

Exhibit No.: \_\_\_\_\_

Issues: Rate Class Restructuring,  
Class Revenue Allocation,  
and Rate Design

Witness: Russell A. Feingold

Sponsoring Party: Missouri Gas Energy

Case No.: GR-2009-0355

Date Testimony Prepared: October 14, 2009

**MISSOURI PUBLIC SERVICE COMMISSION**

**MISSOURI GAS ENERGY**

**CASE NO. GR-2009-0355**

**SURREBUTTAL TESTIMONY OF**

**RUSSELL A. FEINGOLD**

**Jefferson City, Missouri**

**OCTOBER 14, 2009**

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**SURREBUTTAL TESTIMONY OF RUSSELL A. FEINGOLD**

**CASE NO. GR-2009-0355**

**OCTOBER 14, 2009**

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

2   A.   My name is Russell A. Feingold and my business address is 2525 Lindenwood Drive,  
3       Wexford, Pennsylvania 15090.

4  
5   **Q.   BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

6   A.   I am employed by Black & Veatch Corporation (“Black & Veatch”) as a Vice President and I  
7       lead the Rate & Regulatory Advisory Group of its Enterprise Management Solutions (“EMS”)  
8       Division.

9  
10   **Q.   HAVE YOU PREVIOUSLY SUBMITTED DIRECT TESTIMONY BEFORE THE**  
11       **MISSOURI PUBLIC SERVICE COMMISSION (“COMMISSION”) IN THIS**  
12       **PROCEEDING?**

13   A.   Yes. I filed direct testimony in this proceeding on April 2, 2009 on behalf of Missouri Gas  
14       Energy (“MGE” or the “Company”) that addressed the proposed restructuring of the Company’s  
15       current rate classes, its class revenue allocation, and its rate design proposals. I also filed  
16       rebuttal testimony in this proceeding on September 25, 2009 that addressed the appropriate  
17       class revenue allocation and rate design for the Company.

18  
19       **1. PURPOSE OF TESTIMONY**

1 **Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?**

2 A. The purpose of my surrebuttal testimony is to respond to the positions of the Missouri Public  
3 Service Commission Staff (the “Staff”) and the Office of Public Counsel (“OPC”) related to  
4 the rate design issues in this proceeding. I will specifically respond to the rebuttal testimony  
5 of the Staff witness Anne E. Ross and OPC witnesses Barbara A. Meisenheimer and Ryan  
6 Kind.

7  
8 **Q. CAN YOU BRIEFLY SUMMARIZE YOUR FINDINGS AND**  
9 **RECOMMENDATIONS RELATED TO THESE PARTIES’ PRESENTATIONS?**

10 A. Yes. I will discuss certain basic assumptions related to utility ratemaking that the OPC  
11 witnesses either failed to understand, or chose to ignore, causing them to reach erroneous  
12 conclusions. In addition, I will demonstrate that Ms. Meisenheimer provides a number of  
13 flawed arguments related to the cost to serve the Company’s Residential Service (“RS”) and  
14 Small General Service (“SGS”) customers. I will also identify certain errors, faulty  
15 assumptions, and misleading conclusions related to the following points made by Ms.  
16 Meisenheimer:

- 17 • “The SFV rate design is not consistent with collecting more from those that use more  
18 during peak periods because it collects a uniform level of costs per customer per  
19 month. (Page 13, lines 3-5, of Ms. Meisenheimer’s rebuttal testimony)
- 20 • “(E)very party has recognized that a portion of costs vary with average class demand  
21 which is comprised of the demand of some customers that use more and some that  
22 use less.” (Page 13, line 19 through Page 14, line 1 of Ms. Meisenheimer’s rebuttal  
23 testimony)

- 1           • Increases in class peak demand increase the allocated cost of mains to that class.  
2           (Page 14, lines 5-8 of Ms. Meisenheimer's rebuttal testimony)
- 3           • "To the extent that a 2" main can be used to serve multiple customers, 3 for example,  
4           the combined cost to serve them would not be 3 times the cost of a single 2" main,  
5           instead the main becomes a jointly used facility with associated costs that must be  
6           apportioned to customers based on some reasonable method of allocation such as  
7           proportional use of the 2" main." (Page 14, lines 13-18 of Ms. Meisenheimer's  
8           rebuttal testimony).
- 9           • The SFV rate collected more revenue over the period from April 2007 through April  
10          2009 than a rate with a volumetric delivery charge. (Page 15, lines 3-10 of Ms.  
11          Meisenheimer's rebuttal testimony)
- 12          • "By presenting the comparisons with gas cost included the percentage changes  
13          illustrated in his schedules appear smaller in magnitude than the actual increase in  
14          the rates at issue in this case." (Page 15, lines 13-19 of Ms. Meisenheimer's rebuttal  
15          testimony)
- 16          • "(L)ow use customers pay substantially more whether or not they want or need the  
17          same level of service as high use customers." (Page 17, lines 9-10 of Ms.  
18          Meisenheimer's rebuttal testimony).

