

Exhibit No.:

Issue:

Witness:

Type of Exhibit:

Sponsoring Party:

Case No.:

Class Cost of Service & Rate Design

Johnstone

Rebuttal Testimony

Missouri Industrial Energy Consumers

GR-99-315

Before the

**MISSOURI PUBLIC SERVICE COMMISSION**

**Case No. GR-99-315**

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**LACLEDE GAS COMPANY**

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Rebuttal Testimony

and Schedules of

**DONALD E. JOHNSTONE**

On Behalf of

**Missouri Industrial Energy Consumers**

August 1999

Project 7065

**Brubaker & Associates, Inc.**  
**St. Louis, MO 63141-2000**

**FILED**  
AUG 5 1999  
Missouri Public  
Service Commission

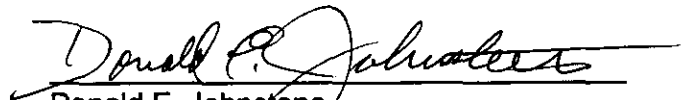
**LACLEDE GAS COMPANY**  
**Case No. GR-99-315**

**AFFIDAVIT OF DONALD E. JOHNSTONE**

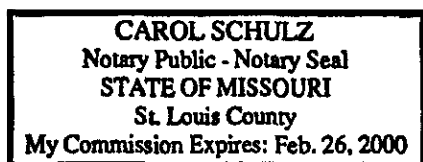
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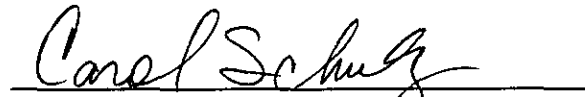
Donald E. Johnstone, being of lawful age and duly affirmed, states the following:

1. My name is Donald E. Johnstone. I am a consultant in the field of utility regulation and a member of Brubaker & Associates, Inc.
2. Attached hereto and made a part hereof for all purposes is my Rebuttal Testimony consisting of Pages 1 through 8, and Schedules 1 through 3, filed on behalf of the Missouri Industrial Energy Consumers.
3. I have reviewed the attached rebuttal testimony and hereby affirm that my testimony is true and correct to the best of my knowledge and belief.

  
Donald E. Johnstone

Duly affirmed before this 5th day of August 1999.



  
Notary Public

My commission expires on February 26, 2000.

# **LACLEDE GAS COMPANY**

**Before the**

**Missouri Public Service Commission**

**Case No. GR-99-315**

## **Rebuttal Testimony of Donald E. Johnstone**

1 **Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A Donald E. Johnstone; 1215 Fern Ridge Parkway, Suite 208; St. Louis, Missouri 63141-  
3 2000. My qualifications are set forth in Appendix A of my Direct Testimony in this  
4 proceeding.

5 **Q WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?**

6 A My purpose is to summarize the Missouri Industrial Energy Consumers (MIEC) position with  
7 respect to class cost of service in response to the testimonies submitted by the Staff of the  
8 Missouri Public Service Commission (Staff) and the Office of the Public Counsel (OPC),  
9 and to a lesser extent, Laclede Gas Company (Laclede or Company).

10 **Q WHAT ARE THE COST OF SERVICE ISSUES YOU WILL BE ADDRESSING?**

11 A I will address the treatment of non-gas revenues in the Staff and OPC cost studies, the  
12 allocation of the cost of the gas mains, and the costs of meters, regulators and services.  
13 Also, I make the recommendation to set rates based on the cost of service.

**1   STAFF AND OPC NON-GAS REVENUES**

**2   Q        IS IT APPROPRIATE THAT RATES OF LACLEDE REFLECT ALL OF THE COSTS OF**  
**3        PROVIDING SERVICE TO CUSTOMERS?**

**4   A        Yes, that is true as a general rule, subject to an appropriate test year and tests of prudence**  
**5            and reasonableness. Of course, for sales customers those costs include the cost of gas**  
**6            as well as the cost of the delivery services. Indeed, even with the transportation customers,**  
**7            there are some significant gas costs to be collected. Both the basic and firm transportation**  
**8            classes purchase gas from Laclede from time to time. In addition, firm transportation**  
**9            customers pay a continuing charge for the right to use gas from Laclede when it is**  
**10          convenient and economical to do so. There is a continuing cost associated with Laclede's**  
**11          ability to provide this service, and the continuing cost must be collected from the firm**  
**12          transportation customers.**

