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Witness: Brian C. Collins
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Case No.: GR-2017-0215 & GR-2017-0216
Date Testimony Prepared: September 22, 2017

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

**In the Matter of Laclede Gas Company's
Request to Increase its Revenues for Gas
Service**

)
) **Case No. GR-2017-0215**
) Tariff No. YG-2017-0195
)

**In the Matter of Laclede Gas Company d/b/a
Missouri Gas Energy's Request to Increase
its Revenues for Gas Service**

)
) **Case No. GR-2017-0216**
) Tariff No. YG-2017-0196
)
)

Direct Testimony of

Brian C. Collins

On behalf of

Missouri Industrial Energy Consumers

September 22, 2017



Projects 10402 & 10403

1 large-use transportation customers served by Laclede Gas Company (“Laclede”) and
2 Missouri Gas Energy (“MGE”). I will sometimes refer to both Laclede and MGE as
3 “the Companies.”

4 **Q WHAT IS THE SUBJECT MATTER OF YOUR TESTIMONY?**

5 A My testimony addresses the Companies’ class cost of service (“CCOS”) studies and
6 the allocation of any allowed gas distribution rate increase. I have examined the
7 testimony and schedules presented by the Companies in this proceeding with respect
8 to cost of service, revenue allocation, and rate design, and will comment on the
9 propriety of their proposals and make certain recommendations.

10 My silence on any aspect of the Companies’ filing should not be construed as
11 an endorsement of, or agreement with, the Companies’ position.

12 **Q PLEASE PROVIDE A BRIEF SUMMARY OF YOUR CONCLUSIONS AND**
13 **RECOMMENDATIONS IN THIS PROCEEDING.**

14 A My conclusions and recommendations are as follows:

- 15 1. The CCOS studies filed by the Companies in this proceeding are
16 generally based on fundamentally sound principles and are reasonable for
17 use in this proceeding to allocate any change in revenue for Laclede and
18 MGE. These CCOS studies allocate distribution mains costs to customer
19 classes on the basis of a demand component and a customer component.
- 20 2. With respect to the electronic version of the MGE CCOS study provided in
21 Excel spreadsheet format, I have discovered and corrected some
22 incorrect spreadsheet cell references in the calculation of certain internal
23 allocators related to plant in the CCOS study. I use the corrected MGE
24 CCOS study to guide my proposed class revenue allocation.
- 25 3. Laclede’s evidence clearly shows that current rates for certain classes are
26 significantly in excess of cost of service and that a reduction in rates
27 would be required to move rates to the cost of providing service to these
28 classes.

- 1 4. MGE’s evidence also shows that current rates for the Large General
2 Service (“LGS”) class are in excess of cost of service and that a reduction
3 in rates would be required to move rates to the cost of providing service to
4 this class.
- 5 5. Based on the level of increase requested by the Companies, the impact
6 on customers and recognizing the principle of gradualism, I have
7 proposed alternative class revenue allocations.
- 8 6. I find the Companies’ proposed rate design for Laclede’s Transportation
9 class to be reasonable. I also find MGE’s proposed rate design for the
10 Large Volume Service (“LVS”) class to be reasonable.

11 **II. Cost of Service and Rate Design Principles**

12 **Q COULD YOU PLEASE EXPLAIN THE RATEMAKING PROCESS AND THE**
13 **DESIGN OF RATES?**

14 A The ratemaking process has three steps. First, we must determine the utility’s total
15 revenue requirement and the extent to which an increase or decrease in revenues is
16 necessary. Second, we must determine how any increase or decrease in revenues is
17 to be distributed among the various customer classes. A determination of how many
18 dollars of revenue should be produced by each class is essential for obtaining the
19 appropriate level of rates. Third, individual tariffs must be designed to produce the
20 required amount of revenues for each class of service and to reflect the cost of
21 serving customers within the class.

22 The guiding principle at each step should be cost of service. In the first step—
23 determining revenue requirements—it is universally agreed that the utility is entitled to
24 an increase only to the extent that its actual cost of service has increased. If current
25 rate levels exceed the utility’s revenue requirement, a rate reduction is required. In
26 short, rate revenues should equal actual cost of service. The same principle should
27 apply in the second and third steps. Each customer class should, to the extent
28 practicable, produce revenues equal to the cost of serving that particular class, no

1 more and no less. This may require a rate increase for some classes and a rate
2 decrease for other classes. The standard tool for performing this exercise is a CCOS
3 study, which shows the cost to serve each class, as well as the rates of return for
4 each class of service. The goal is to modify rate levels so that each class of service
5 provides approximately the same rate of return. Finally, in designing tariffs for
6 individual classes, the goal also should be to align the rate design with the cost of
7 service so that each customer class's rate tracks, to the extent practicable, the utility's
8 cost of providing service to that customer class.

