

Exhibit No.:
Issues: Lead-Lag Study, Cash Working
Capital Requirement
Witness: Timothy S. Lyons
Type of Exhibit: Rebuttal Testimony
Sponsoring Party: The Empire District
Electric Company
Case No.: ER-2019-0374
Testimony Prepared: March 2020

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

Rebuttal Testimony

of

Timothy S. Lyons

on Behalf of

**The Empire District Electric Company
a Liberty Utilities Company**

March 2020



TABLE OF CONTENTS
REBUTTAL TESTIMONY OF
TIMOTHY S. LYONS
ON BEHALF OF
THE EMPIRE DISTRICT ELECTRIC COMPANY
BEFORE THE
MISSOURI PUBLIC SERVICE COMMISSION
CASE NO. ER-2019-0374

SUBJECT	PAGE
I. INTRODUCTION	1
II. PURPOSE OF TESTIMONY.....	1
III. SUMMARY OF STAFF’S AND OPC’S RECOMMENDATIONS	2
IV. SUMMARY OF THE COMPANY’S RESPONSE TO STAFF’S AND OPC’S RECOMMENDATIONS.....	3
V. THE COMPANY’S OPPOSITION TO CERTAIN OF STAFF’S AND OPC’S RECOMMENDATIONS.....	5
VI. CONCLUSION.....	8

REBUTTAL TESTIMONY
OF
TIMOTHY S. LYONS
ON BEHALF OF
THE EMPIRE DISTRICT ELECTRIC COMPANY
BEFORE THE
MISSOURI PUBLIC SERVICE COMMISSION

1 **I. INTRODUCTION**

2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 A. My name is Timothy S. Lyons. My business address is 1900 West Park Drive, Suite 250,
4 Westborough, Massachusetts, 01581.

5 **Q. ARE YOU THE SAME TIMOTHY S. LYONS WHO PREVIOUSLY**
6 **SPONSORED DIRECT TESTIMONY IN THIS PROCEEDING?**

7 A. Yes, I am. I provided direct testimony before the Missouri Public Service Commission
8 (the “Commission”) on behalf of The Empire District Electric Company, a Liberty
9 Utilities company (“Liberty-Empire” or the “Company”).

10 **II. PURPOSE OF TESTIMONY**

11 **Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?**

12 A. The purpose of this rebuttal testimony is to address recommendations by the Staff of the
13 Commission (“Staff”) in their cost of service report related to the Company’s proposed
14 Cash Working Capital (“CWC”) requirement. In addition, this rebuttal testimony will
15 address recommendations by John S. Riley on behalf of the Office of the Public Counsel
16 (“OPC”) in his direct testimony related to the Company’s proposed CWC requirement.

17 **Q. HAVE YOU PREPARED SCHEDULES TO SUPPORT THIS TESTIMONY?**

1 A. Yes. Rebuttal Schedule TSL-R1 supports this rebuttal testimony. The Schedule was
2 prepared by me or under my direction.

3 **III. SUMMARY OF STAFF'S AND OPC'S RECOMMENDATIONS**

4 **Q. PLEASE SUMMARIZE STAFF'S RECOMMENDATIONS RELATED TO THE**
5 **COMPANY'S PROPOSED LEAD-LAG STUDY.**

6 A. Staff recommends the following changes to the Company's lead-lag study:

7 1. Revise lead days associated with several expenses, including fuel payments, taxes
8 other than income, cash vouchers and interest payments.¹

9 2. Measure separately the lead days associated with three expenses that were contained
10 in the Company's lead-lag study but included in other expense categories. The
11 expenses are vacation pay and incentive compensation (which were included in the
12 Company's lead-lag study under payroll expense) and bad debt expense (which was
13 included in the Company's lead-lag study under other O&M expenses).

14 3. Measure separately lead days associated with two expenses that were not included in
15 the Company's lead-lag study. The expenses are Missouri Gross Receipts Tax
16 ("GRT") and sales tax.

17 **Q. PLEASE SUMMARIZE OPC'S RECOMMENDATIONS RELATED TO THE**
18 **COMPANY'S PROPOSED LEAD-LAG STUDY.**

19 A. OPC recommends an increase in the lead days associated with federal income taxes from
20 37.00 days to 365.00 lead days. OPC's rationale is that since the Company has not

¹ The Company's lead-lag study includes "Other Non-Labor O&M expenses" which Staff refers to as "Cash Vouchers".

