
39	- Customer		-	-	-	-	-	-	-	-	0%
40	- Commodity		-	-	-	-	-	-	-	-	0%
41	Total		80,275	58,415	9,145	12,285	419	10	2	-	
42											
43	740 - Maintenance Supervision & Engine.		18,969								DEM
44	- Demand	Plant GasInvDem	18,969	13,804	2,161	2,903	99	2	0	-	100%
45	- Customer		-	-	-	-	-	-	-	-	0%
46	- Commodity		-	-	-	-	-	-	-	-	0%
47	Total		18,969	13,804	2,161	2,903	99	2	0	-	
48											
49	741 - Maintenance of Structures & Impr.		5,498								DEM
50	- Demand	Plant GasInvDem	5,498	4,001	626	841	29	1	0	-	100%
51	- Customer		-	-	-	-	-	-	-	-	0%
52	- Commodity		-	-	-	-	-	-	-	-	0%
53	Total		5,498	4,001	626	841	29	1	0	-	
54											

Laclede Gas Company  
Cost of Service Study  
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	A	B	C	D	E	F	G	H	I	J	K
1	Laclede Gas Company										
2	Allocation of O&M Expenses	Allocation Factor	Total Company	Residential RS	Small General Srv SGS	Large General Srv LGS	Large Volume LV	Interruptible IN	Vehicular Fuel VF	Transportation Transp.	Classification Factor
3											
4											
55	742 - Maintenance of Production Eq.		78,661								DEM
56	- Demand	Plant GasInvDem	78,661	57,240	8,961	12,038	410	10	2	-	100%
57	- Customer		-	-	-	-	-	-	-	-	0%
58	- Commodity		-	-	-	-	-	-	-	-	0%
59	Total		78,661	57,240	8,961	12,038	410	10	2	-	
60											
61	Total Manufactured Gas Production Exp.		163,000								
62	- Demand		272,972	198,638	31,098	41,773	1,423	34	5	-	
63	- Customer		-	-	-	-	-	-	-	-	
64	- Commodity		(109,972)	(74,727)	(11,877)	(20,252)	(1,540)	(1,088)	(489)	-	
65	Total		163,000	123,911	19,221	21,521	(117)	(1,054)	(484)	-	
66											
67	Purchased Gas Expense										
68											
69	804 - Purchased Gas Expense		(4,269,876)								COM
70	- Demand		-	-	-	-	-	-	-	-	0%
71	- Customer		-	-	-	-	-	-	-	-	0%
72	- Commodity	D4_NonTranspSales	(4,269,876)	(2,901,411)	(461,140)	(786,317)	(59,787)	(42,243)	(18,978)	-	100%
73	Total		(4,269,876)	(2,901,411)	(461,140)	(786,317)	(59,787)	(42,243)	(18,978)	-	
74											
75	808.1 - Gas Withdrawn From Stor.- Debit		4,038,366								COM
76	- Demand		-	-	-	-	-	-	-	-	0%
77	- Customer		-	-	-	-	-	-	-	-	0%
78	- Commodity	D4_NonTranspSales	4,038,366	2,744,098	436,137	743,684	56,545	39,953	17,949	-	100%
79	Total		4,038,366	2,744,098	436,137	743,684	56,545	39,953	17,949	-	
80											
81	810 - Gas Used for Comp. St. Fuel - Credit		(63,447)								COM
82	- Demand		-	-	-	-	-	-	-	-	0%
83	- Customer		-	-	-	-	-	-	-	-	0%
84	- Commodity	D4_NonTranspSales	(63,447)	(43,112)	(6,852)	(11,684)	(888)	(628)	(282)	-	100%
85	Total		(63,447)	(43,112)	(6,852)	(11,684)	(888)	(628)	(282)	-	
86											
87	812 - Gas Used for Other Util. Ops. - Credit		(133,306)								COM
88	- Demand		-	-	-	-	-	-	-	-	0%
89	- Customer		-	-	-	-	-	-	-	-	0%
90	- Commodity	D4_NonTranspSales	(133,306)	(90,582)	(14,397)	(24,549)	(1,867)	(1,319)	(592)	-	100%
91	Total		(133,306)	(90,582)	(14,397)	(24,549)	(1,867)	(1,319)	(592)	-	
92											
93	Total Natural Gas Purchases		(428,262)								
94	- Demand		-	-	-	-	-	-	-	-	
95	- Customer		-	-	-	-	-	-	-	-	
96	- Commodity		(428,262)	(291,007)	(46,252)	(78,866)	(5,997)	(4,237)	(1,903)	-	
97	Total		(428,262)	(291,007)	(46,252)	(78,866)	(5,997)	(4,237)	(1,903)	-	
98											
99	Total Production Expenses		(265,263)								
100	- Demand		272,972	198,638	31,098	41,773	1,423	34	5	-	
101	- Customer		-	-	-	-	-	-	-	-	
102	- Commodity		(538,235)	(365,734)	(58,129)	(99,118)	(7,536)	(5,325)	(2,392)	-	
103	Total		(265,263)	(167,096)	(27,030)	(57,345)	(6,113)	(5,291)	(2,387)	-	
104											



Laclede Gas Company  
Cost of Service Study  
12 Months Ending December 31, 2016

	A	B	C	D	E	F	G	H	I	J	K
1	Laclede Gas Company										
2	Allocation of O&M Expenses	Allocation	Total	Residential	Small	Large	Large	Interruptible	Vehicular	Transportation	Classification
3		Factor	Company	RS	General Srv	General Srv	Volume	IN	Fuel	Transp.	Factor
4					SGS	LGS	LV		VF		
105	Natural Gas Storage Expenses										
106	814 - Operation Supervisor & Engineering		261,518								DEM
107	- Demand	Plant GasInvDem	261,518	190,303	29,793	40,020	1,363	33	5	-	100%
108	- Customer		-	-	-	-	-	-	-	-	0%
109	- Commodity		-	-	-	-	-	-	-	-	0%
110	Total		261,518	190,303	29,793	40,020	1,363	33	5	-	
111											
112	815 - Maps and Records		57,853								DEM
113	- Demand	Plant GasInvDem	57,853	42,099	6,591	8,853	302	7	1	-	100%
114	- Customer		-	-	-	-	-	-	-	-	0%
115	- Commodity		-	-	-	-	-	-	-	-	0%
116	Total		57,853	42,099	6,591	8,853	302	7	1	-	
117											
118	816 - Wells Expenses		359,840								DEM
119	- Demand	Plant GasInvDem	359,840	261,851	40,994	55,067	1,876	45	7	-	100%
120	- Customer		-	-	-	-	-	-	-	-	0%
121	- Commodity		-	-	-	-	-	-	-	-	0%
122	Total		359,840	261,851	40,994	55,067	1,876	45	7	-	
123											
124	817 - Line Expenses		13,694								DEM
125	- Demand	Plant GasInvDem	13,694	9,965	1,560	2,096	71	2	0	-	100%
126	- Customer		-	-	-	-	-	-	-	-	0%
127	- Commodity		-	-	-	-	-	-	-	-	0%
128	Total		13,694	9,965	1,560	2,096	71	2	0	-	
129											
130	818 - Compressor Station Expenses		112,122								DEM
131	- Demand	Plant GasInvDem	112,122	81,590	12,773	17,158	585	14	2	-	100%
132	- Customer		-	-	-	-	-	-	-	-	0%
133	- Commodity		-	-	-	-	-	-	-	-	0%
134	Total		112,122	81,590	12,773	17,158	585	14	2	-	
135											
136	819 - Compressor Station Fuel & Power		65,942								COM
137	- Demand		-	-	-	-	-	-	-	-	0%
138	- Customer		-	-	-	-	-	-	-	-	0%
139	- Commodity	D4_NonTranspSales	65,942	44,808	7,122	12,144	923	652	293	-	100%
140	Total		65,942	44,808	7,122	12,144	923	652	293	-	
141											
142	820 - Measuring & Reg. Station Expenses		518,161								DEM
143	- Demand	Plant GasInvDem	518,161	377,059	59,031	79,294	2,702	65	10	-	100%
144	- Customer		-	-	-	-	-	-	-	-	0%
145	- Commodity		-	-	-	-	-	-	-	-	0%
146	Total		518,161	377,059	59,031	79,294	2,702	65	10	-	
147											
148	821 - Purification Expenses		106,554								DEM
149	- Demand	Plant GasInvDem	106,554	77,538	12,139	16,306	556	13	2	-	100%
150	- Customer		-	-	-	-	-	-	-	-	0%
151	- Commodity		-	-	-	-	-	-	-	-	0%
152	Total		106,554	77,538	12,139	16,306	556	13	2	-	
153											
154	823 - Gas Losses		6,883								COM
155	- Demand		-	-	-	-	-	-	-	-	0%
156	- Customer		-	-	-	-	-	-	-	-	0%
157	- Commodity	D4_NonTranspSales	6,883	4,677	743	1,268	96	68	31	-	100%
158	Total		6,883	4,677	743	1,268	96	68	31	-	
159											



	A	B	C	D	E	F	G	H	I	J	K
1	Laclede Gas Company										
2	Allocation of O&M Expenses	Allocation Factor	Total Company	Residential RS	Small General Srv SGS	Large General Srv LGS	Large Volume LV	Interruptible IN	Vehicular Fuel VF	Transportation Transp.	Classification Factor
3											
4											
160	824 - Other Expenses		237,850								DEM
161	- Demand	Plant GasInvDem	237,850	173,081	27,097	36,398	1,240	30	5	-	100%
162	- Customer		-	-	-	-	-	-	-	-	0%
163	- Commodity		-	-	-	-	-	-	-	-	0%
164	Total		237,850	173,081	27,097	36,398	1,240	30	5	-	
165											
166	825 - Storage Well Royalties		99,907								COM
167	- Demand		-	-	-	-	-	-	-	-	0%
168	- Customer		-	-	-	-	-	-	-	-	0%
169	- Commodity	D4_NonTranspSales	99,907	67,887	10,790	18,398	1,399	988	444	-	100%
170	Total		99,907	67,887	10,790	18,398	1,399	988	444	-	
171											
172	830 - Maintenance Supervision & Engine.		30,457								DEM
173	- Demand	Plant GasInvDem	30,457	22,163	3,470	4,661	159	4	1	-	100%
174	- Customer		-	-	-	-	-	-	-	-	0%
175	- Commodity		-	-	-	-	-	-	-	-	0%
176	Total		30,457	22,163	3,470	4,661	159	4	1	-	
177											
178	831 - Maintenance of Structures & Impr.		207,692								DEM
179	- Demand	Plant GasInvDem	207,692	151,134	23,661	31,783	1,083	26	4	-	100%
180	- Customer		-	-	-	-	-	-	-	-	0%
181	- Commodity		-	-	-	-	-	-	-	-	0%
182	Total		207,692	151,134	23,661	31,783	1,083	26	4	-	
183											
184	832 - Maintenance of Reservoirs & Wells		200,399								DEM
185	- Demand	Plant GasInvDem	200,399	145,828	22,830	30,667	1,045	25	4	-	100%
186	- Customer		-	-	-	-	-	-	-	-	0%
187	- Commodity		-	-	-	-	-	-	-	-	0%
188	Total		200,399	145,828	22,830	30,667	1,045	25	4	-	
189											
190	833 - Maintenance of Lines		180,532								DEM
191	- Demand	Plant GasInvDem	180,532	131,370	20,567	27,627	941	23	3	-	100%
192	- Customer		-	-	-	-	-	-	-	-	0%
193	- Commodity		-	-	-	-	-	-	-	-	0%
194	Total		180,532	131,370	20,567	27,627	941	23	3	-	
195											
196	834 - Maintenance of Compr. Station Eq.		308,876								DEM
197	- Demand	Plant GasInvDem	308,876	224,765	35,188	47,267	1,610	39	6	-	100%
198	- Customer		-	-	-	-	-	-	-	-	0%
199	- Commodity		-	-	-	-	-	-	-	-	0%
200	Total		308,876	224,765	35,188	47,267	1,610	39	6	-	
201											
202	835 - Maint. of Measuring & Reg. St. Exp.		44,832								DEM
203	- Demand	Plant GasInvDem	44,832	32,623	5,107	6,861	234	6	1	-	100%
204	- Customer		-	-	-	-	-	-	-	-	0%
205	- Commodity		-	-	-	-	-	-	-	-	0%
206	Total		44,832	32,623	5,107	6,861	234	6	1	-	
207											
208	836 - Maintenance of Purification Eq.		51,568								DEM
209	- Demand	Plant GasInvDem	51,568	37,525	5,875	7,891	269	6	1	-	100%
210	- Customer		-	-	-	-	-	-	-	-	0%
211	- Commodity		-	-	-	-	-	-	-	-	0%
212	Total		51,568	37,525	5,875	7,891	269	6	1	-	
213											

Laclede Gas Company  
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	A	B	C	D	E	F	G	H	I	J	K
1	Laclede Gas Company		Total	Residential	Small	Large	Large	Interruptible	Vehicular	Transportation	Classification
2	Allocation of O&M Expenses	Allocation	Company	RS	General Srv	General Srv	Volume	IN	Fuel	Transp.	Factor
3		Factor			SGS	LGS	LV		VF		
214	837 - Maintenance of Other Equipment		244,982								DEM
215	- Demand	Plant GasInvDem	244,982	178,270	27,909	37,490	1,277	31	5	-	100%
216	- Customer		-	-	-	-	-	-	-	-	0%
217	- Commodity		-	-	-	-	-	-	-	-	0%
218	Total		244,982	178,270	27,909	37,490	1,277	31	5	-	
219											
220	840 - Operation Supervisor & Engineering		20,870								DEM
221	- Demand	Plant GasInvDem	20,870	15,187	2,378	3,194	109	3	0	-	100%
222	- Customer		-	-	-	-	-	-	-	-	0%
223	- Commodity		-	-	-	-	-	-	-	-	0%
224	Total		20,870	15,187	2,378	3,194	109	3	0	-	
225											
226	841 - Operation Labor & Expenses		6,068								DEM
227	- Demand	Plant GasInvDem	6,068	4,416	691	929	32	1	0	-	100%
228	- Customer		-	-	-	-	-	-	-	-	0%
229	- Commodity		-	-	-	-	-	-	-	-	0%
230	Total		6,068	4,416	691	929	32	1	0	-	
231											
232	842.1 - Fuel		9,497								COM
233	- Demand		-	-	-	-	-	-	-	-	0%
234	- Customer		-	-	-	-	-	-	-	-	0%
235	- Commodity	D5_NonTranspDem	9,497	6,845	1,061	1,503	80	-	8	-	100%
236	Total		9,497	6,845	1,061	1,503	80	-	8	-	
237											
238	843.2 - Maintenance of Str. & Impr.		69,195								DEM
239	- Demand	Plant GasInvDem	69,195	50,352	7,883	10,589	361	9	1	-	100%
240	- Customer		-	-	-	-	-	-	-	-	0%
241	- Commodity		-	-	-	-	-	-	-	-	0%
242	Total		69,195	50,352	7,883	10,589	361	9	1	-	
243											
244	Total Natural Gas Storage Expenses		3,215,291								
245	- Demand		3,033,062	2,207,118	345,538	464,151	15,813	382	59	-	
246	- Customer		-	-	-	-	-	-	-	-	
247	- Commodity		182,230	124,218	19,716	33,312	2,499	1,709	776	-	
248	Total		3,215,291	2,331,337	365,254	497,464	18,312	2,091	834	-	
249											
250	Distribution Expenses										
251	Operations Expenses										
252	870 - Operation, Supervision and Engine.		4,914,668								EXP871-880
253	- Demand	EXP_871-880_D	666,159	433,667	67,230	95,210	5,079	-	493	64,481	14%
254	- Customer	EXP_871-880_C	4,050,025	3,078,516	534,884	324,911	17,063	9,853	2,169	82,630	82%
255	- Commodity	EXP_871-880_E	198,483	107,455	17,079	29,122	2,214	1,565	703	40,347	4%
256	Total		4,914,668	3,619,638	619,192	449,242	24,357	11,418	3,364	187,457	
257											
258	871 - Distribution and Load Dispatching		1,180,217								COM
259	- Demand		-	-	-	-	-	-	-	-	0%
260	- Customer		-	-	-	-	-	-	-	-	0%
261	- Commodity	D1_sales	1,180,217	638,946	101,552	173,162	13,166	9,303	4,179	239,909	100%
262	Total		1,180,217	638,946	101,552	173,162	13,166	9,303	4,179	239,909	
263											