9 **Q WHY IS IT IMPORTANT TO ADHERE TO BASIC COST OF SERVICE PRINCIPLES**
10 **IN THE RATEMAKING PROCESS?**

11 A The basic reasons for using cost of service as the primary factor in the ratemaking
12 process are equity and stability.

13 **Q PLEASE DISCUSS THE EQUITY CONSIDERATION.**

14 A When rates are based on cost of service, each customer class pays what it costs the
15 utility to serve that customer class, no more and no less. But when rates are not
16 based on cost of service, then some classes are required to contribute
17 disproportionately to the utility's revenues by subsidizing the service provided to other
18 customer classes. This is inherently inequitable.

19 **Q PLEASE DISCUSS THE STABILITY CONSIDERATION.**

20 A When rates are closely tied to costs, the earnings impact on the utility associated with
21 changes in numbers of customers and their usage patterns will be minimized as a
22 result of rates being designed in the first instance to track changes in the level of

1 costs. Thus, cost-based rates provide an important enhancement to a utility's
2 earnings stability, thereby reducing the utility's need to file for future rate increases.

3 From the perspective of the customer, cost-based rates provide a more
4 reliable means of determining future levels of costs. If rates are based on factors
5 other than costs, it becomes much more difficult for customers to translate expected
6 utility-wide cost changes (*i.e.*, expected increases in overall revenue requirements)
7 into changes in the rates charged to particular customer classes (and to customers
8 within the class). From the customer's perspective, this situation reduces the
9 attractiveness of expansion, as well as continued operations, because of the
10 lessened ability to plan.

11 **Q WHEN YOU SAY "COST," TO WHAT TYPE OF COST ARE YOU REFERRING?**

12 A I am referring to the utility's "embedded" or actual accounting costs of rendering
13 service; that is, those costs that are used by the Missouri Public Service Commission
14 ("Commission") in establishing the utility's overall revenue requirement.

15 **Q WOULD YOU PLEASE COMMENT ON THE BASIC PURPOSE OF A CCOS**
16 **STUDY?**

17 A The basic purpose of a CCOS study is to determine the costs that a utility incurs to
18 provide service to different classes of customers. After the utility's overall cost of
19 service (or revenue requirement) is determined, a cost of service study is used, first,
20 to allocate the cost of service between the utility's jurisdictional and non-jurisdictional
21 businesses and then, second, to allocate the jurisdictional cost of service among the
22 utility's jurisdictional customer classes.

1 A CCOS study shows the extent to which each customer class contributes to
2 the total cost of the system. For example, when a class produces the same rate of
3 return as the total system, it returns to the utility just enough revenues to cover the
4 costs incurred in serving that class (including a reasonable authorized return on
5 investment). If a class produces a rate of return below the system average, the
6 revenues it provides to the utility are insufficient to cover all relevant costs. If, on the
7 other hand, a class produces a rate of return above the average, then that class pays
8 revenues sufficient to cover the costs attributable to it, and it also pays for part of the
9 costs attributable to other classes that produce below-average rates of return. The
10 CCOS study therefore is an important tool, because it shows the revenue
11 requirement for each class along with the rate of return under current rates and any
12 proposed rates.

13 **Q WOULD YOU PLEASE COMMENT ON THE PROPER FUNDAMENTALS OF A**
14 **CCOS STUDY?**

15 **A** Yes. Cost of service is a basic and fundamental ingredient to proper ratemaking. In
16 all CCOS studies, certain fundamental concepts should be recognized. Of primary
17 importance among these concepts are the functionalization, classification, and
18 allocation of costs. Functionalization is the determination and arrangement of costs
19 according to major functions, such as production, storage, transmission and
20 distribution. Classification involves identifying the nature of these costs according to
21 whether the costs vary with the demand placed upon the system, the quantity of gas
22 consumed, or the number of customers being served. After the assignment of costs
23 to demand, commodity and customer categories, each cost category must be
24 allocated to classes. Fixed costs are those costs that tend to remain constant over

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1 the short run irrespective of changes in output, and are generally considered to be
2 demand-related. Fixed costs include those costs that are a function of the size of the
3 utility's investment in facilities, and those costs that are necessary to keep the
4 facilities "on line." Variable costs, on the other hand, are basically those costs that
5 tend to vary with throughput (or usage), and are generally considered to be
6 commodity-related. Customer-related costs are those costs that are most closely
7 related to the number of customers served, rather than the demands placed upon the
8 system or the quantity of gas consumed.

