

# EXHIBIT

Exhibit No.:

Issue(s):

Rate Design/

Energy Efficiency Programs/

Low-Income Programs/

Low-Income Consumption

Witness/Type of Exhibit: Meisenheimer/Surrebuttal

Sponsoring Party:

Public Counsel

Case No.:

GR-2006-0422

## SURREBUTTAL TESTIMONY

OF

**BARBARA A. MEISENHEIMER**

Submitted on Behalf of the Office of the Public Counsel

**MISSOURI GAS ENERGY  
(RATE DESIGN)**

CASE NO. GR-2006-0422

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

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Missouri Public  
Service Commission

December 11, 2006

*CPC* Exhibit No. 203  
Case No(s) GR-2006-0422  
Date 1-8-07 Rptr af

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

In the matter of Missouri Gas Energy's )  
Tariff Sheets Designed to Increase Rates for )  
Gas Service in the Company's Missouri )  
Service Area )

**Case No. GR-2006-0422**

**AFFIDAVIT OF BARBARA A. MEISENHEIMER**

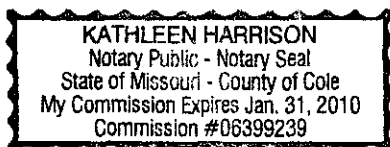
**STATE OF MISSOURI** )  
 ) ss  
**COUNTY OF COLE** )

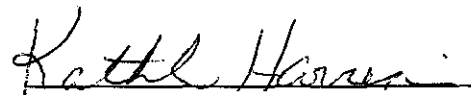
Barbara A. Meisenheimer, of lawful age and being first duly sworn, deposes and states:

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

  
**Barbara A. Meisenheimer**

Subscribed and sworn to me this 11th day of December 2006.



  
**Kathleen Harrison**  
Notary Public

My Commission expires January 31, 2010.

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1 **SURREBUTTAL TESTIMONY**

2 **OF**

3 **BARBARA MEISENHEIMER**

4 **CASE NO. GR-2006-0422**

5 **MISSOURI GAS ENERGY**

6 **I. INTRODUCTION**

7 **Q. PLEASE STATE YOUR NAME, TITLE, AND BUSINESS ADDRESS.**

8 **A. Barbara A. Meisenheimer, Chief Utility Economist, Office of the Public Counsel,**  
9 **P. O. Box 2230, Jefferson City, Missouri 65102.**

10 **Q. HAVE YOU TESTIFIED PREVIOUSLY IN THIS CASE?**

11 **A. Yes, I filed direct testimony on rate design issues on October 20, 2006. I also**  
12 **filed rebuttal testimony on November 21, 2006.**

13 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

14 **A. The purpose of my testimony is to respond to portions of the rebuttal testimony of**  
15 **Michael Noack, Ronald Amen, David Hendershot and Philip Thompson filed on**  
16 **behalf of Missouri Gas Energy (MGE), the testimony of Robert Jackson on behalf**  
17 **of the City of Kansas City and the testimonies of Anne Ross filed on behalf of the**  
18 **Missouri Public Service Commission Staff (Staff).**

19 **II. RESPONSE TO COST OF SERVICE REBUTTAL**

20 **Q. MR AMEN RAISES CONCERN REGARDING YOUR CUSTOMER CHARGE**  
21 **CALCULATION BASED ON A STATEMENT IN YOUR DIRECT TESTIMONY THAT**  
22 **CUSTOMER SERVICE EXPENSES ARE CUSTOMER RELATED AND ARE ALLOCATED**  
23 **ON THE BASIS OF NUMBER OF CUSTOMER BILLS. PLEASE RESPOND.**  
24

1 A. Mr. Amen correctly references the sentence on page 11 of my direct my testimony  
2 and I acknowledge that the sentence should have stated that customer accounts  
3 expenses are customer related and are allocated on the basis of number of  
4 customer bills to be consistent with the allocation factors listed in the Table on  
5 page 11 and with the costs allocated on a customer basis in my study.

