

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: September 28, 2009

MISSOURI PUBLIC SERVICE COMMISSION

MISSOURI GAS ENERGY

CASE NO. GR-2009-0355

REBUTTAL TESTIMONY OF

RUSSELL A. FEINGOLD

Jefferson City, Missouri

September 28, 2009

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REBUTTAL TESTIMONY OF RUSSELL A. FEINGOLD

CASE NO. GR-2009-0355

SEPTEMBER 28, 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. I
7 lead the Rate & Regulatory Advisory Group of its Enterprise Management Solutions
8 (“EMS”) 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
15 Company’s current rate classes, its class revenue allocation, and its rate design proposals.

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1 **1. PURPOSE OF TESTIMONY**

2 **Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?**

3 A. The purpose of my rebuttal testimony is to respond to the positions of the Missouri Public
4 Service Commission Staff (the “Staff”), the Office of Public Counsel (“OPC”), and the
5 Midwest Gas Users’ Association (“MGUA”) on the appropriate class revenue allocation
6 and rate design for the Company. In addition, I will respond to the OPC’s position on
7 the need for a downward adjustment to the Company’s rate of return on equity to
8 recognize the alleged reduction in business risk caused by the Company’s ratemaking
9 proposals. I will specifically respond to the direct testimonies of Staff witnesses Thomas
10 A. Solt and Anne E. Ross, OPC witnesses Barbara A. Meisenheimer and Daniel J.
11 Lawton, and MGUA witness Donald Johnstone.

12
13 **Q. CAN YOU BRIEFLY SUMMARIZE YOUR FINDINGS AND**
14 **RECOMMENDATIONS RELATED TO THESE PARTIES’ PRESENTATIONS?**

15 A. Yes. Based on my review of the points and underlying support presented by witnesses
16 Solt, Ross, Meisenheimer, and Johnstone concerning the Company’s proposed class
17 revenue allocation and its rate design proposals, I have reached the following findings
18 and recommendations:

- 19 • The Commission should reject the class revenue allocation proposals of Staff,
20 OPC, and the MGUA because they are either based on unreasonable cost of
21 service study results or faulty cost of service concepts.

- 1 • The Commission should reject OPC's proposal to revert to a traditional,
2 volumetric-based rate design for the Company's residential customers. This
3 proposal is seriously deficient for a number of important reasons:
 - 4 • It is not reflective of the true costs of serving the Company's residential
5 service customers;
 - 6 • It will recreate the intra-class cross subsidies that existed within the
7 residential class before the Commission approved a Straight Fixed
8 Variable ("SFV") rate design in the Company's last rate case;
 - 9 • It will cause more residential customers to overpay by a greater amount
10 for gas service during colder than normal periods because of the
11 volumetric delivery charges that will be re-established under the OPC's
12 rate design proposal;
 - 13 • It will ignore the ratemaking initiative embodied in the Missouri
14 Legislature granting the Commission (by the enactment of SB 179) the
15 authority to approve for gas utilities ratemaking mechanisms that
16 address the problem of margin revenue losses; and
 - 17 • It will not provide an appropriate ratemaking foundation for the
18 Company to continue to offer energy efficiency and conservation
19 programs for the benefit of its customers because of the disincentive the
20 Company has to promote such programs caused by revenues and sales
21 that are directly linked through the OPC's emphasis placed on a volume-
22 based rate structure in its rate design proposal.
- 23 • The Commission should reject the rate design proposal of the MGUA for the

continuation of seasonal rate differentials in the Company's Large Volume Service rate class because the proposal has no cost basis and is not reflective of the load characteristics of the typical customer served under this rate class.

- The Commission should reject the OPC's recommendation that the Company's rate of return on equity allowance should be adjusted downward because of the change in its business risk profile that it alleges would occur under the Company's ratemaking proposals.

As a result, I recommend that the Commission approve: (1) the Company's class revenue allocation proposal; (2) the continued use of an SFV rate structure for the Company's Residential Service ("RS") rate class; and (3) the extension of the application of an SFV rate design to the Company's new Small General Service ("SGS") rate class.

2. CLASS REVENUE ALLOCATION

Q. DO YOU AGREE WITH THE CLASS REVENUE ALLOCATION PROPOSALS OF THE STAFF, OPC, AND THE MGUA?

A. No. The class revenue allocation proposed by each of these parties should be rejected by the Commission because it is either based on unreasonable cost of service study results or faulty cost of service concepts. Dr. F. Jay Cummings will specifically respond to the cost of service studies presented by the Staff and the OPC, and the costing concepts raised by the MGUA, and will explain why their costing results are unreasonable. On that basis, I conclude that the class revenue allocation proposals presented by the Staff, the OPC, and the MGUA cannot be accepted by the Commission as a basis to fairly reflect in rates the costs of providing delivery service to the Company's customers.

