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Witness: *Robin Kliethermes*
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MISSOURI PUBLIC SERVICE COMMISSION

COMMISSION STAFF DIVISION

OPERATIONAL ANALYSIS DEPARTMENT

TARIFF AND RATE DESIGN UNIT

REBUTTAL TESTIMONY

OF

ROBIN KLIETHERMES

**UNION ELECTRIC COMPANY
D/B/A AMEREN MISSOURI**

CASE NO. ER-2016-0179

*Jefferson City, Missouri
January 2017*

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1 **REBUTTAL TESTIMONY**

2 **OF**

3 **ROBIN KLIETHERMES**

4 **UNION ELECTRIC COMPANY**
5 **D/B/A AMEREN MISSOURI**

6 **CASE NO. ER-2016-0179**

7 Q. Please state your name and business address.

8 A. Robin Kliethermes, 200 Madison Street, Jefferson City, Missouri 65102.

9 Q. By whom are you employed and in what capacity?

10 A. I am employed by the Missouri Public Service Commission (“Commission”)
11 as a Utility Regulatory Manager of the Tariff and Rate Design Unit, of the Operational
12 Analysis Department of the Commission Staff Division. My credentials, and a listing of those
13 cases in which I have filed testimony before the Commission, is attached as Schedule RK-rl.

14 Q. Have you previously filed testimony in this case?

15 A. No.

16 Q. What is the purpose of your rebuttal testimony?

17 A. The purpose of my rebuttal testimony is to respond to Union Electric Company
18 d/b/a Ameren Missouri’s (“Ameren Missouri”) witness William R. Davis regarding
19 Ameren Missouri’s method of normalizing the percentage of kilowatt-hours (“kWh”) billed in
20 the first rate block for residential and small general service (SGS) customers.

21 **RESPONSE TO AMEREN MISSOURI REGARDING NORMALIZED FIRST BLOCK**
22 **USAGE**

23 Q. What is the rate design on Ameren Missouri’s residential tariff?

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1 A. Residential customers are billed a customer charge that is the same amount
2 year round, plus a flat per kWh rate for usage during the months of June, July, August, and
3 September, and a declining block rate for usage over 750 kWh for all other months of the
4 year.

5 Q. What is the rate design on Ameren Missouri's SGS tariff?

6 A. For the winter months, an SGS customer's usage is divided between Base and
7 Seasonal usage. Seasonal usage is defined as usage greater than 1,000 kWh and in excess of
8 the lesser of a) the kwh use during the preceeding May billing period, or b) October billing
9 period, or c) the maximum monthly kWh use during any preceeding summer month, which is
10 then billed at a rate that is less than the rate charged for a customer's base usage or a
11 customer's usage under 1,000 kWh. For the summer months, a flat rate per kWh used during
12 the summer months of June, July, August, and September is charged.

13 Q. How did Ameren Missouri determine the amount of normalized kWh that
14 should be billed in the first rate block during the winter months?

15 A. Ameren Missouri used a regression that studied the relationship between
16 heating degree days and the percent of actual kWh billed in the first block for each winter
17 month from 2007 to 2015, and then applied the outcome of the regression to the normal
18 heating degree days of the applicable winter month of the test year to find the percent of
19 normalized kWh that should be billed in the first block for the month.

20 Q. Did the results of Ameren Missouri's study determine a reasonable amount of
21 normalized kWh for the first rate block.

22 A. No. For example, for the month of January 2016, Ameren Missouri applied a
23 1.14 weather factor to normalize actual usage for that month. This can be interpreted as

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1 January 2016 was a warmer than normal month and customers used less kWh than normal.
2 Therefore, total kWh would need to increase by 114% in order to normalize the usage or
3 similarly customers would have used more kWh if January 2016 was normal. Given this
4 example, normalized kWh in either of Ameren Missouri's two residential rate blocks should
5 increase since Ameren Missouri has both customers whose usage does not exceed 750 kWh in
6 a winter month and whose usage does exceed 750 kWh in a given winter month.¹ However,
7 when Ameren Missouri's percentage of kWh to be billed in January's first residential rate
8 block, as determined by the Company's regression, was applied to January's total normalized
9 usage the amount of normalized usage that was billed in the first rate block was 9,114,245
10 kWh less than the amount of actual kWh billed in the first block.