**13   Q        HOW HAVE THE STAFF AND OPC COST STUDIES DEALT WITH THE GAS COSTS?**

**14   A        They have essentially ignored these costs. However, that creates a problem because there**  
**15            has been no separation in the tariff of the revenues associated with the gas costs.**  
**16            Therefore, any attempt to deal with just the non-gas costs is problematic because the class**  
**17            revenues associated with the non-gas costs are unknown. Also, it is the rates in total that**  
**18            should be based on the cost of service as a matter of equity to prevent undue**  
**19            discrimination.**

**20   Q        PLEASE EXPLAIN THE PROCEDURE FOLLOWED BY STAFF AND OPC.**

**21   A        While Staff and OPC removed all gas costs collected under the PGA mechanism from their**  
**22            cost studies, a corresponding treatment for the revenues was not possible. Consequently,**  
**23            Staff and OPC each assumed that all firm sales customers contribute the same revenues**

1 per therm of gas delivered. That assumption is inconsistent with the underlying costs and  
2 it is simply arbitrary. As a result, the revenues included in their cost studies, which allegedly  
3 form the basis for a comparison to the non-gas cost of service, are also arbitrary because  
4 they were derived by difference. Stated in other words, the alleged non-gas revenues were  
5 derived by subtracting an arbitrary amount of gas revenues from the total revenues of the  
6 company. As a result, any conclusions that could otherwise be drawn from their studies are  
7 hostage to the arbitrary assumption.

8 **Q WHAT SHOULD BE DONE?**

9 **A** One approach under the circumstances would be to include the gas costs and total  
10 revenues in their studies. However, another approach is to define gas revenues as equal  
11 to the allocated gas costs. With this approach, their studies will better measure the  
12 variations from the total cost of service (subject to otherwise appropriate procedures). I  
13 have asked Mr. Mallinckrodt to so adjust the revenues included in their studies. The  
14 adjustment to revenues is the difference between system average gas costs (their  
15 assumption) and the costs of gas as defined in the MIEC study. Again, the effect is to  
16 define gas revenues as being equal to the gas costs and non-gas costs as the remainder.  
17 While Staff and OPC each might advocate a different approach to the allocation of gas  
18 costs, their allocation would impact only the magnitude of the adjustment, not the direction.  
19 Consequently, it is clear that more non-gas revenues are attributable to the large volume  
20 customer classes and less revenues are attributable to the General Service class.

1 **ALLOCATION OF THE COST OF MAINS**

2 **Q HAS MR. MALLINCKRODT DEVELOPED A MORE ACCURATE MEASURE OF THE**  
3 **COSTS OF THE MAINS USED IN PROVIDING SERVICE TO THE CUSTOMER**  
4 **CLASSES?**

5 **A** Yes he has. The distinctly important aspect of Mr. Mallinckrodt's approach is based on the  
6 fundamental principal that customers should only share in the costs of those facilities that  
7 are used in providing service to them.

8           There is a large investment by Laclede in low pressure mains that are necessary  
9 to provide gas service to General Service customers. However, these low pressure mains  
10 are only capable of delivering relatively small volumes of gas and are of no use in providing  
11 service to large volume customers. Mr. Mallinckrodt has defined the costs of these mains  
12 so that the costs may be allocated to customers who use the mains and conversely, so that  
13 costs are not allocated to those that do not use the mains. Mr. Mallinckrodt's work is based  
14 on a careful review of the books and records of the Company and on maps which depict  
15 the system of mains used in providing service to customers. All of this information was  
16 made available pursuant to data requests and the workpapers that have been provided to  
17 Staff, OPC and Laclede. I have asked Mr. Mallinckrodt to make adjustments to the  
18 allocation approaches of Staff and OPC to reflect this fundamental principal of equity. He  
19 has left other elements of the Staff and OPC allocation of mains intact, although he  
20 explains various additional deficiencies.

1 Q IS THERE A SIGNIFICANT IMPACT ON THE STUDIES OF THE STAFF AND OPC?

2 A Yes. As would be expected, the amount of mains cost that is allocated to large volume  
3 customers is significantly reduced. The modified Staff and OPC studies are attached to Mr.  
4 Mallinckrodt's Rebuttal Testimony.