19          With respect to Mr. Kind's rebuttal testimony, I will discuss the problems with his economic  
20          analysis of SFV rates related to price signals, economic efficiency, and the level of social  
21          welfare. In addition, I will demonstrate that Mr. Kind's conclusions related to the Missouri  
22          Energy Task Force Action Plan and the Aquila Fixed Price experiment provide no basis for  
23          the Commission to eliminate the existing SFV rate design for the Company's RS customers,

1 or to reject the proposed SFV rate design for its SGS customers. I will also address the  
2 suggestion of the OPC to implement a lost margin revenue recovery mechanism. Finally, I  
3 will comment on Ms. Ross' apparent change in position between her direct and rebuttal  
4 testimony to accept the Company's proposal to eliminate the seasonal rate differential for its  
5 Large Volume Service ("LVS") rate class and her recommendation to have the Commission  
6 initiate a separate rate design case for the Company.

## 8 **2. SFV RATE DESIGN FOR THE RS AND SFV RATE CLASSES**

9 **Q. IS THERE REASON TO BELIEVE THAT THE OPC WITNESSES FAILED TO**  
10 **UNDERSTAND, OR CHOSE TO IGNORE, THE COMPONENTS OF THE SFV**  
11 **RATE DESIGN?**

12 A. Yes. Both OPC witnesses make erroneous statements about collecting more from customers  
13 who use more. Ms. Meisenheimer contends at page 13 of her rebuttal testimony that "the  
14 SFV rate design is not consistent with collecting more from those that use more during peak  
15 periods because it collects a uniform level of costs per customer per month." Mr. Kind  
16 makes a similar point when he states at page 5 of his rebuttal testimony that, "SFV rate  
17 design is contrary to economic efficiency because it will diminish the efficiency of utility  
18 pricing by removing the price signal associated with higher levels of usage." Contrary to  
19 these statements, under an SFV rate design, only the fixed cost component of the rate  
20 structure does not change with use. The variable cost component of the rate structure  
21 consists of the Company's commodity charge that comprises over 70% of the typical  
22 residential bill. This component of the SFV rate design causes bills to increase as use  
23 increases. Therefore, it is simply incorrect to conclude that more gas use does not collect

1 more revenue from a customer under an SFV rate design. Customer bills increase with use  
2 based on the variable cost component - the Company's commodity cost of gas. This type of  
3 rate design which recovers fixed costs through fixed charges and variable costs through  
4 variable charges has exactly the efficiency properties required by economic theory since  
5 fixed costs have no impact on marginal costs.

6  
7 **Q. DOES THE CONTENTION MADE BY THESE OPC WITNESSES THAT THERE**  
8 **SHOULD BE A VOLUMETRIC COMPONENT OF DELIVERY SERVICE COSTS**  
9 **RELY ON A FALSE ASSUMPTION?**

10 A. Yes. The OPC witnesses must assume that delivery service costs increase with use,  
11 otherwise there is no justification on a cost of service basis for the inclusion of volumetric  
12 charges in a utility's delivery service rate. For a number of reasons, though, it is easily  
13 demonstrated by the facts that this assumption is false. First, if the volume of gas consumed  
14 by customers impacted a gas utility's distribution service costs, it would be necessary to  
15 make weather normalizing adjustments to the cost of delivery service in rate cases just as  
16 utilities do for the gas cost component – which is a true variable cost. Regulatory  
17 commissions do not make such adjustments simply because it is well recognized that  
18 delivery service costs are fixed in nature. Not only are such distribution costs fixed in nature,  
19 they are the same for all RS customers served by the Company based on the minimum size of  
20 main installed. Second, a gas utility builds its system to provide safe and reliable service to  
21 customers on the expected coldest day for the system. Once the delivery facilities are in  
22 place to satisfy the system reliability considerations, changes in the amount of gas delivered  
23 to a customer have no impact on the cost of delivery service. Very simply, if a customer

1 uses one cubic foot of gas or 13.2 Mcf per day (the design day capacity per customer for a  
2 two inch main on the Company's gas system), there is no difference in the cost of delivery  
3 service, on average, within the RS or SGS rate classes. The evidence based on the accepted  
4 regulatory policy of not adjusting a utility's distribution costs for normal weather and the  
5 design and use of the utility's delivery system demonstrate that gas volumes have no impact  
6 on cost.

7  
8 **Q. IF VOLUME HAS NO IMPACT ON DELIVERY SERVICE COSTS, IS THERE ANY**  
9 **RATIONALE FOR INCLUDING A VOLUMETRIC CHARGE TO RECOVER THE**  
10 **COSTS IN COST BASED RATES?**

11 A. No. If rates are to be cost-based, inclusion of a volumetric component in the utility's rate  
12 structure will cause rates to diverge from costs, create undue discrimination within the rate  
13 class, and provide an inappropriate price signal to customers. I have discussed these points  
14 in detail in my direct and rebuttal testimony and will not repeat them here.

