

Exhibit No.:
Issues: Normalized Billing
Units
Witness: James R. Pozzo
Sponsoring Party: Union Electric Co.
Type of Exhibit: Direct Testimony
Case No.: ER-2010-_____
Date Testimony Prepared: July 24, 2009

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. ER-2010-_____

DIRECT TESTIMONY

OF

JAMES R. POZZO

ON

BEHALF OF

**UNION ELECTRIC COMPANY
d/b/a AmerenUE**

**St. Louis, Missouri
July, 2009**

DIRECT TESTIMONY
OF
JAMES R. POZZO
CASE NO. ER-2010-_____

Q. Please state your name and business address.

A. James R. Pozzo, One Ameren Plaza, 1901 Chouteau Avenue, St. Louis, Missouri.

Q. By whom are you employed and in what position?

A. I am employed by Union Electric Company d/b/a AmerenUE (“AmerenUE” or “Company”) as a Rate Engineer in the Missouri Regulated Services Department.

Q. Please describe your educational background, work experience and the 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 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. My current duties and responsibilities include assignments related to the Company’s gas and electric rates. This includes participation in regulatory

1 proceedings, conducting rate analyses, developing and interpreting gas and electric
2 tariffs, and performing other rate or regulatory projects as assigned.

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

4 A. The purpose of my direct testimony is to develop weather normalized test
5 year billing units for the Company's Missouri jurisdictional electric operations, to adjust
6 revenues to reflect the rate increase implemented on March 1, 2009 as a result of the
7 Company's last rate proceeding, to adjust for the number of days in the billing year and
8 to account for customer growth through the proposed true-up period in this case (through
9 February 28, 2010).

10 **Q. Please explain what is meant by the term "billing unit."**

11 A. A billing unit is a quantity of electric customers, and usage (kilowatt-
12 hours), demand (kilowatts) or reactive demand (kilovar) data to which filed rates are
13 applied in determining customers' bills.

14 **Q. Please describe the billing units used by AmerenUE.**

15 A. AmerenUE uses a) customer count; b) kilowatt-hours, which are energy
16 units; c) kilowatts, which are demand units; and d) kilovars, which are units of reactive
17 demand. Depending on a customer's rate class, two or more of these components are
18 used to bill virtually all customers. The weather normalized billing units I developed in
19 this case are a compilation of the individual customer billing units which occurred during
20 the study period, adjusted to reflect normal weather. The study period is the test year
21 consisting of the twelve months ending March 31, 2009. The weather normalized billing
22 units were also adjusted for growth to March 2009 and anticipated customer growth
23 through February 2010, as noted earlier.

1 **Q. What was the initial step you took in the development of the**
2 **Company's billing units for each customer class?**

3 A. Existing Company reports contain aggregate kilowatt-hour sales and
4 revenues on a monthly basis for the Residential, Small General Service, Large General
5 Service, Small Primary Service, Large Primary Service and Large Transmission Service
6 rate classes. A more detailed monthly report provides the billing units that can be priced
7 at the Company's filed rates to calculate customer revenues. This report provides billing
8 data both by revenue month, which is the month for which the data was reported, and the
9 primary month, which is the month the data should have been reflected in customer bills.
10 I used this report to assemble the billing data in the proper primary month. I then applied
11 the rates that took effect in July 2007¹ for each specific rate class to the billing units for
12 each class. This results in the "Calculated Revenue Prev" for each class.

13 **Q. Do the revenues calculated from this process exactly match the**
14 **revenues indicated on the Company's books ("reported revenue") for the same time**
15 **period?**

16 A. While the comparison of calculated revenue and reported revenue match
17 closely, there will always be some difference between the two. The difference results
18 from billing adjustments which are made to a number of accounts each month due to
19 corrected billings, and initial and final bills.

20 **Q. Did you analyze all of the rate classes using the billing unit reports?**

¹ The Initial rates went into effect on June 4, 2007, but the Commission later issued an Order Denying Applications for Rehearing Granting Clarification, and Correcting X Order Nunc pro tunc, June 28, 2007, which increased the Company's revenue requirement. There rates went into effect on July 3, 2007.