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Cost of Service Study  
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	A	B	C	D	E	F	G	H	I	J	K
1	Laclede Gas Company										
2	Allocation of O&M Expenses	Allocation Factor	Total Company	Residential RS	Small General Srv SGS	Large General Srv LGS	Large Volume LV	Interruptible IN	Fuel VF	Transportation Transp.	Classification Factor
264	Odorant Expense (Acct. 874 reduced by Odorant Expense for Test Year)		103,590								COM
265	- Demand		-	-	-	-	-	-	-	-	0%
266	- Customer		-	-	-	-	-	-	-	-	0%
267	- Commodity	D1_sales	103,590	56,082	8,913	15,199	1,156	817	367	21,057	100%
268	Total		103,590	56,082	8,913	15,199	1,156	817	367	21,057	
269											
270	874 - Mains and Service Expenses		9,716,981								MAINSVC
271	- Demand	Plant_MainsSrv_D	3,058,065	1,990,788	308,624	437,068	23,316	-	2,262	296,006	31%
272	- Customer	Plant_MainsSrv_C	6,658,916	6,191,911	377,359	81,579	2,522	675	270	4,602	69%
273	- Commodity		-	-	-	-	-	-	-	-	0%
274	Total		9,716,981	8,182,699	685,983	518,647	25,837	675	2,532	300,608	
275											
276	875 - Distributing Regulating Station Exp.		792,828								DEM
277	- Demand	D2_Demand	792,828	516,128	80,013	113,314	6,045	-	586	76,742	100%
278	- Customer		-	-	-	-	-	-	-	-	0%
279	- Commodity		-	-	-	-	-	-	-	-	0%
280	Total		792,828	516,128	80,013	113,314	6,045	-	586	76,742	
281											
282	876 - Measuring and Reg Station Exp-Ind		155,837								CUS
283	- Demand		-	-	-	-	-	-	-	-	0%
284	- Customer	C14_385cus	155,837	-	32,360	87,427	5,381	3,330	720	26,618	100%
285	- Commodity		-	-	-	-	-	-	-	-	0%
286	Total		155,837	-	32,360	87,427	5,381	3,330	720	26,618	
287											
288	877 - Measuring and Reg Station Exp-CG		110,205								DEM
289	- Demand	D2_Demand	110,205	71,743	11,122	15,751	840	-	82	10,667	100%
290	- Customer		-	-	-	-	-	-	-	-	0%
291	- Commodity		-	-	-	-	-	-	-	-	0%
292	Total		110,205	71,743	11,122	15,751	840	-	82	10,667	
293											
294	878 - Meter and House Regulator Exp.		14,896,146								CUS
295	- Demand		-	-	-	-	-	-	-	-	0%
296	- Customer	C7_Metregcus	14,896,146	10,446,990	2,503,486	1,446,325	75,527	43,426	9,469	370,922	100%
297	- Commodity		-	-	-	-	-	-	-	-	0%
298	Total		14,896,146	10,446,990	2,503,486	1,446,325	75,527	43,426	9,469	370,922	
299											
300	879 - Customer Installation Expenses		2,371,255								CUS
301	- Demand		-	-	-	-	-	-	-	-	0%
302	- Customer	C4_Metincus	2,371,255	1,666,490	267,306	316,645	18,032	11,157	2,436	89,188	100%
303	- Commodity		-	-	-	-	-	-	-	-	0%
304	Total		2,371,255	1,666,490	267,306	316,645	18,032	11,157	2,436	89,188	
305											
306	880 - Other Expenses		2,034,041								EXP871-879
307	- Demand	EXP_871-879_D	275,704	179,482	27,824	39,405	2,102	-	204	26,687	14%
308	- Customer	EXP_871-879_C	1,676,190	1,274,110	221,373	134,471	7,062	4,078	898	34,198	82%
309	- Commodity	EXP_871-879_E	82,147	44,473	7,068	12,053	916	648	291	16,698	4%
310	Total		2,034,041	1,498,065	256,266	185,928	10,081	4,725	1,392	77,583	
311											
312	881 - Rents		-								
313	- Demand		-	-	-	-	-	-	-	-	
314	- Customer		-	-	-	-	-	-	-	-	
315	- Commodity		-	-	-	-	-	-	-	-	
316	Total		-	-	-	-	-	-	-	-	
317											



Laclede Gas Company  
Cost of Service Study  
12 Months Ending December 31, 2016

	A	B	C	D	E	F	G	H	I	J	K
1	Laclede Gas Company										
2	Allocation of O&M Expenses	Allocation	Total	Residential	Small	Large	Large	Interruptible	Vehicular	Transportation	Classification
3		Factor	Company	RS	General Srv	General Srv	Volume	IN	Fuel	Transp.	Factor
4					SGS	LGS	LV		VF		
318	Total Operations Expenses		36,275,765								
319	- Demand		4,902,961	3,191,808	494,813	700,747	37,382	-	3,627	474,583	
320	- Customer		29,808,368	22,658,017	3,936,768	2,391,358	125,587	72,519	15,961	608,157	
321	- Commodity		1,564,437	846,955	134,612	229,535	17,452	12,331	5,540	318,011	
322	Total		36,275,765	26,696,780	4,566,193	3,321,640	180,422	84,850	25,128	1,400,752	
323											
324	Maintenance Expense										
325	885 - Maintenance Sup. and Engine.		2,740,753								EXP887-893
326	- Demand	EXP_887-893_D	962,790	626,773	97,166	137,605	7,341	-	712	93,194	35%
327	- Customer	EXP_887-893_C	1,777,963	1,538,978	154,243	65,417	3,142	1,689	389	14,105	65%
328	- Commodity		-	-	-	-	-	-	-	-	0%
329	Total		2,740,753	2,165,750	251,409	203,022	10,483	1,689	1,101	107,299	
330											
331	886 - Maintenance of Str. and Impr.		810,702								EXP887-893
332	- Demand	EXP_887-893_D	284,789	185,396	28,741	40,703	2,171	-	211	27,566	35%
333	- Customer	EXP_887-893_C	525,913	455,222	45,624	19,350	930	500	115	4,172	65%
334	- Commodity		-	-	-	-	-	-	-	-	0%
335	Total		810,702	640,619	74,366	60,053	3,101	500	326	31,738	
336											
337	887 - Maintenance of Mains		8,162,916								PLT376MAINS
338	- Demand	D2_Demand	5,066,082	3,298,000	511,276	724,061	38,626	-	3,748	490,373	62%
339	- Customer	C1_customers	3,096,834	2,900,482	177,392	17,817	326	99	38	678	38%
340	- Commodity		-	-	-	-	-	-	-	-	0%
341	Total		8,162,916	6,198,482	688,668	741,878	38,952	99	3,786	491,051	
342											
343	889 - Maint. of Meas. and Rep. Eq-General		673,931								DEM
344	- Demand	D2_Demand	673,931	438,727	68,014	96,320	5,138	-	499	65,233	100%
345	- Customer		-	-	-	-	-	-	-	-	0%
346	- Commodity		-	-	-	-	-	-	-	-	0%
347	Total		673,931	438,727	68,014	96,320	5,138	-	499	65,233	
348											
349	890 - Maint. of Meas. and Rep. Eq-Ind		60,228								CUS
350	- Demand		-	-	-	-	-	-	-	-	0%
351	- Customer	C14_385cus	60,228	-	12,507	33,789	2,080	1,287	278	10,287	100%
352	- Commodity		-	-	-	-	-	-	-	-	0%
353	Total		60,228	-	12,507	33,789	2,080	1,287	278	10,287	
354											
355	891 - Maint. of Meas. and Rep. Eq-CG		34,503								DEM
356	- Demand	D2_Demand	34,503	22,461	3,482	4,931	263	-	26	3,340	100%
357	- Customer		-	-	-	-	-	-	-	-	0%
358	- Commodity		-	-	-	-	-	-	-	-	0%
359	Total		34,503	22,461	3,482	4,931	263	-	26	3,340	
360											
361	892 - Maintenance of Services		4,715,313								CUS
362	- Demand		-	-	-	-	-	-	-	-	0%
363	- Customer	C6_services	4,715,313	4,372,234	266,089	69,726	2,288	605	243	4,127	100%
364	- Commodity		-	-	-	-	-	-	-	-	0%
365	Total		4,715,313	4,372,234	266,089	69,726	2,288	605	243	4,127	
366											
367	893 - Maint. of Meters and House Reg.		2,791,294								CUS
368	- Demand		-	-	-	-	-	-	-	-	0%
369	- Customer	C7_Metregcus	2,791,294	1,957,595	469,112	271,018	14,152	8,137	1,774	69,505	100%
370	- Commodity		-	-	-	-	-	-	-	-	0%
371	Total		2,791,294	1,957,595	469,112	271,018	14,152	8,137	1,774	69,505	
372											

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1	A	B	C	D	E	F	G	H	I	J	K
2	Laclede Gas Company										
3	Allocation of O&M Expenses	Allocation Factor	Total Company	Residential RS	Small General Srv SGS	Large General Srv LGS	Large Volume LV	Interruptible IN	Vehicular Fuel VF	Transportation Transp.	Classification Factor
373	894 - Maintenance of Other Equipment		356,692								
374	- Demand	EXP_887-893_D	125,301	81,570	12,646	17,908	955	-	93	12,129	EXP887-893 35%
375	- Customer	EXP_887-893_C	231,391	200,288	20,074	8,514	409	220	51	1,836	65%
376	- Commodity		-	-	-	-	-	-	-	-	0%
377	Total		356,692	281,859	32,719	26,422	1,364	220	143	13,964	
378											
379	Total Maintenance Expense		20,346,332								
380	- Demand		7,147,397	4,652,928	721,325	1,021,529	54,495	-	5,287	691,834	
381	- Customer		13,198,935	11,424,799	1,145,040	485,630	23,328	12,537	2,889	104,710	
382	- Commodity		-	-	-	-	-	-	-	-	
383	Total		20,346,332	16,077,727	1,866,365	1,507,159	77,823	12,537	8,176	796,544	
384											
385	Total Distribution O&M Expenses		56,622,097								
386	- Demand		12,050,358	7,844,736	1,216,138	1,722,276	91,877	-	8,914	1,166,417	
387	- Customer		43,007,302	34,082,817	5,081,808	2,876,989	148,915	85,056	18,850	712,868	
388	- Commodity		1,564,437	846,955	134,612	229,535	17,452	12,331	5,540	318,011	
389	Total		56,622,097	42,774,508	6,432,558	4,828,799	258,244	97,387	33,304	2,197,296	
390											
391	Customer Account Expense										
392	901 - Supervision		-								
393	- Demand		-	-	-	-	-	-	-	-	
394	- Customer		-	-	-	-	-	-	-	-	
395	- Commodity		-	-	-	-	-	-	-	-	
396	Total		-	-	-	-	-	-	-	-	
397											
398	902 - Meter reading expense		8,680,331								
399	- Demand		-	-	-	-	-	-	-	-	CUS
400	- Customer	C1_customers	8,680,331	8,129,963	497,224	49,941	915	279	106	1,902	0%
401	- Commodity		-	-	-	-	-	-	-	-	100%
402	Total		8,680,331	8,129,963	497,224	49,941	915	279	106	1,902	0%
403											
404	903 - Customer records & collections		19,065,392								
405	- Demand		-	-	-	-	-	-	-	-	CUS
406	- Customer	C11_903cus	19,065,392	17,831,316	1,150,236	78,789	1,444	439	168	3,000	0%
407	- Commodity		-	-	-	-	-	-	-	-	100%
408	Total		19,065,392	17,831,316	1,150,236	78,789	1,444	439	168	3,000	0%
409											
410	904 - Uncollectible expense		8,059,990								
411	- Demand		-	-	-	-	-	-	-	-	CUS
412	- Customer	C12_904cus	8,059,990	7,511,056	548,934	-	-	-	-	-	0%
413	- Commodity		-	-	-	-	-	-	-	-	100%
414	Total		8,059,990	7,511,056	548,934	-	-	-	-	-	0%
415											
416	905 - Miscellaneous Customer Service		119,381								
417	- Demand		-	-	-	-	-	-	-	-	CUS
418	- Customer	EXP_902-904_C	119,381	111,601	7,323	429	8	2	1	16	0%
419	- Commodity		-	-	-	-	-	-	-	-	100%
420	Total		119,381	111,601	7,323	429	8	2	1	16	0%
421											
422	Total Customer Account Expenses		35,925,094								
423	- Demand		-	-	-	-	-	-	-	-	
424	- Customer		35,925,094	33,583,936	2,203,718	129,160	2,367	720	275	4,918	
425	- Commodity		-	-	-	-	-	-	-	-	
426	Total		35,925,094	33,583,936	2,203,718	129,160	2,367	720	275	4,918	
427											



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12 Months Ending December 31, 2016

	A	B	C	D	E	F	G	H	I	J	K
1	Laclede Gas Company										
2	Allocation of O&M Expenses	Allocation	Total	Residential	Small	Large	Large	Interruptible	Vehicular	Transportation	Classification
3		Factor	Company	RS	General Srv	General Srv	Volume	IN	Fuel	Transp.	Factor
4					SGS	LGS	LV		VF		
428	<b>Customer Service &amp; Informational Expense</b>										
429	907 - Supervision		-								
430	- Demand		-								
431	- Customer		-								
432	- Commodity		-								
433	Total		-								
434											
435	908 - Customer Assistance		4,674,118								
436	- Demand		-								CUS
437	- Customer	C9_Residcus	4,674,118	4,674,118							0%
438	- Commodity		-								100%
439	Total		4,674,118	4,674,118							0%
440											
441	909 - Info & Inst Advertising		98,614								
442	- Demand		-								CUS
443	- Customer	C1_customers	98,614	92,361	5,649	567	10	3	1	22	0%
444	- Commodity		-								100%
445	Total		98,614	92,361	5,649	567	10	3	1	22	0%
446											
447	Total Customer Service Expenses		4,772,732								
448	- Demand		-								
449	- Customer		4,772,732	4,766,479	5,649	567	10	3	1	22	
450	- Commodity		-								
451	Total		4,772,732	4,766,479	5,649	567	10	3	1	22	
452											
453	<b>Sales &amp; Advertising Expense</b>										
454	911 - Supervision		328,536								
455	- Demand		-								CUS
456	- Customer	EXP_912-913_C	328,536	132,100	178,479	17,926	9	3	1	18	0%
457	- Commodity		-								100%
458	Total		328,536	132,100	178,479	17,926	9	3	1	18	0%
459											
460	912 - Demonstration and selling		1,215,870								
461	- Demand		-								CUS
462	- Customer	C13_912cus	1,215,870	414,750	727,931	73,113	22	7	3	45	0%
463	- Commodity		-								100%
464	Total		1,215,870	414,750	727,931	73,113	22	7	3	45	0%
465											
466	913 - Advertising		138,699								
467	- Demand		-								CUS
468	- Customer	C1_customers	138,699	129,905	7,945	798	15	4	2	30	0%
469	- Commodity		-								100%
470	Total		138,699	129,905	7,945	798	15	4	2	30	0%
471											
472	916 - Misc Sales Expense		-								
473	- Demand		-								
474	- Customer		-								
475	- Commodity		-								
476	Total		-								
477											
478	Total Sales Expense		1,683,105								
479	- Demand		-								
480	- Customer		1,683,105	676,755	914,354	91,838	45	14	5	94	
481	- Commodity		-								
482	Total		1,683,105	676,755	914,354	91,838	45	14	5	94	



