Exhibit No.: Issues:	757 Cost of Service, Rate Design
Witness: Type of Exhibit: Sponsoring Party:	Brian C. Collins Rebuttal Testimony Missouri Industrial Energy Consumers
Case No.: Date Testimony Prepared:	GR-2017-0215 & GR-2017-0216 October 20, 2017 FILED
BEFORE THE PUBLIC SERVICE OF THE STATE OF MIS	
OF THE STATE OF MIS	300M
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
 Statistics - Constatistics - Constatistics 	
Rebuttal Testimony and Sch	edule of
Brian C. Collins	and the second
· · · · · · · · · · · · · · · · · · ·	DIFC Exhibit No 75
	Date DIS-17_Reporter 15.
On behalf of	MIEC_Exhibit No.75 Date DIS-17_Reporter A.F. File NOTR 237-2415 (18-2017-2
	File NO18-227-2415(18-22)17-2
On behalf of	File NO18-227-2415(18-22)17-2
On behalf of	File NO18-227-2415(18-22)17-2
On behalf of Missouri Industrial Energy October 20, 2017	File NCARDAT-DAIS(122)17-D
On behalf of Missouri Industrial Energy	File NCARDAT-DAIS(122)17-D

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

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-2017-0215 Tariff No. YG-2017-0195

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

STATE OF MISSOURI

COUNTY OF ST. LOUIS

SS

Affidavit of Brian C. Collins

Brian C. Collins, being first duly sworn, on his oath states:

1. My name is Brian C. Collins. I am a consultant with Brubaker & Associates, Inc., having its principal place of business at 16690 Swingley Ridge Road, Suite 140, Chesterfield, Missouri 63017. We have been retained by the Missouri Industrial Energy Consumers in this proceeding on their behalf.

2. Attached hereto and made a part hereof for all purposes are my rebuttal testimony and schedule which were prepared in written form for introduction into evidence in Missouri Public Service Commission Case No. GR-2017-0215 and GR-2017-0216.

3. I hereby swear and affirm that the testimony and schedule are true and correct and that they show the matters and things that they purport to show.

Brin C. Collin

Brian C. Collins

Subscribed and sworn to before me this 19th day of October, 2017.

MARIA E. DECKER Notary Public - Notary Seal STATE OF MISSOURI St. Louis City My Commission Expires: May 5, 2021 Commission # 1370879

Maria E. Week

BRUBAKER & ASSOCIATES, INC.

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

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-2017-0215 Tariff No. YG-2017-0195

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

Table of Contents to the Rebuttal Testimony of Brian C. Collins

Page

Conclusions and Recommendations2
Staff's Allocation of the Companies' Distribution Mains Costs
Staff's Allocation of Laclede's Underground Storage Costs
Staff's Allocation of Laclede's Gas Inventory and Propane Inventory Costs11
Staff's Allocation of the Companies' Measuring and Regulating Station Costs
Impact of Corrections to Staff Class Cost of Service Studies
Staff's Proposed Class Revenue Allocation14
Staff's Proposed Composition of the Companies' General Service Classes17
Staff's Proposed Lost and Unaccounted for Gas Factor for Laclede's Transportation Class19
Staff's Proposed Rate Design
Conclusions and Recommendations23
Schedule BCC-R-1

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

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-2017-0215 Tariff No. YG-2017-0195

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

Rebuttal Testimony 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?

- 5 A I am a consultant in the field of public utility regulation and a Principal with Brubaker &
- 6 Associates, Inc., energy, economic and regulatory consultants.
- 7 Q ARE YOU THE SAME BRIAN C. COLLINS WHO FILED DIRECT TESTIMONY ON
- 8 BEHALF OF THE MISSOURI INDUSTRIAL ENERGY CONSUMERS ("MIEC") IN
- 9 THIS CASE?
- 10 A Yes, I am.

1

Q

WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

- 2 А The purpose of my rebuttal testimony is to respond to the positions of the Missouri 3 Public Service Commission ("MPSC") Staff contained in the Staff Report on Class 4 Cost of Service ("Staff Report"). Specifically, I will address the following issues: 5 1. Staff's allocation of the Laclede Gas Company ("Laclede") and Missouri 6 Gas Energy ("MGE") (collectively, "Companies") distribution mains costs. 7 2. Staff's allocation of Laclede's underground storage costs. 8 3. Staff's allocation of Laclede's gas inventory and propane inventory costs. 9 4. Staff's allocation of the Companies' measuring and regulating station 10 costs. 11 5. Staff's proposed class revenue allocation for the Companies. 12 6. Staff's proposed composition of the General Service class for both MGE 13 and Laclede. 14 7. Staff's proposed lost and unaccounted for gas factor applicable to 15 transportation customers on the Laclede system. 16 8. Staff's proposed rate design for Laclede's Transportation class and MGE's 17 Large Volume Service class, 18 My silence on any issue addressed by Staff or other parties does not indicate 19 acceptance or agreement with that particular issue.
- 20

