Exhibit No.:

Issues:

Normalized Billing

Units

Witness:

James R. Pozzo Union Electric

Sponsoring Party: Type of Exhibit:

Rebuttal Testimony

Case No.:

EC-2002-1

Date Testimony Prepared:

May 10, 2002

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. EC-2002-1

REBUTTAL TESTIMONY

OF

JAMES R. POZZO

ON

BEHALF OF

UNION ELECTRIC COMPANY d/b/a AmerenUE

Exhibit No. 166

Date 11002 Case No. EC-2002-1

Reporter Kem

St. Louis, Missouri May, 2002

1		REBUTTAL TESTIMONY
2		OF
3		JAMES R. POZZO
4		CASE NO. EC-2002-1
5	Q.	Please state your name and business address.
6	A.	My name is James R. Pozzo. My business address is 1901 Chouteau
7	Avenue, St. I	Louis, Missouri 63103.
8	Q.	By whom and in what capacity are you employed?
9	A.	I am employed by Ameren Services Company as a Consulting Engineer in
10	the Rate Eng	ineering Department of Corporate Planning. In this capacity, I provide rate
11	engineering s	services to Union Electric Company d/b/a AmerenUE, (referred to herein as
12	UE, Compan	y or AmerenUE).
13	Q.	Please describe Ameren Services Company.
14	A.	Ameren Services is a subsidiary of Ameren Corporation which provides
15	various admi	nistrative and technical support services for its parent and other subsidiaries
16	including Ar	nerenUE.
17	Q.	Please describe your education and qualifications.
18	A.	This information is summarized in Appendix A to this testimony.
19	Q.	What is the purpose of your testimony?
20	A.	The purpose of my testimony is the development of weather normalized
21	test year bill	ing units. An Executive Summary of my testimony is included in
22	Appendix B	of Company witness Richard J. Kovach's rebuttal testimony.
23	Q.	Please explain what is meant by the term "billing unit".

- A. A billing unit is a quantity of electric customers, usage (kilowatthours),

 demand (kilowatts) or kilovar (kVar) data to which a filed rate is applied in determining

 customers' bills.
 - Q. Please describe the billing units used by Union Electric Company.
 - A. Union Electric Company uses a) customer count; b) kilowatthours, which are energy units; c) kilowatts, which are demand units; and d) kilovars, which are units of reactive demand. Depending on a customer's rate class, two or more of these components are used to bill virtually all customers. The weather normalized billing units used in this case are a compilation of the individual customer billing units which occurred during the study period, adjusted to what they would have been had the weather been normal throughout the study period. The study period is the test year established by the Commission for this proceeding the twelve months ending June 2001.
 - Q. What was the initial step in the development of the Company's billing units for each customer class?
 - A. Internal Company reports contain aggregate kilowatthour sales and revenues on a monthly basis for the Residential, Small General Service, Large General Service, Small Primary Service, and Large Primary Service rate classes. Other more detailed monthly reports provide the billing units that can be priced at the Company's filed rates to calculate customer revenues. I used a combination of these reports to calculate the distribution of the kilowatthours and kilowatts to their respective rate blocks. I then applied the Company's existing filed rate values for each specific rate class to the billing units for the class, to derive the "calculated revenue" for each class.

- Q. Do the revenues calculated from this process exactly match the revenues indicated on the Company's books ("reported revenue") for the same time period?
- A. While the comparison of calculated and reported revenues normally match closely, there will always be some relatively small difference ("revenue variation") between the two. This results from billing adjustments which are made to a number of accounts each month due to corrected billings, and initial and final bills, which apply to periods that are either longer or shorter than the Company's standard billing periods, causing such bills to be adjusted or prorated.
- Q. How did you account for these revenue variations in the billing unit development process?
- A. I adjusted the reported billing units for the Residential, Small General Service, Large General Service and Small Primary Service to account for these monthly revenue variations. I calculated the ratio of "reported revenue" to "calculated revenue" monthly for each of the above rate classes. Then I multiplied all of the billing units by this ratio so that when these units are billed, they will produce the Company's reported revenues, thereby accounting for the revenue variation. The billing units that I adjusted by the ratio were: customer counts, kilowatthour usage levels in all blocks, kilowatt demands, and kilovars and Rider B (i.e., high voltage service) kilowatt demands for the Small Primary Service class. This process is a generally acceptable method of accounting for the billing conditions which give rise to such variations, that I mentioned earlier, and was used by both the Company and the Commission Staff in the Company's last rate design case.

