

Exhibit No.: \_\_\_\_\_  
Issue(s): Billing Determinants, Revenue, Class Cost  
of Service Study and Rate Design  
Witness: Timothy S. Lyons  
Type of Exhibit: Surrebuttal and True-Up Direct  
Testimony  
Sponsoring Party: The Empire District Electric  
Company d/b/a Liberty  
Case No.: ER-2024-0261  
Date Testimony Prepared: September 2025

**Before the Public Service Commission  
of the State of Missouri**

**Surrebuttal and True-Up Direct Testimony**

**of**

**Timothy S. Lyons**

**on behalf of**

**The Empire District Electric Company d/b/a Liberty**

**September 17, 2025**



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OF TIMOTHY S. LYONS  
THE EMPIRE DISTRICT ELECTRIC COMPANY D/B/A LIBERTY  
BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION  
CASE NO. ER-2024-0261

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1    **I.    INTRODUCTION**

2    **Q.    Please state your name and business address.**

3    A.    My name is Timothy S. Lyons. My business address is 1 Speen Street, Suite 150,  
4        Framingham, Massachusetts 01701.

5    **Q.    Are you the same Timothy S. Lyons that filed direct and rebuttal testimony in this**  
6        **proceeding?**

7    A.    Yes.

8    **Q.    On whose behalf are you submitting this testimony before the Missouri Public**  
9        **Service Commission (“Commission”)?**

10   A.    I am testifying on behalf of The Empire District Electric Company d/b/a Liberty  
11        (“Liberty” or “Company”).

12   **Q.    What is the purpose of your surrebuttal and true-up testimony?**

13   A.    The purpose of my surrebuttal and true-up direct testimony is to sponsor the Company’s  
14        response to rebuttal testimony of Kim Cox, Hari K. Poudel, PhD, Marina Gonzales,  
15        and Sarah L.K. Lange on behalf of the Staff of the Commission (the “Staff”). I also  
16        explain the revenue adjustments trued up through the end of the true-up period, March  
17        31, 2025. To the extent any specific topic is not addressed in my surrebuttal and/or true-  
18        up testimony, the absence of discussion should not be construed as agreement with  
19        opposing positions. Unless expressly stated otherwise, I continue to rely on and support  
20        the positions presented in my rebuttal testimony.

1    **II.    RESPONSE TO STAFF WITNESS COX**

2    **Q.    What are Staff witness Cox's recommendations?**

3    A.    Staff witness Cox's recommendations are summarized below:

- 4                    • Reflect manual adjustments to align the starting point for Staff and the
- 5                    Company's billing determinants.<sup>1</sup>
- 6                    • Notes concerns regarding the Company's sales kWh adjustments to active
- 7                    customers with zero usage.<sup>2</sup>
- 8                    • Utilize February 2025 customer counts as the basis for customer growth
- 9                    adjustment rather than September 2024 customer counts.<sup>3</sup>

10   **Q.    Does the Company agree with Staff witness Cox's recommendation to reflect**

11   **manual adjustments to align the starting point for Staff and the Company's billing**

12   **determinants?**

13   A.    Yes. The Company agrees that all manual adjustments should be reflected when

14   developing the starting point for billing determinants.

15                    The Company notes Staff's analysis included more recent billing data related

16   to February and March 2025 that became available following the update period filing.

17   **Q.    What concerns has Staff witness Cox raised regarding the Company's customer**

18   **annualization analysis?**

19   A.    Staff raises the following concerns:

- 20                    • If an active customer only had usage in the summer months, the winter months
- 21                    were not adjusted.
- 22                    • A customer cannot have off-peak credit when there was no usage.

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<sup>1</sup> Rebuttal testimony of Kim Cox, p. 4.

<sup>2</sup> Id., pp. 5-8.

<sup>3</sup> Id., p. 9.

- There is no way to know if a net metering customer's or any customer's usage was missing or was actually zero.

**Q. What is the Company's response to Staff's concern that the Company's analysis does not estimate usage in the winter months if customers had usage in only the summer months?**

A. The Company does not necessarily agree with Staff's concern. The Company's analysis was based on customers' historical usage. For example, if winter usage was available, the Company estimated winter usage based on historical winter usage. If winter usage was zero, but summer usage was available, the Company estimated winter usage based on summer historical usage.