Conclusions and Recommendations

21 Q PLEASE SUMMARIZE YOUR CONCLUSIONS AND RECOMMENDATIONS.

- 22 A My conclusions and recommendations are as follows:
- 1. I recommend the Companies' proposal for the allocation of the distribution mains costs to customer classes in lieu of Staff's method because the Companies' cost allocation method is an accepted and common method for allocating the costs of mains and better reflects class cost causation. Under the Companies' approach, the costs are allocated based on how they are incurred by the Companies.
- Staff's allocation of Laclede's underground storage costs to the Transportation
 class should be rejected because Laclede does not incur the cost of

- 1 underground storage in providing distribution delivery service to transportation 2 customers. 3 3. Staff's allocation of Laclede's gas inventory and propane inventory costs to the Transportation class should be rejected because these costs are not 4 5 incurred to provide distribution delivery service to transportation customers. 6 4. Staff's allocation of the Companies' measuring and regulating station costs 7 should be modified to allocate these costs to customer classes using design day demand because this allocation method reflects cost causation. 8 9 Measuring and regulating station equipment must be sized to meet design day demand and is not dependent on the number of customers on the system. 10 5. I continue to recommend the proposed class revenue allocation described in 11 12 my direct testimony in lieu of Staff's proposed class revenue allocation because Staff's class allocation results in increases to certain classes where 13 those increases are not supported by a reasonable cost of service study. 14 15 6. Staff's proposed composition of the General Service class for both MGE and 16 Laclede should be rejected and the Companies' proposal accepted because the Companies' approach recognizes the cost differences in providing service 17 to different commercial customers and Staff's proposal does not. 18 19 7. Staff's proposed lost and unaccounted for gas factor applicable to transportation customers on the Laclede system should be modified from 2% 20 to 1%, as Laclede proposes because Laclede's proposal is reasonable until a 21 study can be performed of losses attributable to transportation customers. 22 23 8. The Companies' proposed rate design for Laclede's Transportation class and MGE's Large Volume Service class should be accepted in lieu of Staff's 24 proposal for an equal percent increase in all rate elements. The Companies' 25 volumetric charges collect significantly more revenue than variable costs as 26 indicated in the cost studies. As a result, the Companies' proposal to increase 27 28 its customer charges at a higher percentage than its volumetric charges is 29 reasonable.
- 30 Staff's Allocation of the Companies' Distribution Mains Costs

31 Q HOW ARE COSTS OF THE COMPANIES' DISTRIBUTION MAINS ALLOCATED

- 32 TO CUSTOMER CLASSES IN THE STAFF REPORT?
- 33 A Staff's allocation of the distribution mains costs to customer classes for both Laclede
- 34 and MGE includes two components: a determination of a stand-alone component,
- and a determination of an integrated system component.

1 Q HOW DOES STAFF ALLOCATE THE COMPANIES' RESPECTIVE STAND-ALONE

2 COST OF DISTRIBUTION MAINS TO CUSTOMER CLASSES?

A According to the Staff Report, for both Laclede and MGE, the stand-alone component of distribution mains cost represents the cost of connecting the Companies' customers to the Companies' respective distribution main system. Based on my understanding of Staff's proposal, the stand-alone component is intended to be similar to the portion of distribution mains costs that is classified as customer related by the Companies.

9 Q DOES STAFF'S STAND-ALONE COMPONENT DIFFER FROM THE COMPANIES'

10

CUSTOMER CLASSIFIED COMPONENT OF DISTRIBUTION MAINS COST?

11 А Yes. Staff's stand-alone component of distribution mains cost does differ from the The 12 Companies' customer classified component of distribution mains cost. 13 Companies' customer component is calculated on a system-wide basis, where the customer component of mains cost assumes the entire length of the distribution 14 15 system is built at the cost of a zero-inch main, with that cost allocated to each customer class based on the number of customers in each class. The Companies' 16 approach results in each customer, regardless of class, being allocated the same 17 amount of customer main cost that represents the minimum cost incurred to connect 18 each customer to the system in order provide the opportunity for that customer to take 19 20 gas service.

21 Under Staff's approach, each class's stand-alone component is dependent on 22 the class's average main length per customer required for connection to the system 23 and the average service line cost per foot unique to that class, resulting in a different

customer cost for each class. Staff's approach results in different per customer costs
 which vary by class.

3 Specifically, for each class, Staff's stand-alone cost for a single customer in a 4 class is determined from a random sample of customers in the class. The stand-5 alone cost for a single customer in the class is calculated by multiplying the average 6 distribution main length in feet (determined by GIS data) from the random customer 7 sample by the average service line cost per foot (based on the class's service lines 8 cost from a previous rate case). The single customer stand-alone cost is then 9 multiplied by the number of customers in the class to determine the total stand-alone 10 cost component of the class. The total respective Laclede and MGE stand-alone 11 component of distribution mains is the sum of the class's stand-alone components. 12 The residual distribution mains cost is treated as the integrated component. 13 discussed below.