1
2 **3 RATE DESIGN**

3 **A. Residential and Small General Service**

4 **Q. AT PAGES 8-10 OF HER DIRECT TESTIMONY, MS. MEISENHEIMER**
5 **CONTENDS THAT TRADITIONAL UTILITY RATE DESIGN BETTER**
6 **REFLECTS COST CAUSATION COMPARED TO SFV RATE DESIGN? DO**
7 **YOU AGREE WITH HER CONTENTION?**

8 A. Absolutely not. I already demonstrated in my direct testimony that the cost to provide
9 delivery service does not differ among the Company's SGS customers. The same
10 conclusion related to the installation of a two-inch distribution main and the design day
11 capacity of that main applies to the Company's residential customers. That is, the
12 minimum installed size of distribution main will serve over 99 percent of the Company's
13 residential customers given the average density of the Company's gas distribution
14 system, its standard operating pressures, and the design day load characteristics of the
15 customers served under the Company's RS rate class.

16
17 **Q. WHAT SPECIFIC ARGUMENTS DOES MS. MEISENHEIMER MAKE**
18 **REGARDING THE COSTS TO SERVE THE COMPANY'S RESIDENTIAL**
19 **CUSTOMERS?**

20 A. Ms. Meisenheimer makes several arguments that she claims lead to the conclusion that costs
21 differ for residential customers based on the size of the customer measured in annual gas
22 consumption. At pages 8 and 9 of her direct testimony, Ms. Meisenheimer contends that:

1 “....it is common in regulated industries for companies to recover costs that are incurred
2 independent of usage in a fixed fee and to recover costs that vary with usage through a
3 usage based fee. Recovering a usage based cost through a usage based fee insures that
4 those who did not cause the cost are not required to pay for it. This objective can be met
5 through establishing a fixed component and a variable component of rates.”

6 The fundamental principle of recovering costs that are incurred independent of usage in
7 fixed fees is the primary basis for the same SFV rate concept that Ms. Meisenheimer
8 criticizes, namely, recovering fixed costs through fixed charges and variable costs
9 through variable charges. Ms. Meisenheimer argues that some facilities such as meters are
10 designed the same for most residential customers independent of usage and should be
11 included in fixed charges. She further argues that other facilities such as measuring
12 equipment located at the entry point to the utility’s gas distribution system are sized based
13 on the volumetric flow of gas and, therefore, should not be considered fixed costs.
14 However, mainline measuring facilities are not designed on throughput or gas volume, but
15 on the design hour requirement of the gas system - which is a measure of gas demand.
16 Moreover, for Ms. Meisenheimer to conclude that designing a piece of equipment so that it
17 will accommodate the maximum flow required to serve customers is somehow related to
18 annual volumetric flows is simply incorrect. This is a misapplication of the concept of fixed
19 costs. Fixed costs do not vary with volume once the cost is incurred. Thus, once measuring
20 equipment is installed, the costs do not change based on the volume of gas that flows
21 through the equipment. These costs are fixed and independent of gas usage. Utility
22 regulation reflects this independence from gas usage because no normalizing adjustments

1 are made to any delivery service costs based on the weather variable that drives volumetric
2 gas usage.

3
4 **Q. DOES THE PRINCIPLE THAT COSTS INDEPENDENT OF GAS USAGE**
5 **SHOULD BE RECOVERED IN A FIXED FEE SUPPORT THE SFV RATE**
6 **DESIGN PROPOSED BY THE COMPANY?**

7 A. Yes. As I demonstrated in my direct testimony, the Company installs the same size meter,
8 regulator, service line, and distribution main to serve virtually all SGS customers regardless
9 of the monthly or annual volume of gas they use. The same situation exists for the
10 Company's residential customers. This means that the size of the delivery service facilities
11 is independent of gas volume and should, by Ms. Meisenheimer's own standard, be
12 recovered through an SFV rate structure

13
14 **Q. DOES THE ALLOCATION OF FIXED COSTS IN THE COMPANY'S COST OF**
15 **SERVICE STUDY ON THE BASIS OF DEMAND IMPLY THAT COSTS VARY**
16 **WITH GAS USAGE AS CLAIMED BY MS. MEISENHEIMER AT PAGE 9 OF**
17 **HER DIRECT TESTIMONY?**

18 A. No. Ms. Meisenheimer has mischaracterized the nature of fixed costs and ignored the
19 importance of scale economies in determining the total cost of a utility's gas delivery
20 system. The allocation of a portion of the cost of distribution mains on a demand basis is an
21 effort to share the gas system's scale economies across all customer classes. While a two-
22 inch distribution main may serve all of the Company's RS and SGS customers, it is less
23 costly per unit to deliver gas to customers through larger facilities. Where these scale

1 economies are important, the demand allocation basis recognizes that all customers should
2 share in the benefit of scale economies. This means that the total allocated cost of service is
3 lower for residential customers because they share in these scale economies. However, this
4 allocation basis does not change the fundamental fact that all of the Company's gas delivery
5 costs are fixed and do not vary with the volume of gas delivered. Importantly, the SFV rate
6 design which is structured to recover the total costs allocated to the RS or SGS rate class
7 incorporates the benefits of scale economies in the costs borne by each customer. The
8 demand allocation basis does not suggest that demand-related costs differ among the
9 Company's residential customers because virtually all customers within that rate class can
10 be served by the smallest distribution main installed on the Company's gas system.