In Staff's example, a customer had very low usage during winter months, and accordingly, the estimated usage for winter months was low. This is a reasonable outcome since a customer's actual historical usage is the best indicator of the customer's expected usage.

**Q. What is the Company's response to Staff's example where a customer has low usage in a month, but has a high off-peak credit?**

A. The Company's analysis was based on the customer total usage rather than individual monthly usage. The Company's analysis was based on total usage to better estimate off-peak usage.

**Q. What is the Company's response to Staff's statement that there is no way to know if a net metering customer's or any customer's usage was missing or was actually zero?<sup>4</sup>**

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<sup>4</sup> Id. pp. 7-8.

1     A.     If a customer had a customer charge during a month but zero usage, the Company  
2           believes it was reasonable to assume the customer was billed during the month and had  
3           zero usage. On the other hand, if a customer did not have a customer charge and zero  
4           usage, the Company believes it was reasonable to assume the customer was not billed  
5           during the month and their usage should be estimated and customer charge added.

6     **Q.     What is the Company’s response to Staff’s recommendation to use February 2025**  
7           **customer counts for the true-up growth adjustment?**

8     A.     The Company utilized more recent March 2025 customer counts for its proposed true-  
9           up adjustment; however, the Company is not opposed to Staff’s recommendation to use  
10          February 2025 customer counts.

11    **Q.     What is the Company’s overall position regarding Staff’s billing determinants?**

12    A.     As stated in rebuttal testimony, the Company generally agrees with Staff’s overall  
13           adjustments to rate revenues and billing determinants. While there are certain  
14           differences in methodologies, assumptions, and approaches between the Company and  
15           Staff – as noted above – the resulting figures fall within a reasonable margin of  
16           difference. The Company supports the types of adjustments made by Staff, which are  
17           broadly consistent with those applied in the Company’s own analysis.

18    **III.    RESPONSE TO STAFF WITNESS POUDEL**

19    **Q.     What are Staff witness Poudel’s recommendations?**

20    A.     Staff witness Poudel opposes a summer declining block rate design due to significant  
21           concerns regarding its reasonableness.<sup>5</sup>

22    **Q.     What is the Company’s response to Staff witness Poudel’s concerns regarding the**  
23           **reasonableness of a summer declining block rate design?**

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<sup>5</sup> Rebuttal testimony of Hari Poudel, p. 5.

1     A.     The Company continues to support its proposed approach to recover in the head block  
2           charge those customer costs not recovered in the customer charge. The proposed  
3           approach reduces volatility in the Company's revenues and customer bills related to  
4           changes in customer usage since head block usage represents the more inelastic portion  
5           of the rate blocks — the portion that is less sensitive to changes in weather.

6     **IV.   RESPONSE TO STAFF WITNESS GONZALES**

7     **Q.     What are Staff witness Gonzales' recommendations?**

8     A.     Staff witness Gonzales' recommendations are summarized below:

- 9           •   The Company's substitute workpapers provided on February 5, 2025 do not  
10           align with the proposed rates.<sup>6</sup>
- 11          •   The Company's varying adjustments to alternative rate schedules within a rate  
12           class are not reasonable.<sup>7</sup>
- 13          •   The Company's NCP demand charges do not properly align customer's usage  
14           with the Grid's capacity and potentially penalizes customers that use most of  
15           their energy when the system is not under strain by overstating their  
16           responsibility for system capacity costs.<sup>8</sup>

17   **Q.     What is the Company's response to Staff witness Gonzales' concerns regarding**  
18       **the substitute workpapers?**

19   A.     The Company's workpapers were filed on February 26, 2025; consequently, the  
20           referenced workpapers reflect an earlier version. My understanding is this issue was  
21           immediately addressed once the Company learned of the concerns.

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<sup>6</sup> Direct testimony of Marina Gonzales, p. 2-3.

<sup>7</sup> Id., p. 3.

<sup>8</sup> Id., p. 5.