6 **III. RESPONSE TO RATE DESIGN**

7 Q. WOULD YOU AGREE THAT YOU HAVE SOFTENED YOUR PROPOSAL ON THE  
8 CUSTOMER CHARGE OVER THE COURSE OF THIS PROCEEDING?

9 A. Yes. In direct testimony, I indicated that based on my initial cost of service study  
10 results I would not alter the existing customer charge. As I explained in rebuttal  
11 testimony, I did not submit an updated class cost of service study in this case  
12 because the parties have settled on an equal percent increase to the customer  
13 classes. Although I do not believe that rerunning the study to reflect the change in  
14 the mains allocator that I accepted in rebuttal or other corrections that I might  
15 have made through the course of the proceeding would have produced a  
16 substantial difference in the resulting Residential customer charge, I did soften my  
17 position on the customer charge in rebuttal testimony to reflect consideration of  
18 the Commission's Report and Order in GR-2004-0209 in which the Commission  
19 allowed 55% of the Residential non-gas revenue requirement to be collected  
20 through the customer charge. In rebuttal testimony I also indicated that in the  
21 event that the Commission approves an increase in the customer charge, it seems  
22 reasonable to limit the increase to no more than the residential class revenue

1 increase consistent with the Commission's decision in the last MGE rate case GR-  
2 2004-0209.

3 Q. HAVE YOU QUANTIFIED THE RANGE OF CUSTOMER CHARGES THAT WOULD  
4 RESULT FROM APPLYING THE RESIDENTIAL CLASS INCREASE TO THE CUSTOMER  
5 CHARGE UNDER THE CURRENT STAFF AND COMPANY PROPOSED REVENUE  
6 REQUIREMENTS?

7 A. Yes. On page 1 of his rebuttal testimony, Staff witness David Winter currently  
8 proposes an increase in revenue requirement of \$16,050,932. On pages 2-3 of his  
9 rebuttal testimony, Company witness Michael Noack indicates that the Company  
10 proposes an increase of \$37,513,421 excluding the \$750,000 in conservation  
11 initiatives proposed in the Company's rebuttal testimony or an increase of  
12 \$38,263,421 if the conservation initiatives are included. Using the Staff's total  
13 current non gas rate revenues of \$159,194,329 as a base, would produce equal  
14 percentage increases of 10.08% associated with the Staff proposal, 23.56%  
15 associated with the Company proposal excluding the conservation initiatives and  
16 24.04% associated with the Company proposal including the conservation  
17 initiatives. Applying the equal percentage increases to the current Residential  
18 customer charge of \$11.65 would result in a range of a \$12.82 customer charge at  
19 the Staff's revenue requirement increase to \$14.45 at the Company proposal  
20 revenue requirement increase including the conservation initiatives.

1 Q. HOW DO THESE LEVELS OF CUSTOMER CHARGES COMPARE TO THE CUSTOMER  
2 CHARGES FOR OTHER INVESTOR OWENED MISSOURI LDCS?

3 A. The customer charge for Laclede Gas is \$12.00 excluding the ISRS. The  
4 AmerenUE Gas customer charge is \$10.20. Atmos has customer charges that  
5 vary by district ranging from \$5.00 to \$9.05. Empire Electric's gas operations  
6 have customer charges of \$7 and \$9.50. Allowing MGE to recover 55% of its  
7 Residential non gas revenues through the customer charge would produce a  
8 customer charge that is higher than those of the other LDCs listed.

9 Q. DO MR. FEINGOLD AND MS. ROSS RAISE ANY NEW RATE DESIGN ARGUMENTS  
10 THAT YOU WISH TO ADDRESS IN THIS TESTIMONY?

11 A. No. The primary arguments raised by Mr. Feingold and Ms. Ross in rebuttal  
12 testimony were addressed in my rebuttal testimony.

13 **IV. RESPONSE TO EFFICIENCY AND LOW INCOME PROGRAM**  
14 **PROPOSALS**

15  
16 Q. WHAT CONSERVATION PROGRAMS DOES MGE PROPOSE IN REBUTTAL  
17 TESTIMONY?