11
12 **Q. DOES THE RATE DESIGN CHARACTERIZED BY MS. MEISENHEIMER AS A**
13 **"TRADITIONAL RATE DESIGN" TRACK COSTS MORE CLOSELY THAN**
14 **UNDER AN SFV RATE DESIGN?**

15 A. No. On the contrary, I have already demonstrated in my direct testimony, and in this
16 testimony, that the Company's delivery costs on average are the same for its SGS
17 customers, and also are the same among its RS customers. If the utility's gas delivery costs
18 are the same for all customers while revenue from rates are not the same under a
19 "traditional" volumetric rate design based on the amount of gas consumed by the customer,
20 then such a rate design cannot track costs appropriately under any circumstances. Since one
21 of the objectives of rate design is to have rates match revenue recovery with cost incurrence,
22 only an SFV rate design will satisfy this objective.

1 **Q. DOES THE OPC OFFER ANY REASONABLE BASIS FOR REVERTING TO A**
2 **VOLUMETRIC-BASED RATE DESIGN FOR THE RS RATE CLASS?**

3 A. No. The OPC offers no specific evidence that the fixed costs of delivery service differ for
4 customers within the Company's RS rate class. For this reason alone, the recommendation
5 made by Ms. Meisenheimer that the Company's residential rates be designed to recover
6 fixed costs on a volumetric basis should be viewed as unduly discriminatory – and should be
7 rejected. The OPC's rate design proposal is simply regressive in nature relative to the
8 Commission's decision in the Company's last rate case to implement an SFV rate design for
9 the Company's RS rate class.

11 **Q. DOES A TRADITIONAL RATE DESIGN THAT RECOVERS FIXED COSTS**
12 **THROUGH VOLUMETRIC CHARGES PROVIDE A “BETTER PRICE**
13 **SIGNAL” FOR CONSERVATION?**

14 A. No. The best price signal for conservation from an economic perspective reflects the
15 marginal cost of the extra consumption to society. As a fundamental principle of
16 economics, fixed costs cannot impact marginal cost. Thus, the inclusion of fixed costs in
17 volumetric rates actually provides an incorrect, inefficient, and wasteful price signal to
18 customers. No amount of conservation will change the cost of gas delivery since the
19 smallest size of distribution mains already can serve virtually all of the Company's
20 residential customers. Thus, there is nothing to be saved from the Company's delivery
21 service costs. Moreover, inclusion of such fixed costs in volumetric rates results in
22 excess investment in energy efficiency and conservation by customers because they will
23 ultimately pay the same total delivery charges under volumetric rates, albeit over a lower

1 gas volume level. SFV rates provide an economically efficient price signal because the
2 volumetric rate represents only the cost of gas which can be saved through conservation
3 because it is a variable cost.
4

5 **Q. IS MS. MEISENHEIMER CORRECT WHEN SHE ASSERTS AT PAGE 7 OF**
6 **HER DIRECT TESTIMONY THAT “THE COMPANY’S PROPOSAL FOR NON-**
7 **GAS RATES PROVIDES NO CONSERVATION INCENTIVE FOR**
8 **RESIDENTIAL YEAR ROUND”?**

9 A. No. Even when the non-gas portion of the customer’s bill does not change from month to
10 month, there is a substantial conservation incentive from the cost of gas component.
11 And as noted above, this is the economically efficient price signal. Any increase in gas
12 consumption due to adding load, or from just colder than normal weather, will cause the
13 customer’s bill to increase at a rate reflecting the only change in costs incurred by the
14 Company, namely higher gas commodity costs.
15

16 **Q. HOW DO YOU RESPOND TO MS. MEISENHEIMER’S CONTENTION AT**
17 **PAGE 3 OF HER DIRECT TESTIMONY THAT WEATHER RELATED RISKS**
18 **ARE SHIFTED TO CUSTOMERS UNDER AN SFV RATE DESIGN?**

19 A. I disagree with Ms. Meisenheimer’s contention. Under volumetric rates, customers bear
20 the risk of colder than normal weather which produces higher bills and greater revenues
21 for the utility. When weather is warmer than normal, the customer pays less than the
22 utility’s underlying costs because volumetric rates produce lower gas bills. If weather is
23 on average normal, the customer pays for delivery service at the average cost which is

1 exactly the same as under an SFV rate design. Since SFV rates are fixed, weather risk is
2 mitigated for both the Company and its customers. As a result, no risk is shifted to
3 customers.

