Exhibit No.:
Issues: Cost of Service and Rate Design
Witness: Timothy S. Lyons
Type of Exhibit: Surrebuttal and True-Up Direct 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

Surrebuttal and True-Up Direct Testimony

of

Timothy S. Lyons

on Behalf of

The Empire District Electric Company
A Liberty Utilities Company

March 2020

Liberty Utilities
EMPIRE DISTRICT

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TIMOTHY S. LYONS
ON BEHALF OF
THE EMPIRE DISTRICT ELECTRIC COMPANY
BEFORE THE
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SUBJECT..PAGE

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I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

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

Q. ARE YOU THE SAME TIMOTHY S. LYONS WHO PREVIOUSLY SPONSORED DIRECT AND REBUTTAL TESTIMONY IN THIS PROCEEDING?

A. Yes, I am. I sponsored direct testimony ("Direct Testimony") and rebuttal testimony ("Rebuttal Testimony") on behalf of The Empire District Electric Company ("Empire" or the "Company") before the Missouri Public Service Commission (the "Commission").

II. PURPOSE OF TESTIMONY

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL AND TRUE-UP DIRECT TESTIMONY?

A. The purpose of this surrebuttal/true-up testimony is to address concerns and recommendations related to the Company's proposed class cost of service study and rate design by witnesses Michael L. Stahlman, Sarah L. K. Lange and Robin Kliethermes on behalf of the Staff of the Commission ("Staff"), witness Kavita Maini on behalf of Midwest Energy Consumers Group ("MECG"), witnesses Geoff Marke and Lena M. Mantle on behalf of the Office of the Public Counsel ("OPC"), witness Emily Piontek on behalf of Renew Missouri, and witness Annika Brink on behalf of National Housing Trust ("NHT") in their rebuttal testimonies. In addition, this surrebuttal/true-up testimony will describe calculation of the Cash Working Capital requirement true-up.

Q. HAVE YOU PREPARED SCHEDULES TO SUPPORT THIS TESTIMONY?

A. Yes. Surrebuttal/True-Up Schedule TSL-SR1 summarizes the results of the Cash Working Capital requirement true-up. The Schedule was prepared by me or under my direction.

III. CASH WORKING CAPITAL REQUIREMENT TRUE-UP

Q. PLEASE SUMMARIZE THE COMPANY'S CASH WORKING CAPITAL REQUIREMENT INCLUDED IN THE TRUE-UP FILING.

A. The Company's Cash Working Capital requirement of (negative) $6.4 million included in the true-up filing is based on the Company's revised lead-lag days described in rebuttal testimony applied to the Company's adjusted test year expenses included in the true-up filing, as shown in Figure TSL-SR1. The Company's revised lead-lag days are described in rebuttal testimony and generally reflect Staff's recommended lead-lag days except the Company proposes to: (1) decrease lead days associated with vacation pay; (2) add a revenue lag associated with bad debt expenses; and (3) decrease lead days associated with voucher payments.[1]

[1] Rebuttal Testimony of Timothy S. Lyons, pg. 10.

IV. SUMMARY OF RECOMMENDATIONS PRESENTED BY THE NON-COMPANY PARTIES IN REBUTTAL TESTIMONY

Q. PLEASE SUMMARIZE THE RECOMMENDATIONS PRESENTED BY THE OTHER PARTIES IN THEIR REBUTTAL TESTIMONIES.

A. The recommendations presented by the other parties relate to the following topics:

1. Weather Normalization Rider ("WNR"). Staff and OPC stated concerns related to the WNR, including complexity, customer understanding and implementation issues.[2]
    a. In its place, Staff recommends the Sales Reconciliation to Levelized Expectations ("SRLE") mechanism to account for the impact of weather and conservation on Schedules Residential General ("RG"), Commercial Service ("CB") and Space Heating ("SH") revenues.[3]
    b. OPC does not support either the WNR or SRLE proposals, stating that the Company is already earning a fair rate of return and does not need the mechanisms. As an alternative, OPC recommends the Commission initiate a rulemaking process for implementation of such a mechanism.[4]
    c. NHT stated that if the Company proceeds with the WNR mechanism, it should include revenue normalization for the effects of conservation and energy efficiency ("EE") to remove disincentives to treat energy