Laclede Gas Company  
Cost of Service Study  
12 Months Ending December 31, 2016

	A	B	C	D	E	F	G	H	I	J	K
1	Laclede Gas Company										
2	Allocation of O&M Expenses	Allocation	Total	Residential	Small	Large	Large	Interruption	Vehicle	Transportation	Classification
3		Factor	Company	RS	General Srv	General Srv	Volume	IN	Fuel	Transp.	Factor
4					SGS	LGS	LV		VF		
483											
484	<b>Administrative &amp; General Expense</b>										
485	<b>Operations</b>										
486	920 - A&G Salaries		20,728,266								NONAGOPEXP
487	- Demand	EXP_Non-A&G_D	3,619,330	2,398,764	372,489	522,900	26,256	70	2,277	296,573	17%
488	- Customer	EXP_Non-A&G_C	16,949,210	14,784,733	1,452,631	549,535	26,258	14,343	3,290	118,420	82%
489	- Commodity	EXP_Non-A&G_E	159,726	80,025	12,715	21,641	1,641	1,152	519	42,034	1%
490	Total		20,728,266	17,263,521	1,837,836	1,094,076	54,155	15,565	6,086	457,027	
491											
492	921 - Office supplies		1,325,382								NONAGOPEXP
493	- Demand	EXP_Non-A&G_D	231,423	153,379	23,817	33,435	1,679	4	146	18,963	17%
494	- Customer	EXP_Non-A&G_C	1,083,746	945,348	92,882	35,138	1,679	917	210	7,572	82%
495	- Commodity	EXP_Non-A&G_E	10,213	5,117	813	1,384	105	74	33	2,688	1%
496	Total		1,325,382	1,103,843	117,513	69,956	3,463	995	389	29,223	
497											
498	922 - Administrative Expense Transfer		(12,025,514)								NONAGOPEXP
499	- Demand	EXP_Non-A&G_D	(2,099,756)	(1,391,644)	(216,100)	(303,361)	(15,233)	(41)	(1,321)	(172,057)	17%
500	- Customer	EXP_Non-A&G_C	(9,833,093)	(8,577,370)	(842,745)	(318,813)	(15,234)	(8,321)	(1,909)	(68,702)	82%
501	- Commodity	EXP_Non-A&G_E	(92,665)	(46,426)	(7,377)	(12,555)	(952)	(668)	(301)	(24,386)	1%
502	Total		(12,025,514)	(10,015,441)	(1,066,221)	(634,729)	(31,418)	(9,030)	(3,531)	(265,144)	
503											
504	923 - Outside services employed		10,302,849								NONAGOPEXP
505	- Demand	EXP_Non-A&G_D	1,798,964	1,192,290	185,143	259,904	13,051	35	1,132	147,410	17%
506	- Customer	EXP_Non-A&G_C	8,424,494	7,348,655	722,021	273,143	13,051	7,129	1,635	58,860	82%
507	- Commodity	EXP_Non-A&G_E	79,391	39,776	6,320	10,757	816	573	258	20,893	1%
508	Total		10,302,849	8,580,720	913,484	543,803	26,918	7,737	3,025	227,162	
509											
510	924 - Property Insurance		663,789								TOTPLT
511	- Demand	Plant_Total_D	205,745	135,230	20,983	29,576	1,528	2	140	18,287	31%
512	- Customer	Plant_Total_C	458,044	413,413	30,481	11,340	515	252	63	1,980	69%
513	- Commodity		-	-	-	-	-	-	-	-	0%
514	Total		663,789	548,643	51,464	40,916	2,043	254	203	20,267	
515											
516	925 - Injuries and damages		6,254,665								NONAGOPEXP
517	- Demand	EXP_Non-A&G_D	1,092,117	723,817	112,397	157,783	7,923	21	687	89,490	17%
518	- Customer	EXP_Non-A&G_C	5,114,351	4,461,230	438,325	165,820	7,923	4,328	993	35,733	82%
519	- Commodity	EXP_Non-A&G_E	48,197	24,147	3,837	6,530	495	348	156	12,683	1%
520	Total		6,254,665	5,209,193	554,559	330,133	16,341	4,697	1,836	137,906	
521											
522	926 - Employed pensions & benefits		36,516,843								NONAGOPEXP
523	- Demand	EXP_Non-A&G_D	6,376,148	4,225,886	656,212	921,189	46,255	123	4,012	522,470	17%
524	- Customer	EXP_Non-A&G_C	29,859,306	26,046,161	2,559,090	968,112	46,259	25,269	5,796	208,621	82%
525	- Commodity	EXP_Non-A&G_E	281,388	140,979	22,400	38,125	2,891	2,029	914	74,050	1%
526	Total		36,516,843	30,413,027	3,237,702	1,927,426	95,405	27,421	10,721	805,141	
527											
528	928 - Regulatory commission expense		2,022,110								CUS
529	- Demand		-	-	-	-	-	-	-	-	0%
530	- Customer	D3_totalrevenues	2,022,110	1,607,340	160,335	152,774	11,058	5,800	1,079	83,723	100%
531	- Commodity		-	-	-	-	-	-	-	-	0%
532	Total		2,022,110	1,607,340	160,335	152,774	11,058	5,800	1,079	83,723	
533											

Laclede Gas Company  
Cost of Service Study  
12 Months Ending December 31, 2016

	A	B	C	D	E	F	G	H	I	J	K
1	Laclede Gas Company										
2	Allocation of O&M Expenses	Allocation	Total	Residential	Small	Large	Large	Interruptible	Vehicular	Transportation	Classification
3		Factor	Company	RS	General Srv	General Srv	Volume	IN	Fuel	Transp.	Factor
4					SGS	LGS	LV		VF		
534	930 - Misc. General Expenses		3,127,102								NONAGOPEXP
535	- Demand	EXP_Non-A&G_D	546,018	361,882	56,194	78,886	3,961	11	344	44,741	17%
536	- Customer	EXP_Non-A&G_C	2,556,987	2,230,450	219,146	82,904	3,961	2,164	496	17,865	82%
537	- Commodity	EXP_Non-A&G_E	24,097	12,073	1,918	3,265	248	174	78	6,341	1%
538	Total		3,127,102	2,604,405	277,259	165,054	8,170	2,348	918	68,948	
539											
540	931 - Rents		2,148,699								PTD PLAN
541	- Demand	Plant Dist_D	666,460	433,863	67,260	95,253	5,081	-	493	64,510	31%
542	- Customer	Plant Dist_C	1,482,239	1,337,813	98,639	36,697	1,665	815	203	6,408	69%
543	- Commodity		-	-	-	-	-	-	-	-	0%
544	Total		2,148,699	1,771,676	165,899	131,949	6,747	815	696	70,918	
545											
546	Total Operations Expenses		71,064,191								
547	- Demand		12,436,450	8,233,467	1,278,396	1,795,564	90,502	225	7,909	1,030,387	
548	- Customer		58,117,394	50,597,772	4,930,807	1,956,649	97,136	52,696	11,855	470,480	
549	- Commodity		510,346	255,690	40,627	69,146	5,243	3,681	1,657	134,303	
550	Total		71,064,191	59,086,928	6,249,830	3,821,359	192,881	56,602	21,422	1,635,169	
551											
552	Maintenance										
553	932 - Maintenance of general plant		208,378								GENPLT
554	- Demand	Plant_Gen_D	64,148	42,162	6,542	9,221	476	1	44	5,701	31%
555	- Customer	Plant_Gen_C	144,230	130,176	9,598	3,571	162	79	20	624	69%
556	- Commodity		-	-	-	-	-	-	-	-	0%
557	Total		208,378	172,339	16,140	12,792	638	80	63	6,325	
558											
559	Payroll Adjustment										
560	Payroll Adjustment		7,596,534								NONAGOPEXP
561	- Demand	EXP_Non-A&G_D	1,326,419	879,104	136,511	191,633	9,622	26	835	108,689	17%
562	- Customer	EXP_Non-A&G_C	6,211,579	5,418,337	532,363	201,395	9,623	5,257	1,206	43,399	82%
563	- Commodity	EXP_Non-A&G_E	58,537	29,328	4,660	7,931	601	422	190	15,405	1%
564	Total		7,596,534	6,326,768	673,533	400,959	19,847	5,704	2,230	167,492	
565											
566	Total A&G Expense		78,869,102								
567	- Demand		13,827,017	9,154,733	1,421,449	1,996,419	100,601	252	8,788	1,144,777	
568	- Customer		64,473,203	56,146,285	5,472,768	2,161,614	106,921	58,032	13,081	514,502	
569	- Commodity		568,883	285,017	45,287	77,077	5,844	4,103	1,847	149,707	
570	Total		78,869,102	65,586,035	6,939,504	4,235,110	213,366	62,386	23,715	1,808,986	
571											
572	Total O&M Expense		180,822,158								
573	- Demand		29,183,408	19,405,225	3,014,223	4,224,618	209,714	668	17,766	2,311,194	
574	- Customer		149,861,435	129,256,272	13,678,297	5,260,167	258,258	143,825	32,212	1,232,403	
575	- Commodity		1,777,315	890,456	141,487	240,806	18,259	12,818	5,770	467,719	
576	Total		180,822,158	149,551,953	16,834,007	9,725,592	486,231	157,311	55,748	4,011,316	



	A	B	C	D	E	F	G	H	I	J	K
1	Laclede Gas Company										
2	Allocation of Depreciation and Amortization	Allocation Factor	Total Company	Residential RS	Small General Srv SGS	Large General Srv LGS	Large Volume LV	Interruptible IN	Vehicular Fuel VF	Transportation Transp.	Classification Factor
5	<b>Intangible Plant</b>										
6	301 - Organization Costs		-								NINTPLT
7	- Demand	Plant NonInt_D	-	-	-	-	-	-	-	-	31%
8	- Customer	Plant Nonint_C	-	-	-	-	-	-	-	-	69%
9	- Commodity	-	-	-	-	-	-	-	-	-	0%
10	Total		-	-	-	-	-	-	-	-	
11											
12	302 - Franchise and Consents		-								NINTPLT
13	- Demand	Plant Nonint_D	-	-	-	-	-	-	-	-	31%
14	- Customer	Plant Nonint_C	-	-	-	-	-	-	-	-	69%
15	- Commodity	-	-	-	-	-	-	-	-	-	0%
16	Total		-	-	-	-	-	-	-	-	
17											
18	303 - Misc. Intangible Plant		-								
19	- Demand		-	-	-	-	-	-	-	-	
20	- Customer		-	-	-	-	-	-	-	-	
21	- Commodity		-	-	-	-	-	-	-	-	
22	Total		-	-	-	-	-	-	-	-	
23											
24	Total Intangible Plant		-								
25	- Demand		-	-	-	-	-	-	-	-	
26	- Customer		-	-	-	-	-	-	-	-	
27	- Commodity		-	-	-	-	-	-	-	-	
28	Total		-	-	-	-	-	-	-	-	
29											
30	<b>Production Plant</b>										
31	304 - Land & Land Rights-Mfg Gas		-								DEM
32	- Demand	Plant GasInvDem	-	-	-	-	-	-	-	-	100%
33	- Customer	-	-	-	-	-	-	-	-	-	0%
34	- Commodity	-	-	-	-	-	-	-	-	-	0%
35	Total		-	-	-	-	-	-	-	-	
36											
37	305 - Structures & Improvements-Mfg Gas		31,213								DEM
38	- Demand	Plant GasInvDem	31,213	22,713	3,556	4,777	163	4	1	-	100%
39	- Customer	-	-	-	-	-	-	-	-	-	0%
40	- Commodity	-	-	-	-	-	-	-	-	-	0%
41	Total		31,213	22,713	3,556	4,777	163	4	1	-	
42											
43	307 - Other Power Equipment		5,566								DEM
44	- Demand	Plant GasInvDem	5,566	4,050	634	852	29	1	0	-	100%
45	- Customer	-	-	-	-	-	-	-	-	-	0%
46	- Commodity	-	-	-	-	-	-	-	-	-	0%
47	Total		5,566	4,050	634	852	29	1	0	-	
48											
49	311 - Propane Equipment-Gas Ops		176,219								DEM
50	- Demand	Plant GasInvDem	176,219	128,232	20,076	26,967	919	22	3	-	100%
51	- Customer	-	-	-	-	-	-	-	-	-	0%
52	- Commodity	-	-	-	-	-	-	-	-	-	0%
53	Total		176,219	128,232	20,076	26,967	919	22	3	-	
54											



	A	B	C	D	E	F	G	H	I	J	K
1	Laclede Gas Company										
2	Allocation of Depreciation and	Allocation	Total	Residential	Small	Large	Large	Interruptible	Vehicular	Transportation	Classification
3	Amortization	Factor	Company	RS	General Srv	General Srv	Volume	IN	Fuel	Transp.	Factor
4					SGS	LGS	LV		VF		
55	311.1 - Propane Storage Cavern-Gas Ops		53,610								DEM
56	- Demand	Plant GasInvDem	53,610	39,011	6,107	8,204	280	7	1	-	100%
57	- Customer	-	-	-	-	-	-	-	-	-	0%
58	- Commodity	-	-	-	-	-	-	-	-	-	0%
59	Total		53,610	39,011	6,107	8,204	280	7	1	-	
60											
61	Total Production Plant		266,608								
62	- Demand		266,608	194,007	30,373	40,799	1,390	34	5	-	
63	- Customer		-	-	-	-	-	-	-	-	
64	- Commodity		-	-	-	-	-	-	-	-	
65	Total		266,608	194,007	30,373	40,799	1,390	34	5	-	
66											
67	Underground Storage Plant										
68	350.1 - Land		-								DEM
69	- Demand	Plant GasInvDem	-	-	-	-	-	-	-	-	100%
70	- Customer	-	-	-	-	-	-	-	-	-	0%
71	- Commodity	-	-	-	-	-	-	-	-	-	0%
72	Total		-	-	-	-	-	-	-	-	
73											
74	350.2 - Rights of Way		-								DEM
75	- Demand	Plant GasInvDem	-	-	-	-	-	-	-	-	100%
76	- Customer	-	-	-	-	-	-	-	-	-	0%
77	- Commodity	-	-	-	-	-	-	-	-	-	0%
78	Total		-	-	-	-	-	-	-	-	
79											
80	351.2 - Compression Station Structure		20,404								DEM
81	- Demand	Plant GasInvDem	20,404	14,848	2,325	3,122	106	3	0	-	100%
82	- Customer	-	-	-	-	-	-	-	-	-	0%
83	- Commodity	-	-	-	-	-	-	-	-	-	0%
84	Total		20,404	14,848	2,325	3,122	106	3	0	-	
85											
86	351.4 - Other Structures		22,014								DEM
87	- Demand	Plant GasInvDem	22,014	16,020	2,508	3,369	115	3	0	-	100%
88	- Customer	-	-	-	-	-	-	-	-	-	0%
89	- Commodity	-	-	-	-	-	-	-	-	-	0%
90	Total		22,014	16,020	2,508	3,369	115	3	0	-	
91											
92	352 - Wells		74,304								DEM
93	- Demand	Plant GasInvDem	74,304	54,070	8,465	11,371	387	9	1	-	100%
94	- Customer	-	-	-	-	-	-	-	-	-	0%
95	- Commodity	-	-	-	-	-	-	-	-	-	0%
96	Total		74,304	54,070	8,465	11,371	387	9	1	-	
97											
98	352.1 - Storage Leaseholds & Rights		-								DEM
99	- Demand	Plant GasInvDem	-	-	-	-	-	-	-	-	100%
100	- Customer	-	-	-	-	-	-	-	-	-	0%
101	- Commodity	-	-	-	-	-	-	-	-	-	0%
102	Total		-	-	-	-	-	-	-	-	
103											
104	352.2 - Reservoirs		2,989								DEM
105	- Demand	Plant GasInvDem	2,989	2,175	341	457	16	0	0	-	100%
106	- Customer	-	-	-	-	-	-	-	-	-	0%
107	- Commodity	-	-	-	-	-	-	-	-	-	0%
108	Total		2,989	2,175	341	457	16	0	0	-	
109											

	A	B	C	D	E	F	G	H	I	J	K
1	Laclede Gas Company				Small	Large	Large		Vehicular		
2	Allocation of Depreciation and	Allocation	Total	Residential	General Srv	General Srv	Volume	Interruptible	Fuel	Transportation	Classification
3	Amortization	Factor	Company	RS	SGS	LGs	LV	IN	VF	Transp.	Factor
4											
110	352.3 - Non-Recoverable Natural Gas		72,190								DEM
111	- Demand	Plant GasInvDem	72,190	52,532	8,224	11,047	376	9	1	-	100%
112	- Customer	-	-	-	-	-	-	-	-	-	0%
113	- Commodity	-	-	-	-	-	-	-	-	-	0%
114	Total		72,190	52,532	8,224	11,047	376	9	1	-	
115											
116	352.4 - Wells - Oil & Vent Gas		23,580								DEM
117	- Demand	Plant GasInvDem	23,580	17,159	2,686	3,609	123	3	0	-	100%
118	- Customer	-	-	-	-	-	-	-	-	-	0%
119	- Commodity	-	-	-	-	-	-	-	-	-	0%
120	Total		23,580	17,159	2,686	3,609	123	3	0	-	
121											
122	353 - Lines		33,654								DEM
123	- Demand	Plant GasInvDem	33,654	24,489	3,834	5,150	175	4	1	-	100%
124	- Customer	-	-	-	-	-	-	-	-	-	0%
125	- Commodity	-	-	-	-	-	-	-	-	-	0%
126	Total		33,654	24,489	3,834	5,150	175	4	1	-	
127											
128	354 - Compressor Station Equipment		33,522								DEM
129	- Demand	Plant GasInvDem	33,522	24,394	3,819	5,130	175	4	1	-	100%
130	- Customer	-	-	-	-	-	-	-	-	-	0%
131	- Commodity	-	-	-	-	-	-	-	-	-	0%
132	Total		33,522	24,394	3,819	5,130	175	4	1	-	
133											
134	355 - Measuring & Regulating Equipment		40,231								DEM
135	- Demand	Plant GasInvDem	40,231	29,275	4,583	6,157	210	5	1	-	100%
136	- Customer	-	-	-	-	-	-	-	-	-	0%
137	- Commodity	-	-	-	-	-	-	-	-	-	0%
138	Total		40,231	29,275	4,583	6,157	210	5	1	-	
139											
140	356 - Purification Equipment		5,546								DEM
141	- Demand	Plant GasInvDem	5,546	4,036	632	849	29	1	0	-	100%
142	- Customer	-	-	-	-	-	-	-	-	-	0%
143	- Commodity	-	-	-	-	-	-	-	-	-	0%
144	Total		5,546	4,036	632	849	29	1	0	-	
145											
146	357 - Other Equipment		3,044								DEM
147	- Demand	Plant GasInvDem	3,044	2,215	347	466	16	0	0	-	100%
148	- Customer	-	-	-	-	-	-	-	-	-	0%
149	- Commodity	-	-	-	-	-	-	-	-	-	0%
150	Total		3,044	2,215	347	466	16	0	0	-	
151											
152	Total Underground Storage Plant		331,479								
153	- Demand		331,479	241,213	37,763	50,727	1,728	42	6	-	
154	- Customer		-	-	-	-	-	-	-	-	
155	- Commodity		-	-	-	-	-	-	-	-	
156	Total		331,479	241,213	37,763	50,727	1,728	42	6	-	
157											



