

EXHIBIT

Exhibit No.:

Issue(s):

Witness/Type of Exhibit:

Sponsoring Party:

Case No.:

Class Cost of Service

& Rate Design

Meisenheimer/Direct

Public Counsel

GR-2006-0422

DIRECT TESTIMONY OF BARBARA A. MEISENHEIMER

Submitted on Behalf of the Office of the Public Counsel

FILED²

FEB 07 2007

Missouri Public
Service Commission

**MISSOURI GAS ENERGY
(RATE DESIGN)**

CASE NO. GR-2006-0422

October 20, 2006

OPC Exhibit No. 201
Case No(s). GR-2006-0422
Date 1-8-07 Rptr pf

My Commission expires January 31, 2010.

**DIRECT TESTIMONY
OF
BARBARA A. MEISENHEIMER**

MISSOURI GAS ENERGY

(RATE DESIGN)

CASE NO. GR-2006-0422

Introduction and Summary

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

A. Barbara A. Meisenheimer, Chief Utility Economist, Office of the Public Counsel (OPC or Public Counsel), P. O. Box 2230, Jefferson City, Missouri 65102. I am also employed as an adjunct Economics and Statistics Instructor for William Woods University.

Q. HAVE YOU TESTIFIED PREVIOUSLY IN THIS CASE?

A. No.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. In this testimony I will present Public Counsel's recommendations regarding rate design and class cost of service.

Class Cost of Service Study Results and Rate Design Recommendations

Q. WHAT IS THE REGULATORY PURPOSE OF A CLASS COST OF SERVICE STUDY?

A. A Class COS Study is a tool used by regulators to aid in determining an appropriate rate structure. A class cost of service study can be used as a guide in identifying, on a cost causative basis, the cost of serving a particular group of customers. A Class COS Study can also be used to evaluate the relative cost of service among classes. This comparison of relative cost is the focus of Public Counsel's study and is reflected in the study assumption that the company's revenue requirement is equal to the level of current revenue.

Q. WHAT IS THE RELATIVE IMPORTANCE OF CCOS STUDY RESULTS IN RATE DESIGN?

A. A CCOS study provides the Commission with a general guide for a service based on costs to determine the just and reasonable rate. Other relevant factors must also be considered when setting rates, such as the value of a service, the affordability of service, the rate impact, and rate continuity, to highlight a few. The Commission must on a case by case basis balance the results of a cost of service study with other relevant factors that go into the rate making decision process.

Q. IF THE COMMISSION DECIDES TO IMPLEMENT CLASS COST OF SERVICE ADJUSTMENTS IN THIS CASE, DO YOU HAVE A CLASS COST OF SERVICE STUDY AND A RATE DESIGN RECOMMENDATION FOR THE COMMISSION TO CONSIDER?

1 A. Yes, I have prepared a CCOS study that should be used as a guide in setting rates.
2 The study results should be weighed against considerations of customer rate
3 impact and affordability.

4 **Q. WHAT CONCLUSIONS ARE SUGGESTED BY PUBLIC COUNSEL'S COST OF SERVICE**
5 **STUDY?**

6 A. Based on the results of my class cost of service studies, (Schedule BAM DIR-1),
7 the following conclusions can be drawn, to equalize the classes' rates of return,
8 the Residential class revenues would need to be reduced by 4.65% , the Small
9 General Service Class revenues would need to be reduced by 1.36%, the Large
10 General Service Class revenues would need to increase by 2.21% and Large
11 Volume revenue would need to increase by about 44.96%. The percent above or
12 below cost of service is shown for each class, by district on Line 4, Schedule
13 BAM DIR-1.

14 **Q. WHAT RATE DESIGN WOULD YOU PROPOSE BASED ON YOU CCOS STUDY**
15 **RESULTS?**

16 A. If the overall change in revenue requirement in this case is negative, a reduction
17 in residential rates would be appropriate. Likewise, since the Residential Class is
18 already paying 4.65% above costs on a revenue neutral basis, if the overall
19 revenue requirement increases, the Residential class revenues should increase by
20 less than the system average, consistent with the rate impact considerations
21 described below.