9 **III. The Companies' CCOS Studies**

10 **Q HAVE YOU REVIEWED THE CCOS STUDIES FILED BY THE COMPANIES IN**
11 **THIS PROCEEDING USED TO ESTABLISH RATES?**

12 A Yes. The CCOS studies filed by the Companies in this proceeding are sponsored by
13 the Companies' witness, Mr. Timothy S. Lyons.

14 **Q HAVE YOU DISCOVERED ANY ERRORS IN THE MGE CCOS STUDY?**

15 A Yes. In my review of the electronic version of the MGE CCOS study, I discovered
16 that there were some incorrect cell references related to the calculation of certain
17 internal plant allocators in the CCOS study for MGE. As a result, I have corrected
18 these errors.¹ This is the only modification I have made to MGE's CCOS study. I
19 made no corrections to the CCOS study for Laclede.

¹On September 21, 2017, the Company indicated its agreement with the corrections.

1 Q WHAT IS THE IMPACT OF THIS CORRECTION ON THE MGE CCOS STUDY
 2 RESULTS?

3 A The impact on the classes' cost of service as calculated in the MGE CCOS study is
 4 shown below in Table 1:

TABLE 1

**MGE CCOS Study Results
 At Equal Percent Rate of Return**

<u>Line</u>	<u>Rate Class</u> (1)	<u>Company CCOS (\$)¹</u> (2)	<u>Corrected CCOS (\$)²</u> (3)	<u>Increase/ (Decrease) \$</u> (4)
1	Residential	\$198,607,571	\$197,931,579	\$(675,992)
2	SGS	\$22,522,534	\$22,640,175	\$117,641
3	LGS	\$12,148,685	\$12,356,734	\$208,049
4	LVS	<u>\$15,265,587</u>	<u>\$15,615,889</u>	<u>\$350,302</u>
5	Total	\$248,544,377	\$248,544,377	\$0

Sources:

¹Missouri Gas Energy, Highly Confidential Exhibit TSL-6, MGE COSS Model_10APR17 (CONFIDENTIAL).xlsx.

²Highly Confidential BCC workpaper version of Missouri Gas Energy, Highly Confidential Exhibit TSL-6 (Corrected), MGE COSS Model_10APR17 (CONFIDENTIAL).xlsx.

5 Q WHAT ARE THE RESULTS OF THE COMPANIES' CCOS STUDIES?

6 A Based on the information provided by the Companies, I have provided the results of
 7 the CCOS studies in Tables 2 and 3 below. Table 2 shows the increases necessary
 8 to bring classes' rates to cost of service for Laclede. Table 3 shows the increases
 9 necessary to bring classes' rates to cost of service for MGE based on my corrections
 10 described above to the MGE CCOS study. It should be noted that the increases

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1 shown in both tables are calculated with respect to total present revenues, which
 2 includes both current base rate revenues and Infrastructure System Replacement
 3 Surcharge (“ISRS”) revenues.

TABLE 2

**Laclede CCOS Study Results
 At Equal Percent Rate of Return**

<u>Line</u>	<u>Rate Class</u>	<u>Current Revenues (with ISRS)¹</u> <u>(1)</u>	<u>CCOS Revenues²</u> <u>(2)</u>	<u>CCOS Increase/ (Decrease) \$</u> <u>(3)</u>	<u>Increase/ (Decrease) %</u> <u>(4)</u>
1	Residential	\$283,545,198	\$316,496,941	\$32,951,743	11.6%
2	SGS	\$27,986,097	\$32,784,844	\$4,798,747	17.1%
3	LGS	\$24,899,092	\$21,900,417	\$(2,998,675)	-12.0%
4	LV	\$1,903,212	\$1,071,676	\$(831,536)	-43.7%
5	IN	\$964,914	\$230,629	\$(734,285)	-76.1%
6	VF	\$173,288	\$112,984	\$(60,304)	-34.8%
7	Transportation	<u>\$14,061,854</u>	<u>\$9,532,506</u>	<u>\$(4,529,348)</u>	<u>-32.2%</u>
8	Total	\$353,533,655	\$382,129,998	\$28,596,343	8.1%

Sources:

¹Laclede Gas Company, Schedule TSL-D11, pages 2-14.

