

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

In the Matter of Missouri Gas Energy and)	
Its Tariff Filing to Implement a General)	Case No. GR-2009-0355
Rate Increase for Natural Gas Service)	

STAFF'S INITIAL BRIEF

COMES NOW the Staff of the Missouri Public Service Commission (Staff) and for its initial post-hearing brief respectfully states as follows:

STATEMENT OF FACTS

On April 2, 2009, in Case No. GR-2009-0355, MGE filed tariff sheets to increase its Missouri jurisdictional rates by \$32,416,997. On April 6, the Commission suspended the tariff. On May 27, the Parties filed a jointly proposed procedural schedule. On June 16, the Company submitted Updated Test Year Direct testimony. On July 8, 2009, the Commission issued its Order Directing Customer Notice and Setting Local Public Hearings.

On August 21, the Missouri Department of Natural Resources (DNR), the Office of the Public Counsel (OPC), the Staff of the Commission (Staff), Midwest Gas Users Association (MGUA), and Constellation NewEnergy Division (Constellation) filed Direct Testimony. On September 3, Staff filed its Report for Class Cost-of-Service and Rate Design. MGUA, OPC and Constellation also filed rate design testimony.

On September 28, Staff, MGE, MGUA, OPC, DNR, Superior Bowen Asphalt Co, and Constellation filed Rebuttal Testimony. Parties filed their Surrebuttal Testimony on October 14. On November 5, 2009 the Parties filed a Partial Stipulation and Agreement intended to resolve all issues except Cost of Capital, Energy Efficiency and Rate Design.

Hearing of the remaining issues in this case began on November 9. Below is Staff's Initial Post-Hearing Brief. For convenience, issues are numbered as they were in the Joint List of Issues filed herein on October 21, 2009.

ARGUMENT

I. REVENUE REQUIREMENT

A. Cost of Capital:

The Cost of Capital issues raised by the parties for determination by the Commission, and Staff's trued-up positions on those issues, are as follows:

Capital Structure: What capital structure should be used for determining MGE's rate of return?

It is Staff's position that a hypothetical capital structure should be used based upon the average capital structure of the proxy group because recent Southern Union financing activities prove that Southern Union does not manage the financing of the natural gas distribution utility operations separate from that of its other non-natural gas distribution utility operations. The hypothetical capital structure that Staff recommends consists of 50.49 percent common stock equity, 42.07 percent long-term debt and 7.44 percent short-term debt (Murray True-up Direct, p. 3).

Return on Common Equity: What return on common equity should be used for determining MGE's rate of return?

It is Staff's position that the appropriate return on common equity is 9.25% to 9.75%, midpoint 9.50%, based upon its analysis of a proxy group of seven LDCs using a constant-growth discounted cash flow (DCF) model, checked against a capital asset pricing model analysis of the same proxy group and corroborated by other significant evidence.

Cost of Debt: What cost of long-term debt and short-term debt should be used for determining MGE's rate of return?

It is Staff's position that the cost of long-term debt and short-term debt should be based upon the average costs experienced by the proxy group, insofar as those are known, updated in the same manner as the other components of the capital structure. Those values are 5.89% for long-term debt and 0.94% for short-term debt (Murray True-up Direct, pp. 3 & 4).

B. Risk:

Would the Commission's adoption of MGE's proposed rate design that recovers all non-gas costs in a fixed customer charge for Residential and SGS customers reduce MGE's business risks? If the answer is "yes," should that reduced risk be recognized in the determination of either cost of capital or the revenue requirement?

Yes, continuation of MGE's current rate design does reduce the Company's business risk. The reduction in risk is reflected in Staff's recommendation.

Rate of Return:

Using the trued-up hypothetical capital structure recommended by Staff, Staff's recommended return on common equity range of 9.25% to 9.75%, midpoint 9.50%, and Staff's trued-up embedded costs of long-term, 5.89%, and short-term debt, 0.94%, Staff recommends an authorized rate of return for MGE of 7.22% to 7.47%, midpoint 7.34% (Murray, True-up Direct, p. 3).

DISCUSSION OF COST OF CAPITAL

Introduction:

"Capital" is, among other things, "material wealth used or available for use in the production of more wealth."¹ Capital is obtained, in general, either from investors in the form of equity or from lenders in the form of debt. The capital structure of an enterprise is a

¹ The American Heritage Dictionary of the English Language, p. 284 (3rd ed. 1996).

statement or representation of its capitalization, that is, “the amounts and types of long-term financing used by a firm, including common stock, preferred stock, retained earnings, and long-term debt.”² It is a summary of the liabilities on its balance sheet. Capital is made available in exchange for the right to receive a return on that capital in the future, whether interest, in the case of debt capital, or dividends and appreciation in the case of equity capital. The phrase “cost of capital” refers to these returns that are owed to the lenders and investors that provided the capital.

The Commission is vested with the state's police power to set "just and reasonable" rates for public utility services,³ subject to judicial review of the question of reasonableness.⁴ A “just and reasonable” rate is one that is fair to both the utility and its customers;⁵ it is no more than is sufficient to “keep public utility plants in proper repair for effective public service, [and] . . . to insure to the investors a reasonable return upon funds invested.”⁶ The Commission must afford the utility an opportunity to recover a reasonable return on the assets it has devoted to the public service.⁷ “There can be no argument but that the Company and its stockholders have a constitutional right to a fair and reasonable return upon their investment.”⁸

² Id.

³ Section 393.130, in pertinent part, requires a utility's charges to be "just and reasonable" and not in excess of charges allowed by law or by order of the Commission. Section 393.140 authorizes the Commission to determine "just and reasonable" rates.

⁴ *Lightfoot v. City of Springfield*, 361 Mo. 659, 669, 236 S.W.2d 348, 353 (1951).

⁵ St. ex rel. Valley Sewage Co. v. Pub. Serv. Comm'n, 515 S.W.2d 845 (Mo. App., K.C.D. 1974).

⁶ St. ex rel. Washington University et al. v. Pub. Serv. Comm'n, 308 Mo. 328, 344-45, 272 S.W. 971, 973 (banc 1925).

⁷ St. ex rel. Utility Consumers Council, Inc. v. Pub. Serv. Comm'n, 585 S.W.2d 41, 49 (Mo. banc 1979).

⁸ St. ex rel. Missouri Public Service Co. v. Fraas, 627 S.W.2d 882, 886 (Mo. App., W.D. 1981).

In practical terms, the Commission must determine, from the evidence adduced in a rate case, a “revenue requirement” for the company, which is the amount of revenue the utility must receive on an annual basis to pay the costs of producing the utility service while offering the investors an opportunity to earn a profit on their investment.⁹ Revenue requirement is usually established based upon a historical test year which focuses on four factors: (1) the rate of return the utility has an opportunity to earn; (2) the rate base upon which a return may be earned; (3) the depreciation costs of plant and equipment; and (4) allowable operating expenses.¹⁰ The calculation of revenue requirement from these four factors is expressed in the following formula:

$$RR = C + (V - D) R$$

where: RR= Revenue Requirement;
C = Prudent Operating Costs, including Depreciation Expense and Taxes;
V = Gross Value of Utility Plant in Service (“Rate Base”);
D = Accumulated Depreciation; and
R = Overall Rate of Return or Weighted Average Cost of Capital.

Capital Structure:

For any utility, the fair rate of return is simply its composite cost of capital: “The rate of return is, essentially, the amount that a utility must pay to secure financing from debt and equity investors.”¹¹ The composite cost of capital is the sum of the weighted cost of each component of the utility's capital structure. The weighted cost of each capital component is calculated by multiplying its cost by a percentage expressing its proportion in the capital

⁹ St. ex rel. Capital City Water Co. v. Missouri Pub. Serv. Comm'n, 850 S.W.2d 903, 916 n. 1 (Mo. App., W.D. 1993).