5 **ALLOCATION OF THE COSTS OF METERS, REGULATORS AND SERVICES**

6 Q DID MR. MALLINCKRODT ALSO REVIEW THE ALLOCATION APPROACH USED BY  
7 STAFF AND OPC WITH RESPECT TO METERS, REGULATORS, SERVICES, LINES  
8 AND CUSTOMER SERVICE?

9 A Yes he did. While I had relied on the Laclede approach in the cost of service study filed  
10 with my Direct Testimony, Mr. Mallinckrodt has determined that Staff and OPC have both  
11 proposed methods which better reflect costs associated with these accounts.  
12 Consequently, I have modified the MIEC study to incorporate the allocation approach of  
13 OPC with respect to these accounts, as recommended by Mr. Mallinckrodt.

14 **COST OF SERVICE RESULTS**

15 Q WHAT ARE THE RESULTS OF THE MIEC CLASS COST OF SERVICE STUDY AS  
16 MODIFIED?

17 A The results are set forth on my Rebuttal Schedule 1. The result is a 1.7% upward  
18 adjustment in the rates for General Service customers while the large volume classes  
19 receive significant downward adjustments in their rates.

1 **Q HOW DO THESE RESULTS COMPARE WITH THE RESULTS OF THE STAFF AND OPC**  
2 **COST OF SERVICE STUDIES AS MODIFIED BY MR. MALLINCKRODT?**

3 **A** The results of the Staff and OPC studies, as adjusted, are set forth on Rebuttal Schedules  
4 1 and 2 attached to Mr. Mallinckrodt's Rebuttal Testimony. The results of their studies are  
5 similar in direction but not as large in magnitude. I would note that these results are based  
6 on the assumption that gas revenues are equal to gas costs, a reasonable assumption in  
7 my opinion.

8 **Q HOW DO THE RESULTS COMPARE TO THE LACLEDE STUDY?**

9 **A** The Laclede study is deficient for all of the reasons set forth in my Direct Testimony. In  
10 addition, as described above, I have now also modified the allocation of the meter, regulator  
11 and service line costs. In essence, the Laclede study results are significantly divergent  
12 from all of the others because Laclede's study pays little heed to the principle of cost  
13 causation. The Laclede study ought not to be given any significant weight in the  
14 Commission's consideration.

15 **Q DID STAFF, OPC, OR LACLEDE RECOMMEND ADJUSTMENTS TO RATES TO**  
16 **BETTER REFLECT COSTS?**

17 **A** Staff and OPC recommend some adjustments in the rates to better reflect the cost of  
18 service. Laclede made no such recommendations.



1 **Q SHOULD CLASS RATES BE ADJUSTED TO REFLECT THE CLASS COST OF**  
2 **SERVICE?**

3 **A** Yes. Upon review of the decision of the Circuit Court in the Noranda case<sup>1</sup>, it seems clear  
4 that rates should be adjusted to the cost of service level at the earliest practical date. As  
5 acknowledged by Mr. Mallinckrodt, the judgement is not final. However, cost-based rates  
6 have long been supported by MIEC and are appropriate in any event as a matter of equity  
7 and to eliminate undue discrimination.

8 **Q DO YOU RECOMMEND RATES BASED ON COST?**

9 **A** Yes. The most equitable approach is to fully eliminate the subsidy so that each class of  
10 customers will pay the costs incurred by Laclede in providing services. The cost-based  
11 revenues for gas and non-gas are set forth in Rebuttal Schedules 2-1 through 2-3.

12 **Q IS THIS A LARGER ADJUSTMENT THAN RECOMMENDED IN YOUR DIRECT**  
13 **TESTIMONY?**

14 **A** Yes, for two reasons. First, the MIEC cost of service analysis has been modified to more  
15 accurately define the cost of service. Second, in my Direct Testimony I only recommended  
16 elimination of 50% of the variation from cost. While elimination of 50% of the variation from  
17 cost would also be acceptable to MIEC at this time, MIEC also recognizes the logic of the  
18 Court in the Noranda Case. In addition, there is no impact arising from a move to full cost  
19 so extraordinary as to preclude that approach. Therefore, I also recommend a full cost of  
20 service adjustment, as an equitable approach and one that would be more in line with the  
21 direction of the Court.

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<sup>1</sup> Noranda Aluminum vs. Public Service Commission of the State of Missouri, Case No. CV 198-  
122C.

