

Exhibit No.:
Issues: Weather Normalization
Witness: Kim Cox
Sponsoring Party: MO PSC Staff
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Case No.: GR-2010-0171
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MISSOURI PUBLIC SERVICE COMMISSION

UTILITY OPERATIONS DIVISION

REBUTTAL TESTIMONY

OF

KIM COX

LACLEDE GAS COMPANY

CASE NO. GR-2010-0171

**Jefferson City, Missouri
June 2010**

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

In the Matter of Laclede Gas Company's)
Tariff to Increase Its Annual Revenues for)
Natural Gas Service)
)

Case No. GR-2010-0171

AFFIDAVIT OF KIM COX

STATE OF MISSOURI)
) ss
COUNTY OF COLE)

Kim Cox, of lawful age, on her oath states: that she has participated in the preparation of the following Rebuttal Testimony in question and answer form, consisting of 3 pages of Rebuttal Testimony to be presented in the above case, that the answers in the following Rebuttal Testimony were given by her; that she has knowledge of the matters set forth in such answers; and that such matters are true to the best of her knowledge and belief.



Kim Cox

Subscribed and sworn to before me this 23rd day of June, 2010.



SUSAN L. SUNDERMEYER
My Commission Expires
September 21, 2010
Callaway County
Commission #06942086



Notary Public

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Q. Please state your name and business address.

A. My name is Kim Cox and my business address is P. O. Box 360, Jefferson City, Missouri, 65102.

Q. Are you the same Kim Cox who contributed to the Staff's May 10, 2010 Revenue Requirement Cost of Service Report (Staff Revenue Requirement Report) and the Staff's Rate Design and Class Cost-of-Service Report (Staff COS Report) filed on May 24, 2010?

A. Yes, I am.

Q. What is the purpose of your Rebuttal Testimony?

A. The purpose of my Rebuttal Testimony is to respond to the Direct Testimony of Laclede Gas Company (Laclede) witness Patricia Krieger regarding test year weather normalization. I will respond to her weather usage per customer computations and associating regressions for the Residential (RES) and the Commercial and Industrial Class I, II and III (CI1, CI2, and CI3) classes.

Q. Which part of the direct testimony of Ms. Krieger's on Weather Normalization do you address in your rebuttal testimony?

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Kim Cox

1 A. Specifically, I will address the Normalization Adjustments for the RES and the
2 CI1, CI2, and CI3 customer classes.

3 Q. Based on her testimony of the Normalization Adjustment what variables did
4 Ms. Krieger utilize for her regression analysis?

5 A. For the customer classes, RES, CI1, CI2, and CI3, Ms. Krieger uses actual
6 average *use per bill per month* and actual billing cycle degree days by month. Staff's
7 normalization adjustment, as reflected in my Direct Testimony, utilizes *use per customer per*
8 *day* calculated from the meter reading cycles (Read Cycles) for each month and the *customer-*
9 *weighted average* daily Heating Degree Days (HDD). Staff's methodology is a more accurate
10 measure to use for the purposes of conducting a regression analysis.

11 Q. What deficiencies could result from the variables used by Ms. Krieger?

12 A. By not using more accurate variables, such as use per customer per day and
13 customer-weighted HDD, the coefficient of the HDD, the use per customer per HDD, may be
14 larger than it would be otherwise. Since the weather normalization adjustment is calculated
15 by multiplying the HDD coefficient by the difference between the actual and normal HDD,
16 the adjusted volumes would be overstated.

17 Q. What data did Ms. Krieger use?

18 A. Ms. Krieger uses data from October 2007 through September 2009. Generally,
19 the data used to develop normalized usage is the twelve (12) months of the test year. Staff is
20 unable to determine how the data affected the overall results of the model she utilized. Staff
21 has consistently used the test year as the base for developing weather normalization usages
22 and this method has been used by other local distribution companies when computing weather
23 normalization usages.

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Kim Cox

1 Q. Were you able to study the model Ms. Krieger used to develop her weather
2 normalization adjustment?

3 A. No. Ms. Krieger only provided the regression model results; Adjusted Squared
4 Multiplier R, Durbin Watson D Statistic, the Standard Error of Estimate and the Coefficients.
5 The model utilized is proprietary and was developed by Jay Turner, of Washington
6 University. Laclede did not provide the model used to develop Mrs. Krieger's weather
7 normalization adjustment, even though Staff requested it. This information should have been
8 part of the workpapers for Laclede in support of its weather normalization adjustments.

9 Q. Can you validate the statistical significance of the coefficients or overall model
10 accuracy?

11 A. No. Laclede did not provide the model that supports their computation.

12 **STAFF RECOMMENDATION**

13 Q. What is your recommendation regarding Ms. Krieger's adjustment to volumes
14 for normal weather?

15 A. Ms. Krieger does not properly characterize the use per customer per day for the
16 customer classes, which leads to inaccurate calculation of use per customer per HDD. It is
17 important that usage per customer per HDD be accurate because this determines the adjustment
18 to volumes based on the difference between test year and normal HDD.

19 Since Ms. Krieger did not provide the model she utilized to obtain her results for
20 normalized sales, I recommend that if the Commission does not adopt the straight fixed variable
21 rate design for the Residential class, the Commission adopt Staff's adjustments to volumes for
22 normal HDD for the RES, CI1, CI2 and CI3.

23 Q. Does this conclude your Rebuttal Testimony?

24 A. Yes, it does.