18 A. In rebuttal testimony, Mr. Hendershot proposes to implement a communication  
19 and customer education proposal including availability and promotion of an on-  
20 line energy analyzer focused on promoting energy efficiency and conservation  
21 based on the Energy Star Program. Mr. Hendershot also describes MGE's  
22 proposal to implement a water heater rebate program that would award rebates for  
23 residential replacement gas water heaters that have an Energy Factor of .62.  
24 (Based on Mr. Hendershot's testimony it appears that MGE's intention is to

1 provide the rebates for water heaters with an Energy Factor of equal to or greater  
2 than .62.) Mr. Hendershot further explains that MGE's willingness to offer these  
3 conservation initiatives is dependent on approval of a rate design that makes the  
4 Company indifferent to volumes consumed by residential consumers and to  
5 recover the cost of the conservation initiatives in rates.

6 **Q. WHAT ARE YOUR PRIMARY CONCERNS WITH THESE PROPOSALS?**

7 **A.** 1) An appropriate first step in developing a comprehensive approach to energy  
8 efficiency programs would have been to establish objectives and to conduct a  
9 study to determine the most cost effective efficiency programs. Such a process  
10 should provide an opportunity for participation by customers in all classes;

11 2) The Company conditions its willingness to offer programs on full residential  
12 revenue decoupling and full recovery of program costs;

13 3) The rebates are limited to natural gas water heaters and tankless water heating  
14 systems excluding other significant sources of consumption such as space heating  
15 for which rebates might produce greater efficiencies;

16 4) The Company provides very little information upon which to evaluate the  
17 customer impacts that might result from the programs;

18 5) It would have been appropriate for the Company to file any proposed  
19 efficiency programs in direct testimony allowing greater time for parties to  
20 consider and offer comments regarding the programs;

21 6) The Company has not explained how the proposals comply with chapter 3

22 Filing & Reporting Requirements and Chapter 14- Promotional Practices



1       Q. WHAT IS YOUR GENERAL RESPONSE TO THE INITIATIVES AS ADEQUATE  
2       MAKEWEIGHT FOR FULL RESIDENTIAL DECOUPLING?

3       A. The Company conditions its willingness to offer the initiatives on approval of a  
4       rate design that makes the Company indifferent to volumes consumed by  
5       residential consumers. Public Counsel is willing to consider partial decoupling  
6       mechanisms in order to secure conservation initiatives that provide meaningful  
7       benefits to consumers, however, the delivery charge proposed by Staff and the  
8       SFV proposed by the Company go too far and will have detrimental impacts on  
9       low use consumers.

10      Q. SETTING ASIDE THE ISSUE OF THE RATE DESIGN CONDITION, DO YOU HAVE  
11      COMMENTS REGARDING MGE'S PROPOSED INFORMATION PROGRAMS?

12      A. Yes. Public Counsel is not conceptually opposed to MGE promoting the Energy  
13      Star Program and making an on-line energy analyzer available to customers.

14      Q. HAVE YOU PARTICIPATED IN THE DESIGN OF A WATER HEATER REBATE PROGRAM  
15      FOR A MISSOURI LDC?

16      A. Yes. I participated in negotiations with Southern Missouri Gas (SMG) that  
17      resulted in the water heater program that SMG currently offers.

18      Q. WHAT CHARACTERISTICS RELATED TO THE SMG WATER HEATER REBATE  
19      PROGRAM DO YOU BELIEVE ARE RELEVANT CONSIDERATIONS RELATED TO THE  
20      MGE WATER HEATER REBATE PROGRAM?

21      A. There are four characteristics that I would encourage the Commission to be  
22      mindful of.

23

1       **Q. PLEASE DISCUSS THE FIRST.**

2       A. The first is that the SMG water heater rebate program is funded by shareholders.  
3       While Public Counsel would not consider shareholder funding a mandatory  
4       condition in supporting a program, we would require evidence that such a  
5       program would provide meaningful overall benefits to ratepayers and would  
6       defray costs that customers would likely not have spent otherwise to purchase  
7       efficient water heaters. MGE proposes a \$75 rebate for replacing electric water  
8       heaters with gas water heaters or replacing gas water heaters with gas water  
9       heaters and a \$200 rebate for installation of a tankless hot water system. MGE  
10      has provided no quantitative projecting that these rebates will provide meaningful  
11      overall benefits to rate-payers or will likely result in customers purchasing more  
12      efficient water heaters than they would have otherwise purchased.