1 Q DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

2 A Yes.

**MIEC (MODIFIED) COST OF SERVICE**  
**LACLEDE GAS COMPANY**  
**COST OF SERVICE SUMMARY**  
(Dollars in Thousands)

Line	Description	General Service	A/C	UMGL	Vehicular Fuel	Large Volume	Inter-rupitible	Firm Trans- portation	Basic Trans- portation	L.P. Gas	Total
<b><u>GAS COST OF SERVICE</u></b>											
							0.30947		0.30677		
1	Cost of Gas	\$290,240	\$712	\$41	\$197	\$11,332	\$1,816	\$3,519	\$1,179	\$71	\$309,108
2	Gas Revenues	<u>287,042</u>	<u>714</u>	<u>49</u>	<u>235</u>	<u>12,473</u>	<u>1,726</u>	<u>5,376</u>	<u>1,421</u>	<u>71</u>	<u>309,108</u>
3	Gas Revenue above (below) Cost of Service	(\$3,197)	\$2	\$8	\$38	\$1,141	(\$90)	\$1,857	\$242	\$0	\$0
<b><u>NON GAS COST OF SERVICE</u></b>											
4	Peaking Expense - Excluding Cost of Gas	\$1,518	\$0	\$0	\$0	\$35	\$2	\$56	\$0	\$0	\$1,611
5	Distribution Operation Expense	26,954	10	2	8	539	54	300	469	9	28,345
6	Customer Accounts Expense	26,218	14	5	8	298	33	167	188	9	26,940
7	Sales Expense	3,541	7	1	2	116	16	67	53	1	3,804
8	Administrative & General Expense - Net	24,476	11	4	8	275	29	244	371	9	25,427
9	Maintenance Expense	17,966	5	2	5	183	15	218	265	6	18,665
10	Depreciation and Amortization	24,321	8	2	7	289	27	269	373	8	25,304
11	Taxes Other than Income Taxes - Excl GRT	16,001	6	2	5	196	18	195	287	5	16,715
12	Income Taxes	11,606	3	1	3	230	21	155	157	3	12,179
13	Total Utility Operating Income	40,731	12	2	11	808	74	546	550	12	42,746
14	Deduct Other Income	(426)	0	0	0	(10)	(1)	(16)	0	0	(453)
15	Deduct Forfeited Disc and Misc Revenue	<u>(3,951)</u>	<u>(12)</u>	<u>(1)</u>	<u>0</u>	<u>(85)</u>	<u>(15)</u>	<u>(24)</u>	<u>(27)</u>	<u>(2)</u>	<u>(4,117)</u>
16	NonGas Cost of Service	\$188,955	\$64	\$20	\$57	\$2,874	\$273	\$2,177	\$2,686	\$60	\$197,166
17	NonGas Revenue Excluding GRT	<u>184,273</u>	<u>261</u>	<u>24</u>	<u>21</u>	<u>2,988</u>	<u>443</u>	<u>3,532</u>	<u>5,572</u>	<u>51</u>	<u>197,166</u>
18	NonGas Revenue above (below) Cost of Servi	(\$4,682)	\$197	\$4	(\$36)	\$114	\$170	\$1,355	\$2,886	(\$9)	\$0
<b><u>TOTAL COST OF SERVICE</u></b>											
19	Cost	\$479,195	\$776	\$61	\$254	\$14,206	\$2,089	\$5,696	\$3,865	\$131	\$506,274
20	Revenue	<u>471,315</u>	<u>975</u>	<u>74</u>	<u>256</u>	<u>15,461</u>	<u>2,168</u>	<u>8,909</u>	<u>6,993</u>	<u>122</u>	<u>506,274</u>
	Revenue above (below) Cost of Service										
21	Revenue	(\$7,880)	\$199	\$12	\$2	\$1,255	\$79	\$3,212	\$3,128	(\$9)	\$0
22	Percent of Present Revenue	-1.7%	20.4%	16.9%	1.0%	8.1%	3.7%	36.1%	44.7%	-7.1%	0.0%
23	Revenue per therm	(\$0.0101)	\$0.0819	\$0.0938	\$0.0038	\$0.0372	\$0.0135	\$0.0438	\$0.0249	(\$0.0511)	\$0.0000

Note:

1. The gas revenues are illustrated assuming each class is responsible for system average gas cost. This is not agreed or approved by the Commission.
2. The allocation of the costs of meters, regulators and service is revised to incorporate the method proposed by OPC witness Hong Hu.