15  
16 **Q. DOES THE FACT THAT A CLASS COST OF SERVICE STUDY ALLOCATES**  
17 **SOME PORTION OF DELIVERY SERVICE COSTS ON CLASS DEMAND IMPLY**  
18 **THAT A VOLUMETRIC COMPONENT OF RATES IS NEEDED TO REFLECT**  
19 **COST, AS CLAIMED BY MS. MEISENHEIMER AT PAGES 13-14 OF HER**  
20 **REBUTTAL TESTIMONY?**

21 A. No. Ms. Meisenheimer misconstrues the use of class demand as a basis for cost allocation.  
22 To understand this issue, it is important to understand the process of determining the cost of  
23 service by class. The establishment of rate classes relies on two fundamental elements – the



1 relative homogeneity with respect to load characteristics and the methods of taking gas  
2 service. For both RS and SGS customers, the load characteristics of each class are similar.  
3 The method of taking gas service also is similar since each customer requires a meter,  
4 regulator, service line, and distribution main. Given the size of the customers, the minimum  
5 size of main installed by the Company will serve the customers at the system average density  
6 and operating pressure. The customers all have similar peak load characteristics,  
7 coincidence factors, and load factors. The system serves other customers as well, and the  
8 combination of customers uses other sizes of pipe than the minimum size because larger pipe  
9 results in lower costs (i.e., economies of scale) for all customers. For both RS and SGS  
10 customers, it is necessary to allocate the demand costs to the class in a manner that will  
11 permit the class to benefit from a share of these scale economies available on the system.  
12 The purpose of allocating common costs among customers on the system is twofold: (1) to  
13 assure that rates are “subsidy free,” and (2) to assure that customers rates reflect the  
14 embedded costs of the utility’s gas system.

15  
16 **Q. IF THE COMPANY USED ONLY TWO INCH MAINS, WOULD THE COSTS BE**  
17 **HIGHER FOR ANY PARTICULAR RATE CLASS?**

18 A. Yes. If the system was built to serve only the RS class on a stand alone basis, costs would be  
19 higher than the actual cost of the system because there would be no scale economies. The  
20 purpose of the class cost of service study is to develop a method for sharing the lower overall  
21 common costs among the utility’s various rate classes so that each class benefits from the  
22 common costs that form the basis for the revenue requirement. In this case, the use of class  
23 demand represents the design day requirements that determine the investment in the utility’s

1 gas system and are used to allocate a portion of the system costs. Simply, using a demand  
2 allocator is a method for sharing the benefits of the common costs of the system in such a  
3 way that each class benefits from the scale economies created by serving all classes of  
4 customers through a common or joint use distribution system.

5  
6 **Q. MS. MEISENHEIMER ARGUES THAT NOT ALL SGS CUSTOMERS ARE**  
7 **SERVED FROM A DEDICATED 2 INCH MAIN, BUT SHARE THE MAIN WITH**  
8 **OTHER CUSTOMERS AND THAT A PROPORTIONAL ALLOCATION OF SUCH**  
9 **COMMON COSTS IS REQUIRED. DO YOU AGREE?**

10 A. Yes. In fact, I have not argued that customers are served by the Company from a dedicated  
11 line. My direct testimony assumes that 59 customers are served per mile of 2 inch main  
12 based on the Company's system average density. This is equivalent to saying that the  
13 average customer requires about 90 feet of main. As I discussed above, an allocation of  
14 "common costs" is required to share the benefits of scale economies resulting from various  
15 customer classes being served by the Company's gas system. In fact, it is also true that some  
16 customers in every class may not be served from the smallest pipe. That is, some RS and  
17 SGS customers may actually be served from 4 inch pipe. The important point in this  
18 analysis is that it actually costs the same to serve customers within the RS rate class, and  
19 within the SGS rate class, and each customer receives a share of the economies of scale  
20 benefits through a cost allocation based on demand. And there is no reason to track the  
21 actual location of individual customers as to the size of main that actually serves the  
22 customer because that decision is based on the least cost option for the system based on the  
23 Company's available facilities and capacity. The cost allocation process creates a class

1 average that reflects the combined cost for serving all of the customers in the class.

2  
3 **Q. DOES THE COST TO SERVE THE COMPANY'S RS AND SGS CUSTOMERS**  
4 **DIFFER BASED ON THE SIZE OF THE CUSTOMER WITHIN THE CLASS, AS**  
5 **ASSUMED BY THE OPC WITNESSES?**

6 A. No. As I demonstrated in my direct testimony and reiterated in my rebuttal testimony, since  
7 the minimum size of main will serve virtually all RS and SGS customers on the Company's  
8 gas system, it is reasonable to conclude that it costs the same, on average, to serve all  
9 customers in each of these classes regardless of demand.

10  
11 **Q: YOU HAVE NOTED ABOVE THAT RESIDENTIAL CUSTOMERS ARE THE**  
12 **SAME "ON AVERAGE." WHAT DOES THAT CHARACTERIZATION MEAN?**

13 A. The reference to "on average" recognizes that even for a rate class that exhibits  
14 homogeneous load characteristics, the cost of assets can vary by the date of installation, by  
15 the type and location of the main, and by the length of the service line. Service line costs can  
16 vary depending on whether the customer is on the same side of the street as the main (a  
17 short-side service) or on the opposite side (a long-side service). However, it is not practical  
18 to determine cost for each customer based on vintage or which side of the street the customer  
19 is located. Hence, the use of average cost eliminates these types of unique issues and results  
20 in all residential customers having an equivalent delivery service cost equal to the average  
21 delivery service cost for the class.