Under the Staff proposal, for Laclede, the sum of all classes' stand-alone
components represents 56.6% of total distribution mains costs and for MGE, the sum
of all classes' stand-alone components represents 29.0% of total mains costs.

17 Q DO YOU AGREE WITH STAFF'S STAND-ALONE COMPONENT PROPOSAL?

A No. While I agree with Staff's attempt to classify and allocate a portion of the distribution mains costs as customer related, I disagree with using the costs of customer services to price the average cost of a distribution main used to connect a customer to the system. The goal of a customer component is to calculate the minimum cost incurred to connect any customer to the distribution mains system to give any customer the opportunity to take gas service. The customer component of distribution mains cost should only provide the opportunity for any customer to

receive gas service and should not be concerned with the correct size of main to
 serve that customer, hence it should reflect the minimum cost of connecting a
 customer to the system. This connection cost should be approximately the same cost
 per customer, regardless of the class in which the customer resides.

5 However, Staff's analysis, because it uses class service line costs, has a 6 distribution main stand-alone cost that varies by customer because of the differences 7 in service line capacity size. As a result, Staff's method does not best reflect class 8 cost causation because the respective class customer cost varies due to differences 9 in class service line capacity cost. Staff's approach results in customer costs that 10 differ by class and that are not reflective of the minimum cost required to connect to 11 the system and as a result, do not best reflect cost causation.

12 Q ARE YOU AWARE OF ANY GAS UTILITY THAT USES STAFF'S METHOD FOR 13 DETERMINING A STAND-ALONE COMPONENT OF DISTRIBUTION MAINS 14 COSTS?

15 A No, I am not aware of any gas utility that uses such an approach.

16 Q HOW DOES STAFF ALLOCATE THE INTEGRATED COMPONENT OF 17 DISTRIBUTION MAINS COSTS TO CUSTOMER CLASSES?

A After determining the stand-alone component of distribution mains costs, the residual amount is the integrated component of distribution mains cost. This component is allocated by Staff to classes based on each class's coincident actual peak demand. The integrated component of distribution mains costs is that portion of mains that is classified as demand related. Staff uses weather adjusted actual class demands to allocate distribution
 mains costs designated as the integrated component. This is in contrast to the
 Companies' allocation of demand-related costs using design day demand.

4 Q DO YOU AGREE WITH STAFF'S PROPOSAL TO USE WEATHER ADJUSTED 5 ACTUAL DEMANDS FOR ALLOCATING ITS INTEGRATED COMPONENT OF 6 DISTRIBUTION MAINS COST?

A No, I do not. Design day demand is most appropriate for allocating demand classified
costs and better reflects cost causation because the Companies design their
distribution systems to meet the expected day of greatest demand and incur the costs
to construct a system to meet the expected day of greatest system demand for gas
supply. Staff's use of actual demands does not best reflect cost causation because it
does not reflect how the Companies incur the costs to design and construct their
distribution mains system in order to meet design day demand.

14 Q ARE YOU AWARE OF OTHER GAS UTILITIES BESIDES LACLEDE AND MGE 15 THAT ALLOCATE DEMAND CLASSIFIED COSTS OF THE DISTRIBUTION MAIN 16 SYSTEM USING DESIGN DAY DEMANDS?

17 A Yes. Based on my experience with other gas utility rate cases, design day demand is
18 the most frequently used method. For example, design day demand is used to
19 allocate the demand classified component of distribution mains cost to customer
20 classes by Montana-Dakota Utilities, Puget Sound Energy, Northern Indiana Public
21 Service, Ameren Illinois, Nicor Gas, Columbia Gas of Virginia, and Virginia Natural
22 Gas, to name a few,

1

Q WHAT IS YOUR RECOMMENDATION WITH RESPECT TO THE ALLOCATION OF

2 DISTRIBUTION MAINS COSTS?

A As described in my direct testimony, I conclude that the Companies' class cost of service studies are reasonable because they allocate the costs of distribution mains on both a demand basis and a customer basis. Under the Companies' approach, the demand classified component is allocated to classes based on design day demands and the customer classified component is allocated to classes based on the number of customers in each class.

9 I recommend that distribution mains costs be allocated as proposed by the 10 Companies, using design day demands to allocate the demand classified component 11 and the number of customers in each class to allocate the customer classified 12 components of distribution mains costs. The Companies' cost allocation method is an 13 accepted and common method for allocating the costs of mains and better reflects 14 class cost causation because the costs are allocated based on how they are incurred 15 by the Companies.

16 Staff's Allocation of Laclede's Underground Storage Costs

17 Q PLEASE DESCRIBE THE COSTS OF LACLEDE'S UNDERGROUND STORAGE.

A These costs, both capital and expenses, are incurred for the construction and operation of assets designed to store natural gas used to meet the demands of its sales customers who purchase both gas supply and delivery service from Laclede.