¹⁰ *Id.*, citing Colton, "Excess Capacity: Who Gets the Charge From the Power Plant?," 34 Hastings L.J. 1133, 1134 & 1149-50 (1983).

¹¹ State ex rel. Public Counsel v. Public Service Com'n, 274 S.W.3d 569, 573 (Mo. App., W.D. 2009).

structure. Where possible, the cost used as well as the composition of the capital structure itself is the "embedded" or historical cost; however, in the case of common equity, the cost must be estimated. The estimated cost of common equity is usually hotly contested and is a matter of expert testimony.

This case is unusual because the Staff and the Company both recommend the use of a hypothetical capital structure and hypothetical costs for long-term and short-term debt. This represents a new approach by Staff and it is not a change that Staff made lightly. MGE does not, in fact, actually have any separate corporate existence, but is merely the alias under which Southern Union Company provides local natural gas service in parts of Missouri.¹² The MGE operation is only a small part of Southern Union's operations, as this excerpt from its 10-K reveals:

Southern Union owns and operates assets in the regulated and unregulated natural gas industry and is primarily engaged in the gathering, processing, transportation, storage and distribution of natural gas in the United States. The Company operates in three reportable segments: Transportation and Storage, Gathering and Processing, and Distribution. The Transportation and Storage segment is primarily engaged in the interstate transportation and storage of natural gas in the Midwest and from the Gulf Coast to Florida, and also provides LNG terminal ling and regasification services. The Gathering and Processing segment is primarily engaged in the gathering, treating, processing and redelivery of natural gas and NGL in West Texas and Southeast New Mexico. The Distribution segment is primarily engaged in the local distribution of natural gas in Missouri and Massachusetts.¹³

Consequently, each successive MGE rate case necessarily requires Staff to determine anew the appropriate method to use in determining a cost of capital recommendation. For several reasons, Staff is now of the opinion that the approach used in the past is no longer appropriate.

¹² Tr. 9:118, lines 20-21: "MGE is an operating division of Southern Union Company"; admission by Mr. Swearengen.

¹³ Staff's Cost of Service Report, p. 21.

First, Southern Union's 10-K reveals that Southern Union does not manage the financing of its Panhandle Eastern Pipeline (PEPL) subsidiary separately from its own financing and vice versa.¹⁴ In August 2008, Southern Union used proceeds from notes issued by PEPL in June of that year, as well as "draw downs of its credit facilities," to retire \$300 million of PEPL debt and \$125 million of Southern Union debt.¹⁵ For this reason, it appears that the approach Staff took in MGE's last rate case, which was to use the consolidated Southern Union capital structure with a cost of long-term debt that excluded debt issued by PEPL, is no longer appropriate because it does not reflect how Southern Union actually operates.

Second, MGE – meaning Southern Union's MGE division – funded its construction activities in 2007, 2008 and 2009 with retained earnings, a practice unreflective of that typical of a stand-alone LDC.¹⁶ A stand-alone LDC would have used internally-generated cash to pay dividends and would have raised construction financing through new debt issues, which would have resulted in a lowering of the embedded cost of debt because of the recent very low cost of issuing debt.¹⁷ Thus, continued use of the approach ordered in MGE's last two rate cases would leave ratepayers paying an unfairly high cost of debt.¹⁸

Third, Southern Union's S&P credit rating, at BBB-, is only one step above junk, following a downgrade in November 2006.¹⁹ The cause of the downgrade, which has resulted in higher capital costs for Southern Union, was a significant increase in the business risk

¹⁴ *Id.*, at p. 25.

¹⁵ *Id.*

¹⁶ *Id.*, at p. 26.

¹⁷ *Id.*

¹⁸ *Id.*, pp. 26-27.

¹⁹ *Id.*, at p. 27.

associated with Southern Union's natural gas gathering and processing operations.²⁰ There is no reason that MGE's Missouri ratepayers should pay the increased capital costs resulting from Southern Union's unregulated activities.

For all of these reasons, Staff decided to use a hypothetical capital structure in this case, including hypothetical costs of long-term and short-term debt. The Company has itself adopted this methodology:

We believe that sound economic theory would indicate that because Southern Union Company is in no way representative of a local gas distribution company, its actual capital structure and cost components are also unrelated to a normal natural gas distribution company and you shouldn't use that corporate capital structure for ratemaking purposes.²¹

The hypothetical capital structure Staff used is the average capital structure of its proxy group of seven LDCs.²²

Cost of Long-Term and Short-Term Debt:

Staff used the average long-term debt cost of its proxy group in calculating the hypothetical cost of long-term debt and included a 10% gross-up to reflect issuance costs.²³ Staff's trued-up figure is 5.89%, which is not very far removed from MGE's figure of 6.00% and OPC's figure of 6.25%.²⁴ For short-term debt, information from all of the proxies was not readily available. Consequently, Staff used figures for two of the comparable which had credit ratings equal to the average credit ratings of the proxy group as a whole.²⁵ Staff's

²⁰ Id.

²¹ Tr. 9:117, admission by Mr. Swearengen.

²² Id., p. 29.

²³ Id., pp. 29-30.

²⁴ Murray True-up Direct, pp. 3 & 4.

²⁵ Id., at pp. 30-31.

trued-up result, 0.94%, is significantly different from the figures endorsed by MGE and OPC, which are 5.42% and 4.367%, respectively.

Staff witness Murray has pointed out that MGE witness Hanley improperly calculated his short-term debt figure.²⁶ Hanley relied upon Southern Union's negotiation of a two-year loan²⁷ and recommended the use of projected three-month LIBOR rates plus a margin of 250 basis points and an up-front fee of 100 basis points as a proxy cost of short-term debt.²⁸ Not only does Hanley's approach violate the methodological basis of his hypothetical capital structure approach, it seriously overstates the actual cost of short-term borrowing.²⁹ Murray provided evidence to the Commission showing that "natural gas companies continue to benefit from an environment of low cost of short-term debt."³⁰ SEC filings reveal that five of Staff's comparable companies raise short-term capital through inexpensive issuances of commercial paper, as do seven of Hanley's nine proxies.³¹ There is no good reason to make Missouri consumers pay more than is necessary for short-term debt.

Cost of Common Equity:

"Determining a rate of return on equity . . . is imprecise and involves balancing a utility's need to compensate investors against its need to keep prices low for consumers."³² This difficult and contentious task requires the Commission to weigh the testimony of opposing expert witnesses. In that regard, the Commission "may adopt or reject any or all of

²⁶ Murray, Surrebuttal, p. 16.

²⁷ Murray, Surrebuttal, p. 3.

²⁸ Murray Rebuttal, p. 22.

²⁹ Murray, Surrebuttal, p. 3 and p. 16.

³⁰ Murray, True-up Rebuttal, p. 2 at lines 20-21.

³¹ Murray Rebuttal, at p. 23.

³² Public Counsel, *supra*, 274 S.W.3d at 574.

any witnesses' testimony.”³³ Three expert witnesses, all eminently qualified, offered ROE recommendations in this case, ranging from 9.50% to 13.90%.