1   **Q.    What is the Company's response to Staff witness Gonzales' concerns regarding**  
2       **the varying adjustments to alternative rate schedules within a rate class?**

3    A.   First, the reason for the varying adjustments to alternative rate schedules is based on  
4       the Company's proposal for a 10.00 percent movement to cost-based rates.

5               Rate classes whose current rates yield a rate of return lower than the system rate  
6       of return receive a rate increase higher than the overall rate increase. By comparison,  
7       rate classes whose current rates yield a rate of return higher than the system rate of  
8       return receive a rate increase lower than the overall rate increase.

9               In the case of the residential rate class, the rate design was based on the  
10      combined revenue targets for the NS-RG, TC-RG, and TP-RG rate classes;  
11      consequently, the varying adjustments of the NS-RG, TC-RG, and TP-RG rate classes  
12      were combined for purposes of setting rates for the NS-RG, TC-RG, and TP-RG rate  
13      classes. Specifically, the rates for the NS-RG, TC-RG, and TP-RG rate classes reflect  
14      the combined revenue targets and the combined billing determinants for the NS-RG,  
15      TC-RG, and TP-RG rate classes.

16   **Q.    What is the Company's response to Staff witness Gonzales' concerns regarding**  
17       **the NCP demands?**

18   A.   The Company agrees with Staff witness Gonzales' that potential mismatches between  
19       customer NCP demands and CP demands could be a concern, particularly related to  
20       production and transmission system costs. Staff's recommendation to utilize customer  
21       CP demands rather than customer NCP demands for demand billing may help address  
22       potential mismatches.



1                   However, there is no evidence that NCP demands are not a good indicator of  
2                   CP demands. In addition, a portion of system costs are related to the distribution  
3                   system, which generally vary based on NCP demands.

4   **V.   RESPONSE TO STAFF WITNESS LANGE**

5   **Q.   What are Staff witness Lange’s concerns as stated in rebuttal testimony?**

6   A.   Staff witness Lange’s concerns are summarized below:

- 7                   • Impact of time of energy consumption on the cost of service.<sup>9</sup>
- 8                   • Treatment of generation plants with low or no variable expenses.<sup>10</sup>
- 9                   • Functionalization of all generation plant.<sup>11</sup>

10   **Q.   What is the Company’s response regarding the impact of time of energy**  
11           **consumption on the cost of service?**

12   A.   The Company agrees that time of energy consumption can have a potential impact on  
13           costs within the cost of service. The Company believes its AMI data could be utilized  
14           in the future to support such analysis of the potential impact of time of energy  
15           consumption on the cost of service.

16   **Q.   What is the Company’s response regarding treatment of generation plants with**  
17           **low or no variable expenses?**

18   A.   The Company believes it is appropriate to allocate all generation plants – whether they  
19           have low or no variable expenses (i.e., renewable generation) – based on the average  
20           and excess (“A&E”) allocator because the generation plants are designed to meet  
21           demand and energy requirements and the A&E allocator is based on customer demand

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<sup>9</sup> Rebuttal testimony of Sarah Lange, pp. 10-13.

<sup>10</sup> Id., pp. 13-18.

<sup>11</sup> Id., pp. 18-21.

1 and energy requirements. Specifically, the Company's wind generation facilities are  
2 used to meet the Company's Southwest Power Pool resource capacity requirements.

3 **Q. Does the Company agree with Staff that "For Empire, peak loads driving capacity**  
4 **investments do not currently coincide with times of peak wind output"?**

5 A. No. As noted earlier, the output of the Company's wind generation facilities is used to  
6 meet the SPP resource capacity requirements.

7 **Q. Does the Company agree with Staff's illustration of mismatch between allocation**  
8 **of wind generation costs and wind generation revenues?**

9 A. No. The Company allocated wind generation costs consistent with cost-causation  
10 principles. Generation plants are designed to meet demand and energy requirements.  
11 Staff's example implies that the Company has allocated all wind generation costs based  
12 on demand only. On the contrary, the Company has allocated wind generation costs  
13 based on the A&E method which includes both demand and energy. Specifically, under  
14 the A&E 4-NCP method, average demands are weighted by 45.80 percent and excess  
15 demands are weighted by 54.20 percent. Thus, the energy component is substantially  
16 reflected in the Company's allocation of production fixed costs based on the A&E  
17 method and it aligns with allocation of wind generation revenues.