1 Q HOW DOES STAFF ALLOCATE THE COSTS OF UNDERGROUND STORAGE TO

2 CLASSES?

A Staff allocates these costs to all classes, including Laclede's Transportation class.
 Transportation class customers purchase only delivery service from Laclede and
 purchase their gas supply from a third party and not from Laclede.

Q DO YOU AGREE WITH STAFF'S PROPOSAL TO ALLOCATE UNDERGROUND STORAGE COSTS TO THE TRANSPORTATION CLASS?

8 A No, I do not. These costs are not incurred by Laclede to provide delivery service to
9 transportation customers. As a result, Staff's allocation of underground storage costs
10 to transportation customers does not reflect cost causation.

11QDOES LACLEDE ALLOCATE THE COSTS OF UNDERGROUND STORAGE TO12THE TRANSPORTATION CLASS IN ITS CLASS COST OF SERVICE STUDY?

- A No, it does not. As a result, underground storage costs are not collected in the
 transportation tariff's customer, reservation, or volumetric transportation charges.
- 15
 Q
 UNDER
 LACLEDE'S
 TRANSPORTATION
 TARIFF,
 ARE
 TRANSPORTATION

 16
 CUSTOMERS
 ASSESSED A STORAGE CHARGE?
- 17 A Yes. A separate storage service charge is collected from a transportation customer
 18 only when the customer delivers more gas to the Laclede system than the customer
 19 consumes. Laclede may need to store that gas if not consumed by the customer,
 20 and charges the customer to do so.
- 21 Under the tariff, transportation customers pay separately for storage service 22 as needed, but should not pay for it ahead of time in their customer, demand or

transportation volumetric charges. To do so would charge some customers twice for
 storage service, and charge others for a service they may never use.

HOW WOULD STAFF'S PROPOSAL TO ALLOCATE UNDERGROUND STORAGE 3 Q SOME TRANSPORTATION CLASS RESULT IN THE 4 COSTS ΤO 5 TRANSPORTATION CUSTOMERS PAYING TWICE FOR STORAGE SERVICE AND OTHER CUSTOMERS PAYING FOR A SERVICE THEY MAY NEVER USE? 6 7 А Under Staff's proposal, transportation customers would pay for storage in their base rates, and pay the separate transportation tariff gas storage charge, which is equal to 8

9 4 cents per therm, for storage service, but only if and when needed. Customers
10 using storage service thus would pay twice for storage service, while others would
11 pay for storage even if they never needed it. Charging transportation customers for
12 storage service in base rates regardless of whether they ever use storage service is
13 inappropriate and does not reflect cost causation.

14 Q WHAT IS YOUR RECOMMENDATION FOR THE ALLOCATION OF LACLEDE'S

15 UNDERGROUND STORAGE COSTS?

16 A I recommend that the costs of underground storage not be allocated to the 17 transportation class customers. This is consistent with how Laclede allocates the 18 costs of underground storage to classes, which excludes the transportation class. 19 This best reflects cost causation because Laclede does not incur the cost of 20 underground storage in providing distribution delivery service to transportation 21 customers.

1 Staff's Allocation of Laclede's Gas

2 Inventory and Propane Inventory Costs

3 Q PLEASE DESCRIBE THE COSTS OF GAS INVENTORY AND PROPANE 4 INVENTORY.

5 A These costs are associated with gas supply and propane supply used for peaking 6 purposes. These costs are commodity costs associated with gas supply provided to 7 sales customers that take both delivery and gas supply service from Laclede.

8 Q HOW DOES STAFF ALLOCATE THE COSTS OF GAS INVENTORY AND

9 PROPANE INVENTORY TO CLASSES?

A Like underground storage costs on the Laclede system, Staff allocates these costs to
 all classes, including the Transportation class.

12 Q DO YOU AGREE WITH STAFF'S PROPOSAL TO ALLOCATE GAS INVENTORY

AND PROPANE INVENTORY COSTS TO LACLEDE'S TRANSPORTATION
 CLASS?

A No, I do not. These costs are not incurred by Laclede to provide distribution delivery
 service to transportation customers. These costs are incurred to provide gas supply
 service to sales customers. Transportation customers purchase their own gas supply
 that is transported on Laclede's distribution system. As a result, Staff's allocation of
 these gas supply costs to transportation customers does not reflect cost causation.

20 Q DOES LACLEDE ALLOCATE THE COSTS OF GAS INVENTORY AND PROPANE

21 INVENTORY TO LACLEDE'S TRANSPORTATION CLASS?

22 A No, it does not.

1 Q WHAT IS YOUR RECOMMENDATION FOR THE ALLOCATION OF LACLEDE'S

2 GAS INVENTORY AND PROPANE INVENTORY COSTS?

A I recommend that gas inventory and propane inventory costs not be allocated to the
 transportation class. Following my recommendation is consistent with how Laclede
 allocates these costs to classes and best reflects cost causation because these costs
 are not incurred to provide distribution delivery service to transportation customers.