ROE Recommendations	
Analyst	ROE
Hanley # 1 (MGE) ³⁴	13.90%
Hanley # 2 (MGE) ³⁵	11.25%
Hanley # 3 (MGE) ³⁶	10.50%
Lawton (OPC) ³⁷	10.00%
Murray (Staff) ³⁸	9.50%

The limits of the PSC’s discretion in setting an ROE are defined by two decisions of the United States Supreme Court. In the earlier of these cases, the Court stated:

A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties; but it has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures. The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties.³⁹

Similarly, in the later of the two cases, the Court stated:

³³ State ex rel. GS Technologies Operating Co., Inc. v. Public Service Commission of the State of Missouri, 116 S.W.3d 680, 690 (Mo. App. W.D. 2003).

³⁴ Company-specific analysis of Southern Union.

³⁵ Hanley’s original recommendation, based upon his analysis of a proxy group of nine companies.

³⁶ Hanley’s updated recommendation, based upon his updated analysis of his proxy group.

³⁷ Lawton’s recommendation, based upon his analysis of a proxy group of twelve companies. Lawton’s recommendation would be about 9.50% if it were modified to include the impact of his proposed downward revenue requirement adjustment.

³⁸ Murray’s recommendation, based upon his analysis of a proxy group of seven companies.

³⁹ Bluefield Water Works & Improvement Co. v. Public Service Comm’n of West Virginia, 262 U.S. 679, 692-93, 43 S.Ct. 675, 679, 67 L.Ed. 1176, 1182-83 (1923).

‘[R]egulation does not insure that the business shall produce net revenues.’ But such considerations aside, the investor interest has a legitimate concern with the financial integrity of the company whose rates are being regulated. From the investor or company point of view it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock. By that standard the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital.⁴⁰

From these two decisions, three guiding principles can be discerned:

(1) An adequate return is commensurate to the returns realized from other businesses with similar risks.⁴¹

(2) An adequate return is sufficient to maintain the utility’s credit and to enable it to obtain necessary capital.

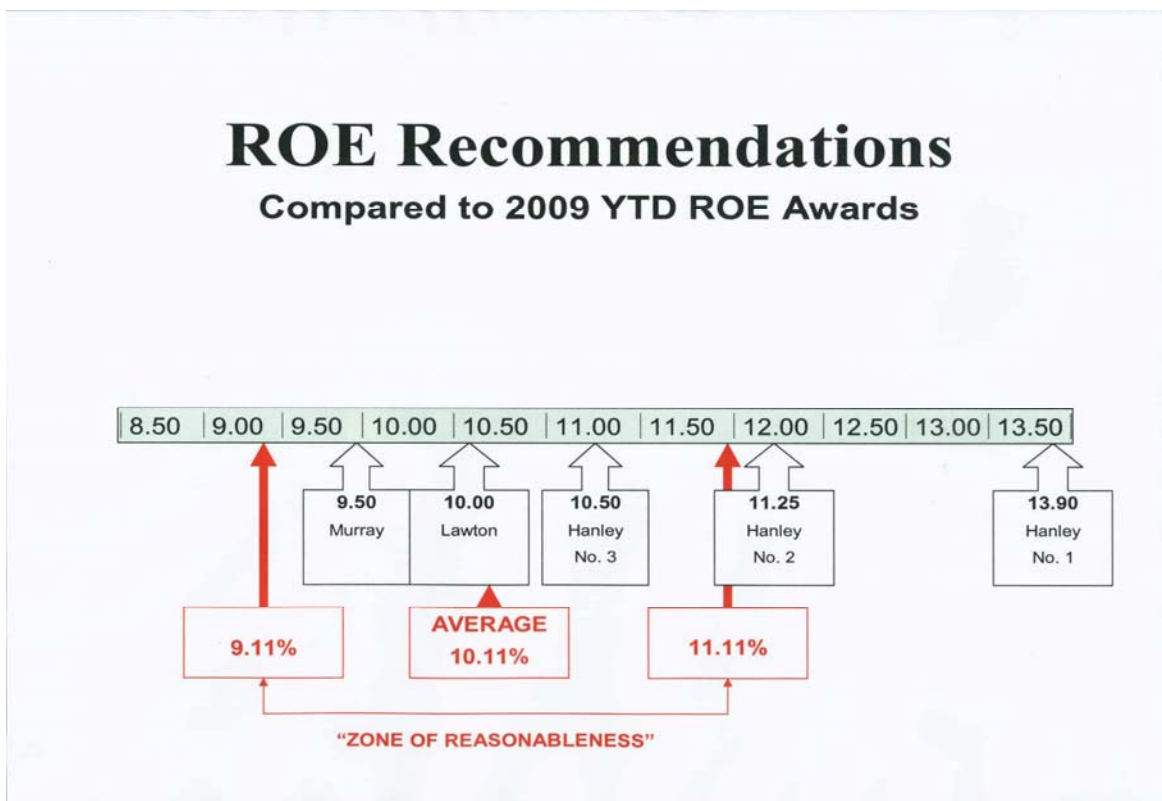
(3) An adequate return is sufficient to assure confidence in the financial integrity of the utility.

The first of these principles unmistakably requires a comparative process. The cost of common equity set by the Commission must be about as much as other, similar utilities are earning. The second principle, simply stated, refers to the effect of the Commission’s decision on the utility’s credit rating. If the Commission’s decision will not cause it to drop, then the utility’s credit is maintained and its ability to attract capital is unimpaired. The third principle is the summation of the other two: if the utility is earning about as much as other, similar utilities and its credit rating isn’t damaged, then one may presume that confidence in its financial integrity is undiminished.

⁴⁰ *Federal Power Comm'n v. Hope Natural Gas Co.*, 320 U.S. 591, 603, 64 S.Ct. 281, 288, 88 L.Ed. 333, 345 (1943) (citations omitted).

⁴¹ What other businesses face similar risks? Other natural gas distribution utilities.

As its initial analytical step, the PSC has used a tool called the “zone of reasonableness,” in which it “presumed that any rate that was within 100 basis points of the national average was reasonable.”⁴² Missouri courts have approved the use of this analytical device because “[t]he United State's Supreme Court has instructed the judiciary not to interfere when the commission's rate is within the zone of reasonableness.”⁴³ The zone of reasonableness analysis is, in fact, exactly the sort of comparative analysis required by *Hope* and *Bluefield*. In the present case, the evidence shows that the average of ROEs awarded to natural gas utilities for the first three quarters of 2009 was 10.11%.⁴⁴



⁴² State ex rel. Public Counsel v. Public Service Com'n, 274 S.W.3d 569, 574 (Mo. App., W.D. 2009).

⁴³ *Public Counsel*, supra, 274 S.W.3d at 574, citing *In re Permian Basin Area Rate Cases*, 390 U.S. 747, 767, 88 S.Ct. 1344, 20 L.Ed.2d 312 (1968) (“courts are without authority to set aside any rate selected by the Commission [that] is within a ‘zone of reasonableness’”).

⁴⁴ Ex. 96, p. 5.

As the diagram above clearly reflects, two of Mr. Hanley’s recommendations are outside of the Zone of Reasonableness. Only his updated recommendation based upon a hypothetical capital structure is within the zone. The Commission has explained elsewhere that “a recommendation greatly varying from the national norm will be viewed with skepticism.”⁴⁵

Using similar methods and data, the three experts reached significantly different conclusions. Each expert applied one or more well-accepted techniques of financial analysis to a group of proxy companies, selected on the basis of their similarity to MGE.⁴⁶

PROXY COMPANIES		
Lawton	Hanley	Murray
AGL Resources	AGL Resources	AGL Resources
Atmos	Atmos	Atmos
Laclede	Laclede	--
New Jersey	New Jersey	New Jersey
NICOR	--	--
Nisource	--	--
Northwest	Northwest	Northwest
Piedmont	Piedmont	Piedmont
South Jersey	South Jersey	South Jersey
Southwest Gas	Southwest Gas	--
UGI	--	--
WGL	WGL	WGL

Hanley also performed a company-specific analysis of Southern Union Company (what has here been termed “Hanley No. 1”). All three experts employed a constant-growth Discounted

⁴⁵ In the Matter of Union Electric Company doing business as AmerenUE, Case No. ER-2007-0002 (Report & Order, issued May 22, 2007) at p. 39.

