

Exhibit No.:
Issue(s): Revenue, Weather
Normalization
Witness: Michael L. Stahlman
Sponsoring Party: MoPSC Staff
Type of Exhibit: Rebuttal Testimony
Case No.: ER-2022-0129 and
ER-2022-0130
Date Testimony Prepared: July 13, 2022

MISSOURI PUBLIC SERVICE COMMISSION

INDUSTRY ANALYSIS DIVISION

TARIFF/RATE DESIGN DEPARTMENT

REBUTTAL TESTIMONY

OF

MICHAEL L. STAHLMAN

**Evergy Metro, Inc., d/b/a Evergy Missouri Metro
Case No. ER-2022-0129**

**Evergy Missouri West, Inc., d/b/a Evergy Missouri West
Case No. ER-2022-0130**

*Jefferson City, Missouri
July 2022*

1 **REBUTTAL TESTIMONY OF**

2 **MICHAEL L. STAHLMAN**

3 **vergy Metro, Inc., d/b/a Evergy Missouri Metro**
4 **Case No. ER-2022-0129**

5 **Evergy Missouri West, Inc., d/b/a Evergy Missouri West**
6 **Case No. ER-2022-0130**

7 Q. Please state your name and business address.

8 A. My name is Michael L. Stahlman, and my business address is Missouri Public
9 Service Commission, P.O. Box 360, Jefferson City, Missouri, 65102.

10 Q. Are you the same Michael L. Stahlman that previously provided direct testimony
11 in this case with written testimony on June 8, 2022 and during the discovery conference held
12 on May 5, 2022?

13 A. Yes I am.

14 **Executive Summary**

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

16 A. The purpose of my rebuttal testimony is to rebut the normalization adjustments
17 made by Evergy witness Alan Bass.

18 Q. Please summarize your testimony.

19 A. There will naturally be some differences between Evergy's and Staff's
20 normalization adjustments due to using different time periods, slightly different methods, and
21 data issues. However, there are other issues with Evergy's weather and Covid normalization
22 adjustments calculations that result in unreasonable results. While the Commission doesn't
23 need to rule on these issues specifically, these problems lend support to Staff's billing

1 determinants, as finalized in the Direct Testimony of Kim Cox, being the most proper billing
2 determinants for this case.

3 **AMI Calibration**

4 Q. In your direct testimony in this case, you discussed using unadjusted AMI data
5 because Staff did not receive sufficient data to adjust the load and would address any significant
6 issues with using the unadjusted data in rebuttal testimony. Have you discovered any
7 significant issues with using the unadjusted data?

8 A. No. The unadjusted data corresponded well with the data provided by the
9 Company in response to 20 CSR 4240-3.190 that Staff used to calculate Load Requirement at
10 Transmission. Additionally, the adjustment provided to Staff Witness Kim Cox is based on a
11 ratio rather than a specific kWh adjustment. Therefore Staff is confident that the unadjusted
12 data was sufficient to obtain proper weather normalization and 365-day adjustment factors in
13 this case.

14 **Normalization**

15 Q. Did you review the workpapers of Albert R. Bass, Jr. who provided the weather
16 normalization, Covid, and 365 day adjustments in this case?

17 A. Yes I did.

18 Q. Did Staff and Evergy use the same time periods for its weather normalization
19 adjustment?

20 A. No. Evergy filed using a test period of July 2020 through June 2021, while Staff
21 filed an updated period of January 2021 through December 2021. There will naturally be some
22 differences in results, even for the months that overlap, due to the regression analysis using
23 different data.

1 Q. Were there any major impacts in how the analysis was performed
2 (e.g. the method) because of the difference in time periods?

3 A. Yes. First, Staff did not perform a Covid adjustment and secondly, as discussed
4 in my direct testimony, Staff changed the method of weather normalizing Sales for Resale
5 (“SFR”) customers for EMW.

6 Q. Why did Staff not include a Covid adjustment?

7 A. Staff’s model included a variable developed from Google mobility data¹ to
8 account for the impact of Covid, but this was largely for the months of March through June of
9 2020. The period Staff used for weather normalization was calendar year 2021 and presumes
10 that the impact of Covid is factored into customer’s decisions to use energy going forward;
11 more people are working from home than before Covid and that is likely to continue. Evergy’s
12 model in the MetrixND file also assumes energy consumption will change, but fixes the data to
13 a weighted period at the end of their test year. This impact can also be seen in the Google
14 mobility data, utilized in the MetrixND models for both Staff and Evergy. Based on that data,
15 Staff concluded that the impact of Covid was largely minimized by September or October 2020,
16 thus no adjustment to Staff’s model was necessary.

