Exhibit No.:
Issue: Large Power Weather Normalization
Customer Growth Adjustment
Witness: George M. McCollister, Ph.D
Type of Exhibit: Rebuttal Testimony
Sponsoring Party: Kansas City Power & Light Company
Case No.: ER-2006-0314
Date Testimony Prepared: September 8, 2006

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO.: ER-2006-0314

REBUTTAL TESTIMONY

OF

GEORGE M. MCCOLLISTER, PH.D

ON BEHALF OF

KANSAS CITY POWER & LIGHT COMPANY

Kansas City, Missouri
September 2006

REBUTTAL TESTIMONY

OF

GEORGE M. MCCOLLISTER, PH.D

Case No. ER-2006-0314

Q: Please state your name and business address.

A: My name is George M. McCollister. My business address is 1201 Walnut, Kansas City, Missouri 64106.

Q: Are you the same George M. McCollister who pre-filed direct testimony in this case?

A: Yes, I am.

Q: What is the purpose of your testimony?

A: The purpose of my rebuttal testimony is to respond to the conclusion of Missouri Public Service Commission Staff ("Staff") witness Shawn E. Lange in his testimony that the Large Power ("LP") class was not weather sensitive. I will also discuss an issue regarding the customer growth adjustment made by Staff witness Kim Bolin.

Q: What was Mr. Lange's conclusion?

A: He *"determined that the LP class was not significantly weather sensitive"* (page 4, lines 9-10).

Q: How did he reach this conclusion?

A: *"The hourly loads were plotted against mean daily temperature to ascertain the weather sensitivity of each class"* (page 4, lines 13-14).

Q: Can you describe the plot that he is referring to?

A: The plot was included in his work papers and is shown in Schedule GMM-4. Average daily load in MWs is plotted on the vertical axis and temperature is plotted on the horizontal axis. Each day of the week is plotted with a different symbol. The loads on weekends are typically about 50 MW lower than on weekdays. The temperature variable "TDWMT" is the two day weighted mean temperature. A few of the data points for Mondays, plotted with pink squares, are substantially below the curve. These include holidays such as Christmas, Memorial Day, the 4th of July and Labor Day.

Q: Does the load from Large Power customers appear to be weather sensitive?

A: Average daily load appears to be very weather sensitive. Typical weekday loads are about 250 MWs up to about 55 degrees and then rise steadily with temperature, reaching about 300 MW at 80 degrees. Weekend loads show a similar weather sensitivity, but starting at a lower base of about 200 MWs.

Q: What type of customers are on the LP tariff?

A: There are both industrial and commercial customers on this tariff. The commercial customers include some hospitals, college campuses, hotels, casinos, shopping malls, hotels and office buildings.

Q: Are these customers typically weather sensitive?

A: Most of these customers would have substantial air conditioning loads that would vary with outdoor temperature.

Q: Is there a statistical test of the weather sensitivity of the customers on the LP tariff?

A: Yes. I performed such a test in developing my direct testimony and the results were supplied to the Staff in my workpapers.

Q: What were the results of the test?

A: I used statistical regression analysis to estimate the effect of cooling degree days with a base temperature of 55 degrees. The statistical significance of the coefficient for this variable as measured by the t-statistic was 17.7. Any value above 2.0 is usually considered significant, so 17.7 is extremely significant.

Q: What is your recommendation for the Commissioners?

A: I recommend that the Commission accept KCPL's weather adjustment for the LP class. This weather adjustment was used to adjust revenues to a weather normalized level in the Company's direct case. This weather adjustment was also used to calculate weather normalized fuel costs in the Company's direct case.

Q: Are you aware of any issues regarding the customer growth adjustments made by Staff witness Kim Bolin?

A: Yes, the Company has been working with Ms. Bolin to identify customers who have changed rates within the Large Power and Large General Service classes during the test period.

Q: Why is this an issue?