²Laclede Gas Company, Schedule TSL-D10, page 1.

TABLE 3

**Corrected MGE CCOS Study Results
At Equal Percent Rate of Return**

<u>Line</u>	<u>Rate Class</u>	<u>Current Revenues (with ISRS)¹</u> <u>(1)</u>	<u>CCOS Revenues²</u> <u>(2)</u>	<u>CCOS Increase/ (Decrease)</u> <u>\$</u> <u>(3)</u>	<u>Increase/ (Decrease)</u> <u>%</u> <u>(4)</u>
1	Residential	\$166,756,215	\$197,931,579	\$31,175,364	18.7%
2	SGS	\$16,016,186	\$22,640,175	\$6,623,989	41.4%
3	LGS	\$13,531,516	\$12,356,734	\$(1,174,782)	-8.7%
4	LVS	<u>\$14,799,403</u>	<u>\$15,615,889</u>	<u>\$816,486</u>	<u>5.5%</u>
5	Total	\$211,103,320	\$248,544,377	\$37,441,057	17.7%

Sources:

¹Missouri Gas Energy, Schedule TSL-D12, pages 2-10.

²Highly Confidential BCC workpaper version of Missouri Gas Energy, Highly Confidential Exhibit TSL-6 (Corrected), MGE COSS Model_10APR17 (CONFIDENTIAL).xlsx.

1 **Q** **WHAT IS YOUR CONCLUSION WITH RESPECT TO THE COMPANIES' CCOS**
2 **STUDIES?**

3 **A** Based on my review of the CCOS studies, I conclude that the CCOS studies reflect
4 generally accepted cost of service principles and are reasonable for the purpose of
5 establishing rates in this proceeding. Specifically, the Companies' CCOS studies
6 appropriately allocate the costs of distribution mains to the Companies' customer
7 classes based on both (1) the contribution of each class to the system design day
8 demand (the Coincident Demand method) and (2) the number of customers served
9 within each class. The Companies' largest investment in terms of cost is distribution

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1 mains,² thus it is especially important that the allocation of these costs follow class
2 cost causation.

3 **Q WHEN SELECTING A CLASS COST OF SERVICE METHODOLOGY, SHOULD**
4 **THE METHODOLOGY APPROPRIATELY REFLECT COST CAUSATION?**

5 A Yes. In selecting a particular class cost of service study methodology, the
6 fundamental question is whether that methodology properly reflects cost causation.
7 In other words, costs should be allocated to the utility's customer classes based on
8 how the costs are incurred. The *Gas Distribution Rate Design Manual* published by
9 the National Association of Regulatory Utility Commissioners describes this principle
10 as follows: "*Historic or embedded cost of service studies attempt to apportion total*
11 *costs to the various customer classes in a manner consistent with the incurrence of*
12 *those costs.* This apportionment must be based on the fashion in which the utility's
13 system, facilities and personnel operate to provide the service."³

14 **Q PLEASE EXPLAIN WHY THE COMPANIES' CCOS STUDIES PROPERLY**
15 **REFLECT COST CAUSATION.**

16 A When a gas distribution utility installs distribution mains to establish/expand the
17 capacity of its system, there are two factors that it must consider. First, the utility
18 must design its system to ensure that it will be capable of meeting customers'
19 demand on the system peak day (or "design day"). The expected demand on the
20 system peak day is the key consideration. It dictates the proper size (in diameter) of
21 the distribution mains to be installed to provide reliable service—and that, in turn,

²According to Mr. Lyons' testimony at page 25, distribution mains represent 43% of utility plant investment for Laclede, and 46% of utility plant investment for MGE.

³NARUC *Gas Distribution Rate Design Manual* at 20 (emphasis added).

1 dictates the costs that the utility must incur. Thus, the costs incurred by the utility are
2 a function of design day demand, because when the distribution system is designed
3 to meet the coincident design day demand of the utility's rate classes, the utility is
4 able to meet its firm customers' demands each and every day of the year.

5 Second, the utility must also design its system in such a way that all
6 customers are physically connected to the system. While the diameter of the mains
7 installed depends upon peak demand, the total length of the mains depends upon the
8 number of customers being served. To illustrate, a much greater level of investment
9 is needed to serve 10,000 customers with individual peak demands of 1 Mcf located
10 at various geographical locations than what is needed to serve one customer with a
11 demand of 10,000 Mcf at a single geographic location. Thus, the costs that a gas
12 distribution utility incurs to provide service are driven by both peak day demand
13 (diameter of the main) and the number of customers connected to the system (length
14 of the main).