# LACLEDE GAS COMPANY

## MIEC Revised Cost of Service - Recommendation One Revenue Adjustment to Achieve Cost of Service for All Classes Twelve Months Ended September 1998 (Dollars in Thousands)

<u>Line</u>	<u>Customer Class</u>	<u>Present Total Revenues (1)</u>	<u>Cost of Service Adjustment (2)</u>	<u>Percent of Total Revenues (3)</u>	<u>Recom- mended Total Revenues (4)</u>
1	General Service	\$471,315	\$7,878	1.67%	\$479,193
2	Air Conditioning	975	(199)	-20.42%	776
3	Large Volume	15,461	(1,255)	-8.12%	14,206
4	Interruptible	2,169	(79)	-3.64%	2,090
	Transportation:				
5	Firm	8,908	(3,212)	-36.06%	5,696
6	Basic	<u>6,993</u>	<u>(3,128)</u>	-44.73%	<u>3,865</u>
7	Total Transportation	15,902	(6,340)	-39.87%	9,562
8	Vehicular Fuel	256	(2)	-0.78%	254
9	L.P. Gas	122	9	7.36%	131
10	Unmetered Gas Light	73	(12)	-16.36%	61
11	Total	\$506,273	\$0	0.00%	\$506,273

Note: Totals may not add due to rounding.

# LACLEDE GAS COMPANY

## MIEC Revised Cost of Service - Recommendation One Gas Cost Revenues Defined at Cost of Service Twelve Months Ended September 1998 (Dollars in Thousands)

<u>Line</u>	<u>Customer Class</u>	<u>Present Gas Revenues</u> (1)	<u>Cost of Service Adjustment</u> (2)	<u>Percent of Gas Revenues</u> (3)	<u>Recom- mended Gas Revenues</u> (4)	<u>Recommended Gas Component of Rates</u> (5)
1	General Service	\$287,042	\$3,197	1.11%	\$290,239	\$0.3737
2	Air Conditioning	714	(2)	-0.28%	712	\$0.2932
3	Large Volume	12,473	(1,141)	-9.15%	11,332	\$0.3358
4	Interruptible	1,726	90	5.21%	1,816	\$0.3095
	Transportation:					
5	Firm - Total	5,376	(1,856)	-34.52%	3,520	
6	Capacity Reservation				2,311	\$0.0315
7	Sales				1,209	\$0.2933
8	Basic - Sales	<u>1,421</u>	<u>(242)</u>	-17.03%	<u>1,179</u>	\$0.3068
9	Total Transportation	6,797	(2,098)	-30.87%	4,699	
10	Vehicular Fuel	235	(38)	-16.17%	197	\$0.3097
11	L.P. Gas	71	0	0.00%	71	\$0.4174
12	Unmetered Gas Light	49	(8)	-16.33%	41	\$0.3073
13	Total	\$309,107	\$0	0.00%	\$309,107	

Note: Totals may not add due to rounding.

# LACLEDE GAS COMPANY

## MIEC Revised Cost of Service - Recommendation One Adjustments to NonGas Revenues to Achieve Cost of Service for All Classes Twelve Months Ended September 1998 (Dollars in Thousands)

<u>Line</u>	<u>Customer Class</u>	<u>Present NonGas Revenues (1)</u>	<u>Cost of Service Adjustment (2)</u>	<u>Percent of NonGas Revenues (3)</u>	<u>Recom- mended NonGas Revenues (4)</u>
1	General Service	\$184,273	\$4,681	2.54%	\$188,954
2	Air Conditioning	261	(197)	-75.55%	64
3	Large Volume	2,988	(114)	-3.81%	2,874
4	Interruptible	443	(169)	-38.15%	274
	Transportation:				
5	Firm	3,532	(1,356)	-38.39%	2,176
6	Basic	<u>5,572</u>	<u>(2,886)</u>	-51.79%	<u>2,686</u>
7	Total Transportation	9,105	(4,242)	-46.59%	4,863
8	Vehicular Fuel	21	36	170.01%	57
9	L.P. Gas	51	9	17.54%	60
10	Unmetered Gas Light	24	(4)	-16.42%	20
11	Total	\$197,166	(\$0)	-0.00%	\$197,166

Note: Totals may not add due to rounding.