1 A. No, I analyzed all but two of the rate classes in the same way. I used more
2 detailed data for the Large Primary Service class, obtaining individual customer data and
3 used actual bills to complete the data for the Large Transmission Service class. The
4 Large Primary Service class contains only approximately sixty customers who are
5 generally the largest customers, and the Large Transmission Class has one customer.

6 **Q. Was there an adjustment made to reflect the rate increase on**
7 **March 1, 2009?**

8 A. Yes, as earlier noted, I priced the actual billing units at the rates in effect
9 for most of the test year except March and again at the rates for the increase implemented
10 on March 1, 2009. This provided verification of the reported revenues. The rate increase
11 on March 1, 2009 was calculated pricing April 2008 through February 2009 billing units
12 using rates in effect during the first 11 months of the test year and the rates that became
13 effective on March 1, 2009. The difference I calculated in these first 11 months along
14 with the difference between reported and calculated revenues for March, 2009, was the
15 amount that the actual revenues were adjusted to annualize actual revenue for the rate
16 increase. The effect of the rate increase was calculated differently for March because
17 customers' bills were prorated during that month, that is, part of the month was billed at
18 prior rates and the remainder of the month billed at the new rates.

19 **Q. Was the Lighting class rate increase adjustment calculated using the**
20 **same method as the method used for the other rate classes?**

21 A. No, the Lighting class rate increase adjustment was calculated using the
22 Lighting percent increase for all of the months in the test year.

1 **Q. After you verified the billing units associated with the Company's**
2 **reported revenues and annualized to reflect the March, 2009 rate increase, how**
3 **were these billing units and revenues adjusted to reflect normal weather?**

4 A. I used weather adjustment ratios provided in the direct testimony of
5 Company witness Steven M. Wills for each billing month to adjust the monthly reported
6 sales to weather normalized sales. The kilowatt-hours in all of the rate blocks were
7 adjusted by the weather ratios and the resulting units were priced at current rates to
8 develop normalized billing units and revenues.

9 **Q. How were the billing units and revenues adjusted to a 365 day test**
10 **year?**

11 A. The annual kWh adjustment for each rate class provided by Company
12 witness Steven M. Wills was used to factor all the kWhs in each rate class in order to
13 adjust to a 365 day test year. The revenue impact from this adjustment was calculated
14 from the kWh adjustments.

15 **Q. How were the billing units adjusted for customer growth?**

16 A. The weather normalized billing units were adjusted for customer growth
17 by multiplying the monthly usage per customer by the customer counts as of March,
18 2009, and then again using forecast customer counts for February, 2010 (to capture the
19 proposed true-up period), to calculate the customer growth through February, 2010. The
20 resulting revenue, calculated from the day adjustment and the growth adjusted billing
21 units, was then used to adjust the normalized billing units to calculate to the total growth
22 adjusted revenues. The growth adjusted normal monthly billing units were then divided
23 into the summer and winter billing periods for presentation on Schedules JRP-E1 through

1 JRP-E6, attached hereto. Schedule JRP-E7 is a summary of the billing unit kilowatt-
2 hours and revenues. These weather normalized, growth adjusted revenues and billing
3 units are used by Company witness Wilbon L. Cooper in his development of the
4 Company's proposed rates in this case. The normalized and growth adjusted revenues are
5 also used by Company witness Gary S. Weiss as an adjustment to revenues in Mr. Weiss'
6 cost of service study.

7 **Q. What was the result of your billing units analysis?**

8 A. My analysis provides the normal billing units to be used to develop
9 proposed rates. Annualizing the rate increase implemented in March, 2009, accounted
10 for a positive \$156 million adjustment to revenues. The study also shows that revenues
11 related to weather normalization must be increased by \$0.9 million. An adjustment of
12 negative \$3.7 million is required to adjust to 365 day test year. An adjustment of \$11.0
13 million is needed to account for growth through February, 2010. All of these adjustments
14 were utilized by Mr. Weiss in his cost of service study.