4
5 **Q. WHILE ON THE TOPIC OF RISK, DO YOU HAVE AN OPINION ON THE**
6 **RECOMMENDATION MADE BY MR. LAWTON (AT PAGES 13 AND 14 OF**
7 **HIS DIRECT TESTIMONY) THAT THE COMPANY’S RATE OF RETURN ON**
8 **EQUITY ALLOWANCE SHOULD BE ADJUSTED DOWNWARD BECAUSE OF**
9 **THE CHANGE IN ITS BUSINESS RISK PROFILE THAT HE ALLEGES**
10 **WOULD OCCUR UNDER THE COMPANY’S RATEMAKING PROPOSALS?**

11 A. Yes. I do have certain comments from a ratemaking perspective in response to the
12 assertion of Mr. Lawton. First, an SFV rate design does not eliminate a utility’s business
13 risks. As always, the utility will have ongoing pressures on earnings in the form of cost
14 increases, infrastructure investment to ensure a safe and reliable distribution system, and
15 an aging workforce. Second, with an SFV rate design, the utility’s upside opportunities
16 are limited at the same time as its downside risk.

17
18 **Q. HAVE OTHERS IN THE UTILITIES INDUSTRY RECENTLY ADDRESSED**
19 **THIS ISSUE?**

20 A. Yes. In December 2008, the American Gas Foundation (“AGF”) issued a report that
21 addressed this issue within the broader context of return on equity considerations in the
22 natural gas utility sector.¹ As part of the report, perceptions of the industry, and their

¹Regulatory Policy of Return on Equity – Review and Analysis of the Natural Gas Utility

1 implications for the utility sector, were compiled based on extensive interviews with
2 equity analysts, bond rating agencies, and senior utility industry executives. One of the
3 thematic issues discussed in the report is particularly relevant to the discussion of the
4 impact of utility ratemaking on a utility's allowed return on equity - How does return on
5 equity interact with other regulatory issues, such as decoupling, pass-through trackers,
6 etc.?

7 With regard to this issue, the report addressed how the process of setting a utility's return
8 on equity can be affected by the existence of innovative ratemaking approaches for other
9 utilities:

10 *"...where RoE is set by reference to a proxy group of other LDCs, it is important*
11 *to ask whether the observed results from those LDCs already reflect the impact of*
12 *the same mechanisms. That is, if a population of proxy LDCs demonstrates an*
13 *investor-required RoE of, say 11 percent, and if all of those proxy LDCs already*
14 *have a decoupling mechanism in place, it is inappropriate to apply an additional*
15 *decrement to the indicated return to reflect the introduction of a decoupling*
16 *mechanism in the LDC whose rates are being set."*²

17 The report also summarized the comments of gas utility executives on this issue. While
18 they acknowledge that properly designed revenue decoupling, Weather Normalization
19 Adjustment ("WNA") mechanisms, and SFV rate design do stabilize revenues and
20 consumer costs, they also point out that rate stability is a "two-sided coin" – "protection
21 against the down-side of load loss is offset by the loss of the upside of load gain. Thus, it
22 is not as if the LDC has been unilaterally relieved of a risk, rather it has given up an

Sector, American Gas Foundation, December 9, 2008.

² Ibid, p. 21.

1 upside gain opportunity for some protection against a downside risk.”³

2
3 **Q. DOES THE AGF REPORT ADDRESS THE EVOLVING AND INCREASING**
4 **BUSINESS RISKS ASSOCIATED WITH GAS DISTRIBUTION UTILITIES**
5 **THAT YOU MENTIONED IN YOUR DIRECT TESTIMONY?**

6 A. Yes. The AGF report notes that despite the positive attributes of the above-described
7 ratemaking mechanisms, gas distribution utilities are exposed to a variety of risks that
8 have been steadily increasing. The report details the nature of these increasing risks as
9 follows:

10 *“These risks include unfunded government mandates, precipitous run-up in the*
11 *cost of critical materials such as steel and in the cost of contract labor, the*
12 *regulatory risk of cost disallowances, especially in periods of rapid gas-cost*
13 *increase, and asymmetric regulation of uncollected gas cost (e.g., paying interest*
14 *on overcollections but collecting no interest on undercollections). Additionally,*
15 *in the competitive, unbundled world of today’s interstate pipelines, the risk of*
16 *bypass for LDCs’ highest volume customers – industrial and power generation –*
17 *is pervasive.*

18 *It is important to contrast the impact of these evolving risks with the impact of the*
19 *revenue volatility that is addressed by rate-design changes such as decoupling.*
20 *As noted above, revenue stabilization is a two-sided coin. Before it took place,*
21 *volatility caused by factors such as weather could and did result in increased*
22 *earnings from time to time, in addition to the periods when it led to deficient*

³ Ibid, p. 22.