15 Consistent with this, the Companies' CCOS studies allocate the costs of
16 distribution mains to customer classes on the basis of both (1) each class's
17 contribution to the total design peak day demand of the system (the Coincident
18 Demand method) and (2) the number of customers within each class. The CCOS
19 studies therefore allocate costs based on how they are incurred, consistent with cost-
20 causation principles, and are reasonable for the purpose of setting rates in this
21 proceeding.

1 **Q WHY DOES ALLOCATING DISTRIBUTION MAIN COSTS ON A DESIGN DAY**
2 **DEMAND BASIS REFLECT SOUND COST OF SERVICE PRINCIPLES?**

3 A As explained above, when a gas distribution utility designs its system, the key
4 consideration is the expected demands of the customer classes on the peak day.
5 The expected demands on the peak day dictate both the proper size of the mains,
6 and that in turn directly impacts the total cost of the system. The cost of the project is
7 therefore a function of the peak day demand—and that cost is *the same* regardless of
8 how much gas customers are expected to use throughout the year. For example, the
9 cost is the same regardless of whether customers are expected to use gas
10 consistently throughout the entire year, or during only part of the year (e.g., the winter
11 months).

12 **Q WHY DOES ALLOCATING DISTRIBUTION MAIN COSTS PARTIALLY ON A**
13 **CUSTOMER BASIS REFLECT SOUND COST OF SERVICE PRINCIPLES?**

14 A Classifying a portion of mains' costs as customer related recognizes that a portion of
15 main costs is incurred to connect customers to the system and is related to the length
16 of mains necessary to connect those customers rather than the demand of its
17 customer classes. Classifying a portion of mains' costs as customer related and
18 allocating those costs on a customer basis appropriately reflects cost of service. The
19 Companies have classified a portion of distribution mains as customer related using
20 the zero-inch analysis. The zero-inch approach assumes that there is a zero or
21 minimum size main necessary to connect customers to the system and thus affords
22 customers the opportunity to take gas delivery service as desired. The results of the
23 Companies' zero-inch analysis determined that approximately 38% of the investment
24 in mains is customer related for Laclede, and approximately 35% for MGE.

1 **Q IS ANNUAL USAGE A DESIGN CRITERION FOR A TYPICAL GAS DISTRIBUTION**
2 **COMPANY FACILITY?**

3 A No, it is not. To be sure, annual usage is certainly a factor that should be and is
4 considered in allocating the variable cost of operating the gas system. However,
5 annual usage does not determine the amount of system capacity that is necessary to
6 provide firm (*i.e.*, non-interruptible) service to every customer (every day of the year).
7 Rather, the actual physical size of the distribution mains, compressors, and related
8 equipment is based on customers' contributions to the system design day demand.

9 The system's capacity to serve customer classes must be sized for design day
10 demand, so that all firm customers can utilize that capacity to receive a firm,
11 uninterrupted supply of gas on the day of the system peak demand. Only if the
12 system is designed to meet the design day demand of the company's rate classes will
13 the company be able to deliver gas each and every day of the year to meet its
14 customers' demands. If the distribution mains were not designed to meet the design
15 day demand of classes but were instead designed to meet the average demand of
16 classes, there would be times when firm customers would not receive service due to
17 inadequate main capacity.

18 **Q BUT DOESN'T THE COMPANIES' DISTRIBUTION SYSTEM ALLOW**
19 **CUSTOMERS TO RECEIVE VOLUMES OF GAS THROUGHOUT THE YEAR?**

20 A I do not dispute that, after the distribution system is designed and constructed to meet
21 design day demand, customers use the system to receive volumes of gas throughout
22 the year. Annual usage is a function of a customer's load factor (*i.e.*, how efficiently it
23 utilizes capacity throughout the year). However, if firm customers expect supply
24 sufficient to meet their design day demand, then they require and should pay for the

1 necessary distribution capacity that allows gas to be delivered every day to meet their
2 expected demands, including days with above-average demands. Otherwise, firm
3 customers will not have adequate capacity for delivery of gas on days with above-
4 average usage, which would be most cold days, and their service would be
5 interrupted on all of those days.

6 It is the design day demand which drives the capacity-related cost incurred in
7 order to design, construct, implement and maintain a distribution system that is
8 adequate to provide firm service throughout the year, including the system peak day,
9 to all customers that want firm service. Distribution systems are sized based on
10 design day demands which will ensure that firm gas supply can actually be delivered
11 every single day of the year. Because cost causation is driven by design day
12 demand, distribution-related costs should be allocated based on design day demand.

