Exhibit No.:	
Issues:	Weather Normalization and Normalized Billing Units
Witness:	James R. Pozzo
Sponsoring Party:	Union Electric Company
Type of Exhibit:	Direct Testimony
Case No.:	GR-2007-0003
Date Testimony Prepared:	July 5, 2006

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. GR-2007-0003

DIRECT TESTIMONY

OF

JAMES R. POZZO

ON

BEHALF OF

UNION ELECTRIC COMPANY
d/b/a AmerenUE

St. Louis, Missouri
July 2006

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DIRECT TESTIMONY

OF

JAMES R. POZZO

CASE NO. GR-2007-0003

I. INTRODUCTION

Q. Please state your name and business address.

A. James R. Pozzo, Ameren Services Company ("Ameren Services"), One Ameren Plaza, 1901 Chouteau Avenue, St. Louis, Missouri.

Q. What is your position with Ameren Services?

A. I am a Rate Engineer in Ameren Services' Regulatory Policy Department. My duties include assistance in the area of rate engineering, including work in the area of weather normalization which is the subject of my direct testimony on this case.

Q. What is Ameren Services?

A. Ameren Services provides various corporate, administrative and technical support services for Ameren Corporation and its affiliates, including Union Electric Company d/b/a AmerenUE (referred to herein as "Company" or "AmerenUE").

Q. Please describe your educational background, work experience and duties of your position.

A. I received the degree of Bachelor of Science in Mechanical Engineering from the University of Missouri-Rolla in December 1978.

I began working at Union Electric Company ("Union Electric") in January 1979 in the Power Operations Department, working as an Engineer at the Ashley Plant for two years and at the Meramec Plant for five years. During this time I was responsible for

operations and maintenance support for assigned plant equipment along with various other projects as assigned.

I transferred into Union Electric's Rate Engineering Department in September 1985 and I assumed my current position with Ameren Services upon completion of the merger of Central Illinois Public Service Company and Union Electric effective December 31, 1997.

My current duties and responsibilities include assignments related to the gas and electric rates of Union Electric Company, now doing business as AmerenUE; Central Illinois Public Service Company, now doing business as AmerenCIPS; Central Illinois Light Company, now doing business as AmerenCILCO; and Illinois Power Company, now doing business as AmerenIP. For each of these companies I participate in regulatory proceedings, conduct rate analyses, develop and interpret the gas and electric tariffs, and perform other rate or regulatory projects as assigned.

II. PURPOSE AND SUMMARY OF TESTIMONY

Q. What is the purpose of your testimony in this proceeding?

A. The purpose of my testimony is to explain the development of the weather normalized billing units for the Residential and General Service customer classes of AmerenUE.

Q. Why is it necessary to calculate a weather normalization adjustment to test year gas usage?

A. The weather normalization adjustment is calculated to modify actual test year usage to reflect what the usage would have been if the weather had been normal. A normal year is one in which the actual weather equals expected weather based on history. No year is

a perfectly normal year, so an adjustment will generally need to be made. In years where the winter is colder than normal, gas usage will be higher than normal because customers will run their furnaces more. If the winter is milder than normal, then customers will not use as much natural gas to heat their homes. The weather normalization adjustment is used to make natural gas usage more representative of normal operating conditions.

Q. What test year is AmerenUE proposing in this case?

A. As explained by AmerenUE witness Gary S. Weiss in his direct testimony, the test year for this case is the twelve months ending June 30, 2006, consisting of nine months of actual data and three months of forecasted data.

III. WEATHER NORMALIZATION METHODOLOGY

Q. How was the weather normalized gas usage developed?

A. I used regression analysis to determine the statistical relationship of billing cycle gas usage and billing cycle heating degree days and then used such results to estimate the weather normalized gas usage for the Residential and General Service customer classes of the Company.

Q. Please explain the general concept of regression analysis.

A. Regression analysis is a statistical technique for modeling and investigating the quantitative relationship between two or more variables. The analysis provides estimates of the portion of the variation of the dependent variable associated with variations in the independent variable. The variable being analyzed is the dependent variable. The variable that is used to examine the movement in the dependent variable is the independent variable.

Q. In your regression analysis, what are the dependent and independent variables?

A. The dependent variable is the billing cycle gas usage per customer. Gas usage is measured in hundreds of cubic feet, abbreviated as "Ccf." The independent variable is the billing cycle heating degree day temperature measure.

Q. Please explain the difference between billing cycle gas usage and calendar month gas usage.

A. Customer billing cycle usage is the accumulated gas consumed in Ccf between meter reading dates. For each of the 21 scheduled meter reading cycles of a specific Company billing month, a portion of the usage within each cycle usually occurs in the month prior to the month in which the meter is read. For example, meters read in mid-January will reflect customer gas consumption from mid-December to mid-January. Calendar usage for January would be the accumulated usage from January 1st to January 31st, as if all customer meters were simultaneously read at the beginning of January 1st and at the end of January 31st.

Q. Please explain the term "heating degree days."

A. A heating degree day is simply a measure of how cold a particular day is. It is calculated by taking the average of the day's high and low temperature and subtracting the result from the 65. One heating degree day is accumulated for each whole degree that the daily average temperature is below 65º Fahrenheit. For example, five (5) heating degree days are incurred on a day having an average temperature of 60º Fahrenheit. If the difference between the average and the base of 65 is a negative number, then zero heating degree days are incurred.

Q. How did you calculate the billing cycle heating degree days?

A. I calculated billing cycle heating degree days by applying a weighting factor to the heating degree days associated with each day in each billing month. I weighted the heating degree days to account for the fact that the Company's meters are read at different times throughout the billing cycle month. Finally, I summed the weighted heating degree days for each billing cycle day to determine heating degree days associated with each billing cycle month during the test year.

