

*Exhibit No.:*  
*Issue:* *Weather Normalization  
Adjustments*  
*Witness:* *Michael L. Stahlman*  
*Sponsoring Party:* *MoPSC Staff*  
*Type of Exhibit:* *Rebuttal Testimony*  
*Case No.:* *ER-2019-0374*  
*Date Testimony Prepared:* *March 9, 2020*

**MISSOURI PUBLIC SERVICE COMMISSION**

**INDUSTRY ANALYSIS DIVISION**

**TARIFF & RATE DESIGN DEPARTMENT**

**REBUTTAL TESTIMONY**

**OF**

**MICHAEL L. STAHLMAN**

**THE EMPIRE DISTRICT ELECTRIC COMPANY**

**CASE NO. ER-2019-0374**

*Jefferson City, Missouri*  
*March 2020*

1 **REBUTTAL TESTIMONY OF**

2 **MICHAEL L. STAHLMAN**

3 **THE EMPIRE DISTRICT ELECTRIC COMPANY**

4 **CASE NO. ER-2019-0374**

5 Q. Please state your name and business address.

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

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

9 A. I am employed by the Missouri Public Service Commission ("Commission")  
10 as a Regulatory Economist III in the Tariff and Rate Design Department of the Industry  
11 Analysis Division.

12 Q. Are you the same Michael L. Stahlman that supported sections in Staff's Cost  
13 of Service ("COS Report")?

14 A. Yes.

15 Q. What is the purpose of your testimony?

16 A. The purpose of my rebuttal testimony is to respond to The Empire District  
17 Electric Company's ("Empire") witnesses Eric Fox concerning the weather normalization  
18 adjustments and Timothy S. Lyons concerning the Weather Normalization Rider ("WNR").

19 Q. Please summarize your testimony.

20 A. My testimony will address Empire's insufficient data provided to Staff and  
21 explain how Empire's own analysis suffers from this data defect. Secondly, there is a mismatch  
22 in methods used to calculate average temperature for Empire's daily average actual temperature

1 and the ranked normal weather data. Finally, Empire’s proposed WNR is unnecessarily  
2 complex and impossible to implement.

3 **WEATHER NORMALIZATION RIDER**

4 Q. Do you agree that the WNR is “similar to the Weather Normalization  
5 Adjustment Rider (“WNAR”) approved by the Commission for the Company’s  
6 Liberty-Midstates Natural Gas division in Missouri”?<sup>1</sup>

7 A. No. The proposed WNR adjustment is customer specific, whereas the WNAR  
8 is one rate applied to all customers in a class (i.e. residential or small firm general service) for  
9 a given rate district. The WNAR was modeled off of Staff’s weather normalization adjustment  
10 process for gas utilities, but Empire’s proposed WNR does not tie back to the weather  
11 normalization adjustment process used in this case. As an example, the weather normalization  
12 process in this case has temperature breakpoints where a class’ response to weather changes.  
13 The proposed WNR has no such breakpoints; it assumes a strictly linear response. Additionally,  
14 the weather normalization process in this case is based on a whole customer class’s response to  
15 weather, while the proposed WNR adjustment is specific to individual customers.

16 Q. Does Empire’s proposed WNR apply a rate to a customer or customer class?

17 A. No. The WNR adjusts an individual customer’s billed usage to develop a ratio  
18 that is multiplied by the “base rates” portion of the customer’s bill. This result is then added to  
19 or subtracted from an individual customer’s bill. Therefore, each customer will have specific  
20 weather adjustments.

21 Q. Does Empire’s “base rates” include ISRS revenue and PGA revenue?

---

<sup>1</sup> Direct Testimony of Timothy Lyons, p. 52, ll. 1-2.

1           A.     Empire does not define what portion of its rates are include in “base rates” in the  
2 WNR rider.

3           Q.     Are there other concerns with Empire’s design?

4           A.     Yes. Under Empire’s design, a customer will not be aware what they will be  
5 billed for energy prior to using that energy. I am not an attorney, but on advice of counsel,  
6 I have concerns that Empire’s proposed treatment to adjust a customer’s bill on an individual  
7 basis after the applicable billing period is concluded may violate the filed rate doctrine or  
8 constitute retroactive rate making. Also, Section 386.266.3, RSMo, requires “rate schedules”,  
9 but the WNR would not create a specific rate that is applicable to all customers, it would instead  
10 modify a customer’s billable usage after that usage has been incurred.