7

8 Staff's Allocation of the Companies' 9 Measuring and Regulating Station Costs

10 Q PLEASE DESCRIBE THE COMPANIES' MEASURING AND REGULATING 11 STATION COSTS.

12 A These costs (Plant Accounts 378 and 379) include the installed cost of meters, 13 gauges and other equipment used in measuring and regulating gas in connection with 14 distribution system operations, including the receipt of gas at entry points to the 15 Companies' distribution system. These plant accounts exclude those costs related to 16 the measurement of gas deliveries to customers to their premises.

17 Q HOW DOES STAFF ALLOCATE THE COMPANIES' COSTS OF MEASURING AND

18 **REGULATING STATION EQUIPMENT IN ITS STAFF REPORT?**

- 19 A Staff uses its distribution mains allocator to allocate these costs. As described above,
- 20 the mains allocator includes a stand-alone component related to customers on the
- 21 system and an integrated system component related to demand.

1 Q DO YOU AGREE WITH STAFF'S PROPOSAL TO USE ITS MAINS ALLOCATOR 2 FOR THE ALLOCATION OF MEASURING AND REGULATING STATION 3 EQUIPMENT COSTS?

4 No, I do not. Staff's mains allocator is partly based on the average class costs of А 5 services and average main lengths in determining a stand-alone component, and 6 partly based on the integrated component which is allocated based on actual class 7 demands. This allocator does not best reflect how the Companies incur the costs of measuring and regulating station equipment because this equipment must be sized 8 according to the design day demand of the system and is not dependent on the 9 number of customers on the system. Allocating a portion of these costs on a 10 customer basis does not reflect how the Companies incur these costs. 11

12QHOW DO THE COMPANIES ALLOCATE THE COSTS OF MEASURING AND13REGULATING STATION EQUIPMENT?

A The Companies use design day demands to allocate these costs to customer
 classes. This is an accepted method for allocating these costs to customer classes
 and is recognized by the NARUC Gas Rate Manual in its cost allocation example.

17QWHAT IS YOUR RECOMMENDATION FOR THE ALLOCATION OF MEASURING18AND REGULATING STATION COSTS?

A I recommend that the Companies' measuring and regulating station equipment costs
 be allocated to classes using design day demands as used by the Companies
 because the design day demand allocation is consistent with how the system is
 designed, and therefore better reflects cost causation.

Impact of Corrections to Staff Class Cost of Service Studies Q WHAT IS THE IMPACT TO LACLEDE'S TRANSPORTATION CLASS IF STAFF'S CLASS COST OF SERVICE STUDY IS CORRECTED FOR THE ISSUES YOU HAVE DESCRIBED ABOVE? A The impact is that the decrease calculated by Staff for the Transportation class increases from approximately a 17% decrease to approximately a 19% decrease.

- 7 Q WHAT IS THE IMPACT TO MGE'S LARGE VOLUME CLASS IF STAFF'S CLASS
- 8 COST OF SERVICE STUDY IS CORRECTED FOR THE ISSUES YOU HAVE 9 DESCRIBED ABOVE?
- A The impact is that the increase calculated by Staff for the Large Volume class
 decreases from approximately 15% to approximately 2%.

12 Staff's Proposed Class Revenue Allocation

- 13 Q HAVE YOU REVIEWED STAFF'S PROPOSED CLASS REVENUE ALLOCATION
- 14 FOR LACLEDE?
- 15 A Yes.

16 Q DO YOU HAVE ANY CONCERNS WITH STAFF'S PROPOSAL?

A Yes. Staff's proposed class revenue allocation produces an increase to Laclede's
 Transportation class that is not supported by a reasonable cost of service study.

19 Under Staff's proposed class revenue allocation for Laclede, the 20 Transportation class would get an increase in base rate revenue for any revenue 21 requirement approved by the Commission that exceeds the base rate revenue level 22 recommendation in the Staff Report. This would occur despite both Staff's and Laclede's class cost of service studies indicating that the Transportation class should
 receive a base rate decrease.

At Laclede's full requested revenue requirement, the Transportation class
would receive a 13% base rate increase under Staff's proposal.

5 Q WHAT IS YOUR RECOMMENDATION FOR LACLEDE'S CLASS REVENUE 6 ALLOCATION?

7 A I continue to recommend the class revenue allocation for Laclede as proposed in my 8 direct testimony. I recommend that all customer classes in Laclede that require a 9 base rate decrease to bring their rates to cost of service be moved 25% toward their 10 full cost of service. In recognition of gradualism, the remaining revenue that would 11 have been used to move these classes to their full cost of service is then used to 12 mitigate the increases necessary to move the Residential and SGS classes to full 13 cost of service.

14 Q HAVE YOU REVIEWED STAFF'S PROPOSED CLASS REVENUE ALLOCATION

- FOR MGE?
- 16 A Yes.

