

*Exhibit No.:*  
*Issue(s):* *Blocks*  
*Witness:* *Michael L. Stahlman*  
*Sponsoring Party:* *MoPSC Staff*  
*Type of Exhibit:* *Rebuttal Testimony*  
*Case No.:* *ER-2022-0337*  
*Date Testimony Prepared:* *February 15, 2023*

**MISSOURI PUBLIC SERVICE COMMISSION**

**INDUSTRY ANALYSIS DIVISION**

**TARIFF/RATE DESIGN DEPARTMENT**

**REBUTTAL TESTIMONY**

**OF**

**MICHAEL L. STAHLMAN**

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

**CASE NO. ER-2022-0337**

*Jefferson City, Missouri*  
*February 2023*

**\*\* Denotes Confidential Information \*\***



1           A.     The fact that Dr. Bowden himself doesn't rely on it. Instead of using the results  
2 of the regression analysis, he opts to use an "additional logical constraint"<sup>1</sup> when his results  
3 self-admittedly don't make sense.

4           Q.     Does the "additional logical constraint" include an alternative method of  
5 weather-normalizing the blocks in the affected months?

6           A.     No. Dr. Bowden's solution is to leave the block unadjusted. This solution, while  
7 better than using an inappropriate regression adjustment, questions the whole reason for  
8 weather normalizing the block usage; if not necessary here, why bother with the other months?

9           Q.     Which months were unadjusted for Block 1 usage?

10          A..    First, Dr. Bowden only ran regression analyses on the months of October,  
11 November, December, January, February, March, April, and May.

12                For 1M Residential, Dr. Bowden left November 2021, December 2021, January 2022,  
13 and February 2022 unadjusted – half of the months that Dr. Bowden analyzed. For June, July,  
14 and August, Dr. Bowden also left the Block 1 percent equal to the actual, but for September,  
15 Dr. Bowden set the Block 1 percentage equal to October's percent.

16                For SGS, Base kWh was only unadjusted for November 2021 and for the unanalyzed  
17 summer months of June through September.

18          Q.     Are there issues with running a regression analysis using monthly temperature  
19 and monthly usage?

20          A.     Yes. Usage is usually measured in a revenue month and weather is normally  
21 read in a calendar month. Revenue months are not the same as calendar months; revenue  
22 months are the sum of several bill cycles that can span over an approximate two calendar month

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<sup>1</sup> Direct Testimony of Nicolas Bowden, Ph.D., p. 14, ll. 15-16.

1 period. Dr. Bowden would need to include a system of weights to ensure that the block  
2 percentages are being compared on the same time basis as the weather.

3 Q. Does it seem rational to regress revenue months individually rather than  
4 combining the data sets together?

5 A. No. The customers in the first billing cycles in a February revenue month  
6 consume most of their usage in January calendar dates and only in the first few days of the  
7 February calendar dates. Only the customers in the later bill cycles of a February revenue  
8 month would have most of their usage occurring in the February calendar month. Likewise,  
9 the customers in the first bill cycles of the March revenue month would have a majority of their  
10 usage in the February. So a weather event in mid-February affects two revenue months rather  
11 than just one; both the February and March revenue months.