	A	B	C	D	E	F	G	H	I	J	K
1	Laclede Gas Company										
2	Allocation of Depreciation and	Allocation	Total	Residential	Small	Large	Large	Interruptible	Vehicular		Classification
3	Amortization	Factor	Company	RS	General Srv	General Srv	Volume	IN	Fuel	Transportation	Factor
4					SGS	LGS	LV		VF	Transp.	
158	<b>Other Storage Equipment</b>										
159	360 - Land & Land Rights		-								DEM
160	- Demand	Plant GasInvDem	-	-	-	-	-	-	-	-	100%
161	- Customer	-	-	-	-	-	-	-	-	-	0%
162	- Commodity	-	-	-	-	-	-	-	-	-	0%
163	Total		-	-	-	-	-	-	-	-	
164											
165	361 - Structures & Improvements		-								DEM
166	- Demand	Plant GasInvDem	-	-	-	-	-	-	-	-	100%
167	- Customer	-	-	-	-	-	-	-	-	-	0%
168	- Commodity	-	-	-	-	-	-	-	-	-	0%
169	Total		-	-	-	-	-	-	-	-	
170											
171	362 - Gas Holders		-								DEM
172	- Demand	Plant GasInvDem	-	-	-	-	-	-	-	-	100%
173	- Customer	-	-	-	-	-	-	-	-	-	0%
174	- Commodity	-	-	-	-	-	-	-	-	-	0%
175	Total		-	-	-	-	-	-	-	-	
176											
177	363.3 - Compressor Equipment		-								DEM
178	- Demand	Plant GasInvDem	-	-	-	-	-	-	-	-	100%
179	- Customer	-	-	-	-	-	-	-	-	-	0%
180	- Commodity	-	-	-	-	-	-	-	-	-	0%
181	Total		-	-	-	-	-	-	-	-	
182											
183	Total Other Storage Equipment		-								
184	- Demand		-	-	-	-	-	-	-	-	
185	- Customer		-	-	-	-	-	-	-	-	
186	- Commodity		-	-	-	-	-	-	-	-	
187	Total		-	-	-	-	-	-	-	-	
188											
189	<b>Transmission Plant</b>										
190	365.2 - Rights-of-Way		-								DEM
191	- Demand	D2_Demand	-	-	-	-	-	-	-	-	100%
192	- Customer	-	-	-	-	-	-	-	-	-	0%
193	- Commodity	-	-	-	-	-	-	-	-	-	0%
194	Total		-	-	-	-	-	-	-	-	
195											
196	367 - Mains		28,999								DEM
197	- Demand	D2_Demand	28,999	18,878	2,927	4,145	221	-	21	2,807	100%
198	- Customer	-	-	-	-	-	-	-	-	-	0%
199	- Commodity	-	-	-	-	-	-	-	-	-	0%
200	Total		28,999	18,878	2,927	4,145	221	-	21	2,807	
201											
202	371 - Other equipment		225								DEM
203	- Demand	D2_Demand	225	146	23	32	2	-	0	22	100%
204	- Customer	-	-	-	-	-	-	-	-	-	0%
205	- Commodity	-	-	-	-	-	-	-	-	-	0%
206	Total		225	146	23	32	2	-	0	22	
207											
208	Total Transmission Plant		29,224								
209	- Demand		29,224	19,025	2,949	4,177	223	-	22	2,829	
210	- Customer		-	-	-	-	-	-	-	-	
211	- Commodity		-	-	-	-	-	-	-	-	
212	Total		29,224	19,025	2,949	4,177	223	-	22	2,829	



Laclede Gas Company  
Cost of Service Study  
12 Months Ending December 31, 2016

	A	B	C	D	E	F	G	H	I	J	K
1	Laclede Gas Company										
2	Allocation of Depreciation and	Allocation	Total	Residential	Small	Large	Large		Vehicular		
3	Amortization	Factor	Company	RS	General Srv	General Srv	Volume	Interruptible	Fuel	Transportation	Classification
4					SGS	LGS	LV	IN	VF	Transp.	Factor
213											

Laclede Gas Company  
Cost of Service Study  
12 Months Ending December 31, 2016

	A	B	C	D	E	F	G	H	I	J	K
1	Laclede Gas Company										
2	Allocation of Depreciation and	Allocation	Total	Residential	Small	Large	Large		Vehicle		
3	Amortization	Factor	Company	RS	General Srv	General Srv	Volume	Interruptible	Fuel	Transportation	Classification
4					SGS	LGS	LV	IN	VF	Transp.	Factor
214	Distribution Expense										
215	374 - Land & Land Rights		-								DIS376-379
216	- Demand	Plant_376-379_D	-	-	-	-	-	-	-	-	63%
217	- Customer	Plant_376-379_C	-	-	-	-	-	-	-	-	37%
218	- Commodity	-	-	-	-	-	-	-	-	-	0%
219	Total		-	-	-	-	-	-	-	-	
220											
221	375 - Structures & Improvements		435,714								DIS376-379
222	- Demand	Plant_376-379_D	273,993	178,369	27,652	39,160	2,089	-	203	26,521	63%
223	- Customer	Plant_376-379_C	161,721	151,467	9,264	930	17	5	2	35	37%
224	- Commodity	-	-	-	-	-	-	-	-	-	0%
225	Total		435,714	329,835	36,915	40,090	2,106	5	205	26,557	
226											
227	376.1 - Mains - Steel		3,322,608								DISMAIN
228	- Demand	D2_Demand	2,062,082	1,342,408	208,108	294,719	15,722	-	1,525	199,600	62%
229	- Customer	C1_customers	1,260,525	1,180,603	72,205	7,252	133	40	15	276	38%
230	- Commodity	-	-	-	-	-	-	-	-	-	0%
231	Total		3,322,608	2,523,011	280,313	301,972	15,855	40	1,541	199,876	
232											
233	376.2 - Mains - Cast Iron		713,488								DISMAIN
234	- Demand	D2_Demand	442,806	288,265	44,689	63,287	3,376	-	328	42,862	62%
235	- Customer	C1_customers	270,682	253,520	15,505	1,557	29	9	3	59	38%
236	- Commodity	-	-	-	-	-	-	-	-	-	0%
237	Total		713,488	541,785	60,194	64,845	3,405	9	331	42,921	
238											
239	376.3 - Mains - Plastic		7,094,892								DISMAIN
240	- Demand	D2_Demand	4,403,244	2,866,494	444,381	629,326	33,572	-	3,257	426,213	62%
241	- Customer	C1_customers	2,691,648	2,520,987	154,182	15,486	284	86	33	590	38%
242	- Commodity	-	-	-	-	-	-	-	-	-	0%
243	Total		7,094,892	5,387,482	598,563	644,812	33,856	86	3,290	426,803	
244											
245	378 - Meas. & Reg. Station - General		472,784								DEM
246	- Demand	D2_Demand	472,784	307,781	47,714	67,572	3,605	-	350	45,763	100%
247	- Customer	-	-	-	-	-	-	-	-	-	0%
248	- Commodity	-	-	-	-	-	-	-	-	-	0%
249	Total		472,784	307,781	47,714	67,572	3,605	-	350	45,763	
250											
251	379 - Meas. & Reg. Station - City Gate		105,523								DEM
252	- Demand	D2_Demand	105,523	68,695	10,650	15,082	805	-	78	10,214	100%
253	- Customer	-	-	-	-	-	-	-	-	-	0%
254	- Commodity	-	-	-	-	-	-	-	-	-	0%
255	Total		105,523	68,695	10,650	15,082	805	-	78	10,214	
256											
257	380.1 - Services - Steel		2,025,626								CUS
258	- Demand	-	-	-	-	-	-	-	-	-	0%
259	- Customer	C6_services	2,025,626	1,878,245	114,308	29,953	983	260	105	1,773	100%
260	- Commodity	-	-	-	-	-	-	-	-	-	0%
261	Total		2,025,626	1,878,245	114,308	29,953	983	260	105	1,773	
262											
263	380.2 - Services - Plastic		24,216,098								CUS
264	- Demand	-	-	-	-	-	-	-	-	-	0%
265	- Customer	C6_services	24,216,098	22,454,173	1,366,533	358,086	11,753	3,107	1,250	21,195	100%
266	- Commodity	-	-	-	-	-	-	-	-	-	0%
267	Total		24,216,098	22,454,173	1,366,533	358,086	11,753	3,107	1,250	21,195	
268											



Laclede Gas Company  
Cost of Service Study  
12 Months Ending December 31, 2016

	A	B	C	D	E	F	G	H	I	J	K
1	Laclede Gas Company										
2	Allocation of Depreciation and	Allocation	Total	Residential	Small	Large	Large	Interruptible	Vehicular	Transportation	Classification
3	Amortization	Factor	Company	RS	General Srv	General Srv	Volume	IN	Fuel	Transp.	Factor
4					SGS	LGS	LV		VF		
269	381 - Meters		3,070,122								CUS
270	- Demand		-								0%
271	- Customer	C3_meters	3,070,122	2,564,647	363,211	112,688	3,722	2,487	555	22,811	100%
272	- Commodity		-								0%
273	Total		3,070,122	2,564,647	363,211	112,688	3,722	2,487	555	22,811	
274											
275	383 - House Regulators		511,362								CUS
276	- Demand		-								0%
277	- Customer	C5_Regcus	511,362	372,859	48,285	66,940	4,978	2,183	504	15,612	100%
278	- Commodity		-								0%
279	Total		511,362	372,859	48,285	66,940	4,978	2,183	504	15,612	
280											
281	385 - Commercial & Ind Meas & Reg Eq		470,614								CUS
282	- Demand		-								0%
283	- Customer	C14_385cus	470,614	-	97,725	264,023	16,251	10,057	2,174	80,384	100%
284	- Commodity		-								0%
285	Total		470,614	-	97,725	264,023	16,251	10,057	2,174	80,384	
286											
287	386 - Other Property - Customer Premises		1,640								CUS
288	- Demand		-								0%
289	- Customer	C1_customers	1,640	1,536	94	9	0	0	0	0	100%
290	- Commodity		-								0%
291	Total		1,640	1,536	94	9	0	0	0	0	
292											
293	387 - Other Equipment		11,289								CUS
294	- Demand		-								0%
295	- Customer	Plant_374-386_C	11,289	10,189	751	279	13	6	2	49	100%
296	- Commodity		-								0%
297	Total		11,289	10,189	751	279	13	6	2	49	
298											
299	Total Distribution Plant		42,451,760								
300	- Demand		7,760,433	5,052,011	783,193	1,109,146	59,169	-	5,741	751,173	
301	- Customer		34,691,327	31,388,226	2,242,064	857,205	38,163	18,241	4,643	142,785	
302	- Commodity		-								
303	Total		42,451,760	36,440,238	3,025,257	1,966,351	97,332	18,241	10,384	893,958	
304											
305	General Plant Expense										
306	389 - Land		-								PTD PLANT
307	- Demand	PTD_D	-								31%
308	- Customer	PTD_C	-								69%
309	- Commodity		-								0%
310	Total		-								
311											
312	390 - Structures & Improvements		17,099								PTD PLANT
313	- Demand	PTD_D	5,304	3,486	541	762	39	0	4	471	31%
314	- Customer	PTD_C	11,795	10,646	785	292	13	6	2	51	69%
315	- Commodity		-								0%
316	Total		17,099	14,132	1,326	1,054	53	7	5	522	
317											
318	391 - Furniture & Fixtures		133,484								PTD PLANT
319	- Demand	PTD_D	41,403	27,213	4,222	5,952	308	0	28	3,680	31%
320	- Customer	PTD_C	92,082	83,109	6,128	2,280	103	51	13	398	69%
321	- Commodity		-								0%
322	Total		133,484	110,322	10,350	8,231	411	51	41	4,078	
323											



Laclede Gas Company  
Cost of Service Study  
12 Months Ending December 31, 2016

	A	B	C	D	E	F	G	H	I	J	K
1	Laclede Gas Company										
2	Allocation of Depreciation and Amortization	Allocation Factor	Total Company	Residential RS	Small General Srv SGS	Large General Srv LGS	Large Volume LV	Interruptible IN	Fuel VF	Transportation Transp.	Classification Factor
3											
4											
324	391.1 - Data Processing Systems		2,578,339								PTD PLANT
325	- Demand	PTD_D	799,722	525,631	81,559	114,960	5,940	8	544	71,079	31%
326	- Customer	PTD_C	1,778,618	1,605,313	118,362	44,034	1,998	978	243	7,689	69%
327	- Commodity	-	-	-	-	-	-	-	-	-	0%
328	Total		2,578,339	2,130,944	199,921	158,994	7,938	986	788	78,768	
329											
330	391.2 - Mechanical Office Equipment		3,056								PTD PLANT
331	- Demand	PTD_D	948	623	97	136	7	0	1	84	31%
332	- Customer	PTD_C	2,108	1,903	140	52	2	1	0	9	69%
333	- Commodity	-	-	-	-	-	-	-	-	-	0%
334	Total		3,056	2,526	237	188	9	1	1	93	
335											
336	391.3 - Data Processing Software		-								PTD PLANT
337	- Demand	PTD_D	-	-	-	-	-	-	-	-	31%
338	- Customer	PTD_C	-	-	-	-	-	-	-	-	69%
339	- Commodity	-	-	-	-	-	-	-	-	-	0%
340	Total		-	-	-	-	-	-	-	-	
341											
342	391.4 - Data Processing Systems		32,998								PTD PLANT
343	- Demand	PTD_D	10,235	6,727	1,044	1,471	76	0	7	910	31%
344	- Customer	PTD_C	22,763	20,545	1,515	564	26	13	3	98	69%
345	- Commodity	-	-	-	-	-	-	-	-	-	0%
346	Total		32,998	27,272	2,559	2,035	102	13	10	1,008	
347											
348	391.5 - Enterprise Software-EIMS		-								PTD PLANT
349	- Demand	PTD_D	-	-	-	-	-	-	-	-	31%
350	- Customer	PTD_C	-	-	-	-	-	-	-	-	69%
351	- Commodity	-	-	-	-	-	-	-	-	-	0%
352	Total		-	-	-	-	-	-	-	-	
353											
354	392.1 - Transportation Eq - Automobiles		415,501								PTD PLANT
355	- Demand	PTD_D	128,876	84,706	13,143	18,526	957	1	88	11,454	31%
356	- Customer	PTD_C	286,626	258,697	19,074	7,096	322	158	39	1,239	69%
357	- Commodity	-	-	-	-	-	-	-	-	-	0%
358	Total		415,501	343,403	32,217	25,622	1,279	159	127	12,693	
359											
360	392.2 - Transportation Eq - Trucks		1,353,582								PTD PLANT
361	- Demand	PTD_D	419,840	275,947	42,817	60,352	3,118	4	286	37,315	31%
362	- Customer	PTD_C	933,743	842,761	62,138	23,117	1,049	513	128	4,037	69%
363	- Commodity	-	-	-	-	-	-	-	-	-	0%
364	Total		1,353,582	1,118,708	104,955	83,469	4,167	518	414	41,352	
365											
366	393 - Stores Equipment		7,382								PTD PLANT
367	- Demand	PTD_D	2,290	1,505	234	329	17	0	2	204	31%
368	- Customer	PTD_C	5,092	4,596	339	126	6	3	1	22	69%
369	- Commodity	-	-	-	-	-	-	-	-	-	0%
370	Total		7,382	6,101	572	455	23	3	2	226	
371											
372	394 - Tools, Shop & Garage Equipment		384,396								PTD PLANT
373	- Demand	PTD_D	119,228	78,365	12,159	17,139	886	1	81	10,597	31%
374	- Customer	PTD_C	265,168	239,331	17,646	6,565	298	146	36	1,146	69%
375	- Commodity	-	-	-	-	-	-	-	-	-	0%
376	Total		384,396	317,696	29,806	23,704	1,183	147	117	11,743	
377											