22  
23 **Q. DOES MS. MEISENHEIMER COMPARE THE RELATIVE REVENUE FROM THE**

1           **SFV RATE DESIGN AND A VOLUMETRIC RATE DESIGN IN HER TESTIMONY?**

2    A.     Yes. Ms. Meisenheimer makes this comparison at page 15 of her rebuttal testimony.

3  
4    **Q.     DO THE RESULTS OF HER RATE COMPARISON HAVE A LOGICAL**  
5           **EXPLANATION?**

6    A.     Yes. The results from this two-year period reflect the impact of a volumetric delivery  
7           service rate on the Company's opportunity to recover its approved revenue requirement.  
8           During this period, the volumetric rates reflected lower revenue due to warmer than normal  
9           weather in the Company's Joplin region and almost normal weather in its Kansas City  
10          region. As a result, the decreased revenues of \$2.9 million under volumetric rates would  
11          have created a revenue requirement shortfall for the Company. This outcome demonstrates  
12          that a volumetric rate design would not have provided the Company with a reasonable  
13          opportunity to recover its revenue requirement under weather conditions that did not reflect  
14          the basis upon which its rates were designed

15  
16   **Q.     AT PAGE 15 OF HER REBUTTAL TESTIMONY, MS. MEISENHEIMER HAS**  
17           **CRITICIZED THE COMPANY'S BILL COMPARISONS BECAUSE THEY**  
18           **INCLUDE ITS COST OF GAS. IS THIS CRITICISM VALID?**

19   A.     No. It is entirely appropriate to discuss customer bill impacts based on the total bill under the  
20          rates as proposed by the Company. As I discussed above, the SFV rate design consists of  
21          both a fixed and a variable component. The variable component reflects the Company's gas  
22          costs. When comparing the impact on customer bills of new rates, the gas cost component is  
23          a necessary component to reflect the actual level of the bill and the resultant impact on the

customer. To present the percentage increase without gas costs removes about 70% of the typical customer's bill amount and greatly overstates the actual percentage impact on customers.

**Q. AT PAGE 17 OF HER REBUTTAL TESTIMONY, MS. MEISENHEIMER CRITICIZES SFV RATES BECAUSE THE “LOW USE CUSTOMERS PAY SUBSTANTIALLY MORE WHETHER OR NOT THEY WANT OR NEED THE SAME LEVEL OF SERVICE AS HIGH USE CUSTOMERS.” IS THIS A VALID CRITICISM?**

**A.** No. The only service option for the Company's RS customers is firm delivery service. Under this condition, the Company incurs the investment to install the minimum size of pipe regardless of the amount of delivery service taken through the pipe. Thus, from a cost perspective, the act of taking delivery service causes the Company to incur the same delivery service cost as if the customer was going to be a larger RS customer. The Company's gas delivery system is not based on the amount of gas the RS customer actually uses because the 2 inch main will serve the maximum gas load in that rate class. Customers in the RS rate class cannot pick and choose a level of reliability since the cost of offering a lower quality of service (i.e., interruptible service) would be far greater than the payment under the SFV rate to install the required automated control equipment to provide such service. Thus, the argument that customers may not want the same level of service is meaningless since all customers are treated equally in the Company's RS and SGS rate classes.

**Q. MR. FEINGOLD, WHILE ON THE TOPIC OF LOW USE CUSTOMERS AND THE**

**IMPACTS OF SFV RATE DESIGN, HAVE YOU HAD AN OPPORTUNITY TO  
REVIEW THE COMMENTS PROVIDED BY CERTAIN CUSTOMERS ON THE  
COMPANY'S RATE DESIGN DURING ITS PUBLIC HEARINGS IN THIS  
PROCEEDING?**

A. Yes, I have. It is my understanding that during the Company's five public hearings conducted within its service area that eleven (11) customers addressed the fixed charge component of the Company currently-effective SFV rate design. Most of these customers are lower use customers, although some had higher than average gas usage in certain years. Surrebuttal Schedule RAF-8HC presents the actual monthly gas usage and billing data for each of these customers from April 2007 to the present.

**Q. DOES THIS INFORMATION CHANGE THE OPINION PRESENTED IN YOUR  
DIRECT TESTIMONY THAT THE DESIRED OBJECTIVES ARE BEING  
ACHIEVED UNDER THIS RATE DESIGN APPROACH?**

A. No. First, it is important to place these comments in their proper context – which is the total number of customers served under the Company's SFV rate design. The Company serves approximately 438,000 customers under its RS rate class, yet only 11 customers expressed any concerns with the Company's current rate design. Next, for the customers presented in Surrebuttal Schedule RAF-8 that had higher than average monthly gas usage, they were better off under the Company's current SFV rate design compared to billings under the Company's prior volumetric rate design. Finally, the monthly and annual change in bills for these customers resulting from the Company's proposed rate increase in this proceeding will be the same as for all other RS customers. This result was previously shown on pages 1 and

1 2 of Schedule RAF-7.