15 **Q. Does this conclude your direct testimony?**

16 A. Yes, it does.

In the Matter of Union Electric Company)
d/b/a AmerenUE for Authority to File)
Tariffs Increasing Rates for Electric)
Service Provided to Customers in the)
Company's Missouri Service Area.)

Case No. ER-2010-

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

1. My name is James R. Pozzo. I work in the City of St. Louis, Missouri, and I am employed by Union Electric Company d/b/a AmerenUE as a Rate Engineer.

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

Subscribed and sworn to before me this 24th day of July, 2009.

Amenda Tesdall - Notary Public
Notary Seal, State of
Missouri - St. Louis County
Commission #07158967
My Commission Expires 7/29/2011

**Residential Service Rate
AmerenUE - Missouri
Weather Normalized-12 months ending March 2009
Growth to February 2010**

<u>Billing Components</u>		<u>Present</u>
<u>Summer (June - September)</u>		
Customer Charge	Per Month	\$7.25
Customer Charge TOD	Per Month	\$15.00
Energy Charge:		
All Kwh	Cents per Kwh	8.63 ¢
TOD On Peak	Cents per Kwh	12.54 ¢
TOD Off Peak	Cents per Kwh	5.14 ¢
<u>Winter (October - May)</u>		
Customer Charge	Per Month	\$7.25
Customer Charge TOD	Per Month	\$15.00
Energy Charge:		
0- 750 Kwh	Cents per Kwh	6.12 ¢
All Kwh Over 750	Cents per Kwh	4.12 ¢
TOD On Peak	Cents per Kwh	7.40 ¢
TOD Off Peak	Cents per Kwh	3.66 ¢

Proof of Revenue			
	<u>Units</u>	<u>Rate</u>	<u>\$1,000</u>
<u>Summer</u>			
Customer Charge	4,161,347	\$7.25	\$30,170
Customer Charge TOD	156	\$15.00	\$2
Mwh	4,807,965	\$0.08630	\$414,927
TOD On Peak Mwh	93	\$0.12540	\$12
TOD Off Peak Mwh	161	\$0.05140	\$8
	4,808,219		\$445,119
<u>Winter</u>			
Customer Charge	8,350,915	\$7.25	\$60,544
Customer Charge TOD	298	\$15.00	\$4
0-750 Mwh	4,968,661	\$0.06120	\$304,082
Over 750 Mwh	4,062,258	\$0.04120	\$167,365
TOD On Peak Mwh	141	\$0.07400	\$10
TOD Off Peak Mwh	312	\$0.03660	\$11
Total MWH	9,031,372		\$532,018
Total Res	13,839,591		\$977,137

Small General Service Rate Comparison
AmerenUE - Missouri
Weather Normalized-12 months ending March 2009
Growth to February 2010

<u>Billing Components</u>		<u>Present</u>
<u>Summer (June - September)</u>		
Customer Charge:		
Single Phase Service	Per Month	\$8.03
Three Phase Service	Per Month	\$16.71
Single Phase Service TOD	Per Month	\$16.60
Three Phase Service TOD	Per Month	\$33.19
Energy Charge:		
All Kwh	Cents per Kwh	8.21 ¢
TOD On Peak	Cents per Kwh	12.19 ¢
TOD Off Peak	Cents per Kwh	4.96 ¢
<u>Winter (October - May)</u>		
Customer Charge:		
Single Phase Service	Per Month	\$8.03
Three Phase Service	Per Month	\$16.71
Single Phase Service TOD	Per Month	\$16.60
Three Phase Service TOD	Per Month	\$33.19
Energy Charge:		
Base Use	Cents per Kwh	6.12 ¢
Seasonal Use	Cents per Kwh	3.54 ¢
TOD On Peak	Cents per Kwh	8.02 ¢
TOD Off Peak	Cents per Kwh	3.68 ¢