22 More generally, OPC's rate design recommendation is that where the
23 existing revenue structure departs greatly from the class cost of service, the

1 Commission should impose, at a maximum, class revenue shifts equal to one half
2 of the "revenue neutral shifts" indicated by Public Counsel's class cost of service
3 study. Revenue neutral shifts are shifts that hold overall company revenue at the
4 existing level but allow for the share attributed to each class to be adjusted to
5 reflect the cost responsibility of the class. In addition to moving half way to the
6 revenue neutral shifts, I recommend that if the Commission determines that an
7 overall increase in revenue requirement is necessary, then no customer class
8 should receive a net decrease as the combined result of: (1) the revenue neutral
9 shift that is applied to that class, and (2) the share of the total revenue increase
10 that is applied to that class. Likewise, if the Commission determines that an
11 overall decrease in revenue requirement is necessary, then no customer class
12 should receive a net increase as the combined result of: (1) the revenue neutral
13 shift that is applied to that class, and (2) the share of the total revenue decrease
14 that is applied to that class.

1 **Q. HAVE YOU PREPARED EXAMPLES OF THIS RATE DESIGN METHOD APPLIED TO**
2 **DIFFERENT REVENUE REQUIREMENTS?**

3 A. Yes. Line 10 of Schedule BAM DIR-1 illustrates one half of the revenue neutral
4 shift indicated by my CCOS study. Lines 16-17 illustrate an equal percentage
5 increase needed for a \$2 million dollar increase or decrease in total revenue.
6 Lines 22-23 illustrate the combined effect of one half of the revenue neutral shift
7 indicated by my CCOS study and a \$2 million dollar increase or decrease in the
8 total revenue requirement. Lines 28-29 illustrate adjustments that ensure that no
9 customer class receives a net increase as the combined result of: (1) the revenue
10 neutral shift that is applied to that class, and (2) the share of the total revenue
11 decrease that is applied to that class.

12 **Q. IF THE COMMISSION DETERMINES IT REASONABLE IN THIS CASE, CAN YOUR**
13 **RATE DESIGN METHOD BE APPLIED TO DIFFERENT REVENUE REQUIREMENTS?**

14 A. Yes, it can. This method could be utilized to calculate class revenue requirements
15 for any practical level of overall revenue requirement.

16 **Q. DO YOU RECOMMEND ANY CHANGE IN THE RESIDENTIAL CUSTOMER CHARGE AT**
17 **THIS TIME?**

18 A. No. My cost of service study results indicate that the current level of the
19 customer charge exceeds the customer specific cost.

Class Cost of Service Study Method

Q. WHAT ARE THE REPRESENTATIVE CLASSES INCLUDED IN PUBLIC COUNSEL'S CLASS COS STUDY?

A. In performing a Class COS Study, customers are grouped into "classes" based on type of customer and utilization patterns. Public Counsel's Class COS Study identifies four distinct classes of customers: Residential, Small General Services, Large General Services and Large Volume.

Q. PLEASE DESCRIBE THE ASSIGNMENT OF COST TO THE CUSTOMER CLASSES.

A. The assignment of costs to customer classes is a three-step process in which costs are first functionalized, then classified, and finally allocated. Public Counsel's Class COS Study primarily reflects the booked cost incurred through the test year.

Q. PLEASE DESCRIBE THE FUNCTIONALIZATION OF COSTS.

A. Functionalization is achieved by categorizing cost accounts by associated function. Functional categories include; Production, Storage, Transmission, Distribution, Customer Accounts and Administrative and General (A&G). Some functional categories contain accounts that are identifiable as being directly or jointly caused by particular customer classes. Other functional categories contain costs associated with common facilities or common overheads.

1 **Q. PLEASE DESCRIBE THE CLASSIFICATION OF COSTS.**

2 A. Classification is achieved by further categorizing costs into customer related,
3 commodity related, demand related or "other related" costs.

