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MISSOURI PUBLIC SERVICE COMMISSION

UTILITY OPERATIONS DIVISION

REFILED DIRECT TESTIMONY

OF

JAMES A. BUSCH

UNION ELECTRIC COMPANY d/b/a AMERENUE

CASE NO. ER-2007-0002

Jefferson City, Missouri December 2006 (Refiled)

Denotes Highly Confidential Information





Case No Date

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 Electric) Service Provided to Customers in the) Company's Missouri Service Area.)

Case No. ER-2007-0002

AFFIDAVIT OF JAMES A. BUSCH

STATE OF MISSOURI)) ss COUNTY OF COLE)

James A. Busch

Subscribed and sworn to before me this 13^{+1} day of December, 2006.

SUSAN L. SUNDERMEYER My Commission Expires September 21, 2010 Callaway County Commission #06942086

9-21-11) My commission expires

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1 2	REFILED DIRECT TESTIMONY									
3	OF									
4	JAMES A. BUSCH									
6	UNION ELECTRIC COMPANY d/b/a AMERENUE									
8 9 10 11	CASE NO. ER-2007-0002									
12 13	Q. Please state your name and business address.									
14	A. My name is James A. Busch and my business address is P. O. Box 360,									
15	Jefferson City, Missouri 65102.									
16	Q. By whom are you employed and in what capacity?									
17	A. I am a Regulatory Economist III in the Economic Analysis Section of the									
18	Energy Department, Utility Operations Division of the Missouri Public Service Commission									
19	(Staff).									
20	Q. Please describe your educational and professional background.									
21	A. l hold Bachelor of Science and Master of Science degrees in Economics from									
22	Southern Illinois University at Edwardsville. I have been employed as a Regulatory									
23	Economist III with the Staff of the Public Service Commission (Staff) since April 2005.									
24	Previously, I worked as a Public Utility Economist with the Office of the Public Counsel									
25	(Public Counsel) from 1999 to 2005. Prior to my employment with Public Counsel, I worked									
26	as a Regulatory Economist I with the Procurement Analysis Department of the Missouri									
27	Public Service Commission from 1997 to 1999. Also, I am a member of the Adjunct Faculty									
28	of Columbia College, Jefferson City Campus. I teach both graduate and undergraduate									
29	classes in economics.									
30	Q. Have you previously filed testimony before the Commission?									

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1	Α.	Yes. The cases in which I have filed testimony before the Commission are							
2	listed on Schedule JAB-1.								
3	Q.	What is the purpose of your direct testimony in this case?							
4	Α.	The purpose of my direct testimony is to present Staff's revenue adjustments to							
5	be used in the Staff Accounting Schedules.								
6	I. Executive Summary								
7	Q.	Please summarize your testimony?							
8	Α.	My testimony describes the process Staff utilized to make adjustments to							
9	Union Electric Company d/b/a AmerenUE's (AmerenUE) booked revenues. Since weather								
10	generally is not normal and the number of days in the Company's billing cycles may be more								
11	or less than 365 days, an adjustment process must occur to take out the effects of abnormal								
12	weather and days greater than or less than 365.								
13	Q.	Are you sponsoring any adjustments to Staff's Accounting Schedule 1?							
14	Α.	Yes. I am sponsoring the following adjustments to revenues for customers							
15	served on the Residential, Small General Service, Large General Service, and small primary								
16	service rate schedules: Test Year Adjustment (S-1.2); Weather Normalization Adjustment (S-								
17	1.5); and Days Adjustment (S-1.4). Staff witness Jeremy Hagemeyer is sponsoring the								
18	Growth Adjustment.								
19	II. Revenue	\$							
20	Q.	What test year did you use for your adjustments?							
21	Α.	I used the test year approved by the Commission in this proceeding, which is							
22	July 2005 – J	une 2006.							
23	Q.	What rate classes' revenues did Staff adjust?							