Proof of Revenue			
	<u>Units</u>	<u>Rate</u>	<u>1000's</u>
<u>Summer</u>			
Customer Charge - Single Phase	379,184	\$8.03	\$3,045
Customer Charge - Three Phase	148,000	\$16.71	\$2,473
Single Phase Service TOD	1,049	\$16.60	\$17
Three Phase Service TOD	278	\$33.19	\$9
Mwh	1,256,658	\$0.0821	\$103,172
TOD On Peak Mwh	3,301	\$0.1219	\$402
TOD Off Peak Mwh	5,744	\$0.0496	\$285
Summer Total MWH	<u>1,265,703</u>		<u>\$109,403</u>
<u>Winter</u>			
Customer Charge - Single Phase	757,488	\$8.03	\$6,083
Customer Charge - Three Phase	297,633	\$16.71	\$4,973
Single Phase Service TOD	2,099	\$16.60	\$35
Three Phase Service TOD	567	\$33.19	\$19
Winter Base Mwh	1,856,684	\$0.0612	\$113,629
Winter Seasonal Mwh	467,899	\$0.0354	\$16,564
TOD On Peak Mwh	5,883	\$0.0802	\$472
TOD Off Peak Mwh	10,433	\$0.0368	\$384
Winter Total MWH	<u>2,340,899</u>		<u>\$142,158</u>
Total	3,606,602		\$251,562

Large General Service Rate Comparison
AmerenUE - Missouri
Weather Normalized-12 months ending March 2009
Growth to February 2010

<u>Billing Components</u>		<u>Present</u>
<u>Summer (June - September)</u>		
Customer Charge	Per Month	\$72.26
Customer Charge TOD	Per Month	\$87.51
Energy Charge (¢ per kWh)		
First 150 kWh per KW		8.09 ¢
Next 200 kWh per KW		6.09 ¢
All over 350 kWh per KW		4.10 ¢
TOD On Peak Adjust. per Kwh		0.96 ¢
TOD Off Peak Adjust. per Kwh		-0.54 ¢
Demand		
Per KW of Billing Demand		\$3.78
<u>Winter (October - May)</u>		
Customer Charge	Per Month	\$72.26
Customer Charge TOD	Per Month	\$87.51
Energy Charge (¢ per kWh)		
First 150 kWh per KW		5.09 ¢
Next 200 kWh per KW		3.78 ¢
All over 350 kWh per KW		2.97 ¢
Seasonal Energy Charge		2.97 ¢
TOD On Peak Adjust. per Kwh		0.29 ¢
TOD Off Peak Adjust. per Kwh		-0.16 ¢
Demand		
Per KW of Billing Demand		\$1.40

Proof of Revenue			
	<u>Units</u>	<u>Rate</u>	<u>\$1,000</u>
<u>Summer</u>			
Customer Charge	39,644	\$72.26	\$2,865
Customer Charge TOD	113	\$87.51	\$10
Summer Energy Mwh			
0-150 hours	1,174,642	\$0.0809	\$95,029
151-350 hours	1,283,320	\$0.0609	\$78,154
Over 350 hours	525,695	\$0.0410	\$21,553
Seasonal	-235	\$0.0000	\$0
TOD On Peak	2,858	\$0.0096	\$27
TOD Off Peak	4,158	-\$0.0054	-\$22
Demand	8,522,831	\$3.78	\$32,216
			<u>\$229,832</u>
<u>Winter</u>			
Customer Charge	79,298	\$72.26	\$5,730
Customer Charge TOD	236	\$87.51	\$21
Winter Energy Mwh			
0-150 hours	1,951,206	\$0.0509	\$99,316
151-350 hours	2,098,724	\$0.0378	\$79,332
Over 350 hours	849,396	\$0.0297	\$25,227
Seasonal	404,090	\$0.0297	\$12,001
TOD On Peak	4,493	\$0.0029	\$13
TOD Off Peak	6,945	-\$0.0016	-\$11
Demand	15,784,841	\$1.40	\$22,099
			<u>\$243,728</u>
	8,286,838		\$473,560

Small Primary Service Rate Comparison
AmerenUE - Missouri
Weather Normalized-12 months ending March 2009
Growth to February 2010