13      **Q. PLEASE DISCUSS THE SECOND CHARACTERISTIC OF THE SMG PROGRAM THAT**  
14      **YOU BELIEVE THE COMMISSION SHOULD CONSIDER.**

15      A. The second characteristic of the SMG Program that I believe is relevant to  
16      consider is that the SMG Program actually requires the replacement water heater  
17      to be more efficient than the water heater being replaced in order to qualify for a  
18      rebate. While MGE's proposed program is intended to encourage the purchase of  
19      higher efficiency water heaters, in reviewing the MGE proposal, I did not find  
20      improved efficiency to be a condition of the rebate. This is of less concern to me  
21      with respect to the tankless hot water systems because MGE's qualifying Energy  
22      Factor of .80 does satisfy the threshold qualification for receiving an Energy  
23      Efficiency tax credit. MGE requires that replacement gas with gas water heaters

1 and replacement gas with electric water heaters have an Energy factor of .62. In  
2 reviewing energy efficiency materials on the Department of Energy website, I was  
3 unable to identify any recognized standard of efficiency that a gas water heater  
4 with an Energy Factor of .62 satisfies. It is my understanding that standards for  
5 an Energy Star designation have not been finalized. Nor does a gas water heater  
6 with an Energy Factor of .62 qualify for an energy efficiency tax credit. MGE has  
7 not provided sufficient evidence that gas water heaters with an Energy Factor of  
8 .62 currently meet or should meet some recognized standard of efficiency.

9 **Q. PLEASE DISCUSS THE THIRD CHARTACTERISTIC OF THE SMG PROGRAM THAT YOU**  
10 **BELIEVE THE COMMISSION SHOULD CONSIDER.**

11 **A.** The SMG Program was designated as an experimental program with a specific  
12 end date unless extended by the Commission.

13 **Q. PLEASE DISCUSS THE FOURTH CHARTACTERISTIC OF THE SMG PROGRAM THAT**  
14 **YOU BELIEVE THE COMMISSION SHOULD CONSIDER.**

15 **A.** The SMG Program requires SMG to regularly provide information regarding the  
16 program to the Staff and Public Counsel in order for Staff and Public Counsel to  
17 evaluate the Program's success, and prior to the Program's end date to prepare a  
18 final report of SMG's evaluation of the Program's success. MGE's proposal does  
19 not appear to have similar conditions on the designation, term or program  
20 evaluation requirements. I believe it would be reasonable for the Commission to  
21 adopt similar conditions if, despite Public Counsel's opposition, the program is  
22 implemented.

23

1 Q. DO YOU HAVE A RECOMMENDATION REGARDING ANY UNSPENT FUNDS?

2 A. Yes. It would be reasonable to allow any annual unspent funds to be used in  
3 subsequent years. Unspent funds remaining upon termination of the program  
4 should be returned to rate payers.

5 Q. PLEASE RESPOND TO THE REBUTTAL RECOMMENDATION OF ROBERT JACKSON ON  
6 BEHALF OF THE CITY OF KANSAS CITY THAT THE LOW INCOME  
7 WEATHERIZATION PROGRAM FUNDING SHOULD INCREASE BY AT LEAST \$250,000.

8 A. In direct testimony, I indicated that Public Counsel supports the Company  
9 proposal of a \$100,000 increase for low-income weatherization in this case.  
10 Weatherization funding increased \$160,000 in the Company's last rate case GR-  
11 2004-0209. In this case the Company proposes an increase of \$100,000 which  
12 would result in total funding of \$600,000. I continue to support a funding level of  
13 \$100,000 for low income weatherization.

14 V. RESPONSE TO REBUTTAL ON LOW INCOME CONSUMPTION

15 Q. COMPANY WITNESS DR. PHILIP THOMPSON SUBMITTED THE RESULTS OF A STUDY  
16 HE CONDUCTED THAT ATTEMPTS TO DRAW THE CONCLUSION THAT LOW  
17 INCOME CUSTOMERS MAY USE MORE GAS THAN HIGHER INCOME CUSTOMERS  
18 AND THEREFORE HIGHER CUSTOMER CHARGES ARE NOT REGRESSIVE. WHAT IS  
19 YOUR RESPONSE TO THE STUDY AND THE CONCLUSIONS THAT DR. THOMPSON  
20 DRAWS FROM IT?