13 If the distribution system can meet the design day demand of its customers, it
14 can meet the demand of its customers on every other day of the year. Daily needs
15 must be met, but the only way to ensure that will happen is through a system that is
16 designed to meet the design day demand.

17 **IV. Laclede's Distribution of Gas Delivery Revenue Increase**

18 **Q HAVE YOU REVIEWED LACLEDE'S PROPOSED CLASS REVENUE**
19 **ALLOCATION?**

20 **A** Yes. Laclede's proposed class revenue allocation is shown below in Table 4.

TABLE 4

Laclede Class Revenue Allocation

<u>Line</u>	<u>Rate Class</u> (1)	<u>Current Revenues (with ISRS)¹</u> (2)	<u>CCOS Revenues²</u> (3)	<u>Company Proposed Revenues³</u> (4)	<u>Increase/ (Decrease) %</u> (5) = [(4) –(2)] / (2)
1	Residential	\$283,545,198	\$316,496,941	\$308,836,261	8.9%
2	SGS	\$27,986,097	\$32,784,844	\$31,291,377	11.8%
3	LGS	\$24,899,092	\$21,900,417	\$24,899,092	0.0%
4	LV	\$1,903,212	\$1,071,676	\$1,903,212	0.0%
5	IN	\$964,914	\$230,629	\$964,914	0.0%
6	VF	\$173,288	\$112,984	\$173,288	0.0%
7	Transportation	<u>\$14,061,854</u>	<u>\$9,532,506</u>	<u>\$14,061,854</u>	<u>0.0%</u>
8	Total	\$353,533,655	\$382,129,998	\$382,129,998	8.1%

Sources:

¹Laclede Gas Company, Schedule TSL-D11, pages 2-14.

²Laclede Gas Company, Schedule TSL-D10, page 1.

³*Id.*

1 **Q DO YOU AGREE WITH LACLEDE'S PROPOSED CLASS REVENUE**
 2 **ALLOCATION?**

3 A I agree that rates should be moved closer to cost of service. Laclede proposes to
 4 hold rates at current levels for the LGS, LV, IN, VF, and Transportation classes, yet
 5 Laclede's CCOS study clearly shows that these classes require rate decreases to
 6 bring their rates to cost of service. As a result, I recommend additional movement
 7 toward class cost of service.

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1 Q WHAT IS YOUR PROPOSED CLASS REVENUE ALLOCATION?

2 A Table 5 below shows my recommended class revenue allocation for Laclede.

<u>Line</u>	<u>Rate Class</u> (1)	<u>Current Revenues (with ISRS)¹</u> (2)	<u>CCOS Revenues²</u> (3)	<u>MIEC Proposed Revenues</u> (4)	<u>Increase/ (Decrease) %</u> (5) = [(4) –(2)] / (2)
1	Residential	\$283,545,198	\$316,496,941	\$311,655,828	9.9%
2	SGS	\$27,986,097	\$32,784,844	\$30,760,635	9.9%
3	LGS	\$24,899,092	\$21,900,417	\$24,149,423	-3.0%
4	LV	\$1,903,212	\$1,071,676	\$1,695,328	-10.9%
5	IN	\$964,914	\$230,629	\$781,343	-19.0%
6	VF	\$173,288	\$112,984	\$158,212	-8.7%
7	Transportation	<u>\$14,061,854</u>	<u>\$9,532,506</u>	<u>\$12,929,517</u>	<u>-8.1%</u>
8	Total	\$353,533,655	\$382,129,998	\$382,129,998	8.1%

Sources:
¹Laclede Gas Company, Schedule TSL-D11, pages 2-14.
²Laclede Gas Company, Schedule TSL-D10, page 1.

3 Q PLEASE EXPLAIN WHY YOUR PROPOSED CLASS REVENUE ALLOCATION
4 FOR LACLEDE IS REASONABLE.

5 A My proposal for class revenue allocation is reasonable for two reasons. First, all
6 classes that require a rate decrease to bring their rates to cost of service are moved
7 25% toward their full cost of service. Second, in recognition of gradualism, the
8 remaining revenue that would have been used to move these classes to their full cost
9 of service is then used to mitigate the increases necessary to move the Residential
10 and SGS classes to full cost of service. Though my class revenue allocation moves

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1 most classes more toward cost of service as compared to the Company's approach,
 2 the LGS, LV, IN, VF, and Transportation classes would still pay rates above their cost
 3 of service while the Residential and SGS classes would still pay rates below their cost
 4 of service. Therefore, my proposed class revenue allocation is reasonable because it
 5 recognizes the principle of gradualism while moving all classes closer to their cost of
 6 service.