<u>Billing Components</u>	<u>Present</u>
<u>Summer (June - September)</u>	
Customer Charge Per Month	\$233.91
Customer Charge TOD Per Month	\$249.16
Energy Charge (¢ per kWh)	
First 150 kWh per KW	7.82 ¢
Next 200 kWh per KW	5.89 ¢
All over 350 kWh per KW	3.96 ¢
TOD On Peak Adjust. per Kwh	0.70 ¢
TOD Off Peak Adjust. per Kwh	-0.39 ¢
Demand	
Per KW of Billing Demand	\$3.13
Billing Kvars	27 ¢
Rider B 34kv	
Per KW	90 ¢
Rider B 138kv	
Per KW	106 ¢
<u>Winter (October - May)</u>	
Customer Charge Per Month	\$233.91
Customer Charge TOD Per Month	\$249.16
Energy Charge (¢ per kWh)	
First 150 kWh per KW	4.92 ¢
Next 200 kWh per KW	3.66 ¢
All over 350 kWh per KW	2.87 ¢
Seasonal Energy Charge	2.87 ¢
TOD On Peak Adjust. per Kwh	0.26 ¢
TOD Off Peak Adjust. per Kwh	-0.14 ¢
Demand	
Per KW of Billing Demand	\$1.14
Billing Kvars	27 ¢
Rider B 34kv	
Per KW	90 ¢
Rider B 138kv	
Per KW	106 ¢

Proof of Revenue			
	<u>Units</u>	<u>Rate</u>	<u>\$1,000</u>
<u>Summer</u>			
Customer Charge	2,557	\$233.91	\$598
Customer Charge TOD	40	\$249.16	\$10
Summer Energy Mwh			
0-150 hours	444,231	\$0.0782	\$34,739
151-350 hours	546,627	\$0.0589	\$32,196
Over 350 hours	400,114	\$0.0396	\$15,845
Seasonal	0	\$0.0000	\$0
TOD On Peak	10,857	\$0.0070	\$76
TOD Off Peak	17,443	-\$0.0039	(\$68)
Demand	3,031,039	\$3.13	\$9,487
Billing Kvars	584,253	\$0.27	\$158
Rider B 34kv	288,165	\$0.90	(\$259)
Rider B 138kv	0	\$1.06	\$0
			<u>\$92,781</u>
<u>Winter</u>			
Customer Charge	5,099	\$233.91	\$1,193
Customer Charge TOD	75	\$249.16	\$19
Winter Energy Mwh			
0-150 hours	724,959	\$0.0492	\$35,668
151-350 hours	895,471	\$0.0366	\$32,774
Over 350 hours	646,889	\$0.0287	\$18,566
Seasonal	156,273	\$0.0287	\$4,485
TOD On Peak	17,857	\$0.0026	\$46
TOD Off Peak	28,483	-\$0.0014	(\$40)
Demand	5,384,176	\$1.14	\$6,138
Billing Kvars	953,434	\$0.27	\$257
Rider B 34kv	577,770	\$0.90	(\$520)
Rider B 138kv	0	\$1.06	\$0
			<u>\$98,586</u>
	3,814,564		\$191,368

Large Primary Service Rate Comparison
AmerenUE - Missouri
Weather Normalized-12 months ending March 2009
Growth to February 2010

<u>Billing Components</u>		<u>Present</u>
<u>Summer (June - September)</u>		
Customer Charge	Per Month	\$234.33
Customer Charge TOD	Per Month	\$249.58
Demand Charge	Per KW of Billing Demand	\$15.46
Energy Charge:		
All Kwh	Cents per Kwh	2.59 ¢
TOD On Peak Adjust. per Kwh		0.50 ¢
TOD Off Peak Adjust. per Kwh		-0.28 ¢
Reactive Charge	Cents per kVar	27 ¢
Rider B 34kv	Per KW	90 ¢
Rider B 138kv	Per KW	106 ¢
<u>Winter (October - May)</u>		
Customer Charge	Per Month	\$234.33
Customer Charge TOD	Per Month	\$249.58
Demand Charge	Per KW of Billing Demand	\$7.02
Energy Charge:		
All Kwh	Cents per Kwh	2.29 ¢
TOD On Peak Adjust. per Kwh		0.23 ¢
TOD Off Peak Adjust. per Kwh		-0.12 ¢
Reactive Charge	Cents per kVar	27 ¢
Rider B 34kv	Per KW	90 ¢
Rider B 138kv	Per KW	106 ¢