1 *earnings. Conversely, the evolving areas of increased risk are ‘one-way.’ They*
2 *work only to the detriment of the LDC without the potential for a compensating*
3 *upside.’”⁴*

4
5 **Q. AT PAGE 17 OF HER DIRECT TESTIMONY, MS. MEISENHEIMER ARGUES**
6 **THAT WEATHER AND A UTILITY’S REVENUE REQUIREMENTS ARE**
7 **LINKED? HOW DO YOU RESPOND?**

8 A. Ms. Meisenheimer argues that the process of weather normalization and an allowed rate
9 of return link weather variations to a utility’s revenue requirements. However, this view
10 is wrong for several reasons. First, the Commission does not normalize as part of a rate
11 case any of the distribution system costs that comprise the utility’s delivery service
12 revenue requirements. It is unnecessary to normalize delivery service costs because these
13 costs are fixed and do not change with weather. By normalizing the utility’s volumetric
14 billing determinants for purposes of determining rates (a step that is unnecessary under
15 SFV rates), the Commission effectively provides the Company with an opportunity to
16 earn its allowed rate of return if actual weather is normal. Second, weather is beyond the
17 Company’s control as recognized by regulators throughout the U.S. who permit gas
18 utilities to weather normalize rates through WNA mechanisms. Third, the requirement
19 that regulation provide the utility with a reasonable opportunity to earn its allowed rate of
20 return must recognize that the utility’s delivery service costs are fixed and that the portion
21 of the utility’s revenue requirement for gas delivery that the Company can control
22 through effective management is limited.

⁴ Ibid, p. 23.

1
2 **Q. DOES MS. MEISENHEIMER RECOGNIZE THAT THE OPPORTUNITY FOR A**
3 **UTILITY TO EARN ITS ALLOWED RATE OF RETURN IS IMPACTED BY**
4 **FACTORS BEYOND THE CONTROL OF THE UTILITY?**

5 A. Yes. Ms. Meisenheimer states the following at page 17 of her direct testimony:

6 “Once rates are set, by improved efficiency or circumstances a Company has an
7 opportunity to earn a return above that incorporated in the revenue requirement.
8 (Emphasis added.) Obviously, the Company cannot control “circumstances.” Ms.
9 Meisenheimer, however, fails to acknowledge that circumstances can go in both
10 directions which may also cause the Company to earn a rate of return below that reflected
11 in its approved revenue requirement. Where circumstances consistently adversely impact
12 the Company’s opportunity to earn its allowed rate of return, it is incumbent upon the
13 regulatory process to establish a utility’s revenue requirements and rates to once again
14 provide a reasonable earnings opportunity.

15
16 **Q. PLEASE CONTRAST SFV RATES WITH TRADITIONAL VOLMETRIC-**
17 **BASED RATES IN TERMS OF PROVIDING THE UTILITY WITH A**
18 **REASONABLE OPPORTUNITY TO EARN ITS ALLOWED RATE OF**
19 **RETURN.**

20 A. When SFV rates are properly designed and implemented, circumstances such as changing
21 weather conditions, additional customer conservation prompted by customer initiatives,
22 gas utility initiatives and even electric utility initiatives, and price elasticity have less
23 impact on the expected revenue than under volumetric rates. However, even with SFV

1 rates, there is no certainty of revenue for the utility. Recognizing that revenue is only
2 part of the equation for determining if there is a reasonable opportunity for the utility to
3 earn its allowed rate of return, it is obvious that where fixed costs are such a significant
4 part of the total costs and that variable costs are essentially matched dollar for dollar
5 through the utility's gas cost adjustment mechanism, any rate design that causes
6 significant variations in revenue cannot provide the utility with a reasonable opportunity
7 to earn its allowed rate of return.

8
9 **Q. IS MS. MEISENHEIMER CORRECT AT PAGE 18 OF HER DIRECT**
10 **TESTIMONY WHERE SHE IMPLIES THAT SFV RATE DESIGN ELIMINATES**
11 **EARNINGS UNCERTAINTY?**

12 A. No. As I noted above, SFV rates do not eliminate revenue uncertainty completely. This
13 means that a utility's actual revenues during the first year of new rates will not
14 necessarily equal the revenue set in a rate case because other factors such as customer
15 count may differ. For example, foreclosures and higher vacancy rates in apartments may
16 result in fewer customers and lower revenues. Low use customers may decide to replace
17 natural gas service with competing fuels. The result is that gas revenues are not
18 guaranteed under SFV rates. In addition, revenues are only part of the earnings equation
19 because earnings equal revenue minus costs. The cost component remains subject to a
20 variety of market and business risks such as inflation, rate base risk, taxes, insurance
21 costs, and many more factors that differ from the utility's test year cost components. A
22 simple example will illustrate how under SFV rates earnings erosion can occur. When
23 the Company adds a new residential customer, it must add a new meter, regulator, service