7 **V. MGE's Distribution of Gas Delivery Revenue Increase**

8 **Q HAVE YOU REVIEWED MGE'S PROPOSED CLASS REVENUE ALLOCATION?**

9 **A** Yes. MGE's proposed class revenue allocation is shown below in Table 6.

TABLE 6					
<u>MGE Class Revenue Allocation</u>					
<u>Line</u>	<u>Rate Class</u>	<u>Current Revenues (with ISRS)¹</u>	<u>CCOS Revenues (Corrected)²</u>	<u>Company Proposed Revenues³</u>	<u>Increase/ (Decrease) %</u>
	(1)	(2)	(3)	(4)	(5) = [(4) - (2)] / (2)
1	Residential	\$166,756,215	\$197,931,579	\$198,607,751	19.1%
2	SGS	\$16,016,186	\$22,640,175	\$20,655,038	29.0%
3	LGS	\$13,531,516	\$12,356,734	\$14,003,741	3.5%
4	LVS	<u>\$14,799,403</u>	<u>\$15,615,889</u>	<u>\$15,278,027</u>	<u>3.2%</u>
5	Total	\$211,103,320	\$248,544,377	\$248,544,377	17.7%

Sources:

¹Missouri Gas Energy, Schedule TSL-D12, pages 2-10.
²Highly Confidential BCC workpaper version of Missouri Gas Energy, Highly Confidential Exhibit TSL-6 (Corrected), MGE COSS Model_10APR17 (CONFIDENTIAL).xlsx.
³Missouri Gas Energy, Schedule TSL-D10, page 2.

1 Q DO YOU AGREE WITH MGE'S PROPOSED CLASS REVENUE ALLOCATION?

2 A I agree that rates should be moved closer to cost of service. However, I recommend
3 additional movement toward cost of service as compared to the Company's
4 approach.

5 Q WHAT IS YOUR PROPOSED CLASS REVENUE ALLOCATION?

6 A Table 7 below shows my recommended class revenue allocation for MGE.

Line	Rate Class (1)	Current Revenues (with ISRS)¹ (2)	CCOS Revenues (Corrected)² (3)	MIEC Proposed Revenues (4)	Increase/ (Decrease) % (5) = [(4) - (1)] / (1)
1	Residential	\$166,756,215	\$197,931,579	\$197,931,579	18.7%
2	SGS	\$16,016,186	\$22,640,175	\$21,759,089	35.9%
3	LGS	\$13,531,516	\$12,356,734	\$13,237,821	-2.2%
4	LVS	<u>\$14,799,403</u>	<u>\$15,615,889</u>	<u>\$15,615,889</u>	<u>5.5%</u>
5	Total	\$211,103,320	\$248,544,377	\$248,544,377	17.7%

Sources:
¹Missouri Gas Energy, Schedule TSL-D12, pages 2-10.
²Highly Confidential BCC workpaper version of Missouri Gas Energy, Highly Confidential Exhibit TSL-6 (Corrected), MGE COSS Model_10APR17 (CONFIDENTIAL).xlsx.

7 Q PLEASE EXPLAIN WHY YOUR PROPOSED CLASS REVENUE ALLOCATION
8 FOR MGE IS REASONABLE.

9 A I believe my proposal for class revenue allocation is reasonable for two reasons.
10 First, the LGS class, which requires a rate decrease to bring its rates to cost of

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1 service, is moved 25% toward its full cost of service. Second, in recognition of
2 gradualism, the remaining revenue that would have been used to move this class to
3 its full cost of service is then used to mitigate the increases necessary to move the
4 SGS class to full cost of service. Though my class revenue allocation results in
5 additional movement toward class cost of service as compared to the Company's
6 approach, the LGS class would still pay rates above its cost of service while the
7 Residential and LVS classes would pay rates that recover their respective cost of
8 service. This is reasonable because it recognizes the principle of gradualism.

