

Exhibit No.:
Issue(s): *Weather Normalization*
Witness: *Robin Kliethermes*
Sponsoring Party: *MoPSC Staff*
Type of Exhibit: *Surrebuttal Testimony*
Case No.: *GR-2019-0077*
Date Testimony Prepared: *July 10, 2019*

MISSOURI PUBLIC SERVICE COMMISSION

COMMISSION STAFF DIVISION

TARIFF/RATE DESIGN

SURREBUTTAL TESTIMONY

OF

ROBIN KLIETHERMES

**UNION ELECTRIC COMPANY,
d/b/a AMEREN MISSOURI**

CASE NO. GR-2019-0077

Jefferson City, Missouri
July 2019

1 **SURREBUTTAL TESTIMONY**

2 **OF**

3 **ROBIN KLIETHERMES**

4 **UNION ELECTRIC COMPANY,**
5 **d/b/a AMEREN MISSOURI**

6 **CASE NO. GR-2019-0077**

7 Q. Please state your name and business address.

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

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

10 A. I am employed by the Missouri Public Service Commission ("Commission") as
11 the Rate and Tariff Examination Manager of the Tariff and Rate Design Department of the
12 Commission Staff Division.

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

14 A. Yes. I previously filed in Staff's Cost of Service Report filed on April 19, 2019,
15 Staff's Class Cost of Service Report filed on May 3, 2019 and rebuttal testimony in this case.

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

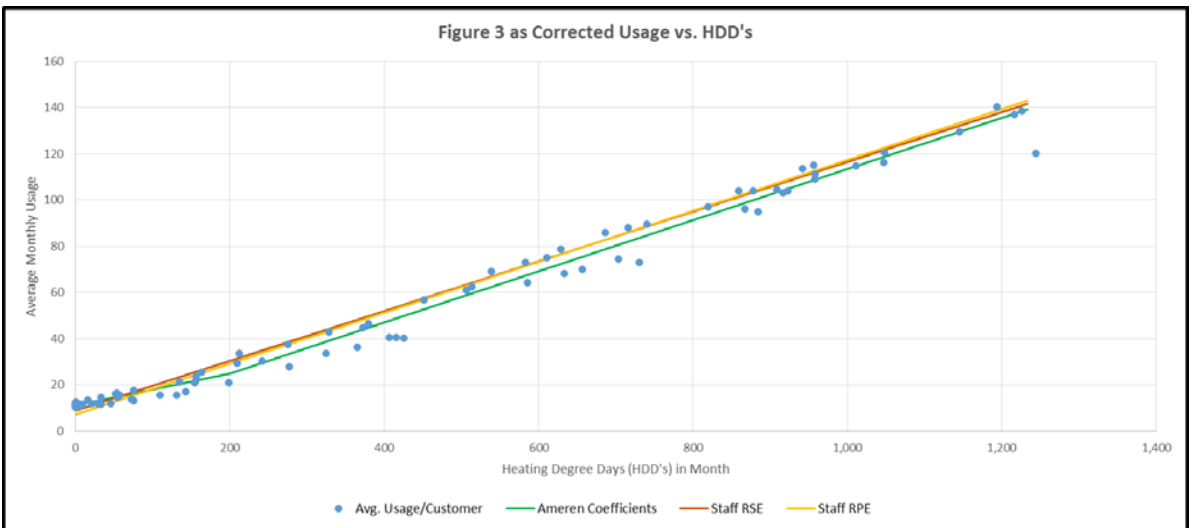
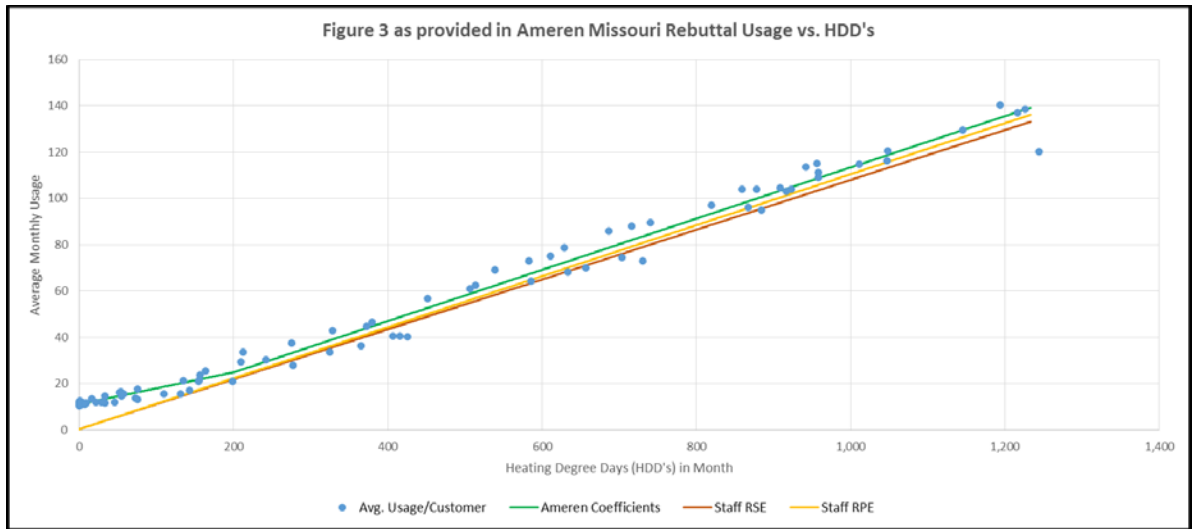
17 A. The purpose of my surrebuttal testimony is to respond to the rebuttal testimony
18 of Union Electric Company, d/b/a Ameren Missouri ("Ameren Missouri") witness Ryan Ryterski
19 regarding Ameren Missouri's representation of Staff's weather normalization regression lines.