# LACLEDE GAS COMPANY

## MIEC Revised Cost of Service - Recommendation Two Revenue Adjustment to Eliminate 50% of Variation from Cost Twelve Months Ended September 1998 (Dollars in Thousands)

<u>Line</u>	<u>Customer Class</u>	<u>Present Total Revenues (1)</u>	<u>Cost of Service Adjustment (2)</u>	<u>Percent of Total Revenues (3)</u>	<u>Recom- mended Total Revenues (4)</u>
1	General Service	\$471,315	\$3,939	0.84%	\$475,254
2	Air Conditioning	975	(100)	-10.21%	875
3	Large Volume	15,461	(628)	-4.06%	14,834
4	Interruptible	2,169	(40)	-1.82%	2,129
	Transportation:				
5	Firm	8,908	(1,606)	-18.03%	7,302
6	Basic	<u>6,993</u>	<u>(1,564)</u>	-22.37%	<u>5,429</u>
7	Total Transportation	15,902	(3,170)	-19.94%	12,732
8	Vehicular Fuel	256	(1)	-0.39%	255
9	L.P. Gas	122	5	3.68%	127
10	Unmetered Gas Light	73	(6)	-8.18%	67
11	Total	\$506,273	\$0	0.00%	\$506,273

Note: Totals may not add due to rounding.

# LACLEDE GAS COMPANY

## MIEC Revised Cost of Service - Recommendation Two Gas Cost Revenues Defined at Cost of Service Twelve Months Ended September 1998 (Dollars in Thousands)

<u>Line</u>	<u>Customer Class</u>	<u>Present Gas Revenues (1)</u>	<u>Cost of Service Adjustment (2)</u>	<u>Percent of Gas Revenues (3)</u>	<u>Recom- mended Gas Revenues (4)</u>	<u>Recommended Gas Component of Rates (5)</u>
1	General Service	\$287,042	\$3,197	1.11%	\$290,239	\$0.3737
2	Air Conditioning	714	(2)	-0.28%	712	\$0.2932
3	Large Volume	12,473	(1,141)	-9.15%	11,332	\$0.3358
4	Interruptible	1,726	90	5.21%	1,816	\$0.3095
	Transportation:					
5	Firm - Total	5,376	(1,856)	-34.52%	3,520	
6	Capacity Reservation				2,311	\$0.0315
7	Sales				1,209	\$0.2933
8	Basic - Sales	<u>1,421</u>	<u>(242)</u>	-17.03%	<u>1,179</u>	\$0.3068
9	Total Transportation	6,797	(2,098)	-30.87%	4,699	
10	Vehicular Fuel	235	(38)	-16.17%	197	\$0.3097
11	L.P. Gas	71	0	0.00%	71	\$0.4174
12	Unmetered Gas Light	49	(8)	-16.33%	41	\$0.3073
13	Total	\$309,107	\$0	0.00%	\$309,107	

Note: Totals may not add due to rounding.



# LACLEDE GAS COMPANY

## MIEC Revised Cost of Service - Recommendation Two Adjustments to NonGas Revenues to Eliminate 50% of Variation from Cost Twelve Months Ended September 1998 (Dollars in Thousands)

<u>Line</u>	<u>Customer Class</u>	<u>Present NonGas Revenues (1)</u>	<u>Cost of Service Adjustment (2)</u>	<u>Percent of NonGas Revenues (3)</u>	<u>Recom- mended NonGas Revenues (4)</u>
1	General Service	\$184,273	\$742	0.40%	\$185,015
2	Air Conditioning	261	(98)	-37.39%	163
3	Large Volume	2,988	514	17.18%	3,502
4	Interruptible	443	(130)	-29.24%	313
	Transportation:				
5	Firm	3,532	250	7.08%	3,782
6	Basic	<u>5,572</u>	<u>(1,322)</u>	-23.73%	<u>4,250</u>
7	Total Transportation	9,105	(1,072)	-11.77%	8,033
8	Vehicular Fuel	21	37	174.73%	58
9	L.P. Gas	51	5	8.77%	56
10	Unmetered Gas Light	24	2	8.11%	26
11	Total	\$197,166	(\$0)	-0.00%	\$197,166

Note: Totals may not add due to rounding.