

Exhibit No.:
Issue: Large Customer Revenue
Adjustments and Peak
Day Demands
Witness: Daniel I. Beck
Sponsoring Party: MO PSC Staff
Type of Exhibit: Direct Testimony
Case No.: GR-99-315

MISSOURI PUBLIC SERVICE COMMISSION

UTILITY OPERATIONS DIVISION

DIRECT TESTIMONY

OF

DANIEL I. BECK

FILED

JUN 28 1999

**Missouri Public
Service Commission**

LACLEDE GAS COMPANY

CASE NO. GR-99-315

Jefferson City, Missouri
June 1999

Direct Testimony of
Daniel I. Beck

1 normalization, customer annualization, tariff review, cost-of-service and rate design. I
2 am a Registered Professional Engineer in the State of Missouri. My registration number
3 is E-26953.

4 Q. Have you previously testified before this Commission?

5 A. Yes, I have. Schedule 1 provides a list of cases in which I have
6 submitted testimony.

7 Q. What is the purpose of your Direct Testimony?

8 A. The purpose of my Direct Testimony is to sponsor: (1) the
9 annualization and weather normalization of usage and revenues for the Large Volume
10 Service (LVS), Interruptible (INT), Basic Transportation (Basic), and the Firm
11 Transportation (Firm) Tariff Classes which make up the Large Commercial and
12 Industrial Cost-of-Service Class (LCI) and (2) the estimation of monthly peak day
13 demands for all of the classes.

14
15 ANNUALIZATION AND NORMALIZATION - LARGE CUSTOMERS

16 Q. What procedure did you follow in annualizing and normalizing large
17 customer usage?

18 A. Normalization of large customer usage was done on a customer
19 subgroup basis. I started with individual customer information provided by the
20 Company on usage and billing demand for each customer which 1) required adjustment
21 and 2) was billed for part of the test year at one of four tariffs that make up the LCI
22 Class. Adjustments made to this data include the following:

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1. Shifting of billing units for customers who switched from one rate class to another during the test year. For each customer, I removed the volumes, billing demands, and customer numbers from the original rate class and added them to the data in the rate class in which they were at the end of the test year;
2. Annualization of volumes for customers who terminated or initiated service with Laclede during this period. In this case, I removed or added the associated usage, billing demands, and bills from the data; and
3. Adjustment of usage for customers who experienced a significant increase/decrease in usage during the period.

Q. Did these adjustments affect any other tariff classes?

A. Yes. A few of the customers that I analyzed had been on the General Service tariff during part of the test year. As part of the Staff's rate-switching analysis, I adjusted the margin revenues for these classes when appropriate. For example, a customer that changed from an General Service (GS) to an LVS customer on August 31, 1998, would have actual test year usages in both the GS and LVS Class billing determinants. I adjusted the billing determinants and associated revenues to reflect the fact that this customer is currently a LVS customer.

Q. Were any of the LCI customers weather-normalized?

A. Yes. I weather-normalized the usage of four subsets that comprise the LCI customers using the monthly billing data that is provided to Staff on an ongoing basis by the Company. These subsets are the same as the four tariff classes listed above. Regressions were run on monthly sales and a monthly weather adjustment was computed. Normal weather information was provided to me by Staff witness Dennis L. Patterson. In my study, all of these subclasses were determined to be weather-sensitive.

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1 Q. Was the blocked usage of the LCI subgroups also weather
2 normalized?

3 A. Yes. The first block usage was also weather-normalized by
4 regression techniques based on data from the Company's previous rate case, Case No.
5 GR-98-374. The second block usage was then adjusted to insure that the sum of the
6 normalized first block usage and the normalized second block usage was equal to the
7 normalized total usage. However, the first block usage of the Basic Transportation
8 Subclass was determined to be non-weather sensitive, and for that subclass, all weather-
9 sensitive usage was assumed to be in the second block usage.

10 Q. When you refer to first block usage and second block usage, what do
11 you mean?

12 A. For Laclede's large customer tariff classes, usage is billed at two
13 different rates depending on the level of usage. For example, the Interruptible Service
14 tariff class is charged different rates for usage above and below 100,000 therms per
15 month. Any usage that is less than or equal to 100,000 therms in a given month is
16 considered first block usage and any usage above 100,000 therms is considered second
17 block usage.

18 Q. How were the results of your customer annualization used?

19 A. Using the Company's existing tariffs, I priced out the adjustments
20 described earlier. I provided the information to Staff witness Arlene S. Westerfield of
21 the Commission's Accounting Department to use in determination of adjusted current

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1 revenues. These adjustments are shown in the Staff Accounting Schedule as
2 adjustments S-2.3, S-2.5, S-3.1, S-3.2, S-4.1 and S-4.2.

3
4 PEAK DAY ESTIMATES

5 Q. Did you also estimate peak day demands?

6 A. Yes. Since all of the LCI subgroups were weather normalized, the
7 peak day demands for each month were estimated using normal peak day weather that
8 were calculated by Mr. Patterson.

9 Q. Are the peak day demands for the other classes (such as the General
10 Service Class) also computed?

11 A. Yes. The peak day demands for each month will be used in the
12 Staff's Cost of Service (C-O-S) study to allocate some of the Company's costs to the
13 various classes. For this reason, I used the per customer peak day demands that were
14 calculated by Staff witness James A. Gray to calculate a peak day demand for the
15 General Service classes. For the General L.P. Gas, Vehicular Fuel Customers, Air
16 Conditioning rate classes that were not weather normalized, the peak day demands were
17 estimated by multiplying the average daily usage for each month by a factor of 1.5 to
18 account for load diversity.

19 Q. Does this conclude your Direct Testimony in this part of the case?

20 A. Yes, it does. However, adjustments S-2.5, S-3.1, and S-4.2 will be
21 updated to reflect recent revisions by Mr. Patterson. In addition, I will also be filing
22 Direct Testimony on Cost-of-Service issues.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of Laclede Gas Company's)
Tariff to Revise Natural Gas Rate)
Schedules.)

Case No. GR-99-315

AFFIDAVIT OF DANIEL I. BECK

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

Daniel I. Beck, is of lawful age, on his oath states: that he has participated in the preparation of the foregoing Direct Testimony in question and answer form, consisting of 5 pages to be presented in the above case; that the answers in the foregoing Direct Testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true and correct to the best of his knowledge and belief.



DANIEL I. BECK

Subscribed and sworn to before me this 25th day of June 1999.



SHARON S. WILES, Notary Public
NOTARY PUBLIC STATE OF MISSOURI
COLE COUNTY
MY COMMISSION EXP. AUG. 23, 2002

My Commission Expires: _____

ST. JOSEPH LIGHT & POWER COMPANY
Case No. GR-99-246

List of Cases in which prepared testimony was presented by:
DANIEL L. BECK

<u>Company Name</u>	<u>Case No.</u>
Union Electric Company	EO-87-175
The Empire District Electric Company	EO-91-74
Missouri Public Service	ER-93-37
St. Joseph Power & Light Company	ER-93-41
The Empire District Electric Company	ER-94-174
Union Electric Company	EM-96-149
Laclede Gas Company	GR-96-193
Missouri Gas Energy	GR-96-285
Kansas City Power & Light Company	ET-97-113
Associated Natural Gas Company	GR-97-272
Union Electric Company	GR-97-393
Missouri Gas Energy	GR-98-140
Missouri Gas Energy	GT-98-237
Ozark Natural Gas Company, Inc.	GA-98-227
Laclede Gas Company	GR-98-374