20 Q. Does Mr. Ryterski accurately reflect Staff's regression lines in Figure 3 and
21 Figure 4 in his rebuttal testimony?

22 A. No, Mr. Ryterski's graph of Staff's regression is wrong. Mr. Ryterski
23 used Staff's daily-associated y-intercept to compare to monthly-associated average usage.
24 Ameren Missouri's regression line is based on monthly values, not daily values. To simplify

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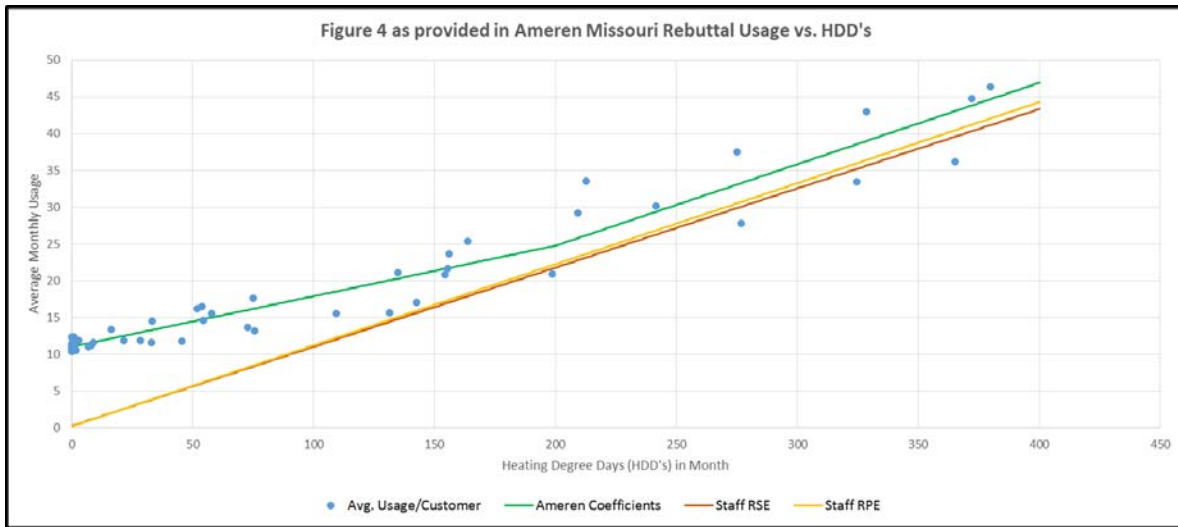
1 Staff's regression to a monthly-associated value the daily-associated y-intercept should be
2 multiplied by 30.5.¹ A comparison of Figure 3 and Figure 4 as filed in Mr. Ryterski's rebuttal
3 testimony and as corrected are provided below.



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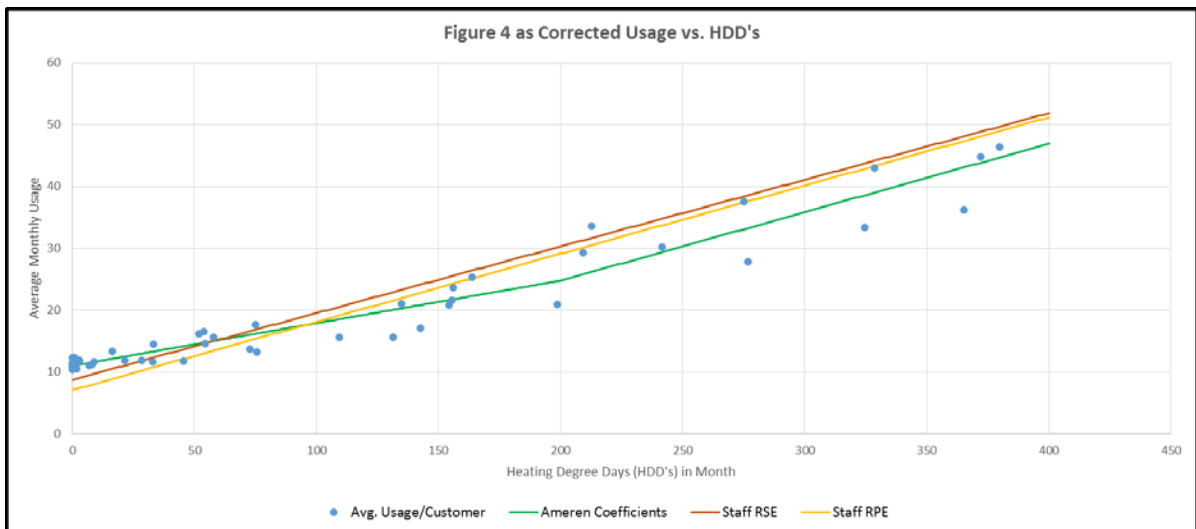
¹ Average number of days for a month.