	A	B	C	D	E	F	G	H	I	J	K
1	Laclede Gas Company										
2	Allocation of Depreciation and Amortization		Total Company	Residential RS	Small General Srv SGS	Large General Srv LGS	Large Volume LV	Interruptible IN	Fuel VF	Transportation Transp.	Classification Factor
3	Allocation Factor										
4											
378	395 - Laboratory Equipment		10,950								PTD PLANT
379	- Demand	PTD_D	3,396	2,232	346	488	25	0	2	302	31%
380	- Customer	PTD_C	7,554	6,818	503	187	8	4	1	33	69%
381	- Commodity	-	-	-	-	-	-	-	-	-	0%
382	Total		10,950	9,050	849	675	34	4	3	335	
383											
384	396 - Power Operated Equipment		1,546,614								PTD PLANT
385	- Demand	PTD_D	479,712	315,299	48,923	68,958	3,563	5	327	42,637	31%
386	- Customer	PTD_C	1,066,902	962,945	70,999	26,414	1,199	587	146	4,612	69%
387	- Commodity	-	-	-	-	-	-	-	-	-	0%
388	Total		1,546,614	1,278,244	119,923	95,372	4,762	592	472	47,249	
389											
390	397.0 - Communication Equipment		61,886								CUS
391	- Demand	-	-	-	-	-	-	-	-	-	0%
392	- Customer	PTD_C	61,886	55,856	4,118	1,532	70	34	8	268	100%
393	- Commodity	-	-	-	-	-	-	-	-	-	0%
394	Total		61,886	55,856	4,118	1,532	70	34	8	268	
395											
396	398 - Miscellaneous Equipment		108,125								PTD PLANT
397	- Demand	PTD_D	33,537	22,043	3,420	4,821	249	0	23	2,981	31%
398	- Customer	PTD_C	74,588	67,320	4,964	1,847	84	41	10	322	69%
399	- Commodity	-	-	-	-	-	-	-	-	-	0%
400	Total		108,125	89,363	8,384	6,668	333	41	33	3,303	
401											
402	Total General Plant		6,653,413								
403	- Demand	-	2,044,489	1,343,777	208,506	293,895	15,185	21	1,392	181,713	
404	- Customer	-	4,608,924	4,159,841	306,711	114,106	5,178	2,534	630	19,924	
405	- Commodity	-	-	-	-	-	-	-	-	-	
406	Total		6,653,413	5,503,617	515,217	408,001	20,363	2,555	2,022	201,637	
407											
408	Less: Depreciation Charged to Clearing										
409											
410	Depreciation Charged to Clearing		(1,129,993)								TOTPLT
411	- Demand	Plant_Total_D	(350,248)	(230,207)	(35,720)	(50,348)	(2,601)	(4)	(238)	(31,130)	31.00%
412	- Customer	Plant_Total_C	(779,745)	(703,768)	(51,890)	(19,305)	(876)	(429)	(107)	(3,371)	69.00%
413	- Commodity	-	-	-	-	-	-	-	-	-	0.00%
414	Total		(1,129,993)	(933,975)	(87,610)	(69,653)	(3,477)	(432)	(345)	(34,501)	
415											
416											
417	Add: Amortization										
418											
419	352.1 - Storage Leaseholds & Rights		406								DEM
420	- Demand	Plant GasInvDem	406	295	46	62	2	0	0	-	100%
421	- Customer	-	-	-	-	-	-	-	-	-	0%
422	- Commodity	-	-	-	-	-	-	-	-	-	0%
423	Total		406	295	46	62	2	0	0	-	
424											



Laclede Gas Company  
Cost of Service Study  
12 Months Ending December 31, 2016

	A	B	C	D	E	F	G	H	I	J	K
1	Laclede Gas Company										
2	Allocation of Depreciation and	Allocation	Total	Residential	Small	Large	Large		Vehicular		
3	Amortization	Factor	Company	RS	General Srv	General Srv	Volume	Interruptible	Fuel	Transportation	Classification
4					SGS	LGS	LV	IN	VF	Transp.	Factor
425	390 - Structures & Improvements		126,256								PTD PLANT
426	- Demand	PTD_D	39,161	25,739	3,994	5,629	291	0	27	3,481	31%
427	- Customer	PTD_C	87,095	78,609	5,796	2,156	98	48	12	377	69%
428	- Commodity		-	-	-	-	-	-	-	-	0%
429	Total		126,256	104,348	9,790	7,786	389	48	39	3,857	
430											
431	391.3 - Data Processing Software		2,233,323								PTD PLANT
432	- Demand	PTD_D	692,708	455,295	70,646	99,577	5,145	7	472	61,568	31%
433	- Customer	PTD_C	1,540,615	1,390,501	102,524	38,142	1,731	847	211	6,660	69%
434	- Commodity		-	-	-	-	-	-	-	-	0%
435	Total		2,233,323	1,845,796	173,169	137,719	6,876	854	682	68,228	
436											
437	391.5 - Enterprise Software-EIMS		3,438,162								PTD PLANT
438	- Demand	PTD_D	1,066,412	700,918	108,758	153,296	7,921	11	726	94,782	31%
439	- Customer	PTD_C	2,371,750	2,140,652	157,833	58,719	2,665	1,304	324	10,253	69%
440	- Commodity		-	-	-	-	-	-	-	-	0%
441	Total		3,438,162	2,841,570	266,591	212,015	10,585	1,315	1,050	105,035	
442											
443	Other Leased Property		469,224								PTD PLANT
444	- Demand	PTD_D	145,539	95,658	14,843	20,921	1,081	1	99	12,935	31%
445	- Customer	PTD_C	323,685	292,146	21,540	8,014	364	178	44	1,399	69%
446	- Commodity		-	-	-	-	-	-	-	-	0%
447	Total		469,224	387,804	36,383	28,935	1,445	179	143	14,335	
448											
449	Total Amortization		6,267,370								
450	- Demand		1,944,225	1,277,905	198,286	279,486	14,439	20	1,323	172,766	
451	- Customer		4,323,145	3,901,907	287,693	107,031	4,857	2,377	591	18,689	
452	- Commodity		-	-	-	-	-	-	-	-	
453	Total		6,267,370	5,179,812	485,979	386,516	19,296	2,397	1,915	191,455	
454											
455	Total Depreciation and Amortization		54,869,862								
456	- Demand		12,026,210	7,897,731	1,225,351	1,727,881	89,533	113	8,251	1,077,351	
457	- Customer		42,843,652	38,746,206	2,784,578	1,059,037	47,322	22,724	5,758	178,027	
458	- Commodity		-	-	-	-	-	-	-	-	
459	Total		54,869,862	46,643,937	4,009,929	2,786,918	136,854	22,836	14,009	1,255,378	



Laclede Gas Company  
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	A	B	C	D	E	F	G	H	I	J	K	
1	Laclede Gas Company											
2	Allocation of Taxes Other Than Income											
3		Allocation Factor	Total Company	Residential RS	Small General Srv SGS	Large General Srv LGS	Large Volume LV	Interruptible IN	Vehicular Fuel VF	Transportation Transp.	Classification Factor	
4												
5	Ad Valorem		16,317,372									TOTPLT
6	- Demand	Plant_Total_D	5,057,668	3,324,241	515,804	727,038	37,565	52	3,443	449,523	31%	
7	- Customer	Plant_Total_C	11,259,705	10,162,584	749,301	278,763	12,650	6,191	1,540	48,675	69%	
8	- Commodity										0%	
9	Total		16,317,372	13,486,825	1,265,105	1,005,802	50,215	6,243	4,983	498,199		
10												
11	Payroll		5,281,239									NONTOTOIPEXP
12	- Demand	EXP_TTotal_D	923,399	611,787	94,998	133,380	6,705	17	583	75,928	17%	
13	- Customer	EXP_TTotal_C	4,318,014	3,764,494	368,890	141,597	6,847	3,732	851	31,604	82%	
14	- Commodity	EXP_TTotal_E	39,825	19,953	3,170	5,396	409	287	129	10,480	1%	
15	Total		5,281,239	4,396,234	467,058	280,372	13,962	4,037	1,563	118,013		
16												
17	Gross Receipts		-									
18	- Demand		-									
19	- Customer		-									
20	- Commodity		-									
21	Total		-									
22												
23	Other		314,901									NONTOTOIPEXP
24	- Demand	EXP_TTotal_D	55,059	36,479	5,664	7,953	400	1	35	4,527	17%	
25	- Customer	EXP_TTotal_C	257,468	224,463	21,996	8,443	408	223	51	1,884	82%	
26	- Commodity	EXP_TTotal_E	2,375	1,190	189	322	24	17	8	625	1%	
27	Total		314,901	262,132	27,849	16,718	832	241	93	7,037		
28												
29	Total Taxes Other Than Income											
30	- Demand		6,036,126	3,972,508	616,466	868,371	44,670	71	4,061	529,979		
31	- Customer		15,835,187	14,151,541	1,140,186	428,803	19,906	10,146	2,441	82,164		
32	- Commodity		42,200	21,142	3,359	5,718	434	304	137	11,105		
33	Total		21,913,512	18,145,191	1,760,012	1,302,892	65,009	10,521	6,639	623,248		
34												

Laclede Gas Company  
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	A	B	C	D	E	F	G	H	I	J
1	Laclede Gas Company									
2	Allocation of Income Taxes	Allocation	Total	Residential	Small	Large	Large		Vehicular	
3		Factor	Company	RS	General Srv	General Srv	Volume	Interruptible	Fuel	Transportation
4					SGS	LGS	LV	IN	VF	Transp.
5	Income Tax Calculation									
6	Operating Revenues		329,345,163	261,790,821	26,114,152	24,882,692	1,801,067	944,654	175,717	13,636,058
7										
8	Operating Expenses									
9	O&M Expenses		180,822,158	149,551,953	16,834,007	9,725,592	486,231	157,311	55,748	4,011,316
10	Depreciation & Amortization		54,869,862	46,643,937	4,009,929	2,786,918	136,854	22,836	14,009	1,255,378
11	Taxes Other than Income		21,913,512	18,145,191	1,760,012	1,302,892	65,009	10,521	6,639	623,248
12	Interest on Customer Deposits	C15_Intcus	114,944	80,593	31,164	3,130	57	-	-	-
13	Total Expenses excl. Income Taxes		257,720,476	214,421,674	22,635,112	13,818,532	688,152	190,668	76,396	5,899,942
14										
15	Net Income before Taxes & Interest		71,624,687	47,369,147	3,479,040	11,064,161	1,112,915	753,986	99,322	7,746,116
16										
17	Less:									
18	Flow through Adjustments	Rate Base_Total	19,187,363	15,721,136	1,562,719	1,256,309	61,080	8,107	5,831	572,181
19	Interest Expense	Rate Base_Total	21,924,033	17,963,423	1,785,607	1,435,495	69,792	9,264	6,662	653,791
20										
21	Net Income Before Taxes		30,513,290	13,684,588	130,714	8,372,357	982,043	736,615	86,828	6,520,144
22										
23	State Taxable Income		30,513,290	13,684,588	130,714	8,372,357	982,043	736,615	86,828	6,520,144
24	Kansas City Income Tax	0.16%	50,255	22,539	215	13,789	1,617	1,213	143	10,739
25										
26	State Taxable Income		30,513,290	13,684,588	130,714	8,372,357	982,043	736,615	86,828	6,520,144
27	Missouri State Income Tax	5.19%	1,583,945	710,367	6,785	434,609	50,978	38,238	4,507	338,461
28										
29	Federal Taxable Income		30,513,290	13,684,588	130,714	8,372,357	982,043	736,615	86,828	6,520,144
30	Federal Income Tax	33.03%	10,079,455	4,520,430	43,179	2,765,641	324,398	243,326	28,682	2,153,799
31										
32	Total Income Tax		11,713,656	5,253,336	50,180	3,214,039	376,993	282,777	33,332	2,502,999
33										
34										
35	State Income Tax		1,634,200	732,905	7,001	448,398	52,595	39,451	4,650	349,199
36	Federal Income Tax		10,079,455	4,520,430	43,179	2,765,641	324,398	243,326	28,682	2,153,799
37	Calculated Income Tax		11,713,656	5,253,336	50,180	3,214,039	376,993	282,777	33,332	2,502,999
38										
39	Actual Income Taxes		11,713,656	5,253,336	50,180	3,214,039	376,993	282,777	33,332	2,502,999
40										



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	A	B	C	D	E	F	G	H	I	J
1	Laclede Gas Company									
2	Summary of Allocators									
3	Description	Total Company	Residential RS	Small General Srv SGS	Large General Srv LGS	Large Volume LV	Interruptible IN	Fuel VF	Transportation Transp.	
4	<b>External Allocators</b>									
5	C1_customers	100.00%	93.66%	5.73%	0.58%	0.01%	0.00%	0.00%	0.02%	
6	C2_depcus	100.00%	70.11%	27.11%	2.72%	0.05%	0.00%	0.00%	0.00%	
7	C3_meters	100.00%	83.54%	11.83%	3.67%	0.12%	0.08%	0.02%	0.74%	
8	C4_Metincus	100.00%	70.28%	11.27%	13.35%	0.76%	0.47%	0.10%	3.76%	
9	C5_Regcus	100.00%	72.91%	9.44%	13.09%	0.97%	0.43%	0.10%	3.05%	
10	C6_services	100.00%	92.72%	5.64%	1.48%	0.05%	0.01%	0.01%	0.09%	
11	C7_Metregcus	100.00%	70.13%	16.81%	9.71%	0.51%	0.29%	0.06%	2.49%	
12	C8_Nonlvcus	100.00%	93.67%	5.73%	0.58%	0.00%	0.00%	0.00%	0.02%	
13	C9_Residcus	100.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
14	C10_LgLvcs	100.00%	0.00%	0.00%	97.67%	1.79%	0.54%	0.00%	0.00%	
15	C11_903cus	100.00%	93.53%	6.03%	0.41%	0.01%	0.00%	0.00%	0.02%	
16	C12_904cus	100.00%	93.19%	6.81%	0.00%	0.00%	0.00%	0.00%	0.00%	
17	C13_912cus	100.00%	34.11%	59.87%	6.01%	0.00%	0.00%	0.00%	0.00%	
18	C14_385cus	100.00%	0.00%	20.77%	56.10%	3.45%	2.14%	0.46%	17.08%	
19	C15_Intcus	100.00%	70.11%	27.11%	2.72%	0.05%	0.00%	0.00%	0.00%	
20	D1_sales	100.00%	54.14%	8.60%	14.67%	1.12%	0.79%	0.35%	20.33%	
21	D2_Demand	100.00%	65.10%	10.09%	14.29%	0.76%	0.00%	0.07%	9.68%	
22	D3_totalrevenues	100.00%	79.49%	7.93%	7.56%	0.55%	0.29%	0.05%	4.14%	
23	D4_NonTranspSales	100.00%	67.95%	10.80%	18.42%	1.40%	0.99%	0.44%	0.00%	
24	D5_NonTranspDem	100.00%	72.08%	11.17%	15.82%	0.84%	0.00%	0.08%	0.00%	
25	Plant GasInvDem	100.00%	72.77%	11.39%	15.30%	0.52%	0.01%	0.00%	0.00%	
26	<b>Internal Allocators</b>									
27	Plant_Total_D	100.00%	65.73%	10.20%	14.37%	0.74%	0.00%	0.07%	8.89%	
28	Plant_Total_C	100.00%	90.26%	6.65%	2.48%	0.11%	0.05%	0.01%	0.43%	
29	PTD_D	100.00%	65.73%	10.20%	14.37%	0.74%	0.00%	0.07%	8.89%	
30	PTD_C	100.00%	90.26%	6.65%	2.48%	0.11%	0.05%	0.01%	0.43%	
31	Plant_Gen_D	100.00%	65.73%	10.20%	14.37%	0.74%	0.00%	0.07%	8.89%	
32	Plant_Gen_C	100.00%	90.26%	6.65%	2.48%	0.11%	0.05%	0.01%	0.43%	
33	Plant Dist_D	100.00%	65.10%	10.09%	14.29%	0.76%	0.00%	0.07%	9.68%	
34	Plant Dist_C	100.00%	90.26%	6.65%	2.48%	0.11%	0.05%	0.01%	0.43%	
35	Plant Nonint_D	100.00%	65.16%	10.10%	14.30%	0.76%	0.00%	0.07%	9.60%	
36	Plant Nonint_C	100.00%	90.26%	6.65%	2.48%	0.11%	0.05%	0.01%	0.43%	
37	Plant_374-386_C	100.00%	90.26%	6.65%	2.48%	0.11%	0.05%	0.01%	0.43%	
38	Plant_376-379_D	100.00%	65.10%	10.09%	14.29%	0.76%	0.00%	0.07%	9.68%	
39	Plant_376-379_C	100.00%	93.66%	5.73%	0.58%	0.01%	0.00%	0.00%	0.02%	
40	Plant_MainsSrv_D	100.00%	65.10%	10.09%	14.29%	0.76%	0.00%	0.07%	9.68%	
41	Plant_MainsSrv_C	100.00%	92.99%	5.67%	1.23%	0.04%	0.01%	0.00%	0.07%	
42	Rate Base_Total	100.00%	81.93%	8.14%	6.55%	0.32%	0.04%	0.03%	2.98%	