2  
3 **Q. DOES MR. KIND ACKNOWLEDGE THAT THE COMPANY CAN “EXPERIENCE**  
4 **ADVERSE IMPACTS ON ITS EARNINGS IN BETWEEN RATE CASES DUE TO**  
5 **USAGE REDUCTIONS FROM ITS ENERGY EFFICIENCY PROGRAMS”?**

6 A. Yes. Mr. Kind acknowledges this point at page 5 of his rebuttal testimony. Nevertheless,  
7 based on the remainder of his rebuttal testimony, he is unwilling to provide the Company  
8 with a reasonable opportunity to earn its allowed rate of return with the exception of a  
9 ratemaking mechanism that is very limited in its scope and impact, and tied directly to the  
10 verified reduction in gas usage resulting from the Company’s own energy efficiency and  
11 conservation programs.

12  
13 **Q. IS HIS VIEW CONSISTENT WITH FEDERAL LEGISLATIVE REQUIREMENTS?**

14 A. No. Both the Energy Independence and Security Act of 2007 and the American Recovery  
15 and Reinvestment Act of 2009 provide for more comprehensive ratemaking tools to address  
16 the issue of a providing a utility with a reasonable opportunity to earn its allowed rate of  
17 return.

18  
19 **Q: HOW DOES THE ENERGY INDEPENDENCE AND SECURITY ACT OF 2007**  
20 **ADDRESS REVENUE DECOUPLING AND SFV RATE DESIGN IN**  
21 **CONJUNCTION WITH THE ACT’S DIRECTIVES ON UTILITY ENERGY**  
22 **EFFICIENCY PROGRAMS?**

1 A. Section 532(b) (6) (A) of the Act states that “the rates allowed to be charged by a natural gas  
2 utility shall align utility incentives with the deployment of cost-effective energy efficiency.”  
3 Further, from a policy perspective, the Act directs each state regulatory authority to consider  
4 “separating fixed-cost revenue recovery from the volume of transportation or sales service  
5 provided to the customer.” Clearly, SFV rate design and revenue decoupling mechanisms are  
6 two ratemaking approaches that do achieve this policy objective. Both options require a  
7 more comprehensive approach than recommended by Mr. Kind. In addition, as I will  
8 demonstrate below, the SFV rate is more economically efficient and is preferred over a  
9 revenue decoupling mechanism.

10  
11 **Q: DOES THE AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009**  
12 **ADDRESS THE CONCEPT OF REVENUE DECOUPLING WITHIN THE**  
13 **CONTEXT OF THE ENERGY EFFICIENCY INITIATIVES DELINEATED IN THE**  
14 **ACT?**

15 A. Yes. The Act specifically states that the applicable State regulatory authority will seek to  
16 implement a general policy that ensures that utility financial incentives are aligned with  
17 helping their customers use energy more efficiently.<sup>1</sup> This alignment can be achieved by a  
18 utility and its stakeholders through the implementation of SFV rate design. These legislative  
19 policies are consistent with providing the Company a reasonable opportunity to earn its  
20 allowed rate of return - regardless of the source of the decline in gas usage.

21  
22 **Q. WHAT ARE THE SOURCES THAT CONTRIBUTE TO DECLINING AVERAGE**



1           **USE OTHER THAN THE COMPANY'S ENERGY EFFICIENCY AND**  
2           **CONSERVATION PROGRAMS?**

3    A.    Multiple sources and programs are available that impact customers beyond the Company's  
4           own programs. For example, there are programs that provide Federal tax credits for energy  
5           efficiency investments such as those related to the thermal envelope. Often there are grants  
6           to non-profit organizations to provide insulation for low income consumers. There are also  
7           appliance efficiency standards established by Federal legislation that cause declining use per  
8           customer. Electric utilities offer energy conservation programs that reduce gas consumption.  
9           These programs include those targeted at the customers' thermal envelopes in their homes.  
10          Because there are multiple sources of energy efficiency opportunities, the impact of the  
11          Company's own programs on use per customer does not begin to provide a comprehensive  
12          picture of the adverse impacts on the ability of the Company to earn its allowed rate of  
13          return.

14  
15   **Q.    DOES MR. KIND CONCLUDE THAT SFV RATES WORK AGAINST ENERGY**  
16   **EFFICIENCY?**

17   A.    Yes. Beginning on page 5 of his rebuttal testimony, Mr. Kind makes a number of arguments  
18          related to energy and economic efficiency. His arguments, however, are based on incorrect  
19          economic analysis. It is the SFV rate that is consistent with both economic efficiency and  
20          the promotion of optimal energy conservation.

21  
22   **Q.    PLEASE EXPLAIN HOW THE SFV RATE SUPPORTS THE ENERGY POLICY**

---

<sup>1</sup> American Recovery and Reinvestment Act of 2009, Section 410 (a) (1).