9 Though my proposed revenue allocation would result in an increase of
10 approximately 2 times the system average increase for the SGS class, this class
11 would still be below its cost of service. Because my proposal uses the Company's
12 requested revenue requirement to illustrate my proposed class revenue allocation,
13 the impact of my class revenue allocation proposal on the SGS class should result in
14 a much lower percentage increase in total revenues because of proposed reductions
15 to the Company's requested revenue requirement. It is my understanding that
16 Commission Staff has recommended an approximate \$9 million increase in revenues
17 for MGE as compared to the MGE requested increase of \$37.4 million as filed.

18 **VI. Proposed Rate Design for Laclede and MGE**

19 **Q HAVE YOU REVIEWED THE COMPANIES' PROPOSED RATE DESIGNS FOR**
20 **THE TRANSPORTATION CLASS IN LACLEDE AND THE LVS CLASS IN MGE?**

21 **A** Yes, I have reviewed the Companies' respective proposed rate designs for these
22 classes and agree with the approach. It appears that the Companies' proposed rate
23 designs, when adjusted to collect the proper amount of revenue, would appropriately
24 charge customers in these classes.

1 Q DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

2 A Yes, it does.

Appendix A

Qualifications of Brian C. Collins

1 **Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A Brian C. Collins. My business address is 16690 Swingley Ridge Road, Suite 140,
3 Chesterfield, MO 63017.

4 **Q WHAT IS YOUR OCCUPATION AND BY WHOM ARE YOU EMPLOYED?**

5 A I am a consultant in the field of public utility regulation and a Principal with the firm of
6 Brubaker & Associates, Inc. ("BAI"), energy, economic and regulatory consultants.

7 **Q PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.**

8 A I graduated from Southern Illinois University Carbondale with a Bachelor of Science
9 degree in Electrical Engineering. I also graduated from the University of Illinois at
10 Springfield with a Master of Business Administration degree. Prior to joining BAI, I
11 was employed by the Illinois Commerce Commission and City Water Light & Power
12 ("CWLP") in Springfield, Illinois.

13 My responsibilities at the Illinois Commerce Commission included the review
14 of the prudence of utilities' fuel costs in fuel adjustment reconciliation cases before
15 the Commission as well as the review of utilities' requests for certificates of public
16 convenience and necessity for new electric transmission lines. My responsibilities at
17 CWLP included generation and transmission system planning. While at CWLP, I
18 completed several thermal and voltage studies in support of CWLP's operating and
19 planning decisions. I also performed duties for CWLP's Operations Department,
20 including calculating CWLP's monthly cost of production. I also determined CWLP's

1 allocation of wholesale purchased power costs to retail and wholesale customers for
2 use in the monthly fuel adjustment.

3 In June 2001, I joined BAI as a Consultant. Since that time, I have
4 participated in the analysis of various utility rate and other matters in several states
5 and before the Federal Energy Regulatory Commission ("FERC"). I have filed or
6 presented testimony before the Arkansas Public Service Commission, the Delaware
7 Public Service Commission, the Florida Public Service Commission, the Idaho Public
8 Utilities Commission, the Illinois Commerce Commission, the Indiana Utility
9 Regulatory Commission, the Minnesota Public Utilities Commission, the Missouri
10 Public Service Commission, the North Dakota Public Service Commission, the Public
11 Utilities Commission of Ohio, the Oregon Public Utility Commission, the Rhode Island
12 Public Utilities Commission, the Virginia State Corporation Commission, the Public
13 Service Commission of Wisconsin, the Washington Utilities and Transportation
14 Commission, and the Wyoming Public Service Commission. I have also assisted in
15 the analysis of transmission line routes proposed in certificate of convenience and
16 necessity proceedings before the Public Utility Commission of Texas.

17 In 2009, I completed the University of Wisconsin – Madison High Voltage
18 Direct Current ("HVDC") Transmission Course for Planners that was sponsored by
19 the Midwest Independent Transmission System Operator, Inc. ("MISO").

20 BAI was formed in April 1995. BAI and its predecessor firm has participated in
21 more than 700 regulatory proceeding in forty states and Canada.

22 BAI provides consulting services in the economic, technical, accounting, and
23 financial aspects of public utility rates and in the acquisition of utility and energy
24 services through RFPs and negotiations, in both regulated and unregulated markets.
25 Our clients include large industrial and institutional customers, some utilities and, on

1 occasion, state regulatory agencies. We also prepare special studies and reports,
2 forecasts, surveys and siting studies, and present seminars on utility-related issues.

3 In general, we are engaged in energy and regulatory consulting, economic
4 analysis and contract negotiation. In addition to our main office in St. Louis, the firm
5 also has branch offices in Phoenix, Arizona and Corpus Christi, Texas.

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