Exhibit No.:

Issue:

Cost of Service, Rate

Design

Witness: Sponsoring Party: Type of Exhibit: Case No.: estimony Prepared:

Daniel I. Beck MoPSC Staff

Direct Testimony

GR-2001-292

Date Testimony Prepared:

April 26, 2001

# MISSOURI PUBLIC SERVICE COMMISSION UTILITY OPERATIONS DIVISION

**DIRECT TESTIMONY** 

**OF** 

**DANIEL I. BECK** 

Service Commission

**MISSOURI GAS ENERGY** 

A Division of Southern Union Company

**CASE NO. GR-2001-292** 

Jefferson City, Missouri April 2001

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for

#### **DIRECT TESTIMONY**

of

#### DANIEL I. BECK

## MISSOURI GAS ENERGY

## A DIVISION OF SOUTHERN UNION COMPANY

## **CASE NO. GR-2001-292**

COST OF SERVICE	 	 ٠.	٠.	 	٠.			٠.		 •	 	 •	•	1	
RATE DESIGN	 	 		 		 	 . ,		 	 	 			 3	

DIRECT TESTIMONY 1 2 **OF** DANIEL I. BECK 3 MISSOURI GAS ENERGY 4 5 A DIVISION OF SOUTHERN UNION COMPANY 6 CASE NO. GR-2001-292 7 8 Q. Please state your name and business address. 9 A. My name is Daniel I. Beck and my business address is P. O. Box 360, Jefferson City, Missouri 65102. 10 11 Q. Are you the same Daniel I. Beck who has previously filed testimony in this case? 12 A. Yes, I am. 13 Q. What is the nature of your testimony as it relates to the rate increase being 14 proposed by Missouri Gas Energy (MGE or Company) in Case No. GR-2001-292? 15 A. I will present testimony in regard to Cost-of-Service (C-O-S) and rate design. 16 **Cost-of-Service** 17 Q. Did you develop a C-O-S study in Case No. GR-2001-292? 18 A. Yes. I updated a C-O-S study filed by Staff in Case No. GR-98-140, which was 19 MGE's previous rate case. 20 Q. What is the purpose of a C-O-S study? 21 A. A C-O-S study indicates the revenue responsibilities of the various C-O-S classes 22 and the related customer charges.

O. What C-O-S classes are used in Staff's C-O-S study?

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- A. Staff's C-O-S study includes five (5) classes. These classes are: the Residential, Small General Service, Large General Service, Large Volume, and Unmetered Gas Light Classes.
  - O. Please describe how Staff's C-O-S study in Case No. GR-98-140 was updated.
- A. First, all costs were adjusted to reflect the values in Staff Accounting Schedules, which were filed in this case on April 19, 2001. To make these adjustments to costs, several hundred values were entered into Staff's C-O-S study. To my knowledge, the only costs that did not change when compared the to previous study were several accounts with balances of zero. Next, all customer numbers, sales, and peak demands were modified to reflect the values provided by Staff. By updating customer numbers, sales, and peak demands, every allocator was modified either directly or indirectly.
  - Q. Are all of the cost components based upon the current Accounting Schedules?
- A. Yes. However, several values in Staff's Accounting Schedules are either projected increases or estimated update adjustments for various groups of accounts. Although I would not expect these adjustments to affect the overall results of the C-O-S study, the actual values, when determined, could have a minor effect on the C-O-S results. As these estimates are quantified, I would propose to update the C-O-S study to reflect these changes. In addition, I developed class revenue estimates (current margin revenues) that approximate the revenue contribution of the classes. These class revenue estimates are not as precise in total as the Staff's Operating Revenues (Accounting Schedule 9).
  - Q. If Staff's Operating Revenues are more precise, why didn't you use those values?

- A. My revenue estimates are based upon Staff's Operating Revenues but Staff's Operating Revenues consist of nine (9) accounts that do not directly correspond to the five (5) C-O-S classes that I previously mentioned. For example, Account 481.1, Commercial and Industrial Revenues, includes revenues from three different C-O-S classes. Therefore, I had to make an estimate to determine the appropriate amount of revenue for each class.
  - Q. Were there changes in customer numbers, sales, and peak demands?
- A. Yes, but considering that there was a period of approximately two years between these two cases, the changes are relatively small. However, all of these values, which are used to develop allocators, were updated to reflect the test year ending December 31, 2000.
  - Q. Could you define an allocator?
- A. An allocator is the set of numbers used to assign the Company's various cost components to each C-O-S class. The analyst attempts to choose allocators that are related to each of the various accounts. The results of Staff's C-O-S study are shown on Schedule 1.

#### Rate Design

- Q. What do you propose regarding revenue shifts between classes?
- A. After reviewing the results of Staff's C-O-S study, I conclude that most of the classes are at or near their class revenue responsibility. However, one class, the Large General Service Class, appears to be the only class that has a difference between revenues and required margin revenues that is greater than 10%. (Staff's study also shows that the unmetered gas light class is contributing significantly more than their class revenue responsibility but this class is extremely small and very sensitive to the assignment of allocators.) However, as I discussed earlier, the Large General Service Class was one of the

classes with estimated current revenues. Until the estimated current revenues are verified, I would not recommend any change in revenues between classes. Therefore, I recommend that no revenues be shifted between classes. I should note, however, that Staff has incorporated several changes to miscellaneous tariffed rates such as connection fees that do result in small shifts between classes. Such changes are normally included in Staff's Accounting Schedule in this way.