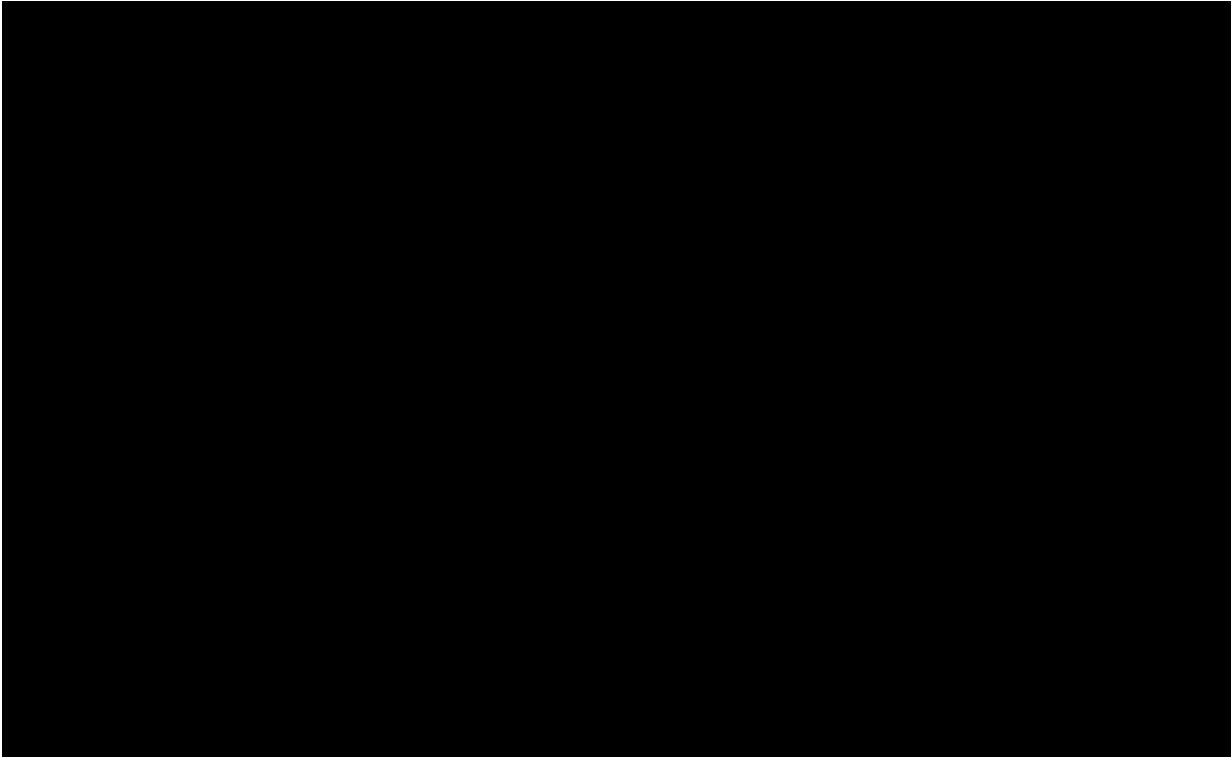
12 Also, the data itself suggests that there is no defined break between revenue months.

13 Confidential Figure 1 below:  
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24 *continued on next page*

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Q. Figure 1 does show a relationship between heating degree days and the usage in the first block. Do you consider this a direct relationship?

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A. No. The relationship is indirect because the increase in heating degree days tends to mean higher usage, and larger customer usage tends to mean more usage is in the second block instead of the first. A more direct way of determining block 1 usage percentage would be to analyze that percent with average customer usage.

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Q. Do you agree with analyzing a period from 2007 through 2022 as Dr. Bowden did?

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A. No. I would expect the relationship between weather and usage, even just in block 1 usage, to change over that period due to technological innovations, such as energy efficiency measure adoption.

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Q. Does this conclude your rebuttal testimony?

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A. Yes it does.

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 Adjust        )  
Its Revenues for Electric Service                )            Case No. ER-2022-0337

**AFFIDAVIT OF MICHAEL L. STAHLMAN**

STATE OF MISSOURI        )  
  )  
COUNTY OF COLE         )            ss.

COMES NOW MICHAEL L. STAHLMAN and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Rebuttal Testimony of Michael L. Stahlman*; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

  
\_\_\_\_\_  
MICHAEL L. STAHLMAN

**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 9<sup>th</sup> day of February 2023.

D. SUZIE MANKIN  
Notary Public - Notary Seal  
State of Missouri  
Commissioned for Cole County  
My Commission Expires: April 04, 2025  
Commission Number: 12412070

  
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Notary Public