

# EXHIBIT

Exhibit No.:

213

Issue(s):

Cost of Service/Rate Design

Witness/Type of Exhibit:

Busch/Rebuttal

Sponsoring Party:

Public Counsel

Case No.:

GR-2004-0209

## REBUTTAL TESTIMONY

OF

**JAMES A. BUSCH**

**FILED<sup>2</sup>**

JUL 13 2004

Missouri Public  
Service Commission

Submitted on Behalf of the Office of the Public Counsel

**MISSOURI GAS ENERGY**


**CASE NO. GR-2004-0209**

May 24, 2004

In the matter of Missouri Gas Energy's tariffs )  
to implement a general rate increase for natural ) Case No. GR-2004-0209  
gas service. )

[illegible]

1. My name is James A. Busch. I am the Public Utility Economist for the Office of the Public Counsel.
2. Attached hereto and made a part hereof for all purposes is my rebuttal testimony consisting of pages 1 through 11.
3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.

  
James A. Busch

**KATHLEEN HARRISON**  
Notary Public - State of Missouri  
County of Cole  
My Commission Expires Jan. 31, 2006

Kathleen Harrison  
Kathleen Harrison, Notary Public

My commission expires May 3, 2005.

**REBUTTAL TESTIMONY**

**OF**

**JAMES A. BUSCH**

**CASE NO. GR-2004-0209**

**MISSOURI GAS ENERGY**

Q. Please state your name and business address.

A. My name is James A. Busch and my business address is P. O. Box 2230, Jefferson City, MO 65102.

Q. By whom are you employed and in what capacity?

A. I am a Public Utility Economist with the Missouri Office of the Public Counsel (Public Counsel).

Q. Are you the same James A. Busch who filed direct testimony earlier in this proceeding?

A. Yes I am.

Q. What is the purpose of your rebuttal testimony in Case No. GR-2004-0209?

A. The purpose of my rebuttal testimony is to address Missouri Gas Energy (MGE or Company) witness F. Jay Cummings's allocation methodology relating to mains costs, to address MGE's request to increase its residential customer charge and to bring to the Commission's attention some of Public Counsel's concerns with MGE's rate design proposal. Public Counsel witness Barbara Meisenheimer will also be addressing some of Public Counsel's concerns regarding MGE's proposed rate design.

1 Q. How is your rebuttal testimony organized?

2 A. My rebuttal testimony is organized in the following manner. First, I will discuss  
3 the problems of using the zero-intercept method as witness Cummings did in his  
4 class cost of service study (COS) for allocating mains cost. Second, I will discuss  
5 MGE's proposed rate design, including an increase to the customer charge.

6 **MAINS COST ALLOCATION**

7 Q. Please discuss witness Cummings's methodology used in determining the  
8 allocation of mains cost.

9 A. According to page 24 of his direct testimony, witness Cummings employs a zero-  
10 intercept method in order to split the mains investment between customer and  
11 demand components. Basically the zero-intercept method uses regression  
12 analysis to fit a curve based on the cost associated with various sizes of  
13 equipment. The analysis is then extended as if the facility was of zero size, that  
14 is, the regression line has a zero-intercept. It can also be looked at as the portion  
15 of the main that gives the customers access, but does not provide any service.

16 Q. Why is the zero-intercept methodology inferior to Public Counsel's methodology?

17 A. The major problem with the zero-intercept methodology, as pointed out by  
18 George Sterzinger in his article, "The Customer Charge and Problems of Double  
19 Allocation of Costs," is that it divides the mains costs into two distinct groups,  
20 customer and demand. The portion that is related to the number of customers is  
21 related to the cost at the zero-intercept. All other costs are associated with the  
22 actual demands placed on the system by the various customer classes. When  
23 mains cost is divided into these two components, those customers that use small

1 amounts of natural gas are potentially being allocated excessive costs.<sup>1</sup> Sterzinger  
2 further states in his article that when the distribution system is split between a  
3 minimum usage portion and an above-minimum usage portion, and allocated on a  
4 customer/demand basis respectively, the low use residential customer ends up  
5 paying for more of the distribution system than is required to serve that customer.<sup>2</sup>  
6 Thus the residential, low use customer pays for a portion of the costs that are  
7 supposedly "customer" related, plus that portion of the costs that are demand  
8 related, by the summing of his individual demand with the overall demand of his  
9 class. Sterzinger argued then, that the way to alleviate this problem is to allocate  
10 costs in a consistent manner; that is to not split them into demand and customer  
11 components. The best way to accomplish that is to allocate mains cost via a  
12 demand allocator. Public Counsel only used a demand allocator in its direct  
13 testimony.

14 Q. On page 24, lines 1 – 6, witness Cummings states that as new customers are  
15 added to the system, a main has to be built simply to reach that customer,  
16 regardless if that customer uses any gas or not. Is that reason enough to divide  
17 mains costs into customer and demand components?