- 1 Q. Did you analyze all of the rate classes using the billing unit reports? 2 No, I analyzed the Large Primary Service class using individual customer A. 3 data because it contains less than sixty customers and has a relatively simple rate 4 structure. 5 Q. After you calculated the billing units associated with the Company's 6 reported revenues, how were these billing units and revenues adjusted to reflect 7 normal test year weather? 8 I reviewed the weather adjustment pricing methodology used by the A. 9 Company's Regulatory Accounting Department and adjusted the reported billing units 10 and revenues that I referred to earlier using this same methodology. The resulting 11 normalized monthly billing units were then summarized into the summer and winter 12 billing periods for presentation on Schedules 1-5, attached hereto. Schedule 6 is a 13 summary of the normalized billing unit kilowatthours and revenues. These weather 14 normalized revenues and billing units are used by Company witness William M. 15 Warwick in the development of his class cost of service study, and by Mr. Kovach, in his 16 development of the Company's proposed rates in this case.
- 17 Q. Does this conclude your testimony?
- 18 A. Yes.

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

QUALIFICATIONS OF JAMES R. POZZO

My name is James R. Pozzo, and I reside in St. Louis County, Missouri.

I am a Consulting Engineer in the Rate Engineering Department of Corporate Planning at Ameren Services Company.

I received the degree of Bachelor of Science in Mechanical Engineering from the University of Missouri, Rolla, Missouri 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 and I assumed my current position with Ameren Services Company upon completion of the merger of CIPSCO Inc. and Union Electric Company effective December 31, 1997.

My duties and responsibilities include assignments related to the gas and electric rates of Union Electric, now doing business as AmerenUE, and Central Illinois Public Service Company, now doing business as AmerenCIPS, including participation in regulatory proceedings, rate analysis, the development and interpretation of the gas and electric tariffs, including rules and regulations, and other rate or regulatory projects as assigned.

Residential Service Rate Comparison AmerenUE - Missouri Weather Normalized-12 months ending June 2001

Billing Components		Present
Summer (June - Septembe	ī)	
Customer Charge	Per Month	\$7.25
Energy Charge: All Kwh	Cents per Kwh	8.130 ¢
Winter (October - May)		
Customer Charge	Per Month	\$7.25
Energy Charge: 0- 750 Kwh	Cents per Kwh	5.770 ¢
All Kwh Over 750	Cents per Kwh	3.891 ¢

	Units	Rate	\$1,000	
Summer				
Customer Charge	3,879,496	\$7.25	\$28,126	
Mwh	4,162,714	\$0.08130	\$338,429	
		•	\$366,555	
Winter				
Customer Charge	7,786,657	\$7.25	\$56,453	
0-750 Mwh	4,115,087	\$0.05770	\$237,441	
Over 750 Mwh	3,236,523	\$0.03891	\$125,933	
Total MWH	11,514,324	•	\$419,827	
=	=======================================		\$786,382	
Res TOD	987		\$63	
-	11,515,311	•	\$786,445	

Small General Service Rate Comparisor AmerenUE - Missouri Weather Normalized-12 months ending June 2001