1 submitted federal income taxes in at least four years, the higher lead days reflect money
2 that the Company received from customers for an expense that was never paid.²

3 **IV. SUMMARY OF THE COMPANY'S RESPONSE TO STAFF'S AND OPC'S**
4 **RECOMMENDATIONS**

5 **Q. PLEASE SUMMARIZE THE COMPANY'S RESPONSE TO STAFF'S**
6 **RECOMMENDATIONS.**

7 A. The Company's response is summarized below.

8 1. The Company does not oppose Staff's recommendation to change the lead days on
9 the expenses in the Company's lead-lag study, except cash vouchers. The proposed
10 changes largely reflect more recent data – as well as additional payment information
11 that helps to better define the service periods. In addition, the Company's study was
12 based on data for the period July 1, 2017 through June 30, 2018, while Staff's study
13 was based on data for the period April 1, 2018 through March 31, 2019.

14 2. The Company does not oppose Staff's recommendation to measure separately lead
15 days associated with vacation pay, incentive compensation and bad debt. The added
16 expenses represent a level of granularity not included in the Company's prior lead-lag
17 study; however, similar items have been included in other lead-lag studies in the
18 industry. The Company does oppose the proposed lead days for vacation pay and the
19 "zero" revenue lag for bad debt, as discussed below.³

20 3. The Company does not oppose Staff's recommendations to measure separately lead
21 days associated with the GRT and sales tax. The added expenses represent a level of

² Direct Testimony of John S. Riley on behalf of OPC, pg. 6.

³ Missouri Public Service Commission Staff Report on the Cost of Service, pg. 20.

1 granularity not included in the Company’s prior lead-lag study; however, similar
2 items have been included in other lead-lag studies in the industry. The Company
3 does not oppose Staff’s recommended lead days.⁴

4 **Q. PLEASE SUMMARIZE THE COMPANY’S RESPONSE TO OPC’S**
5 **RECOMMENDATIONS.**

6 A. The Company opposes OPC’s recommendation. First, the Company’s lead-lag study
7 reflects lead days consistent with payment due dates in Internal Revenue Service (“IRS”)
8 Publication 502. Payments are due on the 15th day of the 4th, 6th, 9th and 12th months of
9 the corporation’s year.⁵ Based on the Company’s fiscal year ending December 31, the
10 estimated payments are due on April 15, June 15, September 15 and December 15.
11 OPC’s recommendation to increase the lead days to 365.00 days is inconsistent with the
12 IRS’s payment schedule.

13 Second, if the Commission determines in this rate case proceeding that the
14 Company has no income tax expense, then the Company’s lead days would be applied to
15 a “zero” expense resulting in no cash working capital requirement. If, on the other hand,
16 the Commission determines in this rate case proceeding that the Company has income tax
17 expenses, then the Company’s lead days for income tax expenses would be applied to the
18 approved level, consistent with the IRS’s payment schedule.

⁴ Ibid, pg. 20.

⁵ <https://www.irs.gov/publications/p509>

1 **V. THE COMPANY'S OPPOSITION TO CERTAIN OF STAFF'S AND OPC'S**
2 **RECOMMENDATIONS**

3 **Q. PLEASE EXPLAIN THE COMPANY'S RATIONALE FOR USING DATA FROM**
4 **THE PERIOD JULY 1, 2017 THROUGH JUNE 30, 2018 FOR THE LEAD-LAG**
5 **STUDY.**

6 A. The Company's rationale for using data from the period July 1, 2017 through June 30,
7 2018 for the lead-lag study was to minimize rate case expenses. Specifically, the
8 Company wanted to utilize the same lead-lag study for its three rate case filings in
9 Kansas (December 2018), Oklahoma (March 2019) and Missouri (August 2019). The
10 period July 1, 2017 through June 30, 2018 was the test year for the Kansas rate case.

11 The Company's goal was to minimize rate case expense by using a single lead-lag
12 study for application to multiple rate case filings, since the Company's payment policies
13 and processes are generally consistent across the states. The only change to the lead-lag
14 study across the three states was the revenue lag, which reflected differences in customer
15 payment practices in each state.

16 **Q. WHY DOES THE COMPANY OPPOSE STAFF'S RECOMMENDATION TO**
17 **INCREASE THE LEAD DAYS ASSOCIATED WITH CASH VOUCHERS?**

18 A. The Company opposes Staff's recommendations to increase the lead days associated with
19 cash vouchers because it does not reflect a weighting of each stratum of the stratified
20 sample.

21 The Company's calculation of lead days associated with cash vouchers is based
22 on a stratified sample of invoices paid. The Company first calculates the lead days
23 associated with each stratum and then weights the lead days in each stratum by

1 proportion of total transactions in each stratum. Staff's calculation does not include the
2 last step: a weighting of the lead days in each stratum by the proportion of the total
3 transactions.

4 The cash working capital impact of this difference is significant. The Company's
5 calculation produces 29.21 lead days while Staff's calculation produces 35.14 lead days.

