

*Exhibit No.:*  
*Issue(s):* *Weather Normalization*  
*Witness:* *Hari K. Poudel, PhD*  
*Sponsoring Party:* *MoPSC Staff*  
*Type of Exhibit:* *Surrebuttal Testimony*  
*Case No.:* *GR-2024-0106*  
*Date Testimony Prepared:* *September 19, 2024*

**MISSOURI PUBLIC SERVICE COMMISSION**

**INDUSTRY ANALYSIS DIVISION**

**TARIFF/RATE DESIGN DEPARTMENT**

**SURREBUTTAL TESTIMONY**

**OF**

**HARI K. POUDEL, PhD**

**LIBERTY UTILITIES (Midstates Natural Gas) CORP.,**

**d/b/a Liberty**

**CASE NO. GR-2024-0106**

*Jefferson City, Missouri*  
*September 2024*

1 **SURREBUTTAL TESTIMONY**

2 **OF**

3 **HARI K. POUDEL, PhD**

4 **LIBERTY UTILITIES (Midstates Natural Gas) CORP.,**

5 **d/b/a Liberty**

6 **CASE NO. GR-2024-0106**

7 Q. Please state your name and business address.

8 A. My name is Hari K. Poudel, and my business address is P.O. Box 360,  
9 Jefferson City, MO 65102.

10 Q. Are you the same Hari Poudel who prepared the direct and rebuttal testimonies  
11 in this case?

12 A. Yes.

13 **EXECUTIVE SUMMARY**

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

15 A. The purpose of my surrebuttal testimony is to address a few concerns raised by  
16 Mr. Eric Fox, a witness for Liberty Utilities (Midstates Natural Gas) Corp., d/b/a Liberty  
17 (“Liberty Midstates” or “Company”), about Staff’s weather normalization (“WN”) analysis.  
18 Staff agrees with the Company analysis that the relationship between temperature and  
19 Large General Service (“LGS”) rate class is weak. Therefore, Staff will exclude this rate class  
20 from the WN adjustment. Staff also updated Transport customers’ weather normalization  
21 workpapers based on the updated information provided by Company.<sup>1</sup>

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<sup>1</sup> DR325S GR-2024-0106

1 **WEATHER NORMALIZATION MODEL**

2 Q. Does the Company reject the WN analysis method used by Staff?

3 A. No. Mr. Fox stated that Staff's WN approach is reliable<sup>2</sup>.

4 Q. Which aspects of the WN adjustments calculated by Staff were brought up  
5 by Mr. Fox?

6 A. Mr. Fox is primarily concerned with the meter read schedules for  
7 October, November, and December that are used in Staff's WN analysis."<sup>3</sup> Liberty changed the  
8 meter read schedule as a result of the new billing system implemented in October 2023.<sup>4</sup>  
9 According to Mr. Fox, compared to the previous billing system, the new billing system has the  
10 largest effect on December billed sales. The rationale is that half of the December sales would  
11 have been deferred to January 2024 if the billed sales were handled using the previous billing  
12 system. Even so, in order to look into the impact of the new billing method on the meter read  
13 schedule and related billed sales, Staff requires sufficient data and analysis. But as of yet,  
14 no data is available.

15 Q. How does Staff handle the new meter read schedules in this filing?

16 A. Staff used exactly the same methodology for the 365-day adjustment in this  
17 filing as it did in the previous rate case. Liberty implemented a new billing system in  
18 October 2023.<sup>5</sup> On September 5, 2024, Mr. Fox submitted his workpaper for meter read  
19 schedule for three months, including October, November, and December. . However, Staff is  
20 unable to apply the 365-days adjustments based on the new billing system for these three  
21 months due to the following reasons:

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<sup>2</sup> Mr. Eric Fox Rebuttal Page 1 Lines 18-19.

<sup>3</sup> Mr. Eric Fox Rebuttal Page 1 Lines 18-19.

<sup>4</sup> Mr. Eric Fox Rebuttal Page 1, Lines 19-20.

<sup>5</sup> Mr. Eric Fox Rebuttal Page 1 Lines 19-20; Page 2 Lines 1-2.

1           1)     Staff is unable to validate the accuracy of the simulation results used in  
2 Mr. Fox's workpaper for the three months. The simulated results are hardcoded.

3           2)     Staff does not possess access to the regression software package used  
4 in his analysis.

5           3)     Mr. Fox's approach lacks consistency since he omitted October from the  
6 simulation modeling, despite the introduction of the new billing system in October 2023.

7           Q.     Will Staff review its adjustment for three months based on the new billing  
8 system after getting the appropriate simulation model information as requested in  
9 Staff's DR365?

10          A.     Possibly. The response to the new meter reading system workpaper will  
11 determine this, and Staff has not received this yet. Once received, Staff could assess and confirm  
12 the accuracy of Mr. Fox's simulation results utilized during the three-month period following  
13 to the implementation of the new billing system.

14          Q.     Do you have any update regarding the analysis of the LGS WN adjustment?

15          A.     Yes. Staff agrees with the Company's analysis that the relationship between  
16 temperature and Large General Service ("LGS") rate class is weak.<sup>6</sup> Staff calculated the  
17 adjustment coefficients for LGS rate class in the direct filing. These coefficients indicate that  
18 Staff's regression model has shown that the impact of weather on sales is not statistically  
19 significant. As a result, Staff does not apply weather normalization to the LGS rate class when  
20 making revenue adjustments. Staff witness Ms. Stever updated the LGS revenue adjustment in  
21 her surrebuttal testimony.

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<sup>6</sup> GR-2024-0106 Direct Page 2 Lines 4.

Surrebuttal Testimony  
of Hari K. Poudel, PhD

1 Q. How are the weather adjustment values for the Transport customers applied?

2 A. Staff witness Justin Tevie used the weather adjustment values for the  
3 Transport customers.

4 **CONCLUSION**

5 Q. Does this conclude your surrebuttal testimony?

6 A. Yes it does.

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

In the Matter of the Request of Liberty            )  
Utilities (Midstates Natural Gas) Corp.        )  
d/b/a Liberty to Implement a General Rate        )  
Increase for Natural Gas Service in the         )  
Missouri Service Areas of the Company         )


Case No. GR-2024-0106

**AFFIDAVIT OF HARI K. POUDEL, PHD**

STATE OF MISSOURI        )  
  )  
COUNTY OF COLE         )        ss.

**COMES NOW HARI K. POUDEL, PhD** and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Surrebuttal Testimony of Hari K. Poudel, PhD*; and that the same is true and correct according to his best knowledge and belief.

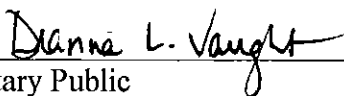
Further the Affiant sayeth not.

  
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**HARI K. POUDEL, PhD**

**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 17<sup>th</sup> day of September 2024.

DIANNA L. VAUGHT  
Notary Public - Notary Seal  
State of Missouri  
Commissioned for Cole County  
My Commission Expires: July 18, 2027  
Commission Number: 15207377

  
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Notary Public