21 A. Based on a description of the data used, Dr. Thompson's study is based on  
22 characteristics aggregated for customers by zip code. He then compares the  
23 characteristics of these zip codes. It is not based on an examination of individual

1 customer income and usage characteristics. For example, a metropolitan area  
2 might include zip codes populated by a mix of high income and low income  
3 customers with differing use characteristics. His study blends these  
4 characteristics. Some zip codes might include a small geographic area consisting  
5 of a few city blocks while others might include the population of an entire town.  
6 I do not believe that Dr. Thompson's study is sufficiently disaggregated to  
7 compare specific patterns of income and consumption among low and high  
8 income households. Further, Dr. Thompson's study contradicts both historic  
9 evidence regarding the relationship between income and consumption for low  
10 income households relative to households at higher income levels. In case GR-  
11 2001-292, Public Counsel witness Roger Colton presented information from the  
12 U.S. Department of Energy, from the U.S. Department of Health and Human  
13 Services (which administers the Low-Income Home Energy Assistance Program  
14 (LIHEAP)) and from the U.S. Bureau of Labor Statistics Consumer Expenditures  
15 Survey (CES) demonstrating that low-income consumers actually have **below**  
16 **average** natural gas usage. Some of the primary findings presented were:

- 17 1) In the January 2001 analysis, the U.S. Department of Energy  
18 concluded: "...natural gas consumption and expenditures  
19 per household did vary by household income—higher  
20 income households consumed more and spent more on  
21 average. Higher income households lived in larger housing  
22 units, which require more energy for heating."
- 23 2) The DOE findings were consistent with results published in  
24 the LIHEAP Home Energy Notebook for Fiscal Year 1998,  
25 prepared in October 2000 by the Division of Energy  
26 Assistance within the Office of Community Services low-  
27 income. The 1998 LIHEAP Home Energy Notebook  
28 reported that Midwest households using natural gas as their  
29 primary heating fuel have average annual energy

1 expenditures of \$1,163, while non-low-income households  
2 have average annual expenditures of \$1,394. Home energy  
3 expenditures for the average household are \$1,328.

- 4 3) The finding that low-income consumers are not high use  
5 consumers is also supported by the annual Consumer  
6 Expenditures reported by the U.S. Department of Labor,  
7 Bureau of Labor Statistics. Based on actual data provided by  
8 households, there is a direct relationship between income and  
9 natural gas expenditures. The results of the Consumer  
10 Expenditure Survey back through 1994 were also presented  
11 in the surrebuttal testimony of Public Counsel in GR-2001-  
12 292. The results indicated that while households with  
13 incomes of less than \$5,000 had natural gas expenditures of  
14 \$193, households with incomes of \$20,000 to \$30,000 had  
15 expenditures of \$352, and households with income over  
16 \$70,000 had natural gas expenditures of \$528. Each level of  
17 higher income reported higher natural gas expenditures.  
18

19 Mr. Colton's paper published in the April 2002 Electricity Journal found  
20 similar results for electric usage. He concludes that "... it is necessary to find that  
21 proposals to move a greater proportion of utility bills to fixed monthly charges are  
22 regressive in nature and will tend to impose adverse impacts on low-income  
23 consumers."

24 Using a weighted sample of individual household income and  
25 consumption data from the Department of Energy's 2001 Residential Energy  
26 Consumption Survey (most recent years data available on website) for the  
27 Midwest Region, West North Central Division that includes Missouri, I calculated  
28 average consumption, average housing square feet, and average heated square feet  
29 by categories of income relative to the poverty level for households with reported  
30 natural gas usage. I performed the calculations for households identified as at or  
31 below the Federal Poverty Level (FPL), at or below 125% of the FPL, at or below  
32 150% of the FPL and then compared them to the results for households not

1 identified as being in one of these low income categories. The results agree with  
2 the traditional evidence regarding the relationship between income and  
3 consumption. Progressively lower income categories had progressively lower gas  
4 consumption in CCF, progressively lower total square feet of space per household  
5 and lower square feet of heated space per household. The results also confirm  
6 that low income consumers tend to live in less efficient housing. I found that low  
7 income households used more CCF per square foot of heated space.

8 **Q. DOES THIS COMPLETE YOUR TESTIMONY?**

9 **A. Yes.**

10