1       **RELATED TO ACHIEVING EFFICIENT LEVELS OF CONSERVATION AND**  
2       **EFFICIENCY.**

3       A.     From an economic perspective, both conservation and efficiency require an appropriate price  
4             signal based on the volumetric component of the SFV rate because that represents the  
5             marginal price for the consumer. The key to sending better price signals is to set rates at the  
6             utility's short run marginal cost. For the Company, the marginal delivery cost of an increase  
7             in gas use from its existing customers is zero because of the relatively low customer growth  
8             and declining use per customer. The declining use experienced over the last two decades  
9             has made available capacity in the Company's gas distribution system so that existing  
10            customers could add new loads without requiring new distribution investment. For new  
11            customers that require delivery system expansion, those costs are customer related and  
12            should be paid for only by those customers. The SFV rate provides the appropriate price  
13            signal for new customers related to the investment in delivery service. The right volumetric  
14            price signal to customers must be based only on the variable component of rates (in this case,  
15            the commodity cost of gas) since this represents the additional cost the Company incurs to  
16            serve the new load of an existing or new customer. In my opinion, volumetric rate design for  
17            delivery service is unreasonable because it does a poor job of aligning the Company's rate  
18            revenue with the costs that it incurs to provide gas delivery service. Under Mr. Kind's  
19            proposal to include a volumetric delivery rate component, there would be a poor alignment  
20            of rates and costs. This poor alignment caused by the OPC's rate design proposal fails to  
21            provide the Company with a reasonable opportunity to recover its costs, including a return  
22            of, and on, the capital that has been invested in the property, plant and equipment that is used  
23            and useful in providing natural gas distribution service to customers.

1  
2 **Q. WHAT ARE THE IMPLICATIONS FOR CUSTOMERS OF USING VOLUMETRIC**  
3 **DELIVERY SERVICE RATES AS PROPOSED BY OPC?**

4 A. Including fixed costs in a utility's volumetric delivery service rates, as recommended by Mr.  
5 Kind, would effectively force gas commodity prices above marginal cost. This pricing  
6 approach would not transmit proper price signals to customers, but, instead, would  
7 encourage excess and wasteful expenditures on energy efficiency investment. In addition,  
8 the volumetric rate design tends to swing monthly gas bills up or down without regard to the  
9 fixed nature of the costs that are being incurred to provide gas delivery service. Thus, a  
10 volumetric delivery service rate falsely indicates that a customer who reduces gas  
11 consumption will somehow produce a corresponding effect on the Company's costs of  
12 providing delivery service. As I have discussed above, changes in use by customers do not  
13 change the level of delivery service costs, either now or in the foreseeable future. Delivery  
14 service costs are fixed costs, and in the analysis of marginal costs, fixed costs do not impact  
15 the calculation of marginal costs.

16  
17 **Q. DOES THE USE OF SFV RATES REMOVE THE PRICE SIGNAL ASSOCIATED**  
18 **WITH HIGHER GAS USE, AS CLAIMED BY MR. KIND AT PAGE 5 OF HIS**  
19 **REBUTTAL TESTIMONY?**

20 A. No. As I have discussed above, the SFV rate includes a variable rate component that causes  
21 bills to increase with increasing gas use based on changes in the Company's commodity cost  
22 of gas. This is the important price signal for customers because it reflects the marginal cost  
23 of gas service to customers. Contrary to Mr. Kind's conclusion, fixed distribution costs

1 cannot be, and are not, changed with customers' changes in gas use. Further, his concern for  
2 customers based on their level of use is also misplaced. I have already demonstrated that the  
3 delivery cost is the same for customers within the RS rate class, and the same for customers  
4 within the SGS rate class, regardless of the volume of gas consumed. There is no impact on  
5 the Company's delivery system costs from the volume of gas consumed by small customers  
6 (or even the largest customers in the RS and SGS rate classes). To reflect otherwise provides  
7 a false price signal to customers.

8  
9 **Q. AT PAGE 6 OF HIS REBUTTAL TESTIMONY, MR. KIND DISCUSSES THE**  
10 **SOCIAL WELFARE FROM MARGINAL COST PRICING AND STATES THAT**  
11 **PRICES MUST BE BASED ON LONG RUN MARGINAL COSTS. IS THAT**  
12 **CORRECT?**

13 A. No. Economic efficiency results from setting prices equal to short run marginal costs - not  
14 long run marginal costs. Efficiency properties of the competitive model depend on this  
15 pricing prescription. Consider the unambiguous statement of Alfred Kahn regarding efficient  
16 pricing:

17 "..., it is short-run marginal cost to which price should at any given time—hence always—be  
18 equated, because it is short-run marginal that reflects the social opportunity cost of providing  
19 the additional unit that buyers are at any given time trying to decide whether to buy.”<sup>2</sup>

20 The principle of marginal cost pricing provides the prescription for economically efficient  
21 prices. In this case, the adoption of SFV rates for the Company's RS and SGS customers is a  
22 requisite for economic efficiency. As I demonstrated above, SFV rate design is not only

1 efficient; it avoids undue discrimination by charging each customer the average cost incurred  
2 to serve that customer. In terms of the social welfare conclusions, it is true that both  
3 producers and consumers make better decisions when prices are based on short run marginal  
4 costs. In any event, the assumptions related to the concept of social welfare require much  
5 more than the marginal cost pricing in utility rates and do not warrant a theoretical  
6 discussion here. As a result, it is better to focus attention on the efficiency provided by SFV  
7 rates that reflect the appropriate short run marginal cost- the cost of the gas commodity. It is  
8 the SFV rate that provides for an increased level of social welfare - not a rate that recovers  
9 fixed delivery service costs in a volumetric rate.