⁴⁶ The descriptions of the proxy groups and analytical methods are drawn from the direct testimony filed by each expert and, in Mr. Hanley’s case, his rebuttal testimony as well.

Cash Flow (DCF) analysis and a Capital Asset Pricing Model (CAPM) analysis, although Murray used the latter merely as a test of reasonableness and discarded the results. Lawton also performed a two-stage DCF analysis, but discarded the results. Hanley and Lawton each used a Risk Premium analysis and Hanley also performed a Comparable Earnings Method analysis; Hanley discarded the results of the latter in his two comparable company analyses. To summarize the analytical results:

ANALYTICAL RESULTS			
Method	Hanley #3	Lawton	Murray
DCF (Constant Growth)	9.20	9.82-10.04	9.25-9.75
DCF (Two Stage)	--	9.51-9.53	--
CAPM	10.83	8.52-8.70	6.97-8.09
Risk Premium (RPM)	10.94	9.9-10.5	--
Comparable Earnings	21.00	--	--
Recommendation:	10.50	10.00	9.50

Of course, the estimation of a cost of common equity is more of an art than a science and each of the expert witness employed professional judgment in selecting the appropriate inputs to use. As Mr. Murray stated, “It is not the number of methods or the number of calculations that makes an estimate reliable; it is the reasonableness of the inputs used in the methods that make them reliable.”⁴⁷ Likewise, each analytical technique may be considered to be weak or suspect in some respect. Thus, the Risk Premium and CAPM methods “are quite sensitive to estimations of the equity risk premium[.]”⁴⁸ Likewise, the reliability of the DCF method depends upon the accuracy of the growth rate used:

⁴⁷ Murray, Surrebuttal, p. 2.

⁴⁸ *Id.*, at 4.

Q. (Mr. Thompson) Now, the risk premium method and the capital asset pricing method are both very sensitive to the estimation of the equity risk premium; isn't that correct?

A. (Mr. Hanley) That's -- that's -- well, that's true, yeah, sure.

Q. I mean, that's a crucial input -

A. Sure. Sure.

Q. -- to both of those? So if an analyst were to get the equity risk premium wrong, then the results of the analysis would be wrong; isn't that correct?

A. Well, yes, but, you know, frankly, that's true with any of the models.

Q. Okay.

A. And the discounted cash flow model, you get the -- the growth rate wrong, and you get - you got the wrong answer.

Q. So it's true, then, that for any of these techniques, the results are only as good as the inputs?

A. True⁴⁹

Staff witness Murray testified, with respect to Mr. Hanley's CAPM and RPM analyses, that "Mr. Hanley's risk premium estimates are beyond the range of any reasonable estimates used in the investment field and, therefore, should be dismissed."⁵⁰ Hanley uses projected bond yields rather than current bond yields in his RPM, which is inappropriate.⁵¹ The analysis is intended to estimate investors' required returns, not economists' future projections. He misstates the average credit rating of his proxy group. Applying his market

⁴⁹ Tr. 9:142, lines 3-24 (cross-examination of Mr. Hanley by Mr. Thompson).

⁵⁰ Murray, Rebuttal, p. 2.

⁵¹ See generally, Murray, Rebuttal, pp. 4-22.

risk premium of 9.71% to his projected bond yield of 6.89% results in an expected return for the broader markets of 16.60%, which is almost twice that used by MOSERS in its investment strategy.⁵² Analysts apply a risk premium to the risk free rate, not to the utility bond yield. See Sch's 20-1 thru 20-7. For example, applying Citigroup's risk premiums to the risk-free rates used in their reports results in an overall estimated return for the broader markets of 9.50 percent to 9.95 percent. After applying the beta of 0.75, the estimated cost of equity for the utilities was in the range of 8.25 percent to 8.34 percent.⁵³ Other commonly used analyses along these lines result in ROEs of 8.97%, 9.17% and 9.37% for MGE.⁵⁴

Murray has similar criticisms for Hanley's CAPM analysis.⁵⁵ Hanley uses projected risk-free rates rather than current risk-free rates and most importantly, his estimated risk premiums are nowhere close to those used by investors and investment analysts. Hanley used an equity risk premium of 10.77 in his CAPM analysis.⁵⁶ It is higher than the risk premium he used in his RPM because this risk premium is based on Hanley's projected stock market returns over the yields on 30-year Treasury bonds rather than over public utility bond yields, which are higher due to the inclusion of default risk.⁵⁷ They are 432-bps to 577-bps higher than the estimated risk premiums used by equity risk analysts.⁵⁸ Based on a 30-Treasury bond yield of 4.40 percent, the current equity risk premium for U.S. markets is approximately 410 basis points, less than half of that used by Hanley and also less than that used by equity

⁵² *Id.*, at p. 15.

⁵³ *Id.*, at pp. 15-16.

⁵⁴ *Id.*, at 16-17.

⁵⁵ *Id.*, at p. 17 and ff.

⁵⁶ *Id.*, at p. 17.

⁵⁷ *Id.*, at 18.

⁵⁸ *Id.*

analysts.⁵⁹ Hanley also erred by using projected risk-free rates rather than current risk-free rates.⁶⁰

Murray did testify that the Commission should rely upon Hanley's DCF analysis.⁶¹ However, Hanley also recommended that an "addor" of 15 basis points be applied to his DCF result as a small-size adjustment.⁶² Mr. Murray testified that this small size adjustment was inappropriate, both because MGE is a division of a larger enterprise and because regulation causes smaller utilities to be no more risky than large ones.⁶³

Finally, it is important to note that Staff presented additional evidence that corroborates its ROE recommendation. A review of equity analysts' research reports on Staff's proxy companies revealed projected ROEs ranging from 7.30% to 8.50%.⁶⁴ Additionally, Staff determined that MOSERS, a large institutional investor, expects returns for large capitalization domestic equities of no more than 8.5%.⁶⁵

Risk Adjustment:

Public Counsel has proposed a risk adjustment to reflect the reduction of MGE's business risk by implementation of the SFV rate design. Public counsel has proposed two alternatives: either reduce the revenue requirement by \$1.8 million or reduce the return on equity by 50 basis points.⁶⁶ Staff opposes OPC's proposal because Staff witness Murray has already incorporated an appropriate risk adjustment in his ROE recommendation. To reflect

⁵⁹ *Id.*, at 19.

⁶⁰ *Id.*

⁶¹ *Id.*, at 19.

⁶² *Id.*, at 19-20.

⁶³ *Id.*

⁶⁴ Murray, Direct, p. 39 and Rebuttal Schs. 20-1 through 20-7.

⁶⁵ *Id.*, at 40.

⁶⁶ For this reason, Staff considers OPC's ROE recommendation to be 9.50% rather than 10.00%.

MGE's reduced business risk, Mr. Murray recommended the lower half of the range produced by his DCF analysis. Consequently, Staff believes that no further risk adjustment is necessary.

Conclusion:

Staff suggests that the Commission would best discharge its important duty of setting a just, fair and reasonable rate of return for MGE by using a hypothetical capital structure based upon the average of the actual capital structure values of Staff's proxy group. Methodological rigor requires, where hypothetical capital component ratios are used, then hypothetical capital component costs must be used as well. These figures, too, should reflect the average actual capital component costs of the proxy group, to the extent that those costs are known. In particular, Staff urges the Commission to resist the temptation to overstate the cost of short-term debt.