11          Q.     Is Empire able to “to calculate a surcharge or credit on a ‘real time’ basis”?<sup>2</sup>

12          A.     No. In order to determine the correct WNR adjustment, Empire’s proposed  
13 WNR includes provisions that will compare actual weather to normal weather. Empire, like  
14 Staff, uses a ranked method to calculate the normal weather. The ranked method of calculating  
15 normal weather requires a calendar month to be completed; it is impossible to rank the normal  
16 weather at the beginning of a given month without knowing the weather at the end of that  
17 month. Therefore it is impossible to calculate a WNR adjustment on a real time basis as Empire  
18 proposes, since a customer’s billing cycle is not based on a calendar month.

19          Q.     Is it true that “Customers pay no more or less than the amount they would have  
20 paid under normal weather conditions.”?<sup>3</sup>

---

<sup>2</sup> Direct Testimony of Timothy Lyons, p. 56, l. 11.

<sup>3</sup> Direct Testimony of Timothy Lyons, p. 56, ll. 20-21.

1           A.     No. The proposed rider assumes a linear response based on the assumed base  
2 load usage and the ratio of actual heating degree days (HDD) or cooling degree days (CDD) to  
3 normal HDD or CDD; it doesn't have the ability to correct for changes in customer usage for  
4 fuel switching, newer energy efficient equipment, etc. The proposal also assumes a linear slope  
5 response whereas Staff's weather normalization process has breakpoints and seasonal affects.

6           Q.     Are there other concerns with Empire's proposed WNR mechanism?

7           A.     Yes. Staff is concerned with the "base load factor" calculation as currently  
8 provided in Empire's proposed WNR tariff. The proposed tariff states that a customer's base  
9 load usage will be the two year average of the lowest month's usage in a shoulder period. Since  
10 there are two shoulder periods in a calendar year, this means that the base load usage will be  
11 determined as the average of four months. However, even these shoulder periods have HDD  
12 and CDD in each month; for there to be no HDD or CDD would require every day in that month  
13 to have an average temperature of 65 degrees. Not only does this mean that Empire is not  
14 capturing the "base usage", it's also extremely unclear how this interplay would factor into a  
15 customer's bill in a shoulder period—what will Empire assume a customer's billed usage  
16 should have been for a shoulder month with both HDD and CDD, and how does this factor into  
17 future base load factors?

18           Also, as discussed in the rebuttal testimony of Robin Kliethermes, Empire has estimated  
19 a large percentage of its bills. However, Empire's WNR relies on each customer's actual usage  
20 to estimate the normal usage. Empire's proposed WNR is customer specific and not a rate  
21 developed based on usage for an entire class; thus missing key months' data can have a large  
22 impact on a customer's base load usage estimate.

Rebuttal Testimony of  
Michael L. Stahlman

1           An additional concern is a provision concerning how the “base load factor” is calculated  
2 for customers without any billing history. The proposed tariff states that “if a customer has no  
3 billing history for shoulder months, then the average daily electric usage for shoulder months  
4 for the rate schedule under which the customer is served will be used.”<sup>4</sup> This means a  
5 customer’s usage may bear no resemblance to their actual response.

6           Q.     Does Staff have any recommendations for an alternative mechanism?

7           A.     Yes. Staff recommends the Sales Reconciliation to Levelized Expectations  
8 (“SRLE”) mechanism discussed in Staff’s Class Cost of Service report. As explained more  
9 fully in the report, Staff’s proposed SRLE is a rate mechanism designed to account for weather  
10 and conservation for customers served on the Residential, CB, and SH rate schedules.

11          Q.     Does this complete your rebuttal testimony?

12          A.     Yes

---

<sup>4</sup> Proposed Tariff Sheet P.S.C. Mo. No. 5 Sec. 4 Original Sheet No. 25a.

**BEFORE THE PUBLIC SERVICE COMMISSION**  
**OF THE STATE OF MISSOURI**

In the Matter of The Empire District Electric )  
Company's Request for Authority to File ) Case No. ER-2019-0374  
Tariffs Increasing Rates for Electric Service )  
Provided to Customers in its Missouri )  
Service Area )

**AFFIDAVIT OF MICHAEL L. STAHLMAN**

STATE OF MISSOURI )  
 ) ss.  
COUNTY OF COLE )

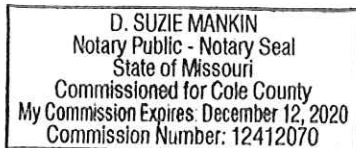
COMES NOW MICHAEL L. STAHLMAN and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Rebuttal Testimony*; and that the same is true and correct according to his best knowledge and belief.

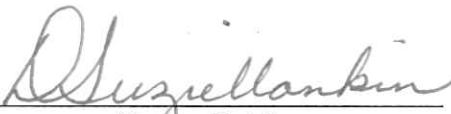
Further the Affiant sayeth not.

  
\_\_\_\_\_  
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 5<sup>th</sup> day of March 2020.



  
\_\_\_\_\_  
Notary Public