Exhibit No.:

Issues: Weather Normalization

Witness: Walt Cecil

Sponsoring Party: MO PSC Staff
Type of Exhibit: Rebuttal Testimony

File No.: ER-2011-0028

Date Testimony Prepared: March 25, 2011

MISSOURI PUBLIC SERVICE COMMISSION UTILITY OPERATIONS DIVISION

REBUTTAL TESTIMONY

OF

WALT CECIL

UNION ELECTRIC COMPANY d/b/a AMEREN MISSOURI

FILE NO. ER-2011-0028

Jefferson City, Missouri March 2011

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Union Electric Company d/b/a AmerenUE's Tariff to Increase Its Annual Revenues for Electric Service) File No. ER-2011-0028		
AFFIDAVIT OF WALT CECIL			
STATE OF MISSOURI)) ss COUNTY OF COLE)			
Walt Cecil, of lawful age, on his oath states: that he has participated in the preparation of the following Rebuttal Testimony in question and answer form, consisting of 4 pages of Rebuttal Testimony to be presented in the above case, that the answers in the following Rebuttal Testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true to the best of his knowledge and belief.			
	Walt Cecil		
Subscribed and sworn to before me this <u>a 4 th</u> day of March, 2011.			
SUSAN L. SUNDERMEYER Notary Public - Notary Seal State of Missouri Commissioned for Callaway County My Commission Expires: October 03, 2014 Commission Number: 10942086	Musan Mundermayer Notary Public		

1		REBUTTAL TESTIMONY
2 3		OF
4 5		WALT CECIL
6 7 8		UNION ELECTRIC COMPANY d/b/a AMEREN MISSOURI
9 10 11		FILE NO. ER-2011-0028
12 13	Q.	Please state your name and business address.
14	A.	Walt Cecil, 200 Madison Street, Jefferson City Missouri 65101.
15	Q.	By whom and in what capacity are you employed?
16	A.	I am a Regulatory Economist employed by the Missouri Public Service
17	Commission (MoPSC or Commission).	
18	Q.	Are you the same Walt Cecil that contributed to Staff's Cost of Service Report
19	previously filed in this case?	
20	A.	Yes, I am.
21	Q.	What is your purpose in filing this rebuttal testimony?
22	A.	I explain why Staff analyzed a different time interval than the one used by
23	Union Electric Company d/b/a Ameren Missouri (Ameren Missouri) to weather normalize	
24	usage. I also	explain why a weather normalization adjustment should not be made to the
25	usage for the	Large Power class (LP) and the industrial component of the Large General
26	Services class (LGS-I).	
27	Q.	Why did Staff choose a different time interval than Ameren Missouri upon
28	which to base	its analysis for the weather normalization of usage?

A. The objective of weather normalization of usage is to adjust for changes in usage resulting from daily fluctuations in weather. Other adjustments such as the 365 days adjustment and annualization adjustments are also made to usage.

However, before any analysis is done, Staff examines class level daily usage information. Staff plots daily usage against the two-day weighted mean temperature for each of the customer classes served by Ameren Missouri for the period January 2008 through July 2010. These plots revealed that the general level of class usage was changed from January 2008 through July 2010. Customarily, Staff analyzes daily class usage over an interval of at least two years in duration to determine a weather response function to normalize usage since typically more data results in a better model; however, based on the plots, Staff concluded, that because the usage changed so much, a better indicator would be found in the most recent, available 12 months of data. Schedule WC-1 contains a plot of the Small Power Service (SPS) class' weekday energy load against the two-day weighted mean temperature for the period January 2008 through July 2010.

- Q. What does the plot in Schedule WC-1 reveal?
- A. This plot shows the daily usage of SPS customers in 2008 is higher than that of the 2009/2010 period. It appears the usage of the SPS class has changed between 2008 and 2009/2010 for a reason other than a change in the two-day weighted mean temperature. To include 2008 data in Staff's analysis would include effects of the previous process determining usage into the 2009/2010 process and in Staff's estimation, overstate any inferences drawn there from.
- Q. Did the other rate classes experience similar changes in usage as that experienced by SPS and demonstrated in Schedule WC-1 for SPS?

- A. Yes. The SPS plot was chosen because it demonstrates the change in usage clearly but the same phenomena compelling the change in usage experienced by SPS was experienced by the other classes.
- Q. Why should a weather normalization adjustment not be made to the usage of the LP class?
- A. The LP class is composed of a relatively small number of businesses that consume very large amounts of electricity but whose operations and business plans differ from one another. Some are more active when the weather is warm while others are more susceptible to economic forces and are active when business is good regardless of the time of year. For example, a university is actively operating during the fall, spring and summer sessions, a lead mine/smelter will produce lead whenever the market demands lead whatever the weather; and, a hospital does not close.
- Q. Did Staff perform the same weather normalization of usage analysis for LP that it did for the other classes?
- A. Staff analyzed LP usage to determine if there was a significant weather response. Staff's results did not show a significant weather response. It did show LP's usage correlates directly with the time of the year (summer vs. non-summer) and the day of the week.
 - Q. Did Staff perform other analysis on the LP class?
- A. Yes. The LP class' load is annualized on an individual customer basis. This annualization is conducted by Staff witness Dr. Seoung Joun Won.
 - Q. Can Staff weather normalize a LP class that has been annualized?

Rebuttal Testimony of Walt Cecil

2 3

1

4

6

7

5

13

14

12

A. Once the annualization is performed, estimated load data either replaces or corrects observed or missing data. To weather normalize usage of that estimated data would be to create weather response estimates on estimated data. Conclusions drawn from inferences based on estimated data would give results that would be difficult to support.

- Why didn't Staff weather normalize usage for the industrial customer Q. component of the Large General Services (LGS-I) class?
- A. The industrial component and the commercial component of the LGS class were separately analyzed. The results of that analysis showed the industrial customer component of the LGS load was not subject to daily fluctuations in the two-day weighted mean temperature but was subject to the day of the week. Having found no evidence to support a load-temperature relationship, Staff did not weather normalize usage for the industrial component of the LGS class.
 - Q. Does this conclude your rebuttal testimony?
 - A. Yes, it does.