As for the return on common equity, always the most onerous and contested aspect of the cost-of-capital factor of the ratemaking exercise, Staff urges the Commission to adopt Mr. Murray's thoughtful and well-considered analysis. Nationally, regulatory ROEs have been trending downward:

Average Regulatory ROE Awards for Natural Gas Utilities, by Year:⁶⁷	
Year	Average ROE
2002	11.03
2003	10.99
2004	10.59
2005	10.46
2006	10.43
2007	10.24

⁶⁷ Ex. 96, p. 3. For 2009, decisions through August are reflected.

2008	10.37
2009	10.11

Staff has offered an ROE recommendation of 9.50% based upon reliable analytical methods and data, with due consideration of economic conditions, industry trends and corroborative evidence. Staff urges the Commission to adopt it.

III. ENERGY EFFICIENCY

MGE currently has natural-gas energy efficiency programs which include rebates for customer purchases of Energy Star[®] gas appliances, rebates for MGE customers to improve their home's building shell, education about energy efficiency measures, and weatherization funding which supplements the federal low-income weatherization program for MGE customers. (Exh. 40, Staff Cost of Service Report, p. 114) In addition to the benefits of saving energy, the weatherization program is designed to help at risk MGE customers reduce their energy costs for heating and subsequently help the Company to reduce costs associated with arrearages, shut-offs, reconnections, and bad debts. (Exh. 40, Staff Cost of Service Report, p. 114)

The natural gas energy efficiency programs are intended to educate MGE customers regarding energy efficiency, promote installation of high-efficiency gas appliances, and promote energy efficiency building shell measures by MGE's customers. In other words, these programs offer incentives to MGE's customers to become more energy conscious and in doing so to reduce energy consumption. (Exh. 40, Staff Cost of Service Report, p. 114) Staff supports continuation of funding for these programs at the \$750,000 level. (Exh. 66, Warren Reb. p. 5. lns 7-12)

A. Relationship to rate design: Should the continuation (for residential customers) or implementation (for small general service customers) of energy efficiency programs be contingent on the adoption of a rate design that protects MGE from negative financial effects associated with usage reductions by these customers?

To the extent the Commission expects the Company to encourage its customers to become more energy efficient, the Staff recommends continuation of the SFV rate design and all energy efficiency programs. After the Commission agreed to implement the SFV rate design, so that MGE no longer depended on customer usage for a significant portion of its earnings, MGE agreed to administer a number of energy efficiency (EE) programs. (Exh. 40, Staff Class Cost-of –Service and Rate Design, p. 11)

The Commission cannot expect a utility to act contrary to its shareholder interests by promoting energy efficiency when the company depends on gas sales to recover its costs of doing business. (Exh. 40 p. 11, ls 6-10) MGE implemented an education program regarding energy efficiency and a water heater rebate program designed to encourage the installation of energy efficient appliances. (Exh. 40, p. 11, ls. Lns 11-23.) These programs have been overseen by an energy efficiency collaborative (EEC) with representatives from MGE, Staff, OPC and the Missouri Department of Natural Resources.

MGE has expressed its willingness to expand the program to include the new SGS customer class if the Commission adopts a rate design for this class that leaves the Company financially indifferent to the volumes of gas consumed.

B. Funding:

The current level of funding from rates is appropriate. The funding level authorized in the last rate case is reasonable for the current energy efficiency programs which are still being

implemented and will subsequently be evaluated. (Exh. 66, Warren Reb. p. 5. lns 7-12)

C. Continuation/Form of Collaborative:

Staff advises the Commission to reauthorize the Energy Efficiency Collaborative as an advisory group with no direct control over Company expenditures. Decisions about the EE programs ultimately need to be Company decisions. Staff and other stakeholders should not directly determine the expenditure of funds by the Company. Staff and other stakeholders need to be able to do independent analysis of the effectiveness of EE programs; consequently Staff agrees with Mr. Buchanan that the EEC be reconstituted as an advisory group. (Exh. Warren Surrebuttal p. 7, lns. 4-8.) Therefore, Staff supports the continuation of the EEC with the collaborative modified such that it acts in an advisory capacity. This is similar to the way other Missouri utilities' EECs are structured.

IV. RATE DESIGN/COST OF SERVICE

A. Class Cost of Service

What rate design should the Commission adopt for the residential customer class?

MGE currently operates under a decoupled rate design, approved by the Commission in its Report and Order in GR-2006-0422, and affirmed by the Southern District Court of Appeals in SD29278 and SD29308. The Straight Fixed Variable (SFV) rate design is a reasonable way for the Commission to support energy conservation in Missouri. It is a simple rate design that tells customers the cost of the natural gas and the separate cost of MGE delivering that gas to their meters, in a clear direct manner.

This rate design benefits consumers because their natural gas bills are spread more evenly throughout the year, reducing the shock of high bills in a cold winter. SFV permits

MGE to promote conservation because the company is indifferent to customer natural gas usage.

Retention of the SFV Residential Rate Design.

In considering and balancing the interests of all MGE customers, the public as a whole and the Company and its shareholders, SFV is a reasonable approach. The SFV rate design was implemented in MGE's last rate case, GR-2006-0422, and has been in place for nearly three years.

Straight Fixed Variable (SFV) Rate Design: Collection of Non-Gas Costs

The term SFV rate design applies to the customer's total bill. Non-gas, or margin costs are collected in a flat delivery charge, and customers pay for each unit of gas they use through the PGA charge. The charge for the gas itself is the 'variable' piece of the rate design. (Exh. 63, Ross Reb., p. 3, lns 4-17).

There is only one level of service for residential customers – access to the natural gas distribution system. This service allows a residential customer to consume the amount of natural gas they wish and to consume it whenever they wish. With access to the system comes the billing and customer service for the commodity. The factor that differs among Residential customers is the actual amount of gas used, and the charge for that is collected in the variable portion(V) of SFV, which is the amount of gas the customer consumes. (Exh. 64, Ross Surreb., p 3 ln. 21 to p. 4 ln 5).

At the heart of SFV rate design is its simplicity. Commissioner Davis: “....And would you say that one of the advantages of the straight fixed variable [SFV] rate design is its simplicity?” Staff witness Ross: “Yes, that's one of the advantages”. (Tr. p. 900 lns 19-22).

Collection of Residential Cost of Service (COS) in a fixed monthly delivery charge (SFV) is an equitable and reasonable way to recover costs from Residential customers. Importantly, SFV rate design reflects that the difference in cost of serving any two residential customers is not driven by size of load (amount of gas consumed). The majority of Residential customers fall within a small band or range of usage. To that end, Staff has not seen any evidence that a difference of a few hundred Ccfs per year among Residential customers creates any difference in MGE's costs to serve customers. MGE's costs to serve any two Residential customers are driven by factors other than customer size, such as distance from the transmission pipeline, customer density in the area, terrain in the customer's geographical area, or the exact age and depreciated cost of the equipment serving the customer. (Exh. 43 p. 10 lns 7-23).

To deliver gas from the interstate pipeline to homes or businesses, each local distribution company has a significant investment in pipeline systems and other long-term assets, together with many other costs incurred to serve every customer – costs such as employees, office space, vehicles, computers and billing systems, meters, insurance, phones – all of which fall under the 'fixed' cost portion of the rate design. (Exh. 63, Ross Reb. p. 3 lns 17 – 22).