18 A. No. MGE does not simply extend a main to a new subdivision or any potential  
19 new customer unless those new premises are going to use natural gas. The main  
20 will be built in order to provide service to any new customer. The new customer  
21 will then have a given level of demand that will be added to the classes' total

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<sup>1</sup> "The Customer Charge and Problems of Double Allocation of Costs," by George Sterzinger, 108 PUBLIC UTILITIES FORTNIGHTLY pp. 30 – 32, July 2, 1981.

<sup>2</sup> Ibid

1 demand. Therefore to receive compensation for merely having a line available to  
2 the consumer does not make sense. Thus it is more appropriate to classify the  
3 costs of mains as demand-related only, instead of splitting them into customer-  
4 related costs and demand-related costs.

## 5 **RESIDENTIAL CUSTOMER CHARGE AND RATE DESIGN**

### 6 **□ Customer Charge**

7 Q. Currently, what is the residential customer charge?

8 A. Currently, the residential customer charge for a MGE consumer is \$10.05.

9 Q. What was Public Counsel's recommendation concerning the residential customer  
10 charge?

11 A. Public Counsel recommends that there is no change in the customer charge.

12 Q. What is MGE's recommendation concerning the residential customer charge?

13 A. MGE is recommending a customer charge of \$13.55. This is an increase of nearly  
14 35% in the customer charge.

15 Q. What is the argument for a customer charge?

16 A. The argument for a customer charge is that there are certain fixed costs that are  
17 present whether or not the customer uses any natural gas.

18 Q. What types of costs would be considered as fixed costs?

19 A. According to the NARUC Gas Distribution Rate Design Manual of June 1989,  
20 examples of those fixed costs would include services, meters, regulators, meter  
21 reading expense and certain administrative costs.

22 Q. What costs does MGE include in its customer charge?

1 A. MGE includes any costs that it considers related to the number of customers in its  
2 calculation of the customer charge. Some examples include, a return on mains, a  
3 return on miscellaneous intangible plant, and a return general plant. These items  
4 go far beyond the scope of items that should be included in a customer charge  
5 according to the NARUC manual.

6 Q. What does Public Counsel include in its customer charge?

7 A. Consistent with the NARUC manual Public Counsel includes a return on MGE's  
8 services, meters, meter installation, and regulators plus the associated expenses  
9 with those items, and the administrative and general expenses associated with  
10 customer accounts.

11 Q. Should customer charges be relatively higher or lower?

12 A. Customer charges should be set as low as possible in order to promote efficiency  
13 in the market.

14 Q. Please explain.

15 A. First, one of the Commission's functions is to try and replicate a competitive  
16 market. Competitive markets are not characterized by firms that collect a  
17 customer charge just for being in business. For instance, McDonald's does not  
18 collect a charge from the customer unless that customer purchases something.  
19 Wal-Mart does not have its people greeters collect an entrance fee from its  
20 customers as they walk in the door. In fact, a customer can go to Wal-Mart, look  
21 around for hours, not purchase anything, and never pay a dime.

22 Second, a higher customer charge necessarily means a lower per-unit price. This  
23 harms the low-use user. Further, the higher customer charge and lower per-unit

1 rate does not promote conservation. In today's market, of high natural gas prices,  
2 there should not be any incentives for consumers to purchase more natural gas  
3 than is necessary.

4 **□ Rate Design**

5 Q. Currently, what is the per-unit delivery charge?

6 A. The per-unit delivery charge is currently \$0.11423 per Ccf.

7 Q. What is MGE's proposal in this proceeding concerning the residential usage  
8 charge?

9 A. In this proceeding, MGE is proposing a radical shift in the manner it collects non-  
10 gas costs from its ratepayers. In the winter months, which MGE defines as  
11 November – April, MGE is proposing to collect all of its non-gas costs within the  
12 first 68 Ccfs. In other words, instead of a flat rate for each Ccf used by a  
13 customer, be it one or 1,000, MGE has calculated a substantially higher per Ccf  
14 rate for the first 68 Ccfs of usage, in this case \$0.32599 per Ccf based on MGE's  
15 filed case, and will charge nothing for usage that is greater than 68 Ccfs. This  
16 type of structure is an extreme example of a declining block rate.

17 Q. Does any other Local Distribution Company (LDC) in Missouri have this type of  
18 rate design.

19 A. Yes. Laclede Gas Company, in its last rate case, Case No. GR-2002-356,  
20 implemented this type of rate design based on a Stipulation and Agreement signed  
21 by the parties in that proceeding.

22 Q. What is Public Counsel's recommendation in this rate case?



1 A. Public Counsel is recommending that the Commission stay with the traditional  
2 method of establishing rates in this proceeding. For a further discussion of Public  
3 Counsel's recommendation against MGE's proposed rate design methodology,  
4 please see Public Counsel witness Barbara Meisenheimer's rebuttal testimony.

