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Issues: Revenues

Witness: James A. Busch Sponsoring Party: MO PSC Staff

Type of Exhibit: Refiled Direct Testimony

Case No.: ER-2007-0002

Date Testimony Prepared: December 15, 2006

(Refiled)

# 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 \*\*



# BEFORE THE PUBLIC SERVICE COMMISSION

# OF THE STATE OF MISSOURI

In the Matter of Union Elect d/b/a AmerenUE for Author Tariffs Increasing Rates Service Provided to Custo Company's Missouri Service	ority to File for Electric omers in the	•	Case No. ER-2007-0002				
AFFIDAVIT OF JAMES A. BUSCH							
STATE OF MISSOURI COUNTY OF COLE	) ) ss )						
preparation of the following I  7 pages of Direct Testimothe following Direct Testimother	Direct Testimon mony to be pre ny were given	ny in questi sented in th by him; tha	es: that he has participated in the on and answer form, consisting of the above case, that the answers in the has knowledge of the matters to the best of his knowledge and				
	١ ٦	#L	James A. Busch				
Subscribed and sworn to befo	ore me this <u>/</u> ਠ	day of D	ecember, 2006.				
NOTARY SEAL SUSAN L. SUNDE My Commission September 21 Callaway Co Commission #00	n Expires 1, 2010 ounty	Kusa	on Sundermayor Notary Public				
My commission expires 9	-21-11)						

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#### REFILED DIRECT TESTIMONY

#### **OF**

#### **JAMES A. BUSCH**

### UNION ELECTRIC COMPANY d/b/a AMERENUE

#### CASE NO. ER-2007-0002

- Q. Please state your name and business address.
- A. My name is James A. Busch and my business address is P. O. Box 360, Jefferson City, Missouri 65102.
  - Q. By whom are you employed and in what capacity?
- A. I am a Regulatory Economist III in the Economic Analysis Section of the Energy Department, Utility Operations Division of the Missouri Public Service Commission (Staff).
  - Q. Please describe your educational and professional background.
- A. I hold Bachelor of Science and Master of Science degrees in Economics from Southern Illinois University at Edwardsville. I have been employed as a Regulatory Economist III with the Staff of the Public Service Commission (Staff) since April 2005. Previously, I worked as a Public Utility Economist with the Office of the Public Counsel (Public Counsel) from 1999 to 2005. Prior to my employment with Public Counsel, I worked as a Regulatory Economist I with the Procurement Analysis Department of the Missouri Public Service Commission from 1997 to 1999. Also, I am a member of the Adjunct Faculty of Columbia College, Jefferson City Campus. I teach both graduate and undergraduate classes in economics.
  - Q. Have you previously filed testimony before the Commission?

- A. Yes. The cases in which I have filed testimony before the Commission are listed on Schedule JAB-1.
  - Q. What is the purpose of your direct testimony in this case?
- A. The purpose of my direct testimony is to present Staff's revenue adjustments to be used in the Staff Accounting Schedules.

## I. Executive Summary

- Q. Please summarize your testimony?
- A. My testimony describes the process Staff utilized to make adjustments to Union Electric Company d/b/a AmerenUE's (AmerenUE) booked revenues. Since weather generally is not normal and the number of days in the Company's billing cycles may be more or less than 365 days, an adjustment process must occur to take out the effects of abnormal weather and days greater than or less than 365.
  - Q. Are you sponsoring any adjustments to Staff's Accounting Schedule 1?
- A. Yes. I am sponsoring the following adjustments to revenues for customers served on the Residential, Small General Service, Large General Service, and small primary service rate schedules: Test Year Adjustment (S-1.2); Weather Normalization Adjustment (S-1.5); and Days Adjustment (S-1.4). Staff witness Jeremy Hagemeyer is sponsoring the Growth Adjustment.

### II. Revenues

- Q. What test year did you use for your adjustments?
- A. I used the test year approved by the Commission in this proceeding, which is July 2005 June 2006.
  - Q. What rate classes' revenues did Staff adjust?

- A. Staff adjusted revenues to the following classes: Residential (RES), Small General Service (SGS), Large General Service (LGS), Small Primary Service (SPS), and Large Primary Service (LPS). Staff did not adjust the revenues for Large Transmission Service (LTS), Lighting, Public Authorities, or Wholesale customer classes.
  - Q. Which rate classes did you specifically address?
- A. My adjustments are to the RES, SGS, LGS, and SPS rate classes. Staff witness Curt Wells sponsors the adjustments to the LPS rate class.
- Q. What is the relationship between Schedule JAB-2 and Schedule JAB-3 attached to your direct testimony?
- A. Schedule JAB-2 shows booked rate revenues for AmerenUE, plus the various adjustments that Mr. Hagemeyer, Mr. Wells and I are sponsoring. When the adjustments are added to test year booked rate revenues, this Schedule shows the total amount of rate revenues Staff is proposing in this proceeding. Schedule JAB-3 shows the test year sales in kWh, plus the adjustments to sales that correspond to the revenue adjustments on Schedule JAB-2. The adjusted sales (in kWh) found on Schedule JAB-3 are from Staff witness Shawn Lange and he is sponsoring those adjustments in his direct testimony.
- Q. What is the relationship between the Missouri rate revenues shown on your Schedule JAB-2 and Missouri operating revenues shown on Staff's Accounting Schedule 9 Income Statement?
- A. Total operating revenues shown on Staff's Accounting Schedule 9 consists of two parts, the rate revenues AmerenUE collects from the sale of electricity to its Missouri retail customers and the "other revenues" AmerenUE receives from other sources, such as late 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.
- A. I found the appropriate tariff sheets to determine the appropriate "price" to charge to each class of customers. Rate revenues consist of various components. One is a customer charge. All classes pay a flat customer charge that does not change due to the 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 have all of these charges. Next, depending upon the season and class, i.e. summer (June September) or non-summer (October May), the energy charge may have a single charge per kWh, or it may be a part of a declining block rate structure. For example, the residential class has a declining rate structure in the non-summer season. The customer is charged a rate of \$0.0542 per kWh for the first 750 kWhs used and \$0.0366 for any usage greater then 750 kWhs. Then, I multiplied the appropriate "price" times the monthly kWh sales in each block as provided by Mr. Lange.
  - 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