Many of MGE's capital investments have an expected service life of over 40 years so MGE makes its long-term investment decisions independent of how much gas any individual customer uses. A fixed charge accurately reflects the nature of the cost MGE incurs to serve a Residential customer and sends a clear price signal to customers as to costs and benefits. (Exh. 43 p. 12 ln 16 to p. 13 ln 9).

Supporting Staff's position that the vast majority of a utility's non-gas costs are fixed costs, Staff witness Ross relies on Dr. James Bonbright, an author of Principles of Public Utility Rates. Here Dr. Bonbright describes "fixed costs" as "short run costs that do not vary with a change in output." On page 31 of his treatise on rates, Dr. Bonbright clarifies the difference between short-run and long-run costs.... "Of course, all costs are variable in the long run but the long life span of the sunk capital costs in the utilities means the long run may often be thirty years or more.." (Exh. 63, Ross Reb. p. 6 lns 1-15). Because utility assets are long-lived and because assets used by the company do not change with an individual customer's gas usage, they fall under Dr. Bonbright's definition of "fixed" costs. (Exh. 63 Ross Reb. p. 7 lns 2- 6).

Not only are such distribution costs fixed in nature, they are the same for all Residential customers served by the Company based on the minimum size of main installed. Second, a gas utility builds its system to provide safe and reliable service to customers on the expected coldest day for the system. Once the delivery facilities are in place to satisfy the system reliability considerations, changes in the amount of gas delivered to a customer have no impact on the cost of delivery service. Very simply, if a customer uses one cubic foot of gas or 13.2 Mcf per day (the design day capacity per customer for a two inch main on the Company's gas system), there is no difference in the cost of delivery service, on average, within the Residential or SGS rate classes.

(Exh. 9, Feingold Surreb. p. 5 ln 18 to p. 6 ln 3).

Public Counsel witness Ms. Meisenheimer even admitted on the stand, several times, that the Company does not change its investment based on individual customer usage:

Q. So when the customer buys in one month, say, 60 Ccf or 160 Ccf, the company does not change its investment to meet that customer's needs?

A. *No, and that's why we proposed that those types of costs be collected in a uniform customer charge.* (Tr. p. 441, lns 12-16).

Q. Now, the company doesn't have to add or change its distribution system investment if a residential customer decides to expand the use of gas from only cooking to include space and water heating, does it?

A. *Maybe not, no.*

Q. The company distribution system can handle such a change in the customer's end uses of gas?

A. *Yes.*

(Tr. p. 441 ln 19 to p. 442 ln 1).

Q. So if I'm a residential user, if I used an extra 100 Ccf in a month, does the company have to buy more measuring and regulating equipment?

A. *No, not necessarily. No, not necessarily.* (Tr p. 445 lns 13-16).

The point is simple. The Company does not change its investment to serve any individual customer. The cost of service is fixed and independent of the amount of gas flowing to the customer.

Public Counsel witness Meisenheimer testified she did not develop a cost of service for Residential customers that quantifies the difference in annual cost to serve individual customers at various annual usage levels. (Tr. p. 445 lns 17-21). Ms. Meisenheimer also agreed that it would be an enormously complex process to list specific cost-causation factors by individual customers. (Tr. p. 440 lns 1-4). Without a cost of service study, Public Counsel has no support for its recommendation to return to traditional rate design.

Staff witness Ms. Ross testified that when customers lower gas usage, they directly lower the largest portion of their gas bill because 70 to 75% of the customer's bill is for the amount of gas used. (Exh. 63, Ross Reb. p 4 lns 1-4). At hearing, MGE witness Mr. Noack

testified “...to the extent that the customer is able to conserve, use our efficiency methods, et cetera, 75% of their bill is gas costs, so they save a lot of money.” (Tr 729 lns 2-5).

“...under an SFV rate design, only the fixed cost component of the rate structure does not change with use. The variable cost component of the rate structure consists of the Company’s commodity charge that comprises over 70% of the typical residential bill. This component of the SFV rate design causes bills to increase as use increases. Therefore, it is simply incorrect to conclude that more gas use does not collect more revenue from a customer under an SFV rate design. Customer bills increase with use based on the variable cost component- the Company’s commodity cost of gas. This type of rate design which recovers fixed costs through fixed charges and variable costs through variable charges has exactly the efficiency properties required by economic theory since fixed costs have no impact on marginal costs.” (Exh. 9, Feingold Surreb. p. 4 ln 19 to p. 5 ln 5).

Effect of Weather and Gas Sales on Earnings under SFV and Traditional Rate Designs

Because revenues from Residential customers do not depend on usage, SFV rate design more closely aligns conservation interests of the Company with its customers and enables MGE to promote conservation without harming its shareholders. (Ex 43 p. 11 lns 3-10). In her Direct testimony, Ms. Meisenheimer wrongly asserts the current SFV rate design “shift[s] all earnings risk to consumers.” (Exh. 72, Meisenheimer Dir. p. 18 lns 23-25). If that were true under SFV, which it is not, then MGE would have no risk of failing to earn its authorized return. As discussed below, under SFV, the Company has no guarantee of earning its authorized return under SFV.

At hearing, Ms. Meisenheimer testified that her traditional volumetric rate design shifts weather risk between the company and the customer. In warmer than normal winters,

the company earns less of its non-gas margin costs and in colder than normal winters, customers pay more non-gas margin so the company earns more, even though its costs of service did not change. (Tr. p. 430 lns 8-15). Ratepayers have weather risk under Public Counsel's traditional volumetric rate design in that colder weather puts ratepayers at risk of overpaying the true cost of service in colder than normal winters.

Public Counsel witness Meisenheimer testified that under its proposed volumetric rate design, the more gas the company sells, the more money it makes. Moreover, Public Counsel knows that under the current SFV rate design, MGE has no incentive to encourage consumers to use more gas because MGE does not recover costs based on the amount of gas it sells. (Tr. p. 431 lns 1-24).

Public Counsel proposes a traditional rate design where the non-gas margin or delivery cost is collected from customers with 55% of the amount collected in a fixed monthly customer charge and 45% collected in a volumetric charge, the latter of which varies with the amount of gas used. (Tr. p. 428 lns 6-17). In addressing why the 45% volumetric charge proposed by Public Counsel is harmful to the company and its customers, MGE witness Mr. Noack testified at hearing: "...if we use Ms. Meisenheimer's rate design as an example, 45 percent of our revenues will be tied to a volumetric number. We have to sell that many MCfs or CCfs of gas to even have a chance at earning our rate of return. And if customers continue to conserve, if they continue to buy appliances that are more efficient as they have over the last 10, 12 years, that usage is going to continue to go down and we'll be back for a rate case." (Tr. p. 726 lns 7-15).

MGE witness Feingold addresses how Public Counsel's proposed traditional rate design creates benefits and disincentives for the Company that work against the interests of Residential and SGS customers:

Under traditional utility ratemaking, an increase in the recovery of fixed costs will occur (compared to the level approved in the utility's most recently completed rate case) when sales are higher than assumed in the design of the utility's rates. Conversely, a decrease in the recovery of fixed costs will occur when sales are low relative to assumed levels. This situation creates a natural disincentive for utilities to promote conservation or energy efficiency initiatives because such actions will reduce the utility's revenues and resulting earnings. The Company's SFV rate design proposed for its new SGS rate class, coupled with the same rate design previously approved for its RS [residential] rate class, effectively eliminates the revenue impact of increases or decreases in sales volumes. By doing so, the Company's rate design approach for the new SGS rate class would effectively eliminate the link between sales volumes and revenues.

(Exh. 7, Feingold Dir, p. 14 ln 21 to p. 15 ln 9).