17 Q. Did you find issues with Mr. Bass’s Covid adjustment?

18 A. Yes. First, it appears that Mr. Bass performed a Covid adjustment twice; once
19 in the MetrixND files so that Weather Normalization Adjustment factor includes a Covid
20 adjustment², then a separate adjustment outside of Weather Normalization Adjustment factor.

¹ COVID-19 Community Mobility Reports

² Working through Mr. Bass’s workpapers it seems that the weather adjustment values are tied to the MetrixND simulation that corrected for both weather and Covid instead of the file only correcting for weather.

1 Another issue is that Mr. Bass's simulates the Google Mobility data with a constant for
2 all time periods rather than a period of concern; the model will overcorrect for factors that aren't
3 necessarily tied to Covid. The Google Mobility data compares how much people spent time at
4 home, work, on the road, or at a store to a specific calendar date in February 2020. Both Staff
5 and Evergy used the data to proxy the impacts of Covid, but Google Mobility data is not a
6 perfect proxy and includes impacts of other events, including seasonal changes in where time
7 is spent and holidays. By using a constant for all time periods instead of leaving the data
8 unadjusted, Mr. Bass will adjust for all factors that impact where a person spends their time to
9 a specific period of a year.

10 An additional concern is that there were adjustments made for Covid when the Covid
11 variable was not significant in the regression model, such as for the Small
12 Commercial/Industrial class for EMW.

13 Q. What is the result of relying on Mr. Bass assumptions?

14 A. Generally, the overall result for EMM and EMW was more calculated revenue
15 for the test period.

16 Q. Is there a simple remedy to avoid that outcome?

17 A. Yes. The Covid adjustments could only be made to the early months and leave
18 later months unadjusted or, as Staff was able to do, shift the period of review to avoid adjusting
19 for Covid altogether.

20 Q. Were there other results of Mr. Bass's analysis that are concerning?

21 A. Yes. One period in particular, February and March 2021 for the residential
22 Missouri EMM class, contradict my expectations for a weather normalization of those months
23 and is inconsistent with other class adjustments. Those months include Winter Storm Uri, a

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Michael L. Stahlman

1 period of extremely cold weather, which would tend to cause usage to be higher than normal.
2 However, for that class, the adjustment factor increases usage even more rather than an expected
3 reduction in usage.

4 Q. Were there other concerns with Mr. Bass's regression analysis?

5 A. Yes. The Large Power class for EMW included independent weather variables
6 that had insignificant regression results. As mentioned in direct, the individual customer's
7 usages also tended to appear seasonal, which explains the relatively lower R-squared value³.

8 Q. Please summarize your testimony.

9 A. Because EMM and EMW included two Covid adjustments and shows
10 unreasonable results in its weather normalization adjustment, Staff's recommends the
11 Commission order the use of Staff's billing determinants as discussed in the Direct Testimony
12 of Kim Cox.

13 Q. Does this conclude your testimony?

14 A. Yes it does.

³ The R-square value is a goodness of fit statistic. The adjusted R-square for the large power class of EMW was about 0.92. Typically Staff would expect this value to be around 0.96 or higher for classes that are weather sensitive, and around 0.99 for the residential customer class.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Evergy Metro, Inc. d/b/a Evergy)
Missouri Metro's Request for Authority to) Case No. ER-2022-0129
Implement a General Rate Increase for Electric)
Service)

In the Matter of Evergy Missouri West, Inc.)
d/b/a Evergy Missouri West's Request for) Case No. ER-2022-0130
Authority to Implement a General Rate)
Increase for Electric Service)

AFFIDAVIT OF MICHAEL L. STAHLMAN

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

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.

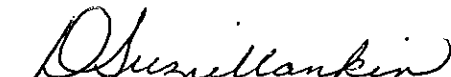
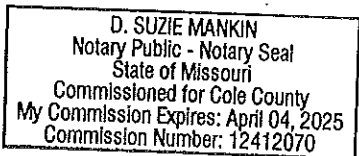
Further the Affiant sayeth not.



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 11th day of July, 2022.



Notary Public