Billing Components	<u>Present</u>	
Summer (June - September)		
Customer Charge:		
Single Phase Service Per Month	\$7.25	
Three Phase Service Per Month	\$15.10	
Energy Charge:		
All Kwh Cents per Kwh	7.99 ¢	
Winter (October - May)		
Customer Charge:		
Single Phase Service Per Month	\$7.25	
Three Phase Service Per Month	\$15.10	
Energy Charge:		
Base Use Cents per Kwh	5.96 ¢	
Seasonal Use Cents per Kwh	3.45 ¢	
Seasonal Use Cents per Kwh	3.45 ¢	

Proof of Revenue			
	Units	Rate	1000's
Summer			
Customer Charge - Single Phase	369,500	\$7.25	\$2,679
Customer Charge - Three Phase	126,756	\$15.10	\$1,914
Mwh	1,193,680	\$0.0799	\$95,375
		_	\$99,968
Winter			
Customer Charge - Single Phase	739,977	\$7.25	\$5,365
Customer Charge - Three Phase	254,195	\$15.10	\$3,838
Winter Base Mwh	1,687,310	\$0.0596	\$100,564
Winter Seasonal Mwh	490,599	\$0.0345	\$16,926
Winter Total MWH	2,177,909	_	\$126,693
Total	3,371,589		\$226,660
		<u>.</u>	<u>-</u> .

Large General Service Rate Comparison AmerenUE - Missouri Weather Normalized-12 months ending June 2001

<u>Summer (June - Septemb</u>	<u>er)</u>		
Customer Charge F	Per Month	\$66.00	
Energy Charge (¢ per kW	'h)		
First 150 kWh pe		7.84 ¢	
Next 200 kWh pe	rKW	5.91 ¢	
All over 300 kWh	per KW	3.96 ¢	
Demand			
Per KW of Billing	Demand	\$3.79	
Winter (October - May)	Dor Month	tee oo	
Customer Charge	Per Month	\$66.00	
Energy Charge (¢ per kW	/h)		
First 150 kWh pe	r KW	4.91 ¢	
Next 200 kWh pe	r KW	3.68 ¢	
All over 300 kWh		2.86 ¢	
Seasonal Energy	Charge	2.86 ¢	
Demand			
- : - : : -	Demand	\$1.35	
Per KW of Billing	-		

	Units	Rate	\$1,000	
Summer				
Customer Charge	32,755	\$66.00	\$2,162	
Summer Energy Mwh				
0-150 hours	1,011,872	\$0.0784	\$79,331	
151-350 hours	1,112,083	\$0.0591	\$65,724	
Over 350 hours	405,723	\$0.0396	\$16,067	
Demand	7,190,823	\$3.79	\$27,253	
		_	\$190,537	
Winter				
Customer Charge	65,908	\$66.00	\$4,350	
Winter Energy Mwh				
0-150 hours	1,689,758	\$0.0491	\$82,967	
151-350 hours	1,840,091	\$0.0368	\$67,715	
Over 350 hours	607,001	\$0.0286	\$17,360	
Seasonal	374,402	\$0.0286	\$10,708	
Demand	14,635,445	\$1.35	\$19,758	
			\$202,858	
	7,040,930		\$393,395	

Small Primary Service Rate Comparison AmerenUE - Missouri Weather Normalized-12 months ending June 2001

Billing Components		Present		
Summer (June - Sept	ember`			
Customer Charge	Per Month	\$210.00		
Energy Charge (¢ per	· kWh)			
First 150 kWh	ı per KW	7.45	¢	
Next 200 kW	n per KW	5.62	¢	
All over 300 l	Wh per KW	3.76	¢	
Demand				
Per KW of Bi	lling Demand	\$3.01		
Billing Kvars	=	24	¢	
Rider B 34kv				
Per KW		81	¢	
Rider B 138kv				
Per KW		95	¢	
Winter (October - Ma	λ,			
Customer Charge	Per Month	\$210.00		
Energy Charge (¢ pe	r kWh)			
First 150 kW	h per KW	4.69	t ¢	
Next 200 kW	h per KW	3.49	¢	
All over 300 l	«Wh per KW	2.73	¢	
Seasonal En	ergy Charge	2.73	\$ ¢	
Demand				
Per KW of Bi	lling Demand	\$1.10		
Billing Kvars		24	· ¢	
Rider B 34kv				
Per KW		81	¢	
Rider B 138kv				
Per KW		95	;¢	