Importantly, SFV rate design does not shift weather risk to customers – rather it eliminates all weather risk for both the Company and the customer. From the customer's perspective, under the traditional rate design advocated by OPC, when the weather is colder, two components of a customer's bill – the margin piece and the cost of the gas itself – will combine to sharply increase a residential customer's bill. Conversely when it is warmer than expected, a customer can expect a lower bill. (Exh. 63, Ross Reb. p. 8 lns 13-22).

At hearing, Commissioner Davis asked Ms. Ross about Public Counsel's proposed traditional rate design and the possibility of MGE earning more than its cost of service from ratepayers in a cold winter:

Q. . . . If they [MGE] had cold weather, they could – if they had really cold weather, they could hit the jackpot, couldn't they?

A. *That's correct. Yes.*

(Tr. p. 907 lns 1-4).

With the current SFV rate design, MGE customers will never overpay the company for gas service in colder than normal winters.

SFV Rate Design Stabilizes Customer Bills

In support of how SFV rate design stabilizes both customer bills and Residential class revenue, Staff witness Ross cites the example of calendar year 2008.

Because the weather was colder than normal in calendar year 2008, the Residential customers paid nearly \$2,205,000 less with SFV than they would have paid under traditional rate design. (FN 4: This amount was calculated using the figures shown on p. 12 of Ms. Meisenheimer's direct testimony [Exh. 72]. While OPC used the table to support a claim that customers paid \$18,000,000 more under the SFV rate design, Staff points out that their number was calculated by including 14 non-winter months and only 7 winter months in their [OPC's] analysis. Thus, the analysis not only covered 21 months, but a majority of the months were non-winter months. The \$2.2 million referenced in this [Ross] rebuttal testimony reflects the 12 month test year). During colder than normal weather, the customers would have overpaid the utility's cost of service under OPC's traditional rate design because they would have paid an additional charge for each unit of gas.

The other component of the customer's bill – the charge for actual gas used – was the same for Residential customers under the SFV rate design as it would have been under the traditional rate design.....

The Company's revenues are stabilized by the SFV rate design. In the case of the test year, MGE collected about \$2,205,000 less from Residential customers than they would have collected under OPC's proposed [traditional] rate design"

(Exh. 63, Ross Reb. p. 9 lns 4-18).

To demonstrate the benefits of its levelized fixed-delivery charge, MGE conducted a study of revenues over the past nine (9) winter months (November 07 through March 08 and November 08 through February 09), which compares the monthly gas bills of residential customers under the SFV rate design to bills that would have been collected under the previous volumetric rate design recomputed at the Company's revenue level approved in its

last rate case. Over the last nine (9) month winter periods, each residential customer saved on average about \$81.00 under the SFV rate design compared to the amount they would have been billed under a volumetric rate design proposed by Public Counsel. In short, the SFV rate design provides revenue stability for both customers and the company. (Exh. 7, Feingold Dir. p. 16 ln 17 to p. 17 ln 5; Sched RAF-6, ln 12 col [I]).

Selling More Gas does Not Increase Earnings under SFV Rate Design

Ms. Ross testified that under the traditional rate design, the company may increase its earnings by increasing revenues or decreasing costs. Under the SFV rate design, unlike OPC's proposed traditional rate design, MGE has no incentive to encourage customers to use more gas to improve its revenues – only the incentive to attract more customers, operate efficiently and provide satisfactory customer service. (Exh. 63 Ross Reb. p. 11 lns 3-15).

On questions from the bench on the effect rate design has on the Company's ability to earn its rate of return and still support energy efficiency programs for its customers, MGE witness Noack testified: "...the straight fixed variable rate design allows us to do that. It – we don't have to worry about whether or not they're conserving. We want to have them conserve. We want to promote their conservation efforts. We want to align our interests with theirs in that case." (Tr. p. 726 ln 16 to p. 727 ln 9). "With a straight fixed variable rate design, all of our costs are being collected through that straight fixed variable rate, other than the purchased gas that we sold to the customers, and that's being collected through our purchased gas adjustment clause...That's simply a flow through." (Tr. p. 728 lns 12-20).

Even Ms. Meisenheimer admitted at hearing that the Company may earn less than its revenue requirement if it loses customers and that such customer losses pose a risk to company earnings. (Tr. p. 448 lns 13-34). Ms. Meisenheimer further agreed, even with an

SFV rate design in place, the Company may not earn its revenue requirement if it operates sloppily or inefficiently. (Tr. p. 449 lns 1-12).

Further supporting how SFV rate design provides an incentive for the Company to operate efficiently and how SFV offers the company no earnings guarantees, Mr. Noack testified on re-direct from MGE counsel:

Q. I want to take you back again to the series of questions and the answers that you had with Commissioner Kenney. Now, again, in the context of the straight fixed variable rate design that's currently in effect for the company, does MGE still have an incentive to be efficient in its operations and to make its earnings targets?

A. *Oh, absolutely.*

Q. Could you elaborate on that, please?

A. *Well, with costs -- I mean, costs continue to increase, payroll, et cetera, and you know, unless we're efficient in our operations, those costs continue to rise and we won't be able to earn our return there. Our plant continues to increase. A lot of that is not due to growth, and we do have a mechanism through this Commission to come in and get relief.*

But, you know, everything considered, the straight fixed variable rate design is going to collect the level of costs that we are at right now, and so it's in our best interests if we want to, you know, continue to earn this rate of return, to watch what we spend our money on.

Q. So it's not a guarantee that the company's going to reach its earnings targets?

A. *Absolutely not, no.*

(Tr. p. 730 lns 1-25).

Demand Costs are Allocated Between Residential and SGS Classes and Not Between Customers

Ms. Meisenheimer, in her Rebuttal testimony (Exh. 73, p. 13, lns 1-5) correctly notes that a measure of demand is used to allocate some of MGE's costs between classes and then wrongly applies that fact to support Public Counsel's notion that intra-class subsidies exist based on usage. Staff witness Ross points out that the goal of setting homogenous customer classes, such as Residential and the new SGS class, is to limit both inter- and intra-class subsidies. Cost allocators derived using coincident or non-coincident demand is appropriate to use to allocate cost between customer classes, but not within rate classes. To the greatest extent possible, rate classes are composed of customers similar in size and usage patterns. (Exh. 64, p. 2 lns 15-23). (emphasis added)

The difference in demand for most residential customers is a few hundred Ccfs, while the difference for the LVS customers can be as much as 50,000 Ccfs. The difference between two individual Residential or two Small General Service customers' size and / or usage patterns is comparatively small. Because of such small usage and load differences, a demand cost component has never been part of any rate design for these customer classes. No Missouri LDC applies a demand charge for its residential or SGS customers. (Exh. 64, p. 3, lns 7-16)

Ms. Meisenheimer, in her Rebuttal testimony confuses the application of "demand" costs to support her view of intra class residential customer subsidies. At hearing, Ms. Meisenheimer again confuses "demand" to the Residential class, but ultimately admits residential meters measure volume of gas used:

Q. Does MGE install demand meters on a residential customer's service connection?

A. *It does install meters.*

Q. But are they demand meters?

A. *They measure use. If you mean a special meter that sends signals on a more frequent basis, I'm not sure what you're asking me.*

Q. Would you agree that the meters that the company does install on a residential service connection measure the volume of gas?

A. *Yes.*

(Tr. p. 444 ln 13 to p. 445 ln 3)

The Company measures only the volume of gas used by individual Residential and new SGS customers. There is no separate demand metering of individual usage in these classes, unlike the large volume classes, because those volume variances are small and insignificant given the homogeneity of Residential and SGS class customers.