1 line, and a new distribution main. All of the new facilities are added at today's cost while
2 delivery rates are based on depreciated, original cost. Based on the Company's cost of
3 service study, the average embedded cost of distribution plant for its residential
4 customers is about \$905. Assuming the new customer requires the average amount of
5 distribution main per customer (89.5 feet) at a current cost of \$11.83 per foot, the cost of
6 only the new distribution main is equal to \$1,059. If we assume that a service line, meter,
7 and regulator have a combined installed cost of about \$750, the total capital costs to
8 connect a new customer is just over \$1,800, or about twice the amount of plant in service
9 included in rates. Thus, it is unlikely that after direct expenses, the Company would earn
10 a full rate of return on new customers in the first year. With all other things being equal,
11 this will result in earnings erosion. On this basis, I believe that earnings uncertainty
12 remains for the Company under an SFV rate design.

13
14 **Q. DOES THE USE OF SFV RATES "SHIFT ALL EARNINGS RISK TO**
15 **CUSTOMERS" AS CLAIMED BY MS. MEISENHEIMER AT PAGE 18 OF HER**
16 **DIRECT TESTIMONY?**

17 A. No. As I have demonstrated above, the Company continues to bear earnings risk and an
18 SFV rate design does not change that fact. SFV rate design only changes the pattern of
19 revenue recovery by eliminating both high and low years of revenue. This result actually
20 benefits customers through rate stability over time.

21
22 **Q. MS. MEISENHEIMER PROVIDES A QUOTE AT PAGE 19 OF HER DIRECT**
23 **TESTIMONY FROM FRANCIS X. WELCH CITED IN A.J.G. PRIEST'S**

**PRINCIPLES OF PUBLIC UTILITY REGULATION AS THE BASIS FOR HER
VIEW THAT THE UTILITY MUST BE ALLOWED A REASONABLE
OPPORTUNITY TO EARN ITS ALLOWED RATE OF RETURN. DOES THIS
QUOTE SUPPORT THE USE OF SFV RATE DESIGN?**

A. Yes. The quotation from Mr. Welch indicates that the opportunity to earn the allowed rate of return is contingent upon the principle that “the holder is successful in his own efforts”. (Emphasis added.) Since no amount of effort on the part of the Company could overcome the impacts on earnings of weather, appliance efficiency and conservation among other impacts (e.g., historic test years, inflation and others) when volumetric delivery service rates generate revenues that are inadequate to recover the fixed cost of delivery service, providing the Company with a reasonable opportunity to earn its allowed rate of return requires the continuation and expansion of the SFV rate design concept, as recommended by both the Company and Staff.

**Q. DOES MS MEISENHEIMER RELY UPON CLAIMS RELATED TO
COMPETITIVE MARKET PRICING TO JUSTIFY A RETURN TO
VOLUMETRIC DELIVERY SERVICE RATES?**

A. Yes. She claims at page 16 of her direct testimony that volumetric rates which cause higher charges for higher gas use are consistent with competitive market pricing. She further states that volumetric rates are the norm in more concentrated markets. However, what Ms. Meisenheimer fails to acknowledge is that under the proposed SFV rates, customers do pay more if they use more gas based on the commodity cost of gas.

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Q. DO COMPETITIVE MARKETS EMPLOY FIXED COST PRICING?

A. Yes. There are a number of competitive markets where fixed charges are used such as cell phone service, cable/satellite television, car rental, and so forth. In these cases, the charge is fixed for the basic service with other costs recovered in variable charges where those costs are incurred. For some businesses such as movie theatres, a flat admissions charge is utilized to ensure fixed costs are recovered, while variable charges are assessed to patrons for snacks and refreshments so that the theatre owner can recover the variable costs of these food items.

Q. ARE THERE COMPETITIVE BUSINESSES WITH SIGNIFICANT FIXED COSTS THAT RECOVER ALL COSTS VOLUMETRICALLY?

A. Yes. There are businesses such as retail purchasing, under which the customers typically pay no access fees at all, and pay only for services rendered. This model holds true for hairdressing, the purchase of propane gas, legal services, accounting services, and many others. Additionally, virtually every capital intensive industry is faced with a high percentage of fixed costs in the short-run. This includes the manufacturing and transportation industries. Prices for competitive products and services in these industries are invariably established on a volumetric basis, including those that were once regulated (e.g., airline travel and rail service).