4 **Q. PLEASE DESCRIBE CUSTOMER RELATED COSTS.**

5 A. Customer related costs vary directly with the number of customers served.
6 Examples of customer related costs include: expenses associated with metering,
7 reading, billing, and the costs associated with metering equipment and service
8 connections

9 **Q. PLEASE DESCRIBE COMMODITY RELATED COSTS.**

10 A. Commodity related costs vary with the quantity of gas purchased. Historically,
11 commodity related costs primarily have included purchased gas cost. Today local
12 distribution companies recover purchased gas cost through the PGA but other
13 plant accounts may still be categorized as commodity related.

14 **Q. PLEASE DESCRIBE DEMAND RELATED COSTS.**

15 A. Demand related costs vary with the capacity requirement of plant or equipment.
16 They are related to the maximum system requirements that reflect the capacity
17 necessary to serve demand during peak periods. Demand related costs include:
18 production, transmission and storage costs and expenses associated with these
19 types of plant. In addition, some distribution plant and related expenses are
20 demand related costs.

1 **Q. PLEASE DESCRIBE THE ALLOCATION PROCESS.**

2 A. Following functionalization and classification, allocation factors are applied to
3 distribute a reasonable share of jurisdictional costs to each customer class. Some
4 allocation factors are based on a simple ratio of a particular class' share of total
5 costs. Other allocation factors are based on usage, sales, or weighted share of
6 customers. Allocation factors are designed to reflect the appropriate classification
7 in allocating costs.

8 **Q. ARE PURCHASED GAS COSTS TREATED DIFFERENTLY THAN OTHER COSTS?**

9 A. Yes. The Company's base tariff rates recover only its non-gas or margin costs. A
10 purchased gas adjustment cost factor is used to recover gas costs. The cost of
11 service study will develop the non-gas or margin costs incurred by the LDC in
12 delivering gas from the city-gate to its customers.

13 **Q. ON WHAT DATA IS YOUR CLASS COS STUDY BASED?**

14 A. The data is associated with a test year ending December, 31, 2005. The
15 Accounting Schedules filed with the Staff's non-rate design testimony were the
16 source of most of the financial data that I utilized in preparing my studies. I
17 utilized annual and winter usage data provided by the Company. I have also
18 utilized peak day volumes received from the Staff. My use of this information
19 should not be viewed as an endorsement of either Staff's or the Company's
20 methods for calculating accounting costs, billing determinants or peak demands. I
21 have used this information because it contained the best level of detail available to
22 perform my studies.

1 **Q. IS THERE IS POSSIBILITY THAT SOME INFORMATION USED IN YOUR STUDY WILL**
2 **BE UPDATED AND REVISED AS THIS CASE PROGRESSES?**

3 A. Yes. Normally, I rely primarily on Staff data in preparing my studies but in this
4 case I had some concerns with the significant differences in reported revenues and
5 normalized volumes for the Large Volume Class. I will update my studies to
6 reflect the use of the final class revenues and volumes presented in Staff's direct
7 testimony.

8 **Q. HOW ARE INTANGIBLE PLANT ACCOUNTS ALLOCATED?**

9 A. Intangible plant accounts include expenses related to organizing the enterprise,
10 obtaining franchise and consent and other miscellaneous items. These costs are
11 not attributable to a particular subset of customer classes, instead they are
12 considered to be common costs and are allocated on the basis of the portion of
13 total non-general plant cost assigned to each customer class.

14 **Q. HOW ARE GAS STORAGE COSTS ALLOCATED?**

15 A. Gas storage costs are allocated on the basis of weather normalized winter sales
16 volumes.

17 **Q. HOW ARE TRANSMISSION PLANT ACCOUNTS ALLOCATED?**

18 A. Transmission plant is allocated on the basis of the RSUM allocation factor
19 discussed in this testimony.

Q. HOW ARE DISTRIBUTION PLANT ACCOUNTS ALLOCATED?

A. Land and Land Rights, Structures and Improvements, and Mains Plant (Accounts 374, 375, and 376) are allocated on the basis of a distribution mains allocator.

Measuring and Regulating Station Equipment (Accounts 378 and 379) are classified as commodity related and allocated on the basis of annual volumes. Accounts 380 through 386 are customer related. The following summary identifies the allocation factor for each account.

Table 1.