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1	A. Staff adjusted revenues to the following classes: Residential (RES), Small								
2	General Service (SGS), Large General Service (LGS), Small Primary Service (SPS), and								
3	Large Primary Service (LPS). Staff did not adjust the revenues for Large Transmission								
4	Service (LTS), Lighting, Public Authorities, or Wholesale customer classes.								
5	Q. Which rate classes did you specifically address?								
6	A. My adjustments are to the RES, SGS, LGS, and SPS rate classes. Staff witness								
7	Curt Wells sponsors the adjustments to the LPS rate class.								
8	Q. What is the relationship between Schedule JAB-2 and Schedule JAB-3								
9	attached to your direct testimony?								
10	A. Schedule JAB-2 shows booked rate revenues for AmerenUE, plus the various								
11	adjustments that Mr. Hagemeyer, Mr. Wells and I are sponsoring. When the adjustments are								
12	added to test year booked rate revenues, this Schedule shows the total amount of rate revenues								
13	Staff is proposing in this proceeding. Schedule JAB-3 shows the test year sales in kWh, plus								
14	the adjustments to sales that correspond to the revenue adjustments on Schedule JAB-2. The								
15	adjusted sales (in kWh) found on Schedule JAB-3 are from Staff witness Shawn Lange and he								
16	is sponsoring those adjustments in his direct testimony.								
17	Q. What is the relationship between the Missouri rate revenues shown on your								
18	Schedule JAB-2 and Missouri operating revenues shown on Staff's Accounting Schedule 9 -								
19	Income Statement?								
20	A. Total operating revenues shown on Staff's Accounting Schedule 9 consists of								
21	two parts, the rate revenues AmerenUE collects from the sale of electricity to its Missouri								
22	retail customers and the "other revenues" AmerenUE receives from other sources, such as late								
23	fees and off-system sales of electricity. Only rate revenues are shown on my Schedule JAB-2.								

Q. Do you have a description of Staff's ratemaking treatment of rate revenues and
 kWh sales?

A. Yes. Attached to this testimony is Schedule JAB-4. This schedule is an
explanation of the basic ratemaking concepts Staff uses in treating rate revenues and kWh
sales.

Q. Please describe the process you used to determine the appropriate revenue
adjustments that correspond to adjustment to sales made by other Staff members.

8 A. I found the appropriate tariff sheets to determine the appropriate "price" to 9 charge to each class of customers. Rate revenues consist of various components. One is a 10 customer charge. All classes pay a flat customer charge that does not change due to the 11 amount of electricity a customer uses from month to month. Other components include an energy charge, a demand charge, and a reactive charge, just to name a few. Not all classes 12 13 have all of these charges. Next, depending upon the season and class, i.e. summer (June – 14 September) or non-summer (October - May), the energy charge may have a single charge per 15 kWh, or it may be a part of a declining block rate structure. For example, the residential class 16 has a declining rate structure in the non-summer season. The customer is charged a rate of 17 \$0.0542 per kWh for the first 750 kWhs used and \$0.0366 for any usage greater then 750 18 kWhs. Then, I multiplied the appropriate "price" times the monthly kWh sales in each block 19 as provided by Mr. Lange.

20 21 Q. Please describe the method you used to make the test year revenue adjustment.

A. I reviewed the workpapers of AmerenUE witness James Pozzo. Mr. Pozzo has
broken the rate revenues for each class into its specific components as described above. For
example, Mr. Pozzo has an amount of usage for each block, if there are multiple blocks for a

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1	class in a specific month. However, Staff witness Lange has calculated a different level of							
2	test year sales. Therefore, when I applied the appropriate tariff charges to Mr. Lange's usage,							
3	there is a different monthly rate revenue total for each class than was booked by AmerenUE							
4	for that specific class. The difference between my calculated revenues and AmerenUE's							
5	booked revenues is the amount of this adjustment. I did this adjustment for the RES, SGS,							
6	LGS, and SPS classes.							
7	Q. Are Mr. Lange's usage volumes broken out by each block, where applicable,							
8	or does he provide monthly totals per class?							
9	A. Mr. Lange's usage volumes are monthly aggregates per class in kWhs.							
10	Q. How did you determine the appropriate block usage for the months and classes							
11	that have blocked rates?							
12	A. Using Staff witness Lange's monthly totals, I multiplied those totals by the							
13	blocked relationship shown in Mr. Pozzo's workpapers. In other words, I took the amount of							
14	usage in the first and second blocks in Mr. Pozzo's workpapers and I calculated the							
15	percentage of his total that was in the first block and the percentage that was in the second							
16	block, and the third block if necessary. I then multiplied these percentages by the monthly							
17	totals provided by Mr. Lange. Thus, I was able to break down Mr. Lange's monthly total							
18	kWhs into the appropriate usage block, where applicable. This information is in column C on							
19	Schedule JAB-2.							
20	Q. How did you calculate the weather normalized adjustment to revenue?							
21	A. Mr. Lange also calculated weather normalized sales usage in kWhs. This is							
22	done because the weather that occurs in the test year deviated from normal weather. Please							
23	see the testimony of Staff witness Shawn Lange for a complete description of the weather							