15

17 Q DO YOU HAVE ANY CONCERNS WITH STAFF'S PROPOSAL?

A Yes. Staff's proposed class revenue allocation results in an increase to MGE's Large
 Volume class that is not supported by a reasonable cost of service study.

20 Under Staff's proposed class revenue allocation for MGE, the Large Volume 21 class would receive an immediate revenue shift of \$700,000 prior to receiving an 22 equal percent increase of any base rate revenue increase approved by the 1 Commission. This would occur despite MGE's class cost of service study indicating 2 that the Large Volume class should receive a below system average increase that is 3 approximately 35% of the system average increase. If Staff's class cost of service 4 study is corrected for the issues I have previously described, the Large Volume class 5 would receive an increase equal to 36% of the system average increase, very close 6 to the results of MGE's class cost of service study.

At MGE's full requested revenue requirement, the Large Volume class would receive an approximate 30% base rate increase under Staff's proposal, as compared to a system average increase of 24.4%. Staff's proposal would give the Large Volume class an increase of approximately 124% of the system average increase at MGE's full revenue request when it should receive an increase that is significantly below the average.

13 Q WHAT IS YOUR RECOMMENDATION?

A I continue to recommend the class revenue allocation for MGE as proposed in my direct testimony. I recommend that the LGS class be moved 25% toward its full cost of service. Second, in recognition of gradualism, the remaining revenue that would have been used to move this class to its full cost of service is then used to mitigate the increase necessary to move the SGS class to full cost of service. The Residential and LVS classes would pay rates that recover their respective cost of service.

> Brian C. Collins Page 16

BRUBAKER & ASSOCIATES, INC.

1 Staff's Proposed Composition of the

2 Companies' General Service Classes

3 Q WHAT IS STAFF'S PROPOSAL FOR THE COMPOSITION OF GENERAL 4 SERVICE CLASSES ON THE COMPANIES' SYSTEMS?

5 A Staff proposes to combine all general service customers into one General Service
6 class for Laclede and one General Service class for MGE and apply a single tariff
7 rate to each respective General Service class.

8 Q DO YOU AGREE WITH STAFF'S PROPOSAL?

9 A No, I do not. Based on the cost studies performed by both Staff and the Companies,
10 there are differences among the General Service classes that cause significant
11 differences in the costs to be incurred in providing delivery services to those
12 customers. Combining these customers into one class under Staff's proposal ignores
13 these cost differences and would result in intraclass subsidies if a single rate were
14 applied to all customers.

15 Q DOES STAFF RECOGNIZE THE DIFFERENCES IN COSTS IN PROVIDING 16 DELIVERY SERVICE TO DIFFERENT GENERAL SERVICE CUSTOMERS?

17 A Yes. In its Report at page 14, Staff states that the cost studies performed in this case 18 for the Companies and general cost principles indicate that the cost of providing 19 service to the higher consuming customers is lower per unit than the cost of providing 20 service to the lower consuming customers. However, despite recognizing these 21 differences, Staff proposes to combine them into one General Service class. Higher 22 consuming customers will have higher average use per customer and higher load factors than lower consuming customers, meaning that it is less expensive per unit to
serve them.

Q HAVE YOU COMPARED HOW AVERAGE USE PER CUSTOMER AND LOAD
 FACTOR VARY FOR LACLEDE'S AND MGE'S EXISTING CLASSES?

5 A Yes. Schedule BCC-R-1 illustrates these differences. As shown on the schedule, 6 these characteristics vary significantly among the three General Service classes for 7 Laclede that Staff proposes to combine and between the two MGE General Service 8 classes that Staff proposes to combine.

In the Laclede portion of Schedule BCC-R-1, the three General Service
classes' consumption and customer numbers are highlighted. The General Service 1 class has nearly 50 times more customers (30,905) than the General Service - 3
class (619). However, the General Service - 3 class average usage per customer
(71,439) is almost 54 times greater than the average usage per customer from the
General Service - 1 class (1,330).

The MGE portion of Schedule BCC-R-1 also shows the same results. In this case, the Small General Service class customer number (29,069) is 8 times higher than the Large General Service class customers (3,628). Yet, the Large General Service class usage per customer (19,045) is 10 times greater than the Small General Service class average usage per customer (1,823).

Load factors are also different, with the larger use customers having higher
load factors. Because of the higher load factor, the fixed costs are spread over more
volumes of gas, thereby resulting in a lower average cost per therm.

1 These customer class size differences, usage per customer differences, and 2 differences in load factor clearly indicate that combining these classes would not be 3 good regulatory policy and would create intra-class subsidies

- 4 Q WHAT IS THE COMPANIES' PROPOSAL FOR THEIR GENERAL SERVICE 5 CLASSES?
- 6 A The Companies propose a Small General Service class and a Large General Service 7 class for both Laclede and MGE. The Companies' proposal is reasonable because it 8 recognizes the cost differences in providing service to different general use 9 customers and as a result, should result in smaller intraclass subsidies as compared 10 to Staff's proposal for combining all classes into a single General Service class.