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	A	B	C	D	E	F	G	H	I	J	
1	Laclede Gas Company										
2	Summary of Allocators										
3		Description	Total Company	Residential RS	Small General Srv SGS	Large General Srv LGS	Large Volume LV	Interruptible IN	Vehicle Fuel VF	Transportation Transp.	
56		OPEXPDEM	100.00%	66.49%	10.33%	14.48%	0.72%	0.00%	0.06%	7.92%	
57		OPEXPCUS	100.00%	86.25%	9.13%	3.51%	0.17%	0.10%	0.02%	0.82%	
58		OPEXPCOM	100.00%	50.10%	7.96%	13.55%	1.03%	0.72%	0.32%	26.32%	
59											
60		EXP_871-880_D	100.00%	65.10%	10.09%	14.29%	0.76%	0.00%	0.07%	9.68%	
61		EXP_871-880_C	100.00%	76.01%	13.21%	8.02%	0.42%	0.24%	0.05%	2.04%	
62		EXP_871-880_E	100.00%	54.14%	8.60%	14.67%	1.12%	0.79%	0.35%	20.33%	
63											
64		EXP_871-879_D	100.00%	65.10%	10.09%	14.29%	0.76%	0.00%	0.07%	9.68%	
65		EXP_871-879_C	100.00%	76.01%	13.21%	8.02%	0.42%	0.24%	0.05%	2.04%	
66		EXP_871-879_E	100.00%	54.14%	8.60%	14.67%	1.12%	0.79%	0.35%	20.33%	
67											
68		EXP_887-893_D	100.00%	65.10%	10.09%	14.29%	0.76%	0.00%	0.07%	9.68%	
69		EXP_887-893_C	100.00%	86.56%	8.68%	3.68%	0.18%	0.09%	0.02%	0.79%	
70											
71		EXP_902-904_C	100.00%	93.48%	6.13%	0.36%	0.01%	0.00%	0.00%	0.01%	
72											
73		EXP_912-913_C	100.00%	40.21%	54.33%	5.46%	0.00%	0.00%	0.00%	0.01%	
74											
75		EXP_Non-A&G_D	100.00%	66.28%	10.29%	14.45%	0.73%	0.00%	0.06%	8.19%	
76		EXP_Non-A&G_C	100.00%	87.23%	8.57%	3.24%	0.15%	0.08%	0.02%	0.70%	
77		EXP_Non-A&G_E	100.00%	50.10%	7.96%	13.55%	1.03%	0.72%	0.32%	26.32%	
78											
79		EXP_TTotal_D	100.00%	66.25%	10.29%	14.44%	0.73%	0.00%	0.06%	8.22%	
80		EXP_TTotal_C	100.00%	87.18%	8.54%	3.28%	0.16%	0.09%	0.02%	0.73%	
81		EXP_TTotal_E	100.00%	50.10%	7.96%	13.55%	1.03%	0.72%	0.32%	26.32%	
82											
83		<b>Derivation External Allocators</b>									
84		C1_customers_INPUT	646,634	605,635	37,040	3,720	68	21	8	142	
85			100.00%	93.66%	5.73%	0.58%	0.01%	0.00%	0.00%	0.02%	
86											
87		C2_depcus_INPUT	(6,210,983)	(4,354,825)	(1,683,925)	(169,134)	(3,099)	-	-	-	
88			100.00%	70.11%	27.11%	2.72%	0.05%	0.00%	0.00%	0.00%	
89											
90		C3_meters_INPUT	193,929,516	162,000,330	22,942,868	7,118,114	235,129	157,122	35,042	1,440,911	
91			100.00%	83.54%	11.83%	3.67%	0.12%	0.08%	0.02%	0.74%	
92											
93		C4_Metincus_INPUT	169,706,034	119,267,441	19,130,593	22,661,656	1,290,509	798,490	174,314	6,383,030	
94			100.00%	70.28%	11.27%	13.35%	0.76%	0.47%	0.10%	3.76%	
95											
96		C5_Regcus_INPUT	16,575,580	12,086,074	1,565,141	2,169,827	161,376	70,751	16,350	506,060	
97			100.00%	72.91%	9.44%	13.09%	0.97%	0.43%	0.10%	3.05%	
98											
99		C6_services_INPUT	2,656,341,330	2,463,070,132	149,899,429	39,279,647	1,289,202	340,853	137,156	2,324,911	
100			100.00%	92.72%	5.64%	1.48%	0.05%	0.01%	0.01%	0.09%	
101											
102		C7_Metregcus_INPUT	78,165,218	54,818,964	13,136,655	7,589,368	396,315	227,873	49,688	1,946,354	
103			100.00%	70.13%	16.81%	9.71%	0.51%	0.29%	0.06%	2.49%	
104											
105		C8_Nonlvcus_INPUT	646,545	605,635	37,040	3,720			8	142	
106			100.00%	93.67%	5.73%	0.58%	0.00%	0.00%	0.00%	0.02%	
107											
108		C9_Residcus_INPUT	605,635	605,635							
109			100.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
110											

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1	Laclede Gas Company									
2	Summary of Allocators									
3										
4	Description	Total Company	Residential AS	Small General Srv SGS	Large General Srv LGS	Large Volume LV	Interruptible IN	Vehicular Fuel VF	Transportation Transp.	
111	C10_Lglvcus_INPUT	3,809			3,720	68	21			
112		100.00%	0.00%	0.00%	97.67%	1.79%	0.54%	0.00%	0.00%	
113										
114	C11_903cus_INPUT	17,549,574	\$ 16,413,614	\$ 1,058,785	\$ 72,525	\$ 1,329	\$ 405	\$ 154	\$ 2,762	
115		100.00%	93.53%	6.03%	0.41%	0.01%	0.00%	0.00%	0.02%	
116										
117	C12_904cus_INPUT	8,290,949	\$ 7,726,285	\$ 564,664	\$ -	\$ -	\$ -	\$ -	\$ -	
118		100.00%	93.19%	6.81%	0.00%	0.00%	0.00%	0.00%	0.00%	
119										
120	C13_912cus_INPUT	1,626,887	\$ 554,953	\$ 974,003	\$ 97,829	\$ 29	\$ 9	\$ 3	\$ 60	
121		100.00%	34.11%	59.87%	6.01%	0.00%	0.00%	0.00%	0.00%	
122										
123	C14_385cus_INPUT	37,366,157	\$ -	\$ 7,759,240	\$ 20,963,083	\$ 1,290,320	\$ 798,490	\$ 172,610	\$ 6,382,414	
124		100.00%	0.00%	20.77%	56.10%	3.45%	2.14%	0.46%	17.08%	
125										
126	C15_intcus_INPUT	295,022	\$ 206,854	\$ 79,986	\$ 8,034	\$ 147	\$ -	\$ -	\$ -	
127		100.00%	70.11%	27.11%	2.72%	0.05%	0.00%	0.00%	0.00%	
128										
129	D1_sales_INPUT	901,742,754	488,185,483	77,590,502	132,304,153	10,059,571	7,107,794	3,193,198	183,302,053	
130		100.00%	54.14%	8.60%	14.67%	1.12%	0.79%	0.35%	20.33%	
131										
132	D2_demand_INPUT	100.00%	65.10%	10.09%	14.29%	0.76%	0.00%	0.07%	9.68%	
133		100.00%	65.10%	10.09%	14.29%	0.76%	0.00%	0.07%	9.68%	
134										
135	D3_totalrevenues_INPUT	324,072,654	257,599,794	25,696,089	24,484,344	1,772,234	929,531	172,904	13,417,758	
136		100.00%	79.49%	7.93%	7.56%	0.55%	0.29%	0.05%	4.14%	
137										
138	D4_NonTranspSales_INPUT	718,440,701	488,185,483	77,590,502	132,304,153	10,059,571	7,107,794	3,193,198		
139		100.00%	67.95%	10.80%	18.42%	1.40%	0.99%	0.44%		
140										
141	D5_NonTranspDem_INPUT	90%	65.10%	10.09%	14.29%	0.76%	0.00%	0.07%		
142		100%	72.08%	11.17%	15.82%	0.84%	0.00%	0.08%		
143										
144	Plant GasInvDem	68,077,170	49,538,844	7,755,618	10,417,892	354,931	8,569	1,316	-	
145		100.00%	72.77%	11.39%	15.30%	0.52%	0.01%	0.00%	0.00%	



Laclede Gas Company  
Cost of Service Study  
12 Months Ending December 31, 2016

	A	B	C	D	E	F
1	<b>Laclede Gas Company</b>					
2	<b>Summary of Classifiers</b>					
3	<b>Classifier Description</b>	<b>Classifier Code</b>	<b>Total</b>	<b>- Demand</b>	<b>- Customer</b>	<b>- Commodity</b>
4						
5	<b>Classifiers</b>					
6						
7	Customer Factor	CUS	100.00%	0.00%	100.00%	0.00%
8	Demand Factor	DEM	100.00%	100.00%	0.00%	0.00%
9	Commodity Factor	COM	100.00%	0.00%	0.00%	100.00%
10	Non-intangible Plant Factor	NINTPLT	100.00%	31.00%	69.00%	0.00%
11	Accounts 376-379 Factor	DIS376-379	100.00%	62.88%	37.12%	0.00%
12	Distribution Mains Factor	DISMAIN	100.00%	62.06%	37.94%	0.00%
13	General Plant Factor	GENPLT	100.00%	30.78%	69.22%	0.00%
14	PTD Plant Factor	PTD PLANT	100.00%	31.02%	68.98%	0.00%
15	Mains Factor	PLT376MAINS	100.00%	62.06%	37.94%	0.00%
16	Mains and Services Factor	MAINSVC	100.00%	31.47%	68.53%	0.00%
17	Total Plant in Service Factor	TOTPLT	100.00%	31.00%	69.00%	0.00%
18	Operating Expense (without TOTI) Factor	NONOTOIPEXP	100.00%	17.48%	81.76%	0.75%
19	Accounts 871-879 Factor	EXP871-879	100.00%	13.55%	82.41%	4.04%
20	Accounts 871-880 Factor	EXP871-880	100.00%	13.55%	82.41%	4.04%
21	Accounts 887-893 Factor	EXP887-893	100.00%	35.13%	64.87%	0.00%
22	Non-A&G Op. Exp. (without TOTI) Factor	NONAGOPEXP	100.00%	17.46%	81.77%	0.77%
23						
24	<b>Derivations</b>					
25						
26	Customer Factor	CUS		0.00%	100.00%	0.00%
27						
28	Demand Factor	DEM		100.00%	0.00%	0.00%
29						
30	Commodity Factor	COM		0.00%	0.00%	100.00%
31						
32	376 Distribution Mains					
33	Distribution Mains Factor	DISMAIN	100.00%	62.06%	37.94%	0.00%
34						



Missouri Gas Energy  
Cost of Service Study  
12 Months Ending December 31, 2016

	A	C	D	E	F	G
1	<u>Missouri Gas Energy</u>			Small	Large	Large
2	<b>COSS Summary</b>	<b>Total</b>	<b>Residential</b>	<b>General Srv</b>	<b>General Srv</b>	<b>Volume Srv</b>
3		<b>Company</b>	<b>RS</b>	<b>SGS</b>	<b>LGS</b>	<b>LVS</b>
4						
5	<b>Current Delivery Service Rates</b>					
6	Rate base	792,519,685	618,157,423	72,784,240	45,186,472	56,391,550
7	Net operating income	30,045,198	21,210,088	962,616	4,096,123	3,776,371
8	Rate of return	3.79%	3.43%	1.32%	9.06%	6.70%
9	Relative rate of return	100%	91%	35%	239%	177%
10	Revenues	\$ 199,714,711	\$ 156,916,485	\$ 15,096,494	\$ 13,248,104	\$ 14,453,629
11	Test Period Usage (therms)	763,483,865	366,148,361	56,239,220	74,357,619	266,738,665
12	Revenue per therm	\$ 0.2616	\$ 0.4286	\$ 0.2684	\$ 0.1782	\$ 0.0542
13						
14	<b>Revenues at Equalized Rates of Return</b>					
15	Rate of return	7.70%	7.70%	7.70%	7.70%	7.70%
16	Return requirement	61,024,016	47,598,122	5,604,386	3,479,358	4,342,149
17	Revenue required	250,115,780	199,842,228	22,641,317	12,252,925	15,379,312
18	Revenue deficiency	50,401,069	42,925,743	7,544,823	(995,179)	925,683
19	Percent increase required	25.2%	27.4%	50.0%	-7.5%	6.4%
20	Test Period Usage (therms)	763,483,865	366,148,361	56,239,220	74,357,619	266,738,665
21	Revenue Required per therm	\$ 0.3276	\$ 0.5458	\$ 0.4026	\$ 0.1648	\$ 0.0577
22	Revenue Deficiency per therm	\$ 0.0660	\$ 0.1172	\$ 0.1342	\$ (0.0134)	\$ 0.0035
23						
24		<b>Revenue Requirements</b>				
25	<b>Rate Class</b>	<b>Class ROR</b>	<b>Overall ROR</b>			
26						
27	Residential	3.43%	3.79%			
28	Small General Service	1.32%	3.79%			
29	Large General Service	9.06%	3.79%			
30	Large Volume Service	6.70%	3.79%			
31						

Missouri Gas Energy  
Cost of Service Study  
12 Months Ending December 31, 2016

	A	C	D	E	F	G
32	Missouri Gas Energy					
33	COSS Summary			Small	Large	Large
34		Total	Residential	General Srv	General Srv	Volume Srv
35		Company	RS	SGS	LGS	LVS
36	Current Rate of Return	3.79%	3.43%	1.32%	9.06%	6.70%
37	Proposed Rate of Return	7.70%	7.70%	7.70%	7.70%	7.70%
38						
39	EROR Revenues	\$ 250,115,781	\$ 199,842,228	\$ 22,641,317	\$ 12,252,925	\$ 15,379,312
40	Current Revenues	199,714,711	156,916,485	15,096,494	13,248,104	14,453,629
41						
42	Difference	\$ 50,401,070	\$ 42,925,743	\$ 7,544,823	\$ (995,179)	\$ 925,683
43	% Difference	25.24%	27.36%	49.98%	-7.51%	6.40%
44						
45	<b>Derivation of Delivery Revenues</b>					
46	Current Total Revenues	\$ 199,714,711	156,916,485	15,096,494	13,248,104	14,453,629
47	Less: Street Lamps	1,190	935	90	79	86
48	Less: Other Revenues	1,570,214	1,233,722	118,693	104,160	113,639
49						
50	Current Delivery Revenues	\$ 198,143,308	\$ 155,681,828	\$ 14,977,711	\$ 13,143,865	\$ 14,339,904
51						
52	Total Revenues at EROR	\$ 250,115,781	199,842,228	22,641,317	12,252,925	15,379,312
53	Less: Street Lamps	1,190	935	90	79	86
54	Less: Other Revenues	1,570,214	1,233,722	118,693	104,160	113,639
55						
56	Delivery Revenues at EROR	\$ 248,544,377	\$ 198,607,571	\$ 22,522,534	\$ 12,148,685	\$ 15,265,587



Missouri Gas Energy  
Cost of Service Study  
12 Months Ending December 31, 2016

	A	B	C	D	E	F	G
1	<b>Missouri Gas Energy</b>						
2	<b>Development of Rate of Return</b>		<b>Total</b>	<b>Residential</b>	<b>Small</b>	<b>Large</b>	<b>Large</b>
3			<b>Company</b>	<b>RS</b>	<b>General Srv</b>	<b>General Srv</b>	<b>Volume Srv</b>
4					<b>SGS</b>	<b>LGS</b>	<b>LVS</b>
5	<b>Rate Base</b>						
6	<b>Gas Plant in Service</b>						
7	- Demand		431,893,890	268,380,968	47,543,170	42,329,808	73,639,944
8	- Customer		874,418,467	771,837,375	68,801,006	24,528,084	9,252,002
9	- Commodity		-	-	-	-	-
10	Total		1,306,312,356	1,040,218,343	116,344,176	66,857,891	82,891,946
11							
12	<b>less: Depreciation &amp; Amortization</b>						
13	- Demand		(140,627,536)	(87,386,636)	(15,480,374)	(13,782,868)	(23,977,658)
14	- Customer		(364,753,384)	(325,558,534)	(27,102,859)	(9,168,816)	(2,923,175)
15	- Commodity		-	-	-	-	-
16	Total		(505,380,920)	(412,945,170)	(42,583,233)	(22,951,684)	(26,900,833)
17							
18	<b>Add: CWIP</b>						
19	- Demand		11,633,225	7,228,943	1,280,593	1,140,169	1,983,520
20	- Customer		23,552,791	20,729,289	1,876,067	685,867	261,569
21	- Commodity		-	-	-	-	-
22	Total		35,186,016	27,958,231	3,156,661	1,826,036	2,245,088
23							
24	<b>Net Utility Plant in Service</b>						
25	- Demand		302,899,578	188,223,274	33,343,389	29,687,109	51,645,806
26	- Customer		533,217,874	467,008,131	43,574,214	16,045,134	6,590,396
27	- Commodity		-	-	-	-	-
28	Total		836,117,453	655,231,405	76,917,603	45,732,243	58,236,201
29							
30	<b>Additions to Rate Base</b>						
31	- Demand		42,543,834	28,673,457	4,668,860	4,445,926	4,755,591
32	- Customer		30,007,087	26,471,967	2,438,792	753,789	342,539
33	- Commodity		50,187	24,068	3,697	4,888	17,534
34	Total		72,601,107	55,169,493	7,111,349	5,204,603	5,115,664
35							
36	<b>Reductions to Rate Base</b>						
37	- Demand		(37,028,186)	(23,245,647)	(4,040,053)	(3,563,435)	(6,179,051)
38	- Customer		(79,170,690)	(68,997,828)	(7,204,659)	(2,186,939)	(781,264)
39	- Commodity		-	-	-	-	-
40	Total		(116,198,876)	(92,243,474)	(11,244,712)	(5,750,374)	(6,960,315)
41							
42	<b>Rate Base</b>						
43	- Demand		308,415,227	193,651,085	33,972,196	30,569,600	50,222,346
44	- Customer		484,054,271	424,482,270	38,808,347	14,611,984	6,151,670
45	- Commodity		50,187	24,068	3,697	4,888	17,534
46	Total		792,519,685	618,157,423	72,784,240	45,186,472	56,391,550
47							