<u>Account</u>	<u>Description</u>	<u>Allocator</u>
380	Services	Services Allocator
381	Meters	Meter Allocator
382	Meter Installations	Meter Installation Allocator
383	House Regulators	Regulator Allocator
384	House Regulators Installation	Regulator Allocator
385	Meas. and Reg. Station Equip. - Industrial	Commercial and Industrial Customers

Q. HOW ARE GENERAL PLANT ACCOUNTS ALLOCATED?

A. General plant accounts are allocated on the basis of the overall class cost of service.

Q. PLEASE DESCRIBE HOW OPERATION AND MAINTENANCE EXPENSES ARE ALLOCATED?

A. For allocating most of the accounts in this category, I used the "expenses follow plant principle".

Q. HOW ARE CUSTOMER ACCOUNTS, CUSTOMER SERVICE, AND SALES PROMOTION EXPENSES ALLOCATED?

A. Customer service expenses are customer related and are allocated on the basis of number of customer bills. Sales promotion expenses are allocated on the basis of the overall class cost of service and the following summary outlines the allocation of customer accounts expenses.

Table 2.

- 11 -

1 **Q. HOW ARE ADMINISTRATIVE AND GENERAL (A & G) EXPENSES ALLOCATED?**

2 A. Property insurance (Account 924) is allocated on the basis of net non-general
3 plant. Injuries and damages and employee pensions and benefits (Accounts 921,
4 922, 923, 925 and 926) are allocated on the basis of payroll. The remainder of A
5 & G expenses are allocated on the basis of the overall class cost of service.

6 **Q. HOW ARE TAXES ALLOCATED?**

7 A. Property taxes are allocated on the basis of the net plant previously allocated to
8 each class. Franchise taxes are allocated on the basis of rate base. Payroll taxes
9 are allocated as a function of payroll expense. Income taxes are allocated
10 according to the rate base attributable to each class.

11 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

12 A. Yes.

Line	Total	Residential	Small GS	Large GS	Large Volume
1 Revenue Neutral Shifts (RNS) to Equalize Class					
2 Rates of Return (ROR)	\$ 0	\$ (5,203,269)	\$ (453,128)	\$ 52,609	\$ 5,603,787
3					
4 Percentage Revenue Change to Equalize Class ROR	0.00%	-4.65%	-1.36%	2.21%	44.96%
5					
6 Current Class Revenue Percentages	100.00%	69.87%	20.86%	1.48%	7.79%
7					
8 COS Indicated Class Revenue Percentages	100.00%	66.62%	20.58%	1.52%	11.29%
9					
10 OPC's Recommended Revenue Neutral Shifts	\$ (2,601,634)	\$ (226,564)	\$ 26,305	\$ 2,801,894	
11					
12 OPC's Recommended Revenue Percentages	0.00%	68.24%	20.72%	1.50%	9.54%
13					
14 Spread of Proposed Revenue Requirement Increases					
16 \$2 Million Reduction	\$ (2,000,000)	\$ (1,364,822)	\$ (414,342)	\$ (30,021)	\$ (190,815)
17 \$2 Million Increase	\$ 2,000,000	\$ 1,364,822	\$ 414,342	\$ 30,021	\$ 190,815
18					
19 Combined Impact of Revenue Increase					
20 and OPC's RNS					
22 \$2 Million Reduction	\$ (2,000,000)	\$ (3,966,457)	\$ (640,906)	\$ (3,716)	\$ 2,611,079
23 \$2 Million Increase	\$ 2,000,000	\$ (1,236,812)	\$ 187,779	\$ 56,326	\$ 2,992,708
24					
25 Combined Impact of Revenue Increase					
27 and OPC's RNS Adjusted For No Decreases					
28 \$2 Million Reduction	\$ (2,000,000)	\$ (1,721,790)	\$ (278,210)	\$ -	\$ -
29 \$2 Million Increase	\$ 2,000,000	\$ -	\$ 116,027	\$ 34,803	\$ 1,849,170
30					
31 Percentage Change in Class Rate Revenue					
32 \$2 Million Reduction	-1.29%	-1.59%	-0.86%	0.00%	0.00%
33 \$2 Million Increase	1.29%	0.00%	0.36%	1.51%	15.28%