11 Q WHAT IS YOUR RECOMMENDATION FOR GENERAL SERVICE CUSTOMERS?

12 A I recommend that the Companies' proposal be accepted.

13 Staff's Proposed Lost and Unaccounted for

14 Gas Factor for Laclede's Transportation Class

15QPLEASEDESCRIBELACLEDE'SPROPOSALTORECOVERFROM16TRANSPORTATION CUSTOMERS A PORTION OF COSTS RELATED TO LOST17AND UNACCOUNTED FOR GAS.

A Laclede currently does not charge transportation customers for gas losses on its
 system. However, Laclede proposes to use 1% as the factor for lost and
 unaccounted for gas. As a result, transportation customers will be required to acquire
 1% more gas than their anticipated needs in order to compensate Laclede for gas
 supply losses on its distribution system. Currently, gas losses are only recovered

from sales customers that purchase both gas supply and delivery service from
 Laclede. Laclede's proposal will allow it to also recover the costs associated with gas
 losses on the distribution system from transportation customers.

4

Q WHAT IS STAFF'S PROPOSAL FOR THE LOST AND UNACCOUNTED FOR GAS

5 FACTOR TO BE APPLIED TO TRANSPORTATION CLASS CUSTOMERS?

A Staff proposes a factor of 2% for Transportation class customers. Staff's primary
basis for its proposal is that this is the same loss factor used for MGE.

8 Q DO YOU AGREE WITH STAFF'S PROPOSED LOST AND UNACCOUNTED FOR 9 GAS FACTOR FOR TRANSPORTATION CUSTOMERS ON THE LACLEDE 10 SYSTEM?

11 А No, I do not. While I agree that it is appropriate to recognize some level of losses on 12 the distribution system for transportation customers, I do not agree with the basis for 13 Staff's proposal. Because transportation customers do not utilize small mains on 14 Laclede's system and are closer to Laclede's larger sized mains than other 15 customers, transportation customer losses are less than the system average losses. 16 However, as indicated in the Companies' response to MPSC Data Request 0328, it is 17 my understanding that no determination has been made of losses on the distribution 18 system attributable to any customer class, including the Transportation class.

1 Q ARE YOU AWARE OF OTHER GAS UTILITIES THAT USE APPROXIMATELY 1%

2 LOSSES FOR TRANSPORTATION CUSTOMERS?

3 A Yes. In Illinois, North Shore Gas, a sister company to Peoples Gas, serves
4 customers in suburban Chicago and currently applies a 0.90% loss factor to
5 transportation customers.

Nicor Gas, which services customers in northern Illinois, currently applies a
1.3% loss factor to transportation customers. Its previous loss factor determined in
2016 was 0.99%.

9 Q WHAT IS YOUR RECOMMENDATION FOR THE LOST AND UNACCOUNTED 10 FOR GAS FACTOR APPLIED TO TRANSPORTATION CUSTOMERS?

11 A I recommend that Laclede's proposal of 1% be used as the factor for losses 12 recovered from transportation customers. Without a study, it is impossible to 13 determine the exact loss factor. Laclede's use of 1% is a reasonable proposal until a 14 study can be performed of losses attributable to transportation customers on the 15 Laclede system. Furthermore, I would also recommend that at some point a loss 16 study be performed on the MGE system to determine the correct loss factor for 17 transportation customers.

18 Staff's Proposed Rate Design

19QWHAT IS STAFF'S PROPOSAL FOR THE RATE DESIGN APPLICABLE TO20LACLEDE'S TRANSPORTATION CLASS?

A It is my understanding that Staff proposes an equal percent increase to each rate
element, which includes the customer charge and all block charges.

1 Q WHAT IS LACLEDE'S PROPOSAL FOR THE RATE DESIGN APPLICABLE TO

2 ITS TRANSPORTATION CLASS?

A Laclede proposes a 21% increase in the customer charge and an equal percent
increase in the commodity charges and reservation charges to recover the revenue
not recovered by the customer charge.

6 Q WHAT IS YOUR RECOMMENDATION?

I recommend that Laclede's proposal for the Transportation class rate design be 7 A accepted by the Commission. Based on Laclede's class cost of service study, the 8 volumetric transportation charges are currently collecting significantly more revenue 9. than the variable or commodity component of this class's cost of service as indicated 10 in Laclede's study. In its rate design proposal for the Transportation class as 11 described by Mr. Lyons in his direct testimony, Laclede proposes to increase its 12 customer charge and reservation charge while almost holding constant the 13 percentage of total Transportation class revenue collected by the volumetric 14 transportation charges. I believe this is a reasonable proposal for the Transportation 15 16 class.

17 Q WHAT IS STAFF'S PROPOSAL FOR THE RATE DESIGN APPLICABLE TO 18 MGE'S LARGE VOLUME CLASS?

19 A Staff proposes an equal percent increase in each rate element, which includes the

20 customer charge and all consumption charges.