Missouri Gas Energy  
Cost of Service Study  
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	A	B	C	D	E	F	G
1	<b>Missouri Gas Energy</b>						
2	<b>Development of Rate of Return</b>		<b>Total</b>	<b>Residential</b>	<b>Small</b>	<b>Large</b>	<b>Large</b>
3			<b>Company</b>	<b>RS</b>	<b>General Srv</b>	<b>General Srv</b>	<b>Volume Srv</b>
4					<b>SGS</b>	<b>LGS</b>	<b>LVS</b>
48	<b>Return Calculation</b>						
49	Customer sales		198,143,308	155,681,828	14,977,711	13,143,865	14,339,904
50	Street Lamps		1,190	935	90	79	86
51	Other revenues		1,570,214	1,233,722	118,693	104,160	113,639
52							
53	Total		199,714,711	156,916,485	15,096,494	13,248,104	14,453,629
54							
55	less:						
56	O&M Expense						
57	- Demand		28,906,167	18,560,034	3,090,823	2,666,857	4,588,453
58	- Customer		77,128,011	67,883,261	6,450,577	1,759,420	1,034,753
59	- Commodity		293,623	140,814	21,629	28,597	102,583
60	Total		106,327,800	86,584,109	9,563,029	4,454,874	5,725,789
61							
62	Depreciation and Amortization Expense						
63	- Demand		11,605,532	7,211,734	1,277,545	1,137,455	1,978,798
64	- Customer		25,047,974	22,049,771	1,996,661	724,111	277,430
65	- Commodity		-	-	-	-	-
66	Total		36,653,506	29,261,506	3,274,206	1,861,566	2,256,228
67							
68	Taxes other than income						
69	- Demand		7,523,479	4,691,404	825,706	732,847	1,273,523
70	- Customer		15,781,126	13,922,805	1,252,799	432,252	173,270
71	- Commodity		7,998	3,835	589	779	2,794
72	Total		23,312,602	18,618,044	2,079,094	1,165,877	1,449,587
73							
74	Interest on customer deposits		226,207	172,506	47,801	5,263	638
75							
76	Income taxes		3,149,398	1,070,232	(830,252)	1,664,401	1,245,017
77	Total Operating Expenses		169,669,514	135,706,397	14,133,878	9,151,981	10,677,258
78							
79	Net Operating Income		30,045,198	21,210,088	962,616	4,096,123	3,776,371
80							
81							
82	After Tax Rate of return		3.79%	3.43%	1.32%	9.06%	6.70%
83	Relative rate of return		1.000	0.905	0.349	2.391	1.766

Missouri Gas Energy  
Cost of Service Study  
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	A	B	C	D	E	F	G
1	<b>Missouri Gas Energy</b>						
2	<b>Summary of Rate of Return</b>						
3			<b>Total</b>	<b>Residential</b>	<b>Small</b>	<b>Large</b>	<b>Large</b>
4			<b>Company</b>	<b>RS</b>	<b>General Srv</b>	<b>General Srv</b>	<b>Volume Srv</b>
5	<b>Rate Base</b>						
6	Gas Plant in Service		1,306,312,356	1,040,218,343	116,344,176	66,857,891	82,891,946
7	less: Depreciation		(505,380,920)	(412,945,170)	(42,583,233)	(22,951,684)	(26,900,833)
8	Add: CWIP		35,186,016	27,958,231	3,156,661	1,826,036	2,245,088
9	Net Utility Plant in Service		836,117,453	655,231,405	76,917,603	45,732,243	58,236,201
10							
11	Add:						
12	Materials and Supplies		5,004,239	3,984,883	445,693	256,120	317,544
13	Net Cost of Removal		-	-	-	-	-
14	Gas Storage		29,273,371	20,307,691	3,226,263	3,178,514	2,560,903
15	Prepaid Expenses		3,169,251	2,573,002	285,909	135,142	175,197
16	Cash Working Capital		7,135,564	5,793,111	643,724	304,273	394,456
17	Other Regulatory Assets		28,018,682	22,510,806	2,509,759	1,330,553	1,667,564
18	Total		72,601,107	55,169,493	7,111,349	5,204,603	5,115,664
19							
20	Less:						
21	Other Regulatory Liabilities		(78,884,239)	(62,815,629)	(7,025,672)	(4,037,345)	(5,005,593)
22	Accumulated Deferred Income Taxes		(28,506,945)	(22,700,120)	(2,538,916)	(1,459,003)	(1,808,906)
23	Customer Deposits		(4,762,253)	(3,189,944)	(1,399,543)	(154,092)	(18,674)
24	Customer Advances		(4,045,439)	(3,537,782)	(280,581)	(99,934)	(127,142)
25	Total		(116,198,876)	(92,243,474)	(11,244,712)	(5,750,374)	(6,960,315)
26							
27	Rate Base		792,519,685	618,157,423	72,784,240	45,186,472	56,391,550
28							



Missouri Gas Energy  
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	A	B	C	D	E	F	G
1	Missouri Gas Energy						
2	Summary of Rate of Return		Total	Residential	Small	Large	Large
3			Company	RS	General Srv	General Srv	Volume Srv
4					SGS	LGS	LVS
29	Return Calculation						
30	Delivery Revenues		198,143,308	155,681,828	14,977,711	13,143,865	14,339,904
31	Street Lamps		1,190	935	90	79	86
32	Other revenues		1,570,214	1,233,722	118,693	104,160	113,639
33	Total Revenues		199,714,711	156,916,485	15,096,494	13,248,104	14,453,629
34							
35	less:						
36	O&M Expense		106,327,800	86,584,109	9,563,029	4,454,874	5,725,789
37	Depreciation and Amortization Expense		36,653,506	29,261,506	3,274,206	1,861,566	2,256,228
38	Taxes other than income		23,312,602	18,618,044	2,079,094	1,165,877	1,449,587
39	Interest on customer deposits		226,207	172,506	47,801	5,263	638
40	Income taxes		3,149,398	1,070,232	(830,252)	1,664,401	1,245,017
41	Total Operating Expenses		169,669,514	135,706,397	14,133,878	9,151,981	10,677,258
42							
43	Net Operating Income		30,045,198	21,210,088	962,616	4,096,123	3,776,371
44							
45	Rate of return		3.79%	3.43%	1.32%	9.06%	6.70%
46	Relative rate of return		1.000	0.905	0.349	2.391	1.766
47							



Missouri Gas Energy  
Cost of Service Study  
12 Months Ending December 31, 2016

	A	B	C	D	E	F	G
1	<b>Missouri Gas Energy</b>						
2	<b>Summary of Rate of Return</b>						
3			<b>Total</b>	<b>Residential</b>	<b>Small</b>	<b>Large</b>	<b>Large</b>
4			<b>Company</b>	<b>RS</b>	<b>General Srv</b>	<b>General Srv</b>	<b>Volume Srv</b>
					<b>SGS</b>	<b>LGS</b>	<b>LVS</b>
48	<b>Derivation of Required Revenues</b>						
49	Net Income after taxes		\$ 61,024,016	\$ 47,598,122	\$ 5,604,386	\$ 3,479,358	\$ 4,342,149
50	Add: Income Taxes		22,571,649	17,605,660	2,072,958	1,286,950	1,606,080
51	Net income before taxes & interest		\$ 83,595,664	\$ 65,203,782	\$ 7,677,345	\$ 4,766,308	\$ 5,948,230
52							
53	Add: O&M		106,327,800	86,584,109	9,563,029	4,454,874	5,725,789
54	Add: Depreciation		36,653,506	29,261,506	3,274,206	1,861,566	2,256,228
55	Add: Taxes other than income		23,312,602	18,618,044	2,079,094	1,165,877	1,449,587
56	Add: Interest on customer deposits		226,207	172,506	47,801	5,263	638
57	Net Revenue Requirement		249,995,780	199,746,348	22,630,454	12,247,046	15,371,933
58							
59	Add: Changes/ True-up Estimate		120,000	95,880	10,863	5,879	7,379
60	Total Revenue Requirement		\$ 250,115,780	\$ 199,842,228	\$ 22,641,317	\$ 12,252,925	\$ 15,379,312
61							38.68%
62	<b>Demand-Related</b>						
63	Rate Base		\$ 308,415,227	\$ 193,651,085	\$ 33,972,196	\$ 30,569,600	\$ 50,222,346
64	Net Income after taxes		23,747,972	14,911,134	2,615,859	2,353,859	3,867,121
65	Add: Income Taxes		8,783,933	5,515,351	967,558	870,649	1,430,376
66	Net income before taxes & interest		\$ 32,531,906	\$ 20,426,485	\$ 3,583,417	\$ 3,224,508	\$ 5,297,497
67							
68	Add: O&M		28,906,167	18,560,034	3,090,823	2,666,857	4,588,453
69	Add: Depreciation		11,605,532	7,211,734	1,277,545	1,137,455	1,978,798
70	Add: Taxes other than income		7,523,479	4,691,404	825,706	732,847	1,273,523
71							
72							
73	Required Demand Revenues		\$ 80,567,084	\$ 50,889,657	\$ 8,777,490	\$ 7,761,667	\$ 13,138,270
74							
75	Number of Customers		501,755	468,460	29,637	3,263	395
76	Monthly cost per customer		\$ 13.38	\$ 9.05	\$ 24.68	\$ 198.22	\$ 2,768.64
77							
78							
79			<b>Total</b>	<b>Residential</b>	<b>Small</b>	<b>Large</b>	<b>Large</b>
80			<b>Company</b>	<b>RS</b>	<b>General Srv</b>	<b>General Srv</b>	<b>Volume Srv</b>
81					<b>SGS</b>	<b>LGS</b>	<b>LVS</b>

Missouri Gas Energy  
Cost of Service Study  
12 Months Ending December 31, 2016

	A	B	C	D	E	F	G				
1	<b>Missouri Gas Energy</b>										
2	<b>Summary of Rate of Return</b>										
3			<b>Total</b>	<b>Residential</b>	<b>Small</b>	<b>Large</b>	<b>Large</b>				
4			<b>Company</b>	<b>RS</b>	<b>General Srv</b>	<b>General Srv</b>	<b>Volume Srv</b>				
					<b>SGS</b>	<b>LGS</b>	<b>LVS</b>				
82	<b>Fully Allocated Customer Costs</b>										
83	Rate Base	\$	484,054,271	\$	424,482,270	\$	38,808,347	\$	14,611,984	\$	6,151,670
84	Net Income after taxes		37,272,179		32,685,135		2,988,243		1,125,123		473,679
85	Add: Income Taxes		13,786,286		12,089,624		1,105,295		416,162		175,205
86	Net income before taxes & interest	\$	51,058,465	\$	44,774,758	\$	4,093,538	\$	1,541,285	\$	648,884
87											
88	Add: O&M		77,128,011		67,883,261		6,450,577		1,759,420		1,034,753
89	Add: Depreciation		25,047,974		22,049,771		1,996,661		724,111		277,430
90	Add: Taxes other than income		15,781,126		13,922,805		1,252,799		432,252		173,270
91	Add: Interest on deposits		226,207		172,506		47,801		5,263		638
92											
93	Required Customer Revenues	\$	169,241,782	\$	148,803,101	\$	13,841,376	\$	4,462,331	\$	2,134,974
94											
95	Number of Customers		501,755		468,460		29,637		3,263		395
96	Monthly cost per customer	\$	28.11	\$	26.47	\$	38.92	\$	113.96	\$	449.91
97											
98	Required Total Revenues		249,808,866		199,692,757		22,618,866		12,223,997		15,273,245
99											



Missouri Gas Energy  
Cost of Service Study  
12 Months Ending December 31, 2016

	A	B	C	D	E	F	G
1	<u>Missouri Gas Energy</u>				Small	Large	Large
2	<u>Summary of Rate of Return</u>		Total	Residential	General Srv	General Srv	Volume Srv
3			Company	RS	SGS	LGS	LVS
4							
100	<u>Basic Customer Costs</u>			-	Small	Large	Large
101			Total	Residential	General Srv	General Srv	Volume Srv
102			Company	RS	SGS	LGS	LVS
103							
104	<u>Basic Customer Costs</u>						
105	<u>Plant</u>						
106	376 - Mains		197,613,574	184,500,378	11,672,311	1,285,140	155,745
107	380 - Services		399,602,056	366,197,599	26,000,781	6,374,562	1,029,114
108	381 - Meters		40,249,691	27,386,110	7,411,999	3,467,303	1,984,279
109	382 - Meter installation		94,813,508	69,849,055	13,308,390	9,004,188	2,651,875
110	383 - House regulators		15,936,615	11,179,286	1,396,676	1,809,435	1,551,217
111	385 - Industrial Meas & Reg stations		1,004,461	-	-	-	1,004,461
112	Total		749,219,904	659,112,428	59,790,156	21,940,627	8,376,692
113							
114	<u>Accumulated Depreciation</u>						
115	376 - Mains		(66,161,738)	(61,771,393)	(3,907,932)	(430,269)	(52,144)
116	380 - Services		(217,100,229)	(198,951,886)	(14,125,992)	(3,463,242)	(559,109)
117	381 - Meters		(5,606,851)	(3,814,932)	(1,032,504)	(483,001)	(276,414)
118	382 - Meter installation		(37,046,542)	(27,292,166)	(5,199,996)	(3,518,212)	(1,036,169)
119	383 - House regulators		(5,439,223)	(3,815,530)	(476,690)	(617,567)	(529,436)
120	385 - Industrial Meas & Reg stations		(252,432)	-	-	-	(252,432)
121	Total		(331,607,016)	(295,645,907)	(24,743,114)	(8,512,292)	(2,705,703)
122							



Missouri Gas Energy  
Cost of Service Study  
12 Months Ending December 31, 2016

	A	B	C	D	E	F	G
1	<b>Missouri Gas Energy</b>						
2	<b>Summary of Rate of Return</b>						
3			<b>Total</b>	<b>Residential</b>	<b>Small</b>	<b>Large</b>	<b>Large</b>
4			<b>Company</b>	<b>RS</b>	<b>General Srv</b>	<b>General Srv</b>	<b>Volume Srv</b>
					<b>SGS</b>	<b>LGS</b>	<b>LVS</b>
123	Net income before taxes & interest						
124	Net Plant		417,612,888	363,466,521	35,047,042	13,428,336	5,670,989
125	Net Income after taxes		32,156,192	\$ 27,986,922	\$ 2,698,622	\$ 1,033,982	\$ 436,666
126	Add: Income Taxes		11,893,978	10,351,842	998,170	382,451	161,515
127	Net income before taxes & interest		\$ 44,050,170	\$ 38,338,764	\$ 3,696,792	\$ 1,416,432	\$ 598,181
128							
129	O&M Expenses						
130	874 - Mains & services expense		2,868,634	2,678,278	169,440	18,656	2,261
131	876 - Measurement & Reg - Industrial		-	-	-	-	-
132	878 - Meter and House Regulator		2,143,852	1,468,300	350,788	197,172	127,593
133	879 - Customer installation		939,433	692,080	131,862	89,215	26,275
134	887 - Maintenance of Mains		6,209,626	5,797,569	366,780	40,383	4,894
135	902 - Meter reading expense		1,976,539	1,845,381	116,747	12,854	1,558
136	903 - Customer records & collections		12,561,118	11,585,112	869,265	98,428	8,314
137	909 - Info & Inst Advertising		38,699	36,131	2,286	252	30
138	913 - Advertising		-	-	-	-	-
139	916 - Misc Sales Expense		5,500	3,008	2,244	247	2
140	Total		26,743,402	24,105,858	2,009,411	457,207	170,927
141							
142	Depreciation Expense						
143	376 - Mains		3,517,522	3,284,107	207,767	22,875	2,772
144	380 - Services		10,709,335	9,814,096	696,821	170,838	27,580
145	381 - Meters		1,151,141	783,243	211,983	99,165	56,750
146	382 - Meter installation		2,711,666	1,997,683	380,620	257,520	75,844
147	383 - House regulators		388,853	272,774	34,079	44,150	37,850
148	385 - Industrial Meas & Reg stations		33,449	-	-	-	33,449
149			18,511,966	16,151,902	1,531,270	594,549	234,245
150							
151	Basic customer-related costs		89,305,538	\$ 78,596,524	\$ 7,237,474	\$ 2,468,188	\$ 1,003,353
152	Number of customers		501,755	468,460	29,637	3,263	395
153	Monthly basic cost per customer		\$ 14.83	\$ 13.98	\$ 20.35	\$ 63.03	\$ 211.44
154							