	Units	Rate	\$1,000	
Summer		1100	<u> </u>	
Customer Charge	2,559	\$210.00	\$537	
Summer Energy Mwh	_,	, , , ,	•	
0-150 hours	492,233	\$0.0745	\$36.671	
151-350 hours	612,369	\$0.0562	\$34,415	
Over 350 hours	410,066	\$0.0376	\$15,418	
Demand	3,328,507	\$3.01	\$10,019	
Billing Kvars	699,337	\$0.24	\$168	
Rider B 34kv	273,075	\$0.81	(\$221)	
Rider B 138kv	8,932	\$0.95	(\$8)	
		•	\$96,999	
Winter				
Customer Charge	5,117	\$210.00	\$1,075	
Winter Energy Mwh				
0-150 hours	808,956	\$0.0469	\$37,940	
151-350 hours	1,013,868	\$0.0349	\$35,384	
Over 350 hours	781,677	\$0.0273	\$21,340	
Seasonal	176,166	\$0.0273	\$4,809	
Demand	6,251,204	\$1.10	\$6,876	
Billing Kvars	1,435,459	\$0.24	\$345	
Rider B 34kv	572,138	\$0.81	(\$463)	
Rider B 138kv	0	\$0.95	\$0	
			\$107,305	
	4,295,335		\$204,304	

Large Primary Service Rate Comparison AmerenUE - Missouri Weather Normalized-12 months ending June 2001

Billing Components		Present	
Summer (June - Septe	ember)		
Customer Charge	Per Month	\$210.00	
Demand Charge Energy Charge:	Per KW of Billing Demand	\$15.67	
All Kwh	Cents per Kwh	2.62 ¢	
Reactive Charge	Cents per kVar	24 ¢	
Rider B 34kv	Per KW	81 ¢	
Rider B 138kv	Per KW	95 ¢	
Winter (October - May	Y)		
Customer Charge	Per Month	\$210.00	
Demand Charge Energy Charge:	Per KW of Billing Demand	\$7.11	
All Kwh	Cents per Kwh	2.31 ¢	
Reactive Charge	Cents per kVar	24 ¢	
Rider B 34kv	Per KW	81 ¢	
Rider B 138kv	Per KW	95 ¢	

	Units	Rate	1000's
Summer			
Customer Charge	219	\$210.00	\$46
Summer Mwh	1,359,800	\$0.0262	\$35,627
Demand	2,460,780	\$15.67	\$38,560
Billing Kvars	322,622	0.24	\$77
Rider B 34kv	719,623	0.81	(\$583)
Rider B 138kv	181,932	0.95	(\$173)
		•	\$73,555
Winter_			
Customer Charge	451	\$210.00	\$95
Winter Mwh	2,521,685	\$0.0231	\$58,251
Demand	4,536,307	\$7.11	\$32,253
Billing Kvars	654,748	\$0.24	\$157
Rider B 34kv	1,335,100	\$0.81	(\$1,081)
Rider B 138kv	345,556	\$0.95	(\$328)
			\$89,346
	3,881,485		\$162,901

AmerenUE - Missouri Weather Normalized-12 months ending June 2001

	Normal Bill Unit MWH	Billing Unit Revenue
Residential	11,515,311	\$786,444,822
Small General Service	3,371,589	\$226,660,492
Large General Service	7,040,930	\$393,394,929
Small Primary Service	4,295,335	\$204,304,510
Large Primary Service	3,881,485	\$162,901,250
Lighting	228,276	\$25,632,730
MSD		\$56,547
Total	30,332,926	\$1,799,395,280