Q. How did you calculate normal heating degree days?

A. I obtained historical daily heating degree days from three weather stations in the areas in which AmerenUE serves gas customers. For the portion of the Company's service area supplied by Panhandle Eastern Pipe Line Company along Interstate 70, I obtained the data from the Columbia Regional Airport. For the areas in Southeast Missouri served by pipelines owned by the Natural Gas Pipeline Company of America and Texas Eastern Transmission Corporation, I obtained the data from the Cape Girardeau Regional Airport. For the area formerly served by Aquila, Inc. (AmerenUE's Rolla System), I obtained the data from the Vichy Rolla National Airport. I used normal daily heating degree days for each day provided by the National Weather Service for the thirty year period ending 2000. I then used the normal daily heating degree days, along with the billing cycle weighting factors for the test year meter reading schedules, to calculate the normal heating degree days for each test year billing month. Panhandle Eastern Pipe Line Company serves the areas in and around Columbia, Jefferson City, Mexico and Wentzville. Natural Gas Pipeline Company of America and Texas Eastern Transmission Corporation serve the area in

and around Cape Girardeau. The Rolla area is served by Missouri Gas Company and includes the areas around Rolla, Salem and Owensville.

Q. What conclusions can be drawn from your regression analysis?

A. There is a valid statistical relationship between the level of customer gas usage and heating degree days for the Residential and General Service customer classes. The R^2 (pronounced R squared) statistic, which ranges from zero to 1.0, indicates the degree of correlation between the variables of a regression model. An R^2 value near zero indicates low or poor correlation, whereas an R^2 value near 1.0 indicates a high or good correlation between the variables being examined. The R^2 values which I calculated for the Residential and General Service classes as a part of this regression analysis were sufficiently high (close to a value of 1.0) to be considered statistically significant for these customer classes. Schedule JRP-G1 shows the R^2 values for AmerenUE's Residential and General Service classes for each region.

IV. WEATHER NORMALIZATION STUDY RESULTS

Q. What adjustments for these customer classes resulted from your weather normalization process?

A. Test year usage for the Residential class was increased by 6,138,522 Ccf (8.9%) and for the General Service class usage was increased by 2,740,934 Ccf (7.5%). Test year revenue for the Residential class was increased by $1,742,742 (5.3%) and revenue for the General Service class was $668,930 (5.3%) to reflect what the gas usage of these customer classes would have been in the test year under normal weather conditions. Schedule JRP-G2 shows the actual and normal sales and revenue for various rate classes.

Q. What do these adjustments tell us about weather in the test year versus "normal" weather?

A. Because the adjustments increased the Ccf's of gas consumed, this means that the weather in the test year was slightly warmer than normal.

Q. Did you adjust sales and revenue for the Transportation and Interruptible customer classes using the weather normalization process?

A. No. The Transportation and Interruptible customer classes consist of large non-residential customers whose usage generally does not vary significantly with weather. For this reason, it was not appropriate to weather normalize the usage or revenue for these customer classes.

Q. In what other ways did you use the results of your regression analyses?

A. I used the results of these regression analyses along with the peak heating degree day data for the test year to estimate the coincident peak day demands for the Residential and General Service customer classes. Company witness William M. Warwick will discuss the use of the peak day demand requirements for allocation factor development in his direct testimony.

Q. How were the coincident peak day demands of the various other rate classes determined?

A. The coincident peak day demand for the Interruptible class was assumed to be the assurance level contracted for by such customers under the Company's Interruptible Service tariff. I determined the coincident peak day demand for the Transportation customers by summing the individual customer usages for the maximum heating degree day during the test year for each region.

Q. How did you determine the non-coincident peak day demands for the various classes?

A. I assumed the non-coincident peak day demands for the Residential, General Service and Standard Transportation to be the same as the peak day demands. The non-coincident peak demands for the Large Volume Transportation was determined using actual individual customer demands for the peak day for the Large Volume Transportation class. I determined the non-coincident peak day demand for the Interruptible Service class by dividing the maximum monthly use by the number of work days in the month.

Q. Please state the results of your analysis.

A. The results of my analysis show that the weather for the test year was warmer than normal. The test year sales and revenue for the Residential and General Service classes were increased by 8,879,457 Ccf and $2,411,672 respectively.

Q. Does this conclude your direct testimony?

A. Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of Union Electric Company d/b/a AmerenUE for Authority to File Tariffs Increasing Rates for Natural Gas Service Provided to Customers in the Company's Missouri Service Area.	)))))	Case No. GR-2007-0003

AFFIDAVIT OF JAMES R. POZZO

STATE OF MISSOURI)
) **ss**
CITY OF ST. LOUIS)

James R. Pozzo, being first duly sworn on his oath, states:

1. My name is James R. Pozzo. I work in the City of St. Louis, Missouri, and I am employed by Ameren Services Company as a Rate Engineer in Regulatory Policy.

2. Attached hereto and made a part hereof for all purposes is my Direct Testimony on behalf of Union Electric Company d/b/a AmerenUE consisting of 8 pages and Schedule JRP-G1, all of which have been prepared in written form for introduction into evidence in the above-referenced docket.

3. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct.

James R. Pozzo

Subscribed and sworn to before me this 5th day of July, 2006.

Notary Public

My commission expires:

CAROLYN J. WOODSTOCK
Notary Public - Notary Seal
STATE OF MISSOURI
Franklin County
My Commission Expires: May 19, 2008

AmerenUE

12 Months Ending June 2006

R^2 Values

Class	R^2
Residential Panhandle Area	0.995
Residential Texas Eastern Area	0.990
Residential Rolla Area	0.986
General Service Panhandle Area	0.991
General Service Texas Eastern Area	0.985
General Service Rolla Area	0.947