Missouri Gas Energy  
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	A	B	C	D	E	F	G	H
1	Missouri Gas Energy				Small	Large	Large	
2	Allocation of Gross Plant	Allocation	Total	Residential	General Srv	General Srv	Volume Srv	Classification
3		Factor	Company	RS	SGS	LGS	LVS	Factor
4								
5	Intangible Plant							
6	301 - Organization Costs		15,600					NINTPLT
7	- Demand	Plant Nonint_D	5,158	3,205	568	506	879	33%
8	- Customer	Plant Nonint_C	10,443	9,217	822	293	111	67%
9	- Commodity		-	-	-	-	-	0%
10	Total		15,600	12,422	1,390	799	990	
11								
12	302 - Franchise and Consents		13,823					NINTPLT
13	- Demand	Plant Nonint_D	4,570	2,840	503	448	779	33%
14	- Customer	Plant Nonint_C	9,253	8,167	728	260	98	67%
15	- Commodity		-	-	-	-	-	0%
16	Total		13,823	11,007	1,231	708	877	
17								
18	303 - Misc. Intangible Plant		773,929					NINTPLT
19	- Demand	D2_Demand	255,877	159,003	28,167	25,078	43,628	33%
20	- Customer	C1_customers	518,052	483,675	30,599	3,369	408	67%
21	- Commodity		-	-	-	-	-	0%
22	Total		773,929	642,678	58,767	28,447	44,037	
23								
24	Total Intangible Plant							
25	- Demand		265,605	165,048	29,238	26,032	45,287	
26	- Customer		537,747	501,059	32,149	3,922	617	
27	- Commodity		-	-	-	-	-	
28	Total		803,352	666,107	61,387	29,954	45,904	
29								
30	Production Plant							
31	304 - Land & land rights		-					
32	- Demand		-					
33	- Customer		-					
34	- Commodity		-					
35	Total		-	-	-	-	-	
36								



Missouri Gas Energy  
Cost of Service Study  
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	A	B	C	D	E	F	G	H
1	<b>Missouri Gas Energy</b>				Small	Large	Large	
2	<b>Allocation of Gross Plant</b>	<b>Allocation</b>	<b>Total</b>	<b>Residential</b>	<b>General Srv</b>	<b>General Srv</b>	<b>Volume Srv</b>	<b>Classification</b>
3		<b>Factor</b>	<b>Company</b>	<b>RS</b>	<b>SGS</b>	<b>LGS</b>	<b>LVS</b>	<b>Factor</b>
4								
37	305 - Structures & improvements		-					
38	- Demand		-					
39	- Customer		-					
40	- Commodity		-					
41	Total		-	-	-	-	-	
42								
43	311 - LPG equipment		-					
44	- Demand		-					
45	- Customer		-					
46	- Commodity		-					
47	Total		-	-	-	-	-	
48								
49	325.4 - Rights of way		-					
50	- Demand		-					
51	- Customer		-					
52	- Commodity		-					
53	Total		-	-	-	-	-	
54								
55	Total Production Plant		-	-	-	-	-	
56	- Demand		-	-	-	-	-	
57	- Customer		-	-	-	-	-	
58	- Commodity		-	-	-	-	-	
59	Total		-	-	-	-	-	
60								
61	<b>Transmission Plant</b>							
62	365.0 - T&D: Land and Land Rights		-					
63	- Demand		-	-	-	-	-	
64	- Customer		-	-	-	-	-	
65	- Commodity		-	-	-	-	-	
66	Total		-	-	-	-	-	
67								



Missouri Gas Energy  
Cost of Service Study  
12 Months Ending December 31, 2016

	A	B	C	D	E	F	G	H
1	<b>Missouri Gas Energy</b>							
2	<b>Allocation of Gross Plant</b>	<b>Allocation</b>	<b>Total</b>	<b>Residential</b>	<b>Small</b>	<b>Large</b>	<b>Large</b>	<b>Classification</b>
3		<b>Factor</b>	<b>Company</b>	<b>RS</b>	<b>General Srv</b>	<b>General Srv</b>	<b>Volume Srv</b>	<b>Factor</b>
4					<b>SGS</b>	<b>LGS</b>	<b>LVS</b>	
68	365.1 - Land and Land Rights		-					
69	- Demand		-	-	-	-	-	
70	- Customer		-					
71	- Commodity		-					
72	Total		-	-	-	-	-	
73								
74	365.2 - Rights-of-Way		-					
75	- Demand		-					
76	- Customer		-					
77	- Commodity		-					
78	Total		-	-	-	-	-	
79								
80	366.1 - Compressor station structures		-					
81	- Demand		-	-	-	-	-	
82	- Customer		-					
83	- Commodity		-					
84	Total		-	-	-	-	-	
85								
86	367.1 - Mains		-					
87	- Demand		-	-	-	-	-	
88	- Customer		-					
89	- Commodity		-					
90	Total		-	-	-	-	-	
91								
92	368 - Compressor Station Equipment		-					
93	- Demand		-					
94	- Customer		-					
95	- Commodity		-					
96	Total		-	-	-	-	-	
97								
98	369 - Measuring and Reg. Sta. Equipment		-					
99	- Demand		-	-	-	-	-	
100	- Customer		-					
101	- Commodity		-					
102	Total		-	-	-	-	-	
103								

Missouri Gas Energy  
Cost of Service Study  
12 Months Ending December 31, 2016

	A	B	C	D	E	F	G	H
1	<b>Missouri Gas Energy</b>				Small	Large	Large	
2	<b>Allocation of Gross Plant</b>	<b>Allocation</b>	<b>Total</b>	<b>Residential</b>	<b>General Srv</b>	<b>General Srv</b>	<b>Volume Srv</b>	<b>Classification</b>
3		<b>Factor</b>	<b>Company</b>	<b>RS</b>	<b>SGS</b>	<b>LGS</b>	<b>LVS</b>	<b>Factor</b>
4								
104	370 - Communication Equipment		-					
105	- Demand		-					
106	- Customer		-					
107	- Commodity		-					
108	Total		-	-	-	-	-	
109								
110	371 - Other equipment		-					
111	- Demand		-					
112	- Customer		-					
113	- Commodity		-					
114	Total		-	-	-	-	-	
115								
116	Total Transmission Plant							
117	- Demand		-	-	-	-	-	
118	- Customer		-	-	-	-	-	
119	- Commodity		-	-	-	-	-	
120	Total		-	-	-	-	-	
121								
122	<b>Distribution Plant</b>							
123	374.1 - Land		476,088					DIS376-379
124	- Demand	Plant_376-379_D	313,361	194,724	34,495	30,712	53,430	66%
125	- Customer	Plant_376-379_C	162,727	151,928	9,612	1,058	128	34%
126	- Commodity		-	-	-	-	-	0%
127	Total		476,088	346,653	44,107	31,771	53,558	
128								
129	374.2 - Land Rights		2,835,349					DIS376-379
130	- Demand	Plant_376-379_D	1,866,227	1,159,683	205,436	182,908	318,201	66%
131	- Customer	Plant_376-379_C	969,122	904,813	57,242	6,302	764	34%
132	- Commodity		-	-	-	-	-	0%
133	Total		2,835,349	2,064,496	262,678	189,211	318,964	
134								
135	375 - Structures and improvements		12,605,882					DIS376-379
136	- Demand	Plant_376-379_D	8,297,194	5,155,917	913,361	813,206	1,414,711	66%
137	- Customer	Plant_376-379_C	4,308,689	4,022,774	254,498	28,021	3,396	34%
138	- Commodity		-	-	-	-	-	0%
139	Total		12,605,882	9,178,690	1,167,859	841,226	1,418,106	
140								



Missouri Gas Energy  
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	A	B	C	D	E	F	G	H
1	<b>Missouri Gas Energy</b>							
2	<b>Allocation of Gross Plant</b>	<b>Allocation</b>	<b>Total</b>	<b>Residential</b>	<b>Small</b>	<b>Large</b>	<b>Large</b>	<b>Classification</b>
3		<b>Factor</b>	<b>Company</b>	<b>RS</b>	<b>General Srv</b>	<b>General Srv</b>	<b>Volume Srv</b>	<b>Factor</b>
4					<b>SGS</b>	<b>LGS</b>	<b>LVS</b>	
141	376 - Mains		557,987,758					DISMAIN
142	- Demand	D2_Demand	360,374,185	223,938,275	39,670,233	35,320,180	61,445,497	65%
143	- Customer	C1_customers	197,613,574	184,500,378	11,672,311	1,285,140	155,745	35%
144	- Commodity		-	-	-	-	-	0%
145	Total		557,987,758	408,438,653	51,342,544	36,605,320	61,601,242	
146								
147	376.1 - Mains steel		-					
148	- Demand		-	-	-	-	-	
149	- Customer		-	-	-	-	-	
150	- Commodity		-	-	-	-	-	
151	Total		-	-	-	-	-	
152								
153	376.2 - Mains plastic		-					
154	- Demand		-	-	-	-	-	
155	- Customer		-	-	-	-	-	
156	- Commodity		-	-	-	-	-	
157	Total		-	-	-	-	-	
158								
159	377 - Compressor station equipment		-					
160	- Demand		-	-	-	-	-	
161	- Customer		-	-	-	-	-	
162	- Commodity		-	-	-	-	-	
163	Total		-	-	-	-	-	
164								
165	378 - Measurement & equip: Gen		14,249,406					DEM
166	- Demand	D2_Demand	14,249,406	8,854,650	1,568,584	1,396,581	2,429,591	100%
167	- Customer		-	-	-	-	-	0%
168	- Commodity		-	-	-	-	-	0%
169	Total		14,249,406	8,854,650	1,568,584	1,396,581	2,429,591	
170								
171	379 - Measurement & equip: CG		5,918,676					DEM
172	- Demand	D2_Demand	5,918,676	3,677,894	651,532	580,088	1,009,162	100%
173	- Customer		-	-	-	-	-	0%
174	- Commodity		-	-	-	-	-	0%
175	Total		5,918,676	3,677,894	651,532	580,088	1,009,162	
176								



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	A	B	C	D	E	F	G	H
1	Missouri Gas Energy				Small	Large	Large	
2	Allocation of Gross Plant	Allocation	Total	Residential	General Srv	General Srv	Volume Srv	Classification
3		Factor	Company	RS	SGS	LGS	LVS	Factor
4								
177	380 - Services		399,602,056					CUS
178	- Demand		-	-	-	-	-	0%
179	- Customer	C6_services	399,602,056	366,197,599	26,000,781	6,374,562	1,029,114	100%
180	- Commodity		-	-	-	-	-	0%
181	Total		399,602,056	366,197,599	26,000,781	6,374,562	1,029,114	
182								
183	381 - Meters		40,249,691					CUS
184	- Demand		-	-	-	-	-	0%
185	- Customer	C3_meters	40,249,691	27,386,110	7,411,999	3,467,303	1,984,279	100%
186	- Commodity		-	-	-	-	-	0%
187	Total		40,249,691	27,386,110	7,411,999	3,467,303	1,984,279	
188								
189	382 - Meter installation		94,813,508					CUS
190	- Demand		-	-	-	-	-	0%
191	- Customer	C4_Metincus	94,813,508	69,849,055	13,308,390	9,004,188	2,651,875	100%
192	- Commodity		-	-	-	-	-	0%
193	Total		94,813,508	69,849,055	13,308,390	9,004,188	2,651,875	
194								
195	383 - House regulators		15,936,615					CUS
196	- Demand		-	-	-	-	-	0%
197	- Customer	C5_Regcus	15,936,615	11,179,286	1,396,676	1,809,435	1,551,217	100%
198	- Commodity		-	-	-	-	-	0%
199	Total		15,936,615	11,179,286	1,396,676	1,809,435	1,551,217	
200								
201	384 - House regulators Installations		-					
202	- Demand		-	-	-	-	-	
203	- Customer		-	-	-	-	-	
204	- Commodity		-	-	-	-	-	
205	Total		-	-	-	-	-	
206								
207	385 - Industrial Meas & Reg stations		1,004,461					CUS
208	- Demand		-	-	-	-	-	0%
209	- Customer	C10_Lvcus	1,004,461	-	-	-	1,004,461	100%
210	- Commodity		-	-	-	-	-	0%
211	Total		1,004,461	-	-	-	1,004,461	
212								

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	A	B	C	D	E	F	G	H
1	<b>Missouri Gas Energy</b>							
2	Allocation of Gross Plant	Allocation	Total	Residential	Small	Large	Large	Classification
3		Factor	Company	RS	General Srv	General Srv	Volume Srv	Factor
4					SGS	LGS	LVS	
213	386 - Other property on customer premises		-					
214	- Demand		-					
215	- Customer		-					
216	- Commodity		-					
217	Total		-					
218								
219	387 - Other distribution equip.		-					
220	- Demand		-					
221	- Customer		-					
222	- Commodity		-					
223	Total		-					
224								
225	Total Distribution Plant							
226	- Demand		391,019,049	242,981,143	43,043,640	38,323,675	66,670,591	
227	- Customer		754,660,441	664,191,944	60,111,509	21,976,009	8,380,979	
228	- Commodity		-	-	-	-	-	
229	Total		1,145,679,490	907,173,086	103,155,149	60,299,684	75,051,570	
230								
231	<b>General Plant</b>							
232	389 - Land & land rights		1,058,065					DISPLT
233	- Demand	Plant Dist_D	361,116	224,399	39,752	35,393	61,572	34%
234	- Customer	Plant Dist_C	696,949	613,399	55,515	20,295	7,740	66%
235	- Commodity		-	-	-	-	-	0%
236	Total		1,058,065	837,798	95,266	55,688	69,312	
237								
238	390.1 - Structures & improvements		878,378					DISPLT
239	- Demand	Plant Dist_D	299,790	186,291	33,001	29,382	51,116	34%
240	- Customer	Plant Dist_C	578,589	509,228	46,087	16,849	6,426	66%
241	- Commodity		-	-	-	-	-	0%
242	Total		878,378	695,519	79,088	46,231	57,541	
243								
244	390.2 - General Improvements		-					
245	- Demand		-					
246	- Customer		-					
247	- Commodity		-					
248	Total		-					
249								



Missouri Gas Energy  
Cost of Service Study  
12 Months Ending December 31, 2016

	A	B	C	D	E	F	G	H
1	<b>Missouri Gas Energy</b>							
2	<b>Allocation of Gross Plant</b>	<b>Allocation</b>	<b>Total</b>	<b>Residential</b>	<b>Small</b>	<b>Large</b>	<b>Large</b>	<b>Classification</b>
3		<b>Factor</b>	<b>Company</b>	<b>RS</b>	<b>General Srv</b>	<b>General Srv</b>	<b>Volume Srv</b>	<b>Factor</b>
4					<b>SGS</b>	<b>LGS</b>	<b>LVS</b>	
250	391 - Office Furniture and Equipment		8,218,464					DISPLT
251	- Demand	Plant Dist_D	2,804,952	1,743,011	308,771	274,913	478,258	34%
252	- Customer	Plant Dist_C	5,413,512	4,764,542	431,206	157,644	60,120	66%
253	- Commodity		-	-	-	-	-	0%
254	Total		8,218,464	6,507,553	739,977	432,556	538,378	
255								
256	391.5 - Enterprise Software-EIMS		67,787,723					DISPLT
257	- Demand	Plant Dist_D	23,135,869	14,376,742	2,546,812	2,267,541	3,944,775	34%
258	- Customer	Plant Dist_C	44,651,854	39,299,001	3,556,686	1,300,280	495,887	66%
259	- Commodity		-	-	-	-	-	0%
260	Total		67,787,723	53,675,743	6,103,498	3,567,820	4,440,662	
261								
262	392.1 - Transp. Equip. Cars & Small Trucks		5,650,033					DISPLT
263	- Demand	Plant Dist_D	1,928,350	1,198,286	212,274	188,997	328,793	34%
264	- Customer	Plant Dist_C	3,721,684	3,275,529	296,446	108,377	41,332	66%
265	- Commodity		-	-	-	-	-	0%
266	Total		5,650,033	4,473,815	508,720	297,374	370,124	
267								
268	392.2 - Transp. Equip. Heavy Trucks		15,294,221					DISPLT
269	- Demand	Plant Dist_D	5,219,899	3,243,671	574,610	511,601	890,017	34%
270	- Customer	Plant Dist_C	10,074,321	8,866,614	802,457	293,368	111,882	66%
271	- Commodity		-	-	-	-	-	0%
272	Total		15,294,221	12,110,285	1,377,067	804,969	1,001,899	
273								
274	393 - Stores Equipment		664,474					DISPLT
275	- Demand	Plant Dist_D	226,784	140,925	24,965	22,227	38,668	34%
276	- Customer	Plant Dist_C	437,689	385,219	34,864	12,746	4,861	66%
277	- Commodity		-	-	-	-	-	0%
278	Total		664,474	526,144	59,828	34,973	43,529	
279								
280	394 - Tools		8,946,227					DISPLT
281	- Demand	Plant Dist_D	3,053,336	1,897,358	336,113	299,257	520,608	34%
282	- Customer	Plant Dist_C	5,892,890	5,186,452	469,391	171,603	65,444	66%
283	- Commodity		-	-	-	-	-	0%
284	Total		8,946,227	7,083,810	805,504	470,860	586,053	
285								