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1	normalization process. I took these weather normalized sales and applied the same								
2	methodology as described above to determine the appropriate weather normalized revenues.								
3	The difference between weather normalized revenues and test year revenues I previously								
4	calculated is the weather normalized adjustment. I did this adjustment for the RES, SGS,								
5	LGS, and SPS classes. This information is in column D of Schedule JAB-2.								
6	Q. How did you calculate the days adjustment to revenue?								
7	A. The days adjustment was calculated in the same manner as the test year and								
8	weather normalization adjustments as described above. For a complete description of the								
9	days adjustment process, please see the testimony of Staff witness Shawn Lange. I did this								
⁻ 10	adjustment for the RES, SGS, LGS, and SPS classes. This information appears in column E								
11	of Schedule JAB-2.								
12	Q. Did you calculate the adjustment to the LPS and LTS rate classes found in								
13	columns F and G of Schedule JAB-2?								
14	A. No. For the LPS class, Staff witness Curt Wells calculated and is sponsoring								
15	the adjustment. Staff witness Jeremy Hagemeyer calculated and is sponsoring the adjustment								
16	to LTS usage and revenues.								
17	Q. Did you calculate and are you sponsoring the growth adjustment to usage and								
18	revenues found in column H of Schedule JAB-2?								
19	A. No. Staff witness Hagemeyer calculated and is sponsoring the growth								
20	adjustment.								
21	Q. What is your recommendation in Case No. ER-2007-0002?								
22	A. I recommend that the Commission adopt Staff's adjustments to billed revenues								
23	that are shown on schedule JAB-2.								

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Q. Does this conclude your direct testimony?

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A. Yes.

Cases of Filed Testimony James A. Busch

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Company	Case No.
Union Electric Company	GR-97-393
Missouri Gas Energy	GR-98-140
Laclede Gas Company	GO-98-484
Laclede Gas Company	GR-98-374
St. Joseph Light & Power	GR-99-246
Laclede Gas Company	GT-99-303
Laclede Gas Company	GR-99-315
Fiber Four Corporation	TA-2000-23; et al.
Missouri American Water Company	WR-2000-281/SR-2000-282
Union Electric Company d/b/a AmerenUE	GR-2000-512
St. Louis County Water	WR-2000-844
Empire District Electric Company	ER-2001-299
Missouri Gas Energy	GR-2001-292
Laclede Gas Company	GT-2001-329
Laclede Gas Company	GO-2000-394
Laclede Gas Company	GR-2001-629
UtiliCorp United, Inc.	ER-2001-672
Union Electric Company d/b/a AmerenUE	EC-2001-1
Laclede Gas Company	GR-2002-356
Empire District Electric Company	ER-2002-424
Southern Union Company	GM-2003-0238
Aquila, Inc.	EF-2003-0465
Missouri American Water Company	WR-2003-0500
Union Electric Company d/b/a AmerenUE	GR-2003-0517
Aquila, Inc.	ER-2004-0034
Aquila, Inc.	GR-2004-0072
Missouri Gas Energy	GR-2004-0209
Empire District Electric Company	ER-2004-0570
Aquila, Inc.	EO-2002-0384
Aquila, Inc.	ER-2005-0436
Empire District Electric Company	ER-2006-0315
Kansas City Power & Light	ER-2006-0314

UNION ELECTRIC COMPANY d/b/a AMERENUE Case No. ER-2007-0002

Summary of Annualized and Normalized Rate Revenues

Missouri Retail

(A)	(B) [`]	(C)	(D)	(E)	(F)	(G)	(H)	(1)
•	Per Book	·	<u>Weather</u>		Large			Total MO
	Revenues w/out	<u>Test Year</u>	Normalization	Days	Customer	LTS	<u>Growth</u>	Normalized
Rate Class	GRT	Adjustment	Adjustment	Adjustment	Annualization	<u>Adjustment</u>	Adjustment**	Revenues
Residential	\$ 880,977,883	\$26,321,860	\$ (29,765,158)	\$1,556,417	\$,-	\$, -	\$ 4,481,675	\$ 883,572,678
Small General Service	\$ 231,079,487	\$ 8,497,030	\$ (3,534,857)	\$ 741,704	\$-	\$-	\$ 2,462,000	\$ 239,245,364
Large General Service	\$ 420,310,044	\$13,225,718	\$ (3,812,230)	\$1,991,788	\$-	\$-	\$ 6,073,326	\$ 437,788,646
Small Primary Service	\$ 182,744,3 11	\$ 4,722,9 42	\$ (1,528,393)	\$ (387,102)	\$-	\$ -	\$ (303,659)	\$ 185,248,100
Large Primary Service (1)	\$ 159,408,062	\$ (809,591)	\$ -	\$.265,973	\$ 7,041	\$ -	\$ -	\$ 158,871,485
. Lighting & Other (2)	\$ 47,910,037	\$ -	\$ -	\$ -	\$-	\$ -	\$ -	\$ 47,910,037
••	<u> </u>	<u>\$</u>	<u>s </u>	\$		\$	<u>\$</u>	\$
TOTALS ++	\$	\$	\$	\$	\$	\$	\$	\$ **
· · ·							·	*** **