Proof of Revenue			
	<u>Units</u>	<u>Rate</u>	<u>1000's</u>
<u>Summer</u>			
Customer Charge	268	\$234.33	\$63
Customer Charge TOD	12	\$15.25	\$0
Summer Mwh	1,521,214	\$0.0259	\$39,399
TOD On Peak	27,116	\$0.0050	\$136
TOD Off Peak	51,699	-\$0.0028	-\$145
Demand	2,786,159	\$15.46	\$43,074
Billing Kvars	279,629	\$0.27	\$75
Rider B 34kv	723,345	\$0.90	(\$651)
Rider B 138kv	192,243	\$1.06	(\$204)
			<u>\$81,748</u>
<u>Winter</u>			
Customer Charge	540	\$234.33	\$127
Customer Charge TOD	24	\$15.25	\$0
Winter Mwh	2,546,370	\$0.0229	\$58,312
TOD On Peak	45,558	\$0.0023	\$105
TOD Off Peak	91,036	-\$0.0012	-\$109
Demand	4,848,057	\$7.02	\$34,033
Billing Kvars	499,798	\$0.27	\$135
Rider B 34kv	1,311,078	\$0.90	(\$1,180)
Rider B 138kv	392,890	\$1.06	(\$416)
			<u>\$91,006</u>
	4,067,584		\$172,754

**Large Transmission Service Rate
AmerenUE - Missouri
Weather Normalized-12 months ending March 2009
Growth to February 2010**

<u>Billing Components</u>		<u>Present</u>
<u>Summer (June - September)</u>		
Customer Charge	Per Month	\$230.44
Demand Charge	Per KW of Billing Demand	\$12.740
Energy Charge:		
All Kwh	Cents per Kwh	2.418 ¢
Line Loss Kwh	Cents per Kwh	3.27 ¢
Reactive Charge	Cents per kVar	27 ¢
<u>Winter (October - May)</u>		
Customer Charge	Per Month	\$230.44
Demand Charge	Per KW of Billing Demand	\$4.860
Energy Charge:		
All Kwh	Cents per Kwh	2.129 ¢
Line Loss Kwh	Cents per Kwh	3.27 ¢
Reactive Charge	Cents per kVar	27 ¢

Proof of Revenue			
	<u>Units</u>	<u>Rate</u>	<u>1000's</u>
<u>Summer</u>			
Customer Charge	4	\$230.44	\$1
Summer Mwh	1,373,281	\$0.02418	\$33,206
Line Loss Mwh	48,065	\$0.03270	\$1,572
Demand	1,902,596	\$12.740	\$24,239
Billing Kvars	0	0.27	\$0
			<u>\$59,018</u>
<u>Winter</u>			
Customer Charge	8	\$230.44	\$2
Winter Mwh	2,745,737	\$0.02129	\$58,457
Line Loss Mwh	96,101	\$0.03270	\$3,143
Demand	3,814,346	\$4.86	\$18,538
Billing Kvars	0	\$0.27	\$0
			<u>\$80,139</u>
	4,119,018		\$139,156
			\$139,156

AmerenUE - Missouri
Weather Normalized-12 months ending March 2009
Growth to February 2010

	<u>Normal Bill Unit MWH</u>	<u>Billing Unit Revenue</u>
Residential	13,839,591	\$977,136,967
Small General Service	3,606,602	\$251,561,602
Large General Service	8,286,838	\$473,560,171
Small Primary Service	3,814,564	\$191,367,672
Large Primary Service	4,067,584	\$172,754,188
Large Transmission Service	4,119,018	\$134,442,232
Lighting	231,026	\$31,252,205
MSD	<u> </u>	<u>\$57,918</u>
Total	37,965,223	\$2,232,132,955
Large Transmission Service Line Losses		<u>\$4,714,216</u>
		\$2,236,847,171