10  
11 **Q. IS MR. KIND CORRECT IN CONCLUDING THAT SFV RATES ARE**  
12 **INCONSISTENT WITH THE MISSOURI ENERGY TASK FORCE ACTION PLAN**  
13 **(THE “PLAN”)?**

14 A. No. The Plan states that, “The PSC should consider rate designs that reward customers for  
15 conservation efforts.” As I have described previously, the SFV rate does reward customers  
16 for conservation based on the variable component of the rate equal to the Company’s cost of  
17 gas. This reward is consistent with the underlying economics of decisions related to  
18 conservation. That is, the customer’s bill changes by the amount that the Company’s cost  
19 changes. Any other price signal would create confusion for customers who make their  
20 decisions based on current rates. This confusion results from the fact that using a volumetric  
21 component for delivery service, as recommended by the OPC, would require the volumetric  
22 rate component of the bill to be increased for all customers in a subsequent rate case just to

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2 The Economics of Regulation, Alfred E. Kahn, The MIT Press, 1995 (Sixth Printing), Vol. I, page 71

1 recover the same level of fixed delivery service costs for the utility. This has several  
2 negative effects. First, all customers including those who use gas efficiently will pay higher  
3 delivery charges as the result of conservation under volumetric rates. This type of price  
4 distortion causes intraclass subsidies from customers who implemented efficiency measures  
5 prior to the time new rates were established to customers who implement efficiency  
6 measures during a subsequent period. Second, changing volumetric delivery rates will  
7 periodically create uncertainty about the level of benefits customers will receive from  
8 conservation. This risk also would tend to reduce the investment in conservation relative to  
9 that expected under SFV rates.

10  
11 **Q. IS THERE ANY REASON TO BELIEVE THAT THE COMPANY'S SFV RATE**  
12 **DESIGN HAS ANY SIMILARITY TO THE AQUILA FIXED BILL PLAN THAT**  
13 **WOULD CAUSE ONE TO BELIEVE THAT THE COMMISSION IS "STEPPING**  
14 **BACK" FROM PROPER UTILITY PRICING AS CLAIMED BY MR. KIND?**

15 A. No. There is no comparison between a fixed bill program and the Company's SFV rate  
16 design. Under the Aquila fixed bill experiment, both the delivery and the commodity  
17 portions of the bill were fixed. Under SFV rates, only the delivery component of the bill is  
18 fixed. The commodity component of the bill varies up or down with each increase or  
19 decrease in the amount of gas consumed. I believe the Commission understood this  
20 difference in recognizing that there were no cost consequences to customers for using  
21 additional electricity. The fixed bill approach essentially would have provided a zero  
22 marginal price for each additional kWh of electricity. In contrast, the Company's SFV rate  
23 design provides a significant marginal price for additional consumption equal to the cost of

1 the gas commodity. There is no reasonable way to conclude that this price signal encourages  
2 wasteful use or promotes increases in the use of natural gas. The volumetric portion of the  
3 SFV rate provides the appropriate price signal and cannot unnecessarily create increased  
4 load for the Company's RS and SGS customers. If consumers make the decision to increase  
5 or decrease their gas use under the Company's SFV rate design, they will have done so based  
6 on the appropriate marginal cost of gas. There is no unnecessary increase in gas load under  
7 SFV rates.

8  
9 **Q. DOES MR. KIND SUGGEST A REMEDY FOR THE LOST REVENUE PROBLEM**  
10 **CREATED BY HIS RECOMMENDATION OF A VOLUMETRIC RATE DESIGN?**

11 A. Yes. Having re-created the ongoing problem that volumetric recovery of fixed costs causes  
12 for a gas utility and acknowledging that volumetric rates do not provide a reasonable  
13 opportunity to recover fixed costs, Mr. Kind suggests a partial solution. The partial solution  
14 he suggests as a possibility is the use of a ratemaking mechanism he characterizes as a Lost  
15 Margin Revenue Recovery Mechanism ("LMRRM") to provide for limited recovery of lost  
16 margin resulting from his proposed volumetric rate design proposal. First, the LMRRM  
17 cannot fairly be considered to be an integral part of the OPC's preferred ratemaking  
18 alternative to the Company's SFV rate design proposal inasmuch as Mr. Kind chose to first  
19 introduce this new concept in his rebuttal testimony and not in his direct testimony. In  
20 addition, I believe that Mr. Kind's suggestion falls far short of constituting a viable proposal  
21 since he has provided no detail for the Commission to make an informed decision on how the  
22 concept would work, its impact on the Company and its customers, and whether it could  
23 address the business challenges that gave rise to the Commission approving an SFV rate

1 design. It is simply too vague a concept to be seriously considered.