These examples provide no guidance, however, for regulated pricing because of several fundamental economic differences between these types of businesses and a gas distribution utility. First, none of these businesses have an obligation to serve. They are

1 free to enter and exit the business at a moments notice. Second, these businesses directly
2 control the volume of production and may adjust that production consistent with market
3 conditions so as to insure recovery of fixed costs. Third, these businesses may adjust the
4 price in response to market conditions so that during times of high demand the earned
5 return increases and falls during times of low demand. Whereas, utilities have limited
6 upside potential and must file a rate case and wait to adjust revenues upward when
7 demand falls or costs increase. Even when costs fall, the utility is subject to regulatory
8 review of earnings and the potential for lower rates. Fourth, these businesses are free to
9 choose whether to serve a customer or not provide service. Fifth, these businesses have
10 the right to dictate payment terms. Thus, a propane supplier might require payment at the
11 time of delivery rather than bill the customer. In sum, all of these differences make
12 pricing strategies differ by type of service. Consider the airline industry and its pricing.
13 Prices vary significantly from one passenger to the next even on the same flight and for
14 the same class of service. Utilities may not price discriminate in this way. Further,
15 airlines may adjust to demand by cancelling flights, changing aircraft type and limiting
16 access to service by overbooking. None of these options would be permitted for a utility
17 trying to manage costs and revenues. Finally, in the competitive model, volumetric
18 pricing based on marginal cost produces a full return of and on investment under
19 competitive equilibrium conditions, but would not do so for a regulated utility.

20
21 **Q. DOES ECONOMIC THEORY SUPPORT THE USE OF FIXED RATES FOR**
22 **UTILITIES?**

23 A. Yes. To understand the dynamic of fixed cost pricing for utility service, one must begin

1 with the concept of economies of scale. Utilities exhibit significant economies of scale.
2 This means that pricing at marginal cost would not result in the utility recovering all of its
3 costs. As a result, economists have long recognized that regulated utilities must follow a
4 different pricing paradigm. The theory of Ramsey pricing was developed to address the
5 recovery of fixed costs when prices are set at marginal cost for utilities with scale
6 economies. Under Ramsey pricing, the recovery of fixed costs above the level that
7 marginal cost pricing would recover must come by increasing the least elastic infra-
8 marginal price. In this case, the customer charge is the least elastic infra-marginal price.
9 Indeed, economic theory directly supports SFV rate design. Since fixed costs do not
10 impact marginal costs, the separate recovery of fixed costs is fully consistent with
11 economic theory.

12
13 **Q. DOES THE COMPANY’S PROPOSED SFV RATE DESIGN RECOGNIZE BOTH**
14 **ACCESS AND USE OF NATURAL GAS?**

15 A. Yes. The SFV charge is the “access” charge and reflects the cost of providing sufficient
16 design day capacity to the customer to serve its load. The “use” component of the SFV
17 rate is the cost of gas that varies with the amount of gas consumed. Since the design day
18 delivery capacity for RS and SGS customers is predicated upon the smallest installed
19 facilities and those facilities will serve the largest customers in these rate classes, a fixed
20 access charge is cost-based and efficient. The alternative proposed by the OPC of
21 charging more for access through a volumetric delivery charge forces higher commodity
22 use customers to pay more for the same facilities than low use customers. The SFV rate
23 design reflects the actual fixed cost of access as well as the actual variable cost of using

1 additional volumes of natural gas.

2
3 **Q. WHAT IS THE KEY PRINCIPLE OF COMPETITIVE MARKETS AS IT**
4 **RELATES TO UTILITY SERVICE?**

5 A. The concept that price equals marginal cost is the key to economic efficiency in regulated
6 markets. Since the cost of additional gas consumption by an RS or SGS customer does
7 not change the Company's cost of delivery service, any recovery of fixed delivery costs
8 through volumetric charges violates the competitive market pricing principle. There is no
9 evidence to support the claim that volumetric recovery of delivery service costs is
10 required to send appropriate, economically efficient price signals to customers. Thus, it
11 is the concept of SFV rates that meets the test of economic theory and the marginal cost
12 principle.

13
14 **Q. PLEASE COMMENT ON THE STAFF'S CONCLUSIONS RELATED TO SFV**
15 **RATE DESIGN FOR THE COMPANY'S RS AND SGS CUSTOMERS.**

16 A. Staff concludes that "collection of the Residential customers' cost-of-service in a fixed
17 monthly Delivery Charge is an equitable and reasonable way to recover costs from the
18 customers in this class." This conclusion is supported by the evidence provided in my
19 direct testimony and in this testimony related to the capacity of the minimum sized
20 distribution main being adequate to serve virtually all RS and SGS customers. Staff
21 correctly concludes that the annual gas consumption of these customers is not the critical
22 factor in determining the cost to serve such smaller customers. It is also correct to
23 conclude that on average it costs the same to provide delivery service to all customers in

1 these rate classes. I agree with the Staff's assessment of the importance of SFV rate
2 design aligning customer and shareholder interests with respect to utility promotion of
3 conservation. Additionally, the Staff recognizes that SFV rates provide new customers a
4 better price signal and avoids the implied subsidy that other customers must pay when
5 new customers make limited use of the same facilities that are installed for all customers.
6 Since it costs the same to connect these customers, as I have discussed above, it is
7 reasonable to have all customers pay the same for delivery service.