6 The difference is largely related to three invoices within the Company's sample of
7 274 invoices. Specifically, there are three invoices in the highest stratum 5 (i.e., those
8 invoices great than \$2,500) with an average lead day of 77.20 days, while the remaining
9 48 invoices in stratum 5 have an average day of 24.50.⁶ The Company's approach to
10 weight each stratum in proportion to the number of transactions addresses this variance.

11 If the Commission decides to use Staff's approach and remove the weight of each
12 stratum, then the Company recommends removing the three invoices referenced above.
13 They are outliers within the sample. Removing the three invoices does not jeopardized
14 the confidence level in the sample size, since the Company needed only 260 invoices to
15 produce a 95.0 percent confidence level, while the actual sample size is 274 invoices.

16 Removing the three invoices from stratum 5 reduces the lead days to 28.81 days,
17 which is generally consistent with the Company's proposed lead lag study.

18 **Q. WHY DOES THE COMPANY OPPOSE STAFF'S RECOMMENDATION**
19 **REGARDING LEAD DAYS ASSOCIATED WITH VACATION PAY?**

20 A. The Company opposes Staff's recommendation regarding lead days associated with
21 vacation pay because it is not consistent with how employees take vacation. Staff's

⁶ There are five strata in the stratified sampling process: Stratum 1 for invoices less than \$50.00; Stratum 2 for invoices between \$50.00 and \$150.00; Stratum 3 for invoices between \$150.00 and \$750.00; Stratum 4 for invoices between \$750.00 and \$2,500; and Stratum 5 for invoices over \$2,500.

1 approach assumes that employees wait a full year before taking their full allotment of
2 vacation. That is, Staff's approach assumes employees receive their vacation allotment
3 on January 1st and take their vacation on December 31st. The lead days associated with
4 Staff's approach is 365.00 days.

5 A more traditional approach to lead days associated with vacation pay is to
6 assume that employees take vacation uniformly throughout the year. That is, employees
7 receive their vacation allotment on January 1st and take their vacation by December 31st.
8 This approach assumes vacation is taken at the midpoint of the year rather than at the end
9 of the year. The Company proposes the more traditional approach and proposes to use
10 lead days associated with vacation pay of 182.50 days.

11 **Q. WHY DOES THE COMPANY OPPOSE STAFF'S RECOMMENDATION TO**
12 **HAVE "ZERO" REVENUE LAG DAYS ASSOCIATED WITH BAD DEBT**
13 **EXPENSES?**

14 A. The Company opposes Staff's recommendation to have a "zero" revenue lag days
15 associated with bad debt expenses since it does not reflect the collection lag from the
16 time a customer bill is considered uncollectible and charged to bad debt expense to the
17 time payment is received from customers. That is, there is a lag from the time the
18 expense is recorded to the time payment is received from customers. This lag represents
19 a cash working capital requirement that is not otherwise included in Staff's lead-lag
20 study.

21 **Q. WHY DOES THE COMPANY OPPOSE OPC'S RECOMMENDATION**
22 **REGARDING LEAD DAYS ASSOCIATED WITH INCOME TAX EXPENSES?**

1 A. As noted previously, the Company opposes OPC’s recommendation because it does not
 2 reflect the lead days associated with payment due dates in IRS Publication 502, and it
 3 does not reflect the Commission’s determination of income tax expense in this rate case
 4 proceeding.

5 **VI. CONCLUSION**

6 **Q. PLEASE SUMMARIZE THE IMPACT OF THE COMPANY’S REBUTTAL**
 7 **POSITION RELATIVE TO STAFF.**

8 A. Figure 1 (below) compares the Company’s rebuttal testimony to Staff’s direct testimony
 9 regarding the cash working capital requirement. The Company’s cash working capital
 10 requirement is based on the revised lead-lag days applied to Staff’s test year expenses to
 11 produce an “illustrative” apples-to-apples comparison between the Company’s rebuttal
 12 position and Staff’s filed position. The illustrative, apples-to-apples comparison is meant
 13 only to compare the Company and Staff’s cash working capital positions rather than
 14 represent the Company’s rebuttal position regarding test year expense levels.

15 **Figure 1: Comparison of Cash Working Capital Requirements**

	Cash Working Capital Requirement
Staff's Filed Position	\$ (2,438,165)
Decrease vacation lead days	\$ 783,483
Add bad debt revenue lag	\$ 216,514
Decrease voucher payment lead days	\$ 1,430,708
Empire's Rebuttal Position	\$ (7,460)

16

1 Specifically, the Figure compares Staff's filed position of negative \$2.4 million with the
2 Company's rebuttal position of negative \$7,460. The primary differences are: (1)
3 decrease in lead days associated with vacation pay of \$0.8 million; (2) add revenue lag
4 associated with bad debt expenses of \$0.2 million; and (3) decrease in lead days
5 associated with voucher payments of \$1.4 million.