2  
3 **Q. DO YOU HAVE ANY CONCERNS WITH THE OPC'S CONCEPT?**

4 A, Yes, I do. An LMRRM will create additional costs for detailed program evaluation,  
5 potential regulatory costs, and ignores the effects on volume associated with other sources of  
6 conservation and efficiency programs beyond those offered by the Company to its  
7 customers. Without being able to accommodate the impact of other non-Company programs,  
8 the LMRRM is very narrow in its scope and, as a result, will not eliminate the financial  
9 disincentives the Company has to promote energy efficiency and conservation initiatives.  
10 Furthermore, it will not provide the Company with a reasonable opportunity to earn its  
11 allowed rate of return. Since an SFV rate design is a direct solution to the margin under-  
12 recovery problem caused by volumetric rates, and does so without additional costs, SFV  
13 rates is the preferred ratemaking solution.

14  
15 **Q. PLEASE EXPLAIN WHY AN SFV RATE DESIGN IS THE BEST RATEMAKING**  
16 **OPTION FOR THE COMPANY'S RS AND SGS CUSTOMERS.**

17 A. SFV rates represent the best available option for a number of reasons, including:

- 18 • An SFV rate design is a more economically efficient rate design by recovering fixed  
19 costs in fixed charges and appropriately reflecting short run marginal cost in the  
20 commodity charge.
- 21 • SFV rates eliminate intra-class subsidies by setting rates to match the average cost of  
22 service for each customer in a rate class. Where rates track costs, undue  
23 discrimination is avoided.



- SFV rates provide the opportunity to recover the Company's total revenue requirement without the use of a deferral mechanism.
- SFV rates provide customer bill stability.
- SFV rates avoid issues related to tracker mechanisms such as proposed by Mr. Kind.
- SFV rates avoid the administrative burden on all parties associated with more complex alternatives.
- SFV rates provide no incentive for sales growth or disincentive for conservation and efficiency.
- SFV rates represent the least cost mitigation alternative for revenue instability.

For all these reasons, the Commission should adopt the proposed SFV rate for the Company's SGS rate class and continue the use of an SFV rate design for its RS rate class.

### **3. RATE DESIGN FOR THE LVS RATE CLASS**

**Q. WHY DID YOU CHARACTERIZE MS. ROSS AS HAVING AN APPARENT CHANGE IN POSITION BETWEEN HER DIRECT AND REBUTTAL TESTIMONY TO ACCEPT THE COMPANY'S PROPOSAL TO ELIMINATE THE SEASONAL RATE DIFFERENTIAL FOR ITS LARGE VOLUME SERVICE RATE CLASS?**

A. Very simply, at page 14 of the Staff Report on Class Cost of Service and Rate Design, it was stated that, "Staff believes it is appropriate to eliminate the seasonal differential in MGE's non-gas rates" (Staff Expert – Anne E. Ross). Presumably, this finding was based on the Company's proposal which was explained in my direct testimony and an assessment of that proposal by Ms. Ross on behalf of Staff. Ms. Ross reiterated this position at page 18 of her

1 rebuttal testimony, where she stated that, “In my direct testimony, I concurred with Company  
2 witness Russell A. Feingold that the seasonal differential be eliminated. I believe that his  
3 arguments in favor of this proposal are sound.” Yet, in the next sentence of her rebuttal  
4 testimony, she states that, while Mr. Johnstone has a different proposal, I believe that there is  
5 also merit in his observations.” In my view, Ms. Ross has now reversed her position on this  
6 issue without the benefit of any specific evidence to support her changed belief. If she  
7 apparently did not require cost evidence at the outset to be able to support the Company’s  
8 proposal to eliminate its current seasonal rate differentials, I fail to see why she would  
9 require such information now simply because Mr. Johnstone has taken the opposite position  
10 of the Company on this issue as it relates to its Large Volume Service rate class.  
11

#### 12 **4. THE NEED FOR A SEPARATE RATE DESIGN CASE**

13 **Q. DOES MS. ROSS’ RECOMMENDATION FOR A SEPARATE RATE DESIGN CASE**  
14 **PROVIDE BENEFITS FOR THE COMPANY OR ITS CUSTOMERS?**

15 A. I see no benefit from Ms. Ross’ recommendation that a separate case be initiated to design  
16 rates for the Company. In my opinion, the evidence presented to date by the parties in this  
17 proceeding is sufficient for the Commission to make a determination on the Company rate  
18 design proposals. To require a separate case to address rate design at this late stage of this  
19 proceeding will only necessitate a dedicated time commitment and create additional costs for  
20 all stakeholders – while adding no benefit.  
21

22 **Q. DOES THIS COMPLETE YOUR SURREBUTTAL TESTIMONY?**

23 A. Yes.