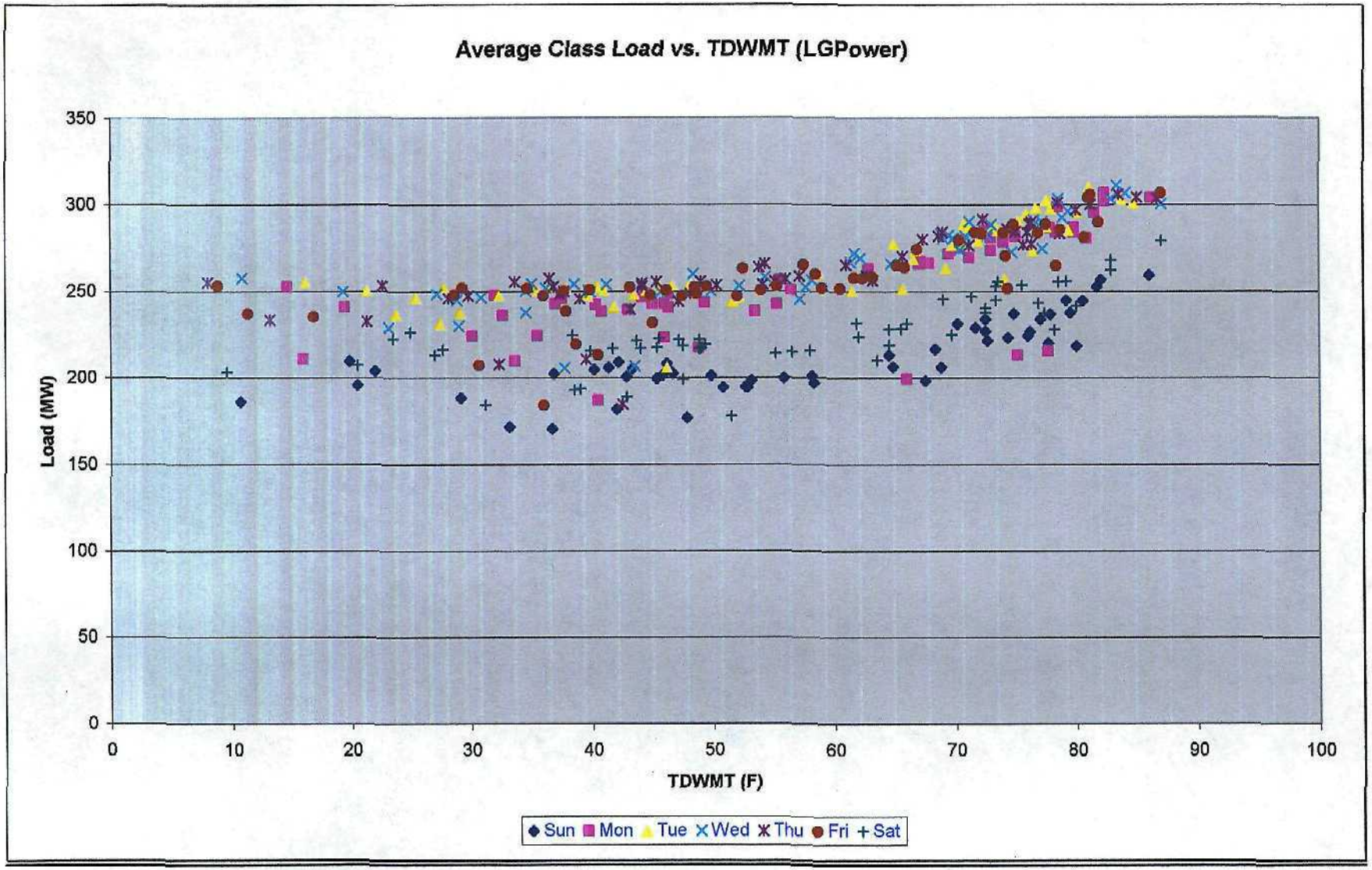
A: Staff used a different methodology to calculate revenue and kwh adjustments necessary due to customer growth, than that used by the Company. The Company looked at each customer class in total, including the Large Power class. Ms. Bolin made the adjustment to the Large Power class on a customer-by-customer basis. Using the Staff's methodology, failing to identify customers who changed rates introduces an error.

Q: Do you expect this issue to be resolved in the September update to this case?

A: Yes, it is the Company's understanding that Staff intends to update the customer growth adjustment in the update, taking into consideration customers who have changed rates.

Q: Does that conclude your testimony?

A: Yes, it does.


Average Class Load vs. TDWMT (LGPower)
Load (MW)
350
300
250
200
150
100
50
0
0
10
20
30
40
50
60
70
80
90
100
TDWMT (F)
Sun
Mon
Tue
Wed
Thu
Fri
Sat

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Application of Kansas City Power & Light Company to Modify Its Tariff to Begin the Implementation of Its Regulatory Plan	)))	Case No. ER-2006-0314

AFFIDAVIT OF GEORGE M. MCCOLLISTER, PH.D

STATE OF MISSOURI)
) **ss**
COUNTY OF JACKSON)

George M. McCollister, Being first duly sworn on his oath, states:

1. My name is George M. McCollister. I work in Kansas City, Missouri, and I am employed by Kansas City Power & Light Company as Manager of Market Assessment.

2. Attached hereto and made a part hereof for all purposes is my Rebuttal Testimony on behalf of Kansas City Power & Light Company consisting of four (4) pages and Schedule GMM-4, all having been prepared in written form for introduction into evidence in the above-captioned docket.

3. I have knowledge of the matters set forth therein. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded, including any attachments thereto, are true and accurate to the best of my knowledge, information and belief.

George M. McCollister

Subscribed and sworn before me this 8th day of September 2006.

Notary Public

My commission expires:

CAROL SIVILS
NOTARY SEAL
NOTARY PUBLIC
STATE OF MISSOURI

CAROL SIVILS
Notary Public - Notary Seal
STATE OF MISSOURI
Clay County
My Commission Expires: June 15, 2007