6 **Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?**

7 A. Yes, it does.

The Empire District Electric Company

Missouri Jurisdiction

Case No. ER-2019-0374

Rebuttal Schedule TSL-R1

Page 1 of 1

The Empire District Electric Company

Cash Working Capital Requirement

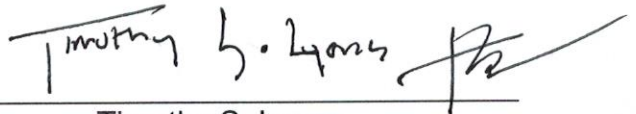
Line	Description	Revenue Requirement Amount	Average Daily Amount	Revenue Lag	Expense Lead	Net (Lead)/Lag Days	Working Capital Requirement
1	<u>Operation and Maintenance Expenses</u>						
2	Payroll Expense	\$ 35,624,278	97,601	42.13	(12.00)	30.13	\$ 2,940,711
3	Federal Income Tax Withheld	20,164,615	55,246	42.13	(15.50)	26.63	1,471,188
4	State Income Tax Withheld	340,877	934	42.13	(20.06)	22.07	20,611
5	FICA Tax Withheld	3,141,159	8,606	42.13	(15.50)	26.63	229,176
6	Accrued Vacation	1,566,966	4,293	42.13	(182.50)	(140.37)	(602,616)
7	Fuel - Coal	36,426,102	99,798	42.13	(25.11)	17.02	1,698,554
8	Fuel - Gas	40,664,865	111,411	42.13	(37.17)	4.96	552,597
9	Fuel - Purchased Oil	628,960	1,723	42.13	(21.47)	20.66	35,601
10	Purchased Power	40,778,894	111,723	42.13	(34.95)	7.18	\$ 802,171
11	401K	6,481,406	17,757	42.13	(11.06)	31.07	551,719
12	Life Insurance and AD&D	155,165	425	42.13	(25.75)	16.38	6,963
13	Employers Healthcare/Dental/Vision	4,652,391	12,746	42.13	(11.29)	30.84	393,095
14	Pension and OPEB Expense	9,806,685	26,868	42.13	(60.75)	(18.62)	(500,275)
15	PSC Assessment	903,545	2,475	42.13	25.50	67.63	167,416
16	Incentive Compensation	222,780	610	42.13	(290.50)	(248.37)	(151,594)
17	Bad Debt Expense	1,875,800	5,139	42.13	0.00	42.13	216,514
18	Cash Vouchers	88,062,129	241,266	42.13	(29.21)	12.92	\$ 3,117,158
19	<u>Total O&M Expenses</u>	\$ 291,496,617	\$ 798,621				\$ 10,948,987
20	<u>Taxes Other Than Income Taxes</u>						
21	FICA - Employer Portion	\$ 3,141,159	8,606	42.13	(15.50)	26.63	\$ 229,176
22	Federal Unemployment Taxes	19,919	55	42.13	(75.20)	(33.07)	(1,805)
23	State Unemployment Taxes	\$ 101,132	277	42.13	(75.20)	(33.07)	(9,163)
24	MO Gross Receipts Tax	9,923,690	27,188	26.92	(16.90)	10.02	272,426
25	Property Tax	\$ 18,610,532	50,988	42.13	(204.80)	(162.67)	(8,294,179)
26	Sales Tax	13,581,160	37,209	26.92	(4.53)	22.39	833,102
27	<u>Total Taxes Other Than Income Taxes</u>	\$ 45,377,592	\$ 124,322				\$ (6,970,443)
28	<u>Tax Offset From Rate Base</u>						
29	Federal Tax Offset	\$ 14,952,613	40,966	42.13	(39.38)	2.75	\$ 112,657
30	State Tax Offset	2,655,275	7,275	42.13	(39.38)	2.75	20,005
31	City Tax Offset	\$ -	-	0.00	0.00	0.00	\$ -
32	Interest Expense Offset	30,692,389	84,089	42.13	(91.11)	(48.98)	(4,118,666)
33	<u>Total Offset From Rate Base</u>	\$ 48,300,277	\$ 132,330				\$ (3,986,004)
34	<u>Total</u>	\$ 385,174,486	\$ 1,055,273				\$ (7,460)

AFFIDAVIT OF TIMOTHY S. LYONS

STATE OF VERMONT

)
) ss
)

On the 2ND day of March 2020, before me appeared Timothy S. Lyons, to me personally known, who, being by me first duly sworn, states that he a partner at ScottMadden, Inc and acknowledges that he has read the above and foregoing document and believes that the statements therein are true and correct to the best of his information, knowledge and belief.



Timothy S. Lyons

Subscribed and sworn to before me this 2ND day of March 2020.



Notary Public

My commission expires: 01/31/2021