18 **Q. What is the Company's response regarding the functionalization of certain wind**  
19 **energy costs recorded under intangible plant as production rather than intangible**  
20 **plant?**

21 A. The Company agrees it is appropriate to functionalize wind-related intangible plant  
22 costs as production rather than intangible plant. The Company has revised its cost of  
23 service study as discussed below to functionalize costs associated with wind energy as  
24 production rather than intangible plant.

1    **Q.     Does the Company have any corrections to its COSS study?**

2    A.     Yes. The Company has three corrections to its COSS study.

3            1. Revise functionalization and allocation of costs related to wind energy from  
4            intangible to production. The change to production better reflects the design of  
5            the facilities to meet customer demand and energy requirements.

6            2. Revise amortization of regulatory assets from production to total plant in  
7            service. The change to total plant in service better reflects the underlying costs  
8            which are related to plant.

9            3. Revise system load factor used in the A&E allocator from 45.90 percent to  
10           45.80 percent. The change aligns the average demands used in derivation of  
11           the system demands and A&E allocator.

12   **Q.     What is the impact of the changes?**

13   A.     Figure 1 (below) summarizes the changes.

**Figure 1: Rate of Return Changes**

Rate Class	Class Rates of Return				
	Filed Study	Revision #1	Revision #2	Revision #3	Surrebuttal Study
NS-RG	2.9%	2.9%	2.7%	2.9%	2.7%
TC-RG	1.3%	1.3%	1.1%	1.3%	1.1%
TP-RG	0.0%	0.0%	-0.3%	0.0%	-0.3%
NS-GS	4.1%	4.1%	3.9%	4.1%	3.9%
TC-GS	5.2%	5.2%	5.2%	5.2%	5.2%
TP-GS	-3.7%	-3.7%	-4.7%	-3.7%	-4.7%
NS-LG	2.5%	2.5%	2.6%	2.5%	2.6%
TC-LG	3.0%	3.0%	3.1%	3.0%	3.1%
NS-SP	7.3%	7.3%	8.0%	7.4%	8.0%
TC-SP	7.6%	7.6%	7.8%	7.6%	7.8%
LP	6.2%	6.2%	7.2%	6.2%	7.2%
TS	4.6%	4.5%	6.6%	4.6%	6.6%
MS	14.1%	14.1%	15.3%	14.1%	15.4%
SPL	1.6%	1.6%	1.1%	1.6%	1.1%
PL	15.2%	15.4%	14.1%	15.2%	14.2%
LS	-5.4%	-5.4%	-6.5%	-5.4%	-6.5%

1 The Figure shows the impact on the class rates of return for each revision relative to  
2 the filed study – as well as the cumulative impact under “Surrebuttal Study.”

3 **VI. TRUE-UP DIRECT**

4 **Q. What revenue adjustments did the Company true-up through March 31, 2025?**

5 A. The Company prepared a true-up revenue adjustment, REV ADJ 15, to reflect the  
6 number of customers as of March 2025. The true-up adjustment reflects changes in  
7 customers, associated billing determinants, and revenues between September 2024 and  
8 March 2025. Revenues and billing determinants are adjusted to reflect customers who  
9 switched rates during the period (for example, from NS- to TC-rates), customers who  
10 left the system, and customers who joined the system. This adjustment reflects an  
11 increase to Missouri retail revenues of \$2,935,313, and which have been included in  
12 the Company’s calculation of its true-up revenue requirements model as provided in  
13 the true-up direct testimony of Company witness Charlotte T. Emery.

14 **Q. Does this conclude your surrebuttal and true-up direct testimony at this time?**

15 A. Yes, it does.

**VERIFICATION**

I, Timothy S. Lyons, under penalty of perjury, on this 17th day of September 2025,  
declare that the foregoing is true and correct to the best of my knowledge and belief.

/s/ Timothy S. Lyons