class in a specific month. However, Staff witness Lange has calculated a different level of test year sales. Therefore, when I applied the appropriate tariff charges to Mr. Lange's usage, there is a different monthly rate revenue total for each class than was booked by AmerenUE for that specific class. The difference between my calculated revenues and AmerenUE's booked revenues is the amount of this adjustment. I did this adjustment for the RES, SGS, LGS, and SPS classes.

- Q. Are Mr. Lange's usage volumes broken out by each block, where applicable, or does he provide monthly totals per class?
  - A. Mr. Lange's usage volumes are monthly aggregates per class in kWhs.
- Q. How did you determine the appropriate block usage for the months and classes that have blocked rates?
- A. Using Staff witness Lange's monthly totals, I multiplied those totals by the blocked relationship shown in Mr. Pozzo's workpapers. In other words, I took the amount of usage in the first and second blocks in Mr. Pozzo's workpapers and I calculated the percentage of his total that was in the first block and the percentage that was in the second block, and the third block if necessary. I then multiplied these percentages by the monthly totals provided by Mr. Lange. Thus, I was able to break down Mr. Lange's monthly total kWhs into the appropriate usage block, where applicable. This information is in column C on Schedule JAB-2.
  - Q. How did you calculate the weather normalized adjustment to revenue?
- A. Mr. Lange also calculated weather normalized sales usage in kWhs. This is done because the weather that occurs in the test year deviated from normal weather. Please see the testimony of Staff witness Shawn Lange for a complete description of the weather

normalization process. I took these weather normalized sales and applied the same methodology as described above to determine the appropriate weather normalized revenues. The difference between weather normalized revenues and test year revenues I previously calculated is the weather normalized adjustment. I did this adjustment for the RES, SGS, LGS, and SPS classes. This information is in column D of Schedule JAB-2.

- Q. How did you calculate the days adjustment to revenue?
- A. The days adjustment was calculated in the same manner as the test year and weather normalization adjustments as described above. For a complete description of the days adjustment process, please see the testimony of Staff witness Shawn Lange. I did this adjustment for the RES, SGS, LGS, and SPS classes. This information appears in column E of Schedule JAB-2.
- Q. Did you calculate the adjustment to the LPS and LTS rate classes found in columns F and G of Schedule JAB-2?
- A. No. For the LPS class, Staff witness Curt Wells calculated and is sponsoring the adjustment. Staff witness Jeremy Hagemeyer calculated and is sponsoring the adjustment to LTS usage and revenues.
- Q. Did you calculate and are you sponsoring the growth adjustment to usage and revenues found in column H of Schedule JAB-2?
- A. No. Staff witness Hagemeyer calculated and is sponsoring the growth adjustment.
  - Q. What is your recommendation in Case No. ER-2007-0002?
- A. I recommend that the Commission adopt Staff's adjustments to billed revenues that are shown on schedule JAB-2.

- Q. Does this conclude your direct testimony?
- 2 A. Yes.

# Cases of Filed Testimony James A. Busch

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>		<u>Large</u>			Total MO
	Revenues w/out	<u>Test Year</u>	<u>Normalization</u>	<u>Days</u>	<u>Customer</u>	<u>LTS</u>	<u>Growth</u>	<u>Normalized</u>
Rate Class	GRT	<u>Adjustment</u>	<u>Adjustment</u>	<u>Adjustment</u>	<u>Annualization</u>	<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	\$ 182,744,311	\$ 4,722,942	\$ (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>-</u> _	**
TOTALS **	\$	\$	\$	\$	\$	\$	\$	**
						· · · · · · · · · · · · · · · · · · ·		

<sup>(1)</sup> From Staff Witness Curt Wells



<sup>(2)</sup> From Staff Witness Jeremy Hagemeyer

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

# Missouri Retail

(A)	(B)	( C)	(D)	(E)	(F)	(G)
•	Tank Wang Oaka	<b>T</b> 4 <b>W</b>	Davis	<u>Large</u>	Connection	Total NO
	<u>Test Year Sales</u>	<u>Test Year</u>	<u>Days</u>	Customer	<u>Growth</u>	Total MO
Rate Class	<u>(kWh)</u>	<u>Adjustment</u>	<u>Adjustment</u>	<u>Annulization</u>	<u>Adjustment**</u>	Normalized kWh
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>				±1

<sup>(1)</sup> From Staff Witness Curt Wells

TOTALS



<sup>(2)</sup> From Staff Witness Jeremy Hagemeyer

# 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.

### **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.