(1) From Staff Witness Curt Wells

(2) From Staff Witness Jeremy Hagemeyer

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Schedule JAB-2

UNION ELECTRIC COMPANY d/b/a AMERENUE Summary of Annual kWh Sales

Missouri Retail

. (A)	(B) -	(C)	(D)	(E)	(F)	(G)	
•				Large			
· · · ·	Test Year Sales	<u>Test Year</u>	<u>Days</u>	<u>Customer</u>	Growth	Total MO	
Rate Class	(kWh)	Adjustment	<u>Adjustment</u>	Annulization	Adjustment**	<u>Normalized kWh</u>	
Residential.	13,932,766,937	(326,315,323)	18,057,756		56,384,240	13,680,893,609	
Small General Service	3,764,435,948	(39,111,278)	6,125,357		67,305,504	3,798,755,532	
Large General Service	8,253,970,457	(50,819,431)	29,293,675		129,422,995	8,361,867,696	
Small Primary Service	4,198,891,797	. (32,175,584)	(14,523,992)		(14,110,746)	4,138,081,475	
Large Primary Service(1)	4,214,198,498		7,187,357	21,794,021		4,243,179,876	
Lighting & Other(2)	871,505,103					871,505,103	
				·	- <u>-</u>		**
TOTALS	**						**

(1) From Staff Witness Curt Wells(2) From Staff Witness Jeremy Hagemeyer

Schedule JAB-3

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STAFF'S RATEMAKING TREATMENT OF RATE REVENUES AND KWH SALES Rationale for Making Adjustments

The historical 12-month time period (test year) and update period (if any) that the Commission determines should be used for analyzing the costs of providing service to Missouri retail customers is also used for analyzing kilowatt-hour (kWh) sales and revenue, based on the "matching principle" of ratemaking.

An accurate quantification of total Company kWh sales plus losses is important for determining fuel and purchased power costs. Hourly net system loads, updated for these known and measurable changes in total company kWh sales, are reflected in the production cost simulation model (fuel run) to ensure that sufficient generation and purchases exist to meet total net system requirements.

The intent of adjustments to test year Missouri rate revenues is to estimate the revenue that the Company would have collected on an annual, normal-weather basis, based on information "known and measurable" at the end of the update period. Missouri retail rate revenues and kWh sales will be used to determine the amount of any revenue increase (or decrease) that results from this case, as well as the final rate levels.

Categories of Adjustments

The two major categories of adjustments are known as normalizations and annualizations. *(margin)*Normalizations deal with test year events that are unusual and unlikely to be repeated in the years when the new rates from this case are in effect. Test year weather is an example. It is unlikely that the weather that occurred in the test year will, on average, be repeated in the future, but what weather will actually occur is not predictable. The objective of the weather normalization process is to re-state test year kWh sales and rate revenues on a "normal-weather" basis.

Annualizations are adjustments that re-state test year results as if conditions known at the end of the update period had existed throughout the entire test year.

Schedule JAB-4-1

Examples of Annualizations

A common example of a revenue annualization is a rate change that occurs during the test year. In this situation, actual test year rate revenues will be understated or overstated by the difference between the amount that was actually billed to customers and the revenue that would have been realized by the Company if the rates in effect at the end of the update period had been in effect throughout the entire test year.

An example of an annualization that affects both kWh sales and rate revenues is a large customer that either begins or ceases taking service during the analysis period. In the situation where a large customer ceases business, in order to accurately reflect revenues going forward, test year revenues should be decreased by the amount of revenue the customer provided the Company. A corresponding reduction to kWh sales and to fuel and purchased power expense should be made to reflect the costs the company will no longer incur. Conversely, when a large customer begins service, test year revenue, kWh sales, and fuel expense should be increased to reflect both the costs and the revenues associated with serving the new customer on an annual basis.

Customer growth adjustments are annualizations that reflect any additional sales and revenues that would have occurred if the total number of customers on the system at the end of the update period had been customers during all 12 months of the test year.

Schedule JAB-4-2