1 Q WHAT IS MGE'S PROPOSAL FOR THE RATE DESIGN APPLICABLE TO ITS

2 LARGE VOLUME CLASS?

A MGE proposes an increase of 41% in the customer charge, and equal percent
 decrease in the commodity charges to recover the Large Volume class revenue
 requirement.

6 Q WHAT IS YOUR RECOMMENDATION FOR LARGE VOLUME CUSTOMERS?

7 A I recommend that MGE's proposal for the Large Volume class rate design be
accepted by the Commission. As indicated by Mr. Lyons in his direct testimony, the
9 consumption charges were designed to recover the same percentage of revenues in
10 the peak and off-peak periods, and head (or first) block and tail block rates,
11 respectively, as the current rates. I believe this is a reasonable proposal for the Large
12 Volume class.

13 Conclusions and Recommendations

14 Q PLEASE SUMMARIZE YOUR CONCLUSIONS AND RECOMMENDATIONS.

- 15 A My conclusions and recommendations are as follows:
- 16 1. I recommend the Companies' proposal for the allocation of the distribution 17 mains costs to customer classes in lieu of Staff's method because the 18 Companies' cost allocation method is an accepted and common method for 19 allocating the costs of mains and better reflects class cost causation. Under 20 the Companies' approach, the costs are allocated based on how they are 21 incurred by the Companies.
- Staff's allocation of Laclede's underground storage costs to the Transportation
 class should be rejected because Laclede does not incur the cost of
 underground storage in providing distribution delivery service to transportation
 customers.
- 3. Staff's allocation of Laclede's gas inventory and propane inventory costs to
 the Transportation class should be rejected because these costs are not
 incurred to provide distribution delivery service to transportation customers.

- Staff's allocation of the Companies' measuring and regulating station costs should be modified to allocate these costs to customer classes using design day demand because this allocation method reflects cost causation. Measuring and regulating station equipment must be sized to meet design day demand and is not dependent on the number of customers on the system.
- 5. I continue to recommend the proposed class revenue allocation described in my direct testimony in lieu of Staff's proposed class revenue allocation because Staff's class allocation results in increases to certain classes where those increases are not supported by a reasonable cost of service study.
- Staff's proposed composition of the General Service class for both MGE and Laclede should be rejected and the Companies' proposal accepted because the Companies' approach recognizes the cost differences in providing service to different commercial customers and Staff's proposal does not.
- 7. Staff's proposed lost and unaccounted for gas factor applicable to transportation customers on the Laclede system should be modified from 2% to 1%, as Laclede proposes because Laclede's proposal is reasonable until a study can be performed of losses attributable to transportation customers.
- 8. The Companies' proposed rate design for Laclede's Transportation class and MGE's Large Volume Service class should be accepted in lieu of Staff's proposal for an equal percent increase in all rate elements. The Companies' volumetric charges collect significantly more revenue than variable costs as indicated in the cost studies. As a result, the Companies' proposal to increase its customer charges at a higher percentage than its volumetric charges is reasonable.

25 Q DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

26 A Yes, it does.

\Doc\Shares\ProtawDocs\SDW10402\Testimony-BAf\330923.doc

Line	Class	Usage (therms)	Peak Day (therms)	Customers	Load Factor	Customer Average Use (therms/customer)
	(1)	(2)	(3)	(4)	$(5) = (2) / [(3) \times 365]$	(6) = (2) / (4)
1	Residential	410,795,485	5,525,687	604,357	20%	680
2	General Service - 1	41,100,953	570,014	30,905	20%	1,330
3	General Service - 2	90,552,597	1,084,543	9,032	23%	10,026
4	General Service - 3	44,220,790	468,325	619	26%	71,439
5	Large Volume	9,107,660	60,614	67	41%	135,935
6	Transportation	99,754,471	953,341	145	29%	687,962
7	Interruptible	5,251,162	19,302	20	75%	262,558
8	General LP	13,621		36		378
9	Gas Lights	128,093	-	84	bin ya	1,525
10	Vehicle	2,662,573		8		332,822
11	Total	703,587,406	8,681,826	645,273	22%	,

Laclede Gas Customer Class Profiles Using Staff Data

Missouri Gas Energy Customer Class Profiles Using Staff Data

Line	Class	Usage (therms)	Peak Day (therms)	Customers	Load Factor	Customer Average Use (therms/customer)
	(1)	(2)	(3)	(4)	$(5) = (2) / [(3) \times 365]$	(6) = (2) / (4)
12	Residential	359,235,185	3,793,828	472,413	26%	760
13	Small General Service	52,990,990	701,946	29,069	21%	1,823
14	Large General Service	69,095,869	634,896	3,628	30%	19,045
15	Large Volume	269,631,207	1,227,673	395	60%	682,611
	Total	750,953,251	6,358,343	505,505	32%	

-