- Q. What recommendations do you have regarding the customer charges?
- A. Staff's C-O-S study indicates that most classes currently have customer charges that are above the calculated customer charge, that is the current customer charge is higher than the study would indicate is needed. However, the current customer charge for the Small General Service (SGS) Class is below the study's indicated level, \$11.05 vs. \$11.70. If an increase in revenues for the SGS class is granted in this case, I recommend that the SGS Classes' customer charge be increased to \$11.70 before any other SGS rates are changed.
- Q. Is it correct that the Company proposed significantly different customer charges and rate structures?
- Q. Yes. However, MGE's proposals are based on a significantly different revenue requirement and a significant shift in rate design policy. Such a change in rate design policy has positive and negative consequences to individual customers, classes of customers, individual shareholders and to the Company. Staff will attempt to explain the consequences to the Company's rate design proposal in Staff's rebuttal testimony.
  - Q. Did Staff use the same billing units as the Company?
  - A. No. Both Staff and the Company developed normalized billing units that

- correspond to the Commission ordered test year. These billing units also reflect specific
  adjustments made by the respective parties. There are significant differences between the
  billing units of Staff and the Company at this time.

  Q. If you assume that Residential revenues were increased by \$100,000 and that the
  reduction was reflected in the Residential commodity rates, would Staff and the Company's
  - A. No. The differences in the various revenue adjustments will result in two different rates even though the revenue increase is supposed to be the same (\$100,000 in this example). I propose that all parties work toward developing a single set of billing units for the test year so that any Commission ordered change in revenue can be implemented.
    - Q. Does this conclude your testimony?

billing units result in the same commodity charges?

12 A. Yes.

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# 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-2001-292 ) )
AFFIDAVIT OF	DANIEL I. BECK
STATE OF MISSOURI )  COUNTY OF COLE )	
of the foregoing Direct Testimony in question be presented in the above case; that the an	states: that he has participated in the preparation on and answer form, consisting of 5 pages to swers in the foregoing Direct Testimony were matters set forth in such answers; and that such is knowledge and belief.
	Daniel I. Beck  DANIEL I. BECK
Subscribed and sworn to before me this 26	th day of April 2001.
Notary Public, S	Notary Public  Neuner State of Missouri of Osage Exp. 06/18/2001

#### CLASS COST-OF-SERVICE SUMMARY

#### MISSOURI GAS ENERGY CASE NO. GR-2001-292 TEST YEAR ENDED DECEMBER 31, 2000

	TOTAL	RESIDENTIAL	SMALL GENERAL SERVICE	LARGE GENERAL SERVICE	LARGE VOLUME	UNMETERED GAS LIGHTS
RATE BASE	\$486,933,326	\$339,617,564	\$94,490,236	\$8,472,745	\$44,350,703	\$2,078
REQUESTED RETURN	8.8200%	8.8200%	8.8200%	8.8200%	8.8200%	8.8200%
RETURN ON RATE BASE	\$42,947,519	\$29,954,269	\$8,334,039	\$747,296	\$3,911,732	\$183
O & M EXPENSES	\$59,926,439	\$43,513,928	\$10,779,310	\$851,968	\$4,780,906	\$328
DEPRECIATION EXPENSE	\$19,608,427	\$14,116,9 <del>9</del> 1	\$3,693,985	\$299,308	\$1,498,076	\$66
TAXES OTHER THAN INCOME	\$8,872,646	\$6,328,655	\$1,669,703	\$142,616	\$731,634	\$38
INCOME TAXES	\$9,022,489	\$6,292,845	\$1,750,829	<b>\$156,993</b>	\$821,783	\$39
TOTAL EXPENSES	\$97,430,001	\$70,252,419	\$17,893,827	\$1,450,885	\$7,832,400	\$471
TOTAL C-O-S	\$140,377,520	\$100,206,688	\$26,227,866	\$2,198,181	\$11,744,132	\$654
OTHER REVENUES	\$4,915,410	\$4,344,225	\$460,591	\$17,436	\$93,153	\$5
REQUIRED MARGIN REVENUE	\$135,462,110	\$95,862,463	\$25,767,274	\$2,180,745	\$11,650,979	\$649
CURRENT MARGIN REVENUES	\$137,311,419	\$94,228,285	\$28,515,452	\$2,992,701	\$11,574,081	\$900
ZERO REVENUE INCREASE PLUG	(\$1,849,309)	(\$1,308,700)	(\$351,771)	(\$29,771)	(\$159,057)	(\$9)
C-O-S MARGIN REVENUES @ 0%	\$137,311,419	\$97,171,163	\$26,119,045	\$2,210,517	\$11,810,037	\$658
REVENUE ABOVE (BELOW) COS	(\$0)	(\$2,942,878)	\$2,396,407	\$782,184	(\$235,956)	\$242
% INCREASE WITHOUT GAS COSTS	0.00%	3.12%	-8.40%	-26.14%	2.04%	-26.94%
CLASS' SHARE OF TOTAL MARGIN REVENUES	100.00%	70.77%	19.02%	1.61%	8.60%	0.00%