5 Q. Why is Public Counsel opposed to this new rate design methodology?

6 A. There are various reasons why Public Counsel is opposed to this methodology.

7 Q. What is one reason that Public Counsel has for being opposed to this  
8 methodology?

9 A. One reason, similar to my earlier discussion concerning the customer charge, is  
10 that regulation is supposed to act as a surrogate for competition. With  
11 competition, there are certain risks that all firms face. In the natural gas industry,  
12 one risk is weather. Rates are set on the basis of normal weather. Thus if it is  
13 colder than normal, more volumes are used by the consumers, and the LDC earns  
14 more money, all else equal. Conversely, if weather is warmer-than-normal, fewer  
15 volumes are used, and the LDC may not earn as much, all else equal.

16 MGE's weather rate design eliminates much of the weather risk. As witness  
17 Cummings points out in his direct testimony on page 31, average usage in the six  
18 months that it considers winter ranges from 48 Ccfs in November up to 176 Ccfs  
19 in January. In fact, only the month of November has average usage less than 68  
20 Ccfs. Furthermore, average usage is so high in the other five months, that even  
21 usage as much as 20% less than normal would still have average usage greater  
22 than 68 Ccfs. This means that any risk that MGE had due to weather has been  
23 virtually eliminated. That is not the role of regulation or this Commission. The

1 Commission should not guarantee the rate of return for any investor-owned utility  
2 (IOU). Instead it should offer the opportunity for the IOU to earn a normal rate of  
3 return. For a further discussion of MGE's proposal and how it affects the return  
4 on equity of the Company, please see Public Counsel witness Travis Allen's  
5 rebuttal testimony.

6 Q. What is another one of Public Counsel's criticisms of MGE's proposal?

7 A. During the winter months, this declining block rate is essentially a glorified  
8 customer charge. Since only substantially warmer than normal weather would  
9 cause average usage to be less than 68 Ccfs in any given month (and that would  
10 probably only happen in April), the customers will be basically charged a fixed  
11 dollar amount per month. Please see my earlier discussion against high customer  
12 charges.

13 Q. Doesn't MGE's rate design address the concern about price signals by turning the  
14 PGA rate into an increasing block rate so that the total per Ccf charge is the same  
15 no matter the usage?

16 A. Yes, MGE does split the PGA to keep the total Ccf rate the same. However, this  
17 leads to other problems. During normal, warmer-than-normal, and certain colder-  
18 than-normal weather conditions, the Company will collect all of its non-gas costs,  
19 however, it will under-collect its gas costs, all else equal. This happens because  
20 in order to keep the effect of this radical rate design transparent to the consumer,  
21 the PGA rate has to be lowered for the first 68 Ccfs. It is then raised for each Ccf  
22 used in excess of 68. However, as Ms. Meisenheimer shows in her rebuttal  
23 testimony, under warmer-than-normal and average use conditions, MGE cannot

1 collect enough in its PGA rate to pay for its gas costs under this type of rate  
2 design. The effect of this under-collection is than felt during the following year  
3 when the ACA has to be increased in order to make up the shortfall. Therefore,  
4 consumers are worse off under this rate design methodology than under the  
5 traditional, widely accepted methodology.

6 Q. Laclede has this same type of rate design, what has happened so far in its  
7 experiences?

8 A. We do not know. Laclede has just recently filed its first ACA case under its new  
9 rate design proposal. It will take time for a review to be conducted to determine  
10 the overall effects their experiment has on customer's bills.

11 Q. You mentioned experiment, why?

12 A. Because Laclede's plan, as agreed to in the Stipulation and Agreement in Case  
13 No. GR-2002-356, was proposed as an experiment. Before the Commission  
14 should agree to a similar design, the results of the first experiment need to be  
15 reviewed and analyzed. Without a proper analysis, a plan that may be proven to  
16 be extremely harmful to ratepayers may be implemented on more 500,000  
17 ratepayers due to a rush to judgment. A more balanced approach would be for the  
18 Commission to reject MGE's proposal and undertake a thorough review of  
19 Laclede's experiment to ensure that any radical changes to the traditional rate  
20 design methodology do not harm ratepayers unnecessarily simply in order to give  
21 the LDC a guaranteed rate of return.

22 Q. Are there any other points the Public Counsel would like to make?

1 A. Yes. In this proceeding, MGE has proposed to implement the radical rate design  
2 that was approved on an experimental basis for Laclede Gas Company. Further,  
3 MGE has also asked for a nearly 35% increase in the residential customer charge.  
4 These two proposals, if approved by the Commission would go a long way  
5 towards providing the Company a guaranteed rate of return. Considering MGE  
6 currently is operating with an ISRS (Infrastructure System Replacement

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