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Q. In his rebuttal testimony Mr. Rysterki's statement stated that Ameren Missouri

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used "[a] regression technique called a spline" "to differentiate the relationship of usage and

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HDDs during very cold months (those with monthly HDDs greater than 200), and milder

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months with fewer HDDs. Is it logical that in milder spring and fall months, all customers begin

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heating their homes at the same temperature threshold, a clear reflection of Ameren Missouri's

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regression and its relationship to seasonal values?

1 A. No. As discussed in my Rebuttal testimony at Pages 6 -10, the 200HD break in
2 the spline is arbitrary, and the statistical significance Ameren Missouri achieves in its regression
3 is the result of averaging of averages, which does not improve the line's significance to the
4 relevant daily-associated data, and does not appropriately weight the sales to the
5 geographically-distinct service territories.

6 Finally, based on my analysis of the data relied on by Mr. Ryterski, the Ameren
7 Missouri – proposed line, the seasonal response to weather is different in the spring than it is in
8 the fall. Mr. Ryterski's spline of monthly-associated data does no better at capturing these
9 different relationships than does Staff's daily-associated data for the time period studied in this
10 case. However, Staff's daily-associated data should be expected to better capture
11 these differences in responses going forward where actual weather should not be expected
12 to align cleanly with changes in calendar months. Even if Mr. Ryterski's spline break of
13 200 HDD were not arbitrary, his reliance on average monthly data over consideration of
14 customer billing cycles is unreasonable.

15 Q. Mr. Ryterski states that "The Staff used the 12 months of the test year to develop
16 its regression lines compared to the 92 months of data that Ameren Missouri observed in
17 developing its regression equation." For purposes of annualizing billing units and establishing
18 a relationship between weather and sales, is it more reasonable to rely on an analysis of
19 92 average months, or 21 billing cycles for each of the 12 months of the test year?

20 A. There are several reasons that it is more reasonable to use billing cycle
21 information rather than average monthly information, and that it is more reasonable to use
22 a shorter time period than a longer time period, in this case for the following purposes.

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1 First, billing cycle information is able to capture the reality that weather does not
2 align specifically to a calendar month and that the number of customers billed on any of
3 the Company's 21 billing cycles varies. If a cold spell hits on January 31 of the test period,
4 Staff's method will more accurately capture the customer's response to the weather for that
5 time period than Ameren Missouri's method. Under Ameren Missouri's method the customer's
6 response would be simply averaged across all other billing cycles for the billing month. Staff's
7 method better addresses the multiple billing-cycles at play in Ameren Missouri's billing
8 process.

9 Second, use of a longer time is likely to fail to capture the interacting impacts of
10 (1) customer conservation, (2) customer retention/replacement of aging appliances, (3) changes
11 in customer behaviors regarding energy-intensive appliances, (4) changes in customer housing
12 stock such as increases/decreases in the relative proportion of multifamily and single-family
13 housing within Ameren Missouri's customer base. A more-recently defined study period has
14 the advantage of capturing the interaction of these factors as closely to real time as is
15 practicable.

16 Q. Is Ameren Missouri's selection of a 92 average month study period for purposes
17 of weather normalization consistent with its stated rationale for the WCAR?

18 A. No, as discussed further by Staff witness Mr. Stahlman. The Company ignores
19 the above stated elements in its selection of a time for weather normalization while using
20 a portion of this list as the basis for its justification for the design of its proposed WCAR.

21 Q. Does this conclude your surrebuttal testimony?

22 A. Yes.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of Union Electric Company)
d/b/a Ameren Missouri's Tariffs to Increase)
its Revenues for Natural Gas Service) Case No. GR-2019-0077

AFFIDAVIT OF ROBIN KLIETHERMES

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW ROBIN KLIETHERMES and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing *Surrebuttal Testimony*; and that the same is true and correct according to her best knowledge and belief.

Further the Affiant sayeth not.

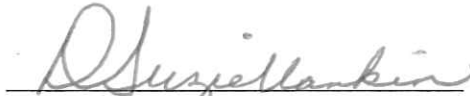


ROBIN KLIETHERMES

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 8th day of July 2019.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: December 12, 2020
Commission Number: 12412070



Notary Public