OPC misleads the Commission in its claim that the Residential customer class overpaid \$18 million under the SFV rate design than they would have under a traditional volumetric rate design:

Staff witness Ross analyzed Ms. Meisenheimer's workpapers that support her calculation and points out how OPC achieved its fictitious \$18 million:

Because the 21 month time period Ms. Meisenheimer elected to use in the calculation of the \$18 million amount included 2 full non-winter periods (14 months) and less than 2 full winter periods (7 of 10 months), it is not surprising that the SFV collected more revenue. (FN 2 Ms. Meisenheimer used a 21 month period running from April 2007 to December 2008) If you use the same information, but chose a different 21 month period, the numbers would change.

For example, during the 21 month period starting in August 2007 through April 2009, Ms. Meisenheimer's [traditional volumetric] rate

design [would have] collected around \$8 million more from Residential customers. The choice of the time period makes quite a difference.”

(Exh. 63, Ross Reb. p. 4 lns 5-22).

Public Counsel Mischaracterizes Fixed Costs

Ms. Meisenheimer has mischaracterized the nature of fixed costs by implying in her Direct testimony (Exh. 72, Meisenheimer Dir. p. 9) that the Company’s costs vary with gas usage. Cost of service does not vary with gas usage.

The allocation of a portion of the cost of distribution mains on a demand basis is an effort to share the gas system’s scale economies across all customer classes. While a two inch distribution main may serve all of the Company’s RS and SGS customers, it is less costly per unit to deliver gas to customers through larger facilities. Where these scale economies are important, the demand allocation basis recognizes that all customers should share in the benefit of scale economies. This means that the total allocated cost of service is lower for residential customers because they share in these scale economies. However, this [demand] allocation basis does not change the fundamental fact that all of the Company’s gas delivery costs are fixed and do not vary with the volume of gas delivered....The demand allocation basis does not suggest that demand-related costs differ among the Company’s residential customers because virtually all customers within that rate class can be served by the smallest distribution main installed on the Company’s gas system.”

(Exh. 8, Feingold Reb. p. 7 ln 14 to p. ln 10).

Just because a class cost of service study allocates a portion of delivery service costs based on class demand - this fact by itself does not imply that a volumetric component of rates is an appropriate way in which to collect this cost, as Ms. Meisenheimer has proposed in her Rebuttal testimony (Exh. 73, pp. 13-14). Ms. Meisenheimer misconstrues the use of class demand as a basis for cost allocation. To understand this issue, one must first understand the process of determining cost of service by class. Establishment of rate classes relies on two key elements – the relative homogeneity of load characteristics and the ways of taking gas service. For both RS and SGS customers, the load characteristics of each class are similar.

The method of taking gas service also is similar because each customer requires a meter, regulator, service line, and distribution main. Given the size of the customers, the smallest main size installed by the Company will serve the customers at the system average density and operating pressure. The customers all have like peak load characteristics, coincidence factors, and load factors. The system serves other customers too. Any particular customer combination uses other sizes of pipe than the minimum size because larger pipe results in lower costs (i.e. economies of scale) for all customers. For both RS and SGS customers, it is necessary to allocate the demand costs to the class in a way that will permit the class to benefit from a share of the scale economies available on the system. The purpose of allocating common costs among customers on the system is twofold: (1) to assure that rates are “subsidy free,” and (2) to assure that customers’ rates reflect the embedded costs of the utility’s gas system. (Exh. 9, Feingold Surreb p. 6 ln 16 to p. 7 ln 14).

Ms. Meisenheimer’s mischaracterization of demand costs discussed above, and how those costs are allocated to the Residential and new SGS classes misleads the Commission to the wrong conclusion that class cost allocations somehow support the notion that a 45% volumetric charge should be applied to individual residential gas bills.

Such misdirection by Ms. Meisenheimer detracts from her credibility as an expert and her testimony. Ms. Meisenheimer’s testimony at hearing also lacks credibility because of her vacillation and elusiveness. Under cross examination, Ms. Meisenheimer twice testified under oath that she did not review Mr. Hack’s filed testimony on policy regarding the benefits of the SFV rate design. Later, she testified that she didn’t review all of Mr. Hack’s testimony. On follow up questions, she testified she reviewed Mr. Hack’s direct testimony. Which is it? Ms. Meisenheimer’s equivocation on the stand indicates a lack of credibility. Ms.

Meisenheimer's unsupported testimony demonstrates her dedication to a method of rate design which fails to recognize the impact of higher gas costs on consumers and the importance of conservation. (Tr. p. 562 lns 18 – 24 and Tr. p. 587 lns 21 -25 and p. 588 lns 1-10).

Q. -- think it's -- did you -- you reviewed Mr. Hack's testimony, did you not?

A. *No, actually, I didn't.*

Q. You didn't? Okay. So you have no knowledge as to whether MGE was actually earning its allowed return or not, then?

A. *I didn't review his testimony.*

(Tr. p. 562)

FURTHER RECROSS-EXAMINATION BY MR. BOUDREAU:

Q. I believe in response to a question from Commissioner Davis, you said you did not review Mr. Hack's testimony in this case; is that correct?

A. *I didn't review all of Mr. Hack's testimony in this case.*

Q. Well, the reason I ask is Mr. Hack filed rebuttal concerning at least one aspect of your direct testimony. Are you aware of that?

A. *No. I --*

Q. No. So you didn't bother to look at the record to see what somebody was saying about what you were saying?

A. *I reviewed his direct testimony. I didn't -- I didn't review his testimony for rebuttal.*

(Tr. p. 587-588)

MGE Proposed SGS and LGS Class Restructuring

MGE will restructure the SGS class from customers whose usage does not exceed 10K Ccfs in any one month to a new SGS class where usage is less than 10K Ccfs annually. (Exh. 43, p. 13 lns 11-16). SGS customers may vary end uses from larger fryers, dishwashers, or water heating for restaurants and laundries, to many SGS customers using gas only for space heating. SGS loads are small and the difference between two SGS customer's loads even smaller. The proposed SGS class requirements provide a more homogenous customer class. Load size is not the cost driver in the restructured SGS class. (Exh. 43, p. 14 lns 1-15).

Residential class customers and the new SGS class customers are similar in size and load. The average Residential customer buys 66 Ccf/month or 796 Ccf/year and the average new SGS class customer buys 114 Ccf/month or 1362 Ccf/year. (Exh. 7, Sched RAF-7, p. 1 ln 15; p. 2 ln 11; p. 3 ln 19; p. 4 ln 15). Residential and new SGS customer class usage levels, in contrast to the LGS class, are far below the LGS usage levels of 22,118 Ccf/year or 1.843 Ccf/month. (Exh. 7, Sched RAF -7, p. 7 ln17 and p. 8 ln 16).

MGE installs the same size meter, regulator service line, and distribution main to serve virtually all SGS customers regardless of the monthly or annual volume of gas they use. The same situation exists for the Company's residential customers. This means that the size of the delivery service facilities is independent of gas volume and should, by Public Counsel's own standard, be recovered through an SFV rate structure. (Exh. 8, Feingold Reb p. 7 lns 7-12).

Staff proposed the new SGS class be formed in the last general rate case, GR-2006-0422, because the usage classification ensures the customers are relatively small and homogenous in their usage patterns and their weather sensitivity. (Exh. 63 p. 18 lns 1-6).

CONCLUSION

WHEREFORE, on account of all the foregoing, Staff prays that the Commission will resolve the issues remaining for determination according to its recommendations set out herein.

Respectfully submitted,

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Certificate of Service

I hereby certify that copies of the foregoing have been mailed, hand-delivered, or transmitted by facsimile or electronic mail to all counsel of record this 18th day of December, 2009.

/s/ Lera L. Shemwell