11 Q. Is this a reasonable result?

12 A. No. If the weather factor is greater than 1, then actual usage in that month was
13 below normal and normalized usage in the first rate block for that month should increase by
14 some percentage and if the weather factor was less than one, then both blocks should decrease
15 by some percentage.

16 Q. How did Staff determine the amount of normalized kWh that should be billed
17 in the first rate block during the winter months?

18 A. Staff used a regression that studied the relationship between average usage per
19 customer and the percent of kWh billed in the first block and applied the outcome to
20 normalized usage per customer to determine the percentage of usage that should be billed in
21 the first rate block.

22 Q. Did Staff's outcome have reasonable results?

¹ The same logic would apply to the SGS class where some customers do and do not exceed 1,000 kwh.

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1 A. Yes. If the weather factor was greater than one, the kWh in both the first block
2 and second block increased, and if the weather factor was less than one it decreased.

3 Q. Did Staff use any other measures as a test of reasonableness?

4 A. Yes, Staff reviewed actual cumulative frequency distribution² data for the
5 residential and SGS classes and performed an analysis using the change in average usage per
6 customer when kWh is normalized to develop a normalized percentage of usage for the first
7 rate block.

8 Q. Were Staff's results of this study similar to Staff's regression results?

9 A. Yes. They are provided in Table 1 below.

Month	Regression Summary		Cumulative Frequency Summary		
	Block 1	Block 2	Block 1	Block 2	Difference
1	44.54%	55.46%	43.96%	56.04%	0.58%
2	46.76%	53.24%	46.33%	53.67%	0.43%
3	55.47%	44.53%	54.11%	45.89%	1.37%
4	67.83%	32.17%	65.99%	34.01%	1.85%
5	78.29%	21.71%	78.32%	21.68%	-0.02%
6	100.00%	0.00%	100.00%	0.00%	0.00%
7	100.00%	0.00%	100.00%	0.00%	0.00%
8	100.00%	0.00%	100.00%	0.00%	0.00%
9	100.00%	0.00%	100.00%	0.00%	0.00%
10	71.17%	28.83%	73.59%	26.41%	-2.42%
11	75.29%	24.71%	74.15%	25.85%	1.14%
12	57.27%	42.73%	55.19%	44.81%	2.08%

10 Q. Why didn't Staff use the results of the cumulative frequency analysis instead
11 of the regression analysis?

12 A. The cumulative frequency data received from Ameren Missouri only includes
13 usage from customers who received a full bill in the month, so any customer who received a
14 partial bill was excluded. Therefore, the total number of customers and kWh in the

² Cumulative frequency distribution data is the distribution of customer bills and kWh over various block sizes. This data shows how many customers and how much kWh exceed or do not exceed certain rate blocks.

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1 cumulative frequency data does not exactly match the test year billing determinants which are
2 being normalized; however, the data is very close and provides a basis to test the
3 reasonableness of the regression.

4 Q. Did Staff use this same method to normalize blocked kWh usage for the
5 residential and SGS classes in Ameren Missouri's last rate case ER-2014-0258?

6 A. Yes; however, Staff updated for the 12-months ending June 2016.

7 Q. Does this conclude your rebuttal testimony?

8 A. Yes.

Robin Kliethermes

Present Position:

I am the Utility Regulatory Manager of the Tariff and Rate Design Unit, Operational Analysis Department, Commission Staff Division, of the Missouri Public Service Commission. I had this position since July 16th, 2016. I have been employed by the Missouri Public Service Commission since March of 2012. In May of 2013, I presented on Class Cost of Service and Cost Allocation to the National Agency for Energy Regulation of Moldova (ANRE) as part of the National Association of Regulatory Utility Commissioners (NARUC) Energy Regulatory Partnership Program. I also serve on the Electric Meter Variance Committee.