8
9 **Q. DOES STAFF SUPPORT THE COMPANY'S PROPOSAL TO RESTRUCTURE**
10 **ITS SGS RATE CLASS?**

11 A. Yes. The Staff accepts the Company's proposal because it correctly recognizes that the
12 new SGS rate class will be more homogeneous.⁵ Staff also is correct that having a more
13 homogeneous rate class permits the application of an SFV rate design without having to
14 implement multiple delivery service charges or demand charges to fairly allocate costs as
15 would be the case in a less homogeneous rate class.

16
17 **Q. PLEASE SUMMARIZE YOUR CONCLUSIONS WHY THE COMPANY'S SFV**
18 **PROPOSAL IS SUPERIOR TO THE OPC'S VOLUMETRIC RATE PROPOSAL**
19 **FOR GAS DELIVERY RATES.**

20 A. I believe SFV rate design is the preferred pricing method for the Company's RS and SGS

⁵ Based on the statements at pages 13-14 of the Staff Report, it is presumed that Staff is in agreement with the Company's proposal to establish the new SGS rate class for customers who use less than 10,000 Ccf per year - even though Mr. Thomas M. Imhoff states at page 4 of his direct testimony that the "composition of the SGS class is non-residential customers who use less than 5,000 Cubic Hundred Feet (Ccfs) per year."

1 rate classes for several reasons:

- 2 1. SFV rates offer the most economically efficient alternative to volumetric rates.
- 3 2. SFV rates result in rates that track embedded costs more accurately thus
- 4 eliminating intra-class subsidies and undue discrimination within the residential
- 5 class.
- 6 3. SFV rates provide the opportunity to recover revenue during post rate case
- 7 periods without the use of a deferral mechanism.
- 8 4. SFV rates provide customer bill stability.
- 9 5. SFV rates represent a simple and easily understood rate.
- 10 6. SFV rates avoid issues related to revenue tracker mechanisms.
- 11 7. SFV rates avoid the administrative burden on all parties associated with more
- 12 complex alternatives.
- 13 8. SFV rates reduce revenue related risks for both the Company and customers.
- 14 9. SFV rates provide no incentive for sales growth or disincentive for conservation
- 15 and efficiency.
- 16 10. SFV rates represent the least cost mitigation alternative for revenue instability.
- 17 11. SFV rates eliminate the debate over the definition of normal weather and indeed
- 18 eliminate the weather normalization process for base rates.
- 19 12. SFV rates eliminate the distortion of commodity prices, thus, promoting more
- 20 accurate commodity price signals to the customer and hence provides greater
- 21 economic efficiency.
- 22
- 23

B. Large Volume Service

Q. DO YOU AGREE WITH MR. JOHNSTONE'S CONCLUSION AT PAGE 5 OF HIS DIRECT TESTIMONY THAT THE COMPANY'S SEASONAL RATE DIFFERENTIAL FOR ITS LVS RATE CLASS IS REASONABLE AND SHOULD BE CONTINUED?

A. No. In my opinion, the continuation of these seasonal rate differentials has no cost basis and is not reflective of the load characteristics of the typical customer served under this rate class. As I explained in my direct testimony, the Company has proposed to eliminate the current seasonal differentials in the delivery service charges of the Large Volume Service ("LVS") rate class, and in its other rate classes, in recognition of the fact that a gas distribution utility's costs of delivery service are fixed in nature and do not vary by season. In addition, the rate structure and rate levels established in the LVS rate class are premised upon providing delivery service to the average-sized customer. As such, the design of rates assumes that customers will take gas delivery service twelve months out of the year and that the revenues collected through rates to recover costs also will occur in each of the twelve months. To the extent a particular customer, or group of customers, does not exhibit the common characteristics of the class, it is not good ratemaking policy to design rates for the exception, especially in a rate class such as the LVS rate class that does not exhibit homogeneous load characteristics.

Q. JUST AS A POINT OF CLARIFICATION, IS MS. MEISENHEIMER CORRECT WHEN SHE ASSERTS AT PAGE 7 OF HER DIRECT TESTIMONY THAT THE COMPANY'S RATE DESIGN PROPOSAL FOR THE LVS RATE CLASS

1 **“ELIMINATES THE VOLMETRIC RATES FOR THE SUMMER MONTHS?”**

2 A. No. The proposed tariff for the LVS rate class has no seasonal provision so the gas
3 delivery charge in each of the two proposed rate blocks is the same year round (\$0.04361
4 per Ccf and \$0.03261 per Ccf) Contrary to Ms. Meisenheimer’s assertion (and to her
5 portrayal of the Company’s LVS rate design proposal in Table 2 in her direct testimony),
6 there is no “free” period in the summer months for volumetric delivery charges under the
7 Company’s LVS rate design proposal. Moreover, her claim that the Company’s rate
8 design for its LVS rate class will promote greater summer use is unfounded and simply
9 misleading.

10
11 **Q. MR. FEINGOLD, DOES THIS COMPLETE YOUR REBUTTAL TESTIMONY?**

12 A. Yes, it does.