Educational Background and Work Experience:

I have a Bachelor of Science degree in Parks, Recreation and Tourism with a minor in Agricultural Economics from the University of Missouri – Columbia in 2008, and a Master of Science degree in Agricultural Economics from the same institution in 2010. Prior to joining the Commission, I was employed by the University of Missouri Extension as a 4-H Youth Development Specialist and County Program Director in Gasconade County.

Additionally, I completed two online classes through Bismarck State College: Energy Markets and Structures (ENRG 420) in December, 2014 and Energy Economics and Finance (ENRG 412) in May, 2015.

Previous Testimony of Robin Kliethermes

Case No.	Company	Type of Filing	Issue
ER-2012-0166	Ameren Missouri	Staff Report	Economic Considerations
ER-2012-0174	Kansas City Power & Light Company	Staff Report	Economic Considerations
ER-2012-0175	KCP&L Greater Missouri Operations Company	Staff Report	Economic Considerations & Large Power Revenues
ER-2012-0345	Empire District Electric Company	Staff Report	Economic Considerations, Non-Weather Sensitive Classes & Energy Efficiency
HR-2014-0066	Veolia Kansas City	Staff Report	Revenue by Class and Class Cost of Service
GR-2014-0086	Summit Natural Gas	Staff Report	Large Customer Revenues
GR-2014-0086	Summit Natural Gas	Rebuttal	Large Customer Revenues
EC-2014-0316	City of O'Fallon Missouri and City of Ballwin, Missouri v. Union Electric Company d/b/a Ameren Missouri	Staff Memorandum	Overview of Case
EO-2014-0151	KCP&L Greater Missouri Operations Company	Staff Recommendation	Renewable Energy Standard Rate Adjustment Mechanism (RESRAM)
ER-2014-0258	Ameren Missouri	Staff Report	Rate Revenue by Class, Class Cost of Service study, Residential Customer Charge
ER-2014-0258	Ameren Missouri	Rebuttal	Weather normalization adjustment to class billing units
ER-2014-0258	Ameren Missouri	Surrebuttal	Residential Customer Charge and Class allocations
ER-2014-0351	Empire District Electric Company	Staff Report	Rate Revenue by Class, Class Cost of Service study, Residential Customer Charge

Case No.	Company	Type of Filing	Issue
ER-2014-0351	Empire District Electric Company	Rebuttal & Surrebuttal	Residential Customer, Interruptible Customers
ER-2014-0370	Kansas City Power & Light Company	Staff Report	Rate Revenue by Class, Class Cost of Service study, Residential Customer Charge
ER-2014-0370	Kansas City Power & Light Company	Rebuttal & Surrebuttal	Class Cost of Service, Rate Design, Residential Customer Charge
ER-2014-0370	Kansas City Power & Light Company	True-Up Direct & True-Up Rebuttal	Customer Growth & Rate Switching
EE-2015-0177	Kansas City Power & Light Company	Staff Recommendation	Electric Meter Variance Request
EE-2016-0090	Ameren Missouri	Staff Recommendation	Tariff Variance Request
EO-2016-0100	KCP&L Greater Missouri Operations Company	Staff Recommendation	RESRAM Annual Rate Adjustment Filing
ET-2016-0185	Kansas City Power & Light Company	Staff Recommendation	Solar Rebate Tariff Change
ER-2016-0023	Empire District Electric Company	Staff Report	Rate Revenue by Class, CCOS and Residential Customer Charge
ER-2016-0023	Empire District Electric Company	Rebuttal & Surrebuttal	Residential Customer Charge and CCOS
ER-2016-0156	KCP&L Greater Missouri Operations	Staff Report	Rate Revenue by Class, CCOS and Residential Customer Charge
ER-2016-0156	KCP&L Greater Missouri Operations	Rebuttal & Surrebuttal	Data Availability, Energy Efficiency Revenue Adj., Residential Customer Charge
ER-2106-0285	Kansas City Power & Light Company	Rebuttal	Customer Charge and Inclining Block Rates