[2] Rebuttal Testimony of Michael L. Stahlman, pgs. 2-5; Rebuttal Testimony of Lena M. Mantle, pgs. 2-7; and, Rebuttal Testimony of Geoff Marke, pgs. 13-14.
[3] Rebuttal Testimony of Michael L. Stahlman, pg. 5.
[4] Rebuttal Testimony Lena M. Mantle, pg. 7.

efficiency as an essential resource for addressing customer demand while avoiding new supply and lowering the energy burden on customers.[5]

2. Residential customer charges. Staff, OPC, Renew Missouri, and NHT stated concerns regarding the Company's proposed increase in the residential customer charge, including adverse impacts on low income customers, adverse impacts on customers' investments in EE and Distributed Generation ("DG"), and inclusion of certain distribution plant-related costs in the calculation of customer-related costs.[6]

3. The Class Cost of Service Study ("CCOS"). The other parties have expressed the following concerns and recommendations related to the Company' CCOS:

    a. Staff states that Secondary Distribution Plant is currently classified as only customer-related and should be classified as customer- and demand-related based on the minimum-system study.[7]

    b. MECG recommends allocating production costs with an average and excess ("A&E") allocation factor based on 6 months non-coincident peak loads ("6NCP"), correcting the calculation of load factor in the A&E derivation, and allocating distribution costs based single non-coincident peak ("NCP") loads.[8]

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[5] Rebuttal Testimony of Annika Brink, pg. 5.
[6] Rebuttal Testimony of Robin Kliethermes, pgs. 5-7; Rebuttal Testimony of Geoff Marke, pgs. 5-8; Rebuttal Testimony of Emily Piontek, pgs. 3-10; and Rebuttal Testimony of Annika Brink, pgs. 6-7.
[7] Rebuttal Testimony of Robin Kliethermes, pgs. 7-8.
[8] Rebuttal Testimony of Kavita Maini, pgs. 6-10.

Q. WHAT IS THE COMPANY'S RESPONSE TO THE OTHER PARTIES' REBUTTAL TESTIMONIES REGARDING THE PROPOSED WNR.

A. The Company supports Staff's Sales Reconciliation to Levelized Expectations ("SRLE") proposal with four modifications. First, the Company recommends an adjustment to the SRLE mechanism to address the partial loss of new customer and sales revenues. Under Staff's proposal, the Company would not retain between rate cases a portion of the incremental revenues associated with customer and sales growth. The incremental revenues are used to offset plant investments and expenses related to serving customer and sales growth. Under Staff's proposal, the Company would refund to all customers the incremental revenues associated with customer and sales growth above the proposed 400 kWh threshold. To correct for this, the Company proposes to remove from the reconciliation process the incremental revenues associated with customer and sales growth above the 400 kWh threshold. The Company proposes to calculate such incremental revenues based on the number of new premises (i.e., new service locations) applied to the incremental revenues associated with customer and sales growth above the 400 kWh threshold based on average residential and commercial customer kWh usage. For example, if the average residential kWh usage is 1,000 kWh per month, then the Company proposed to remove from the reconciliation process the incremental revenues associated with customer and sales growth between 400 kWh and 1,000 kWh times the number of new premises.

Second, the Company agrees with Staff that the reconciliation process should remove any customer migration from the Commercial (CB) or Space Heating (SH) classes to the General Power (GP) class. The Company proposes to engage Staff and the other parties regarding the mechanics to achieve this modification given the technical nature of the change.

Third, the Company proposes to implement the SRLE mechanism on a temporary basis to provide the Company, Staff, OPC and the other parties an opportunity to review and evaluate the SRLE mechanism's ability to achieve its objective of stabilizing revenues and customer bills and providing the Company with a better opportunity to earn its authorized rate of return.

Fourth, the Company proposes to implement the SRLE mechanism on a calendar basis effective with the Commission's order. Since the effective date of the order is July 11, 2020, this would result in a reconciliation of sales and revenues beginning January 1, 2020. The Company believes this approach is consistent with the goal of the SRLE mechanism: to stabilize the Company's revenues and customer bills. Absent a calendar year implementation, the Company could be faced with a lose-lose situation: incur the impact of lower than normal revenues in the first half of the year (due to warmer weather) but possibly credit to customer higher than normal revenues in the second half of the year. This possibility would be inconsistent with the goal of the SRLE mechanism. Instead, the Company proposes to implement on a calendar year basis with the reconciliation process beginning January 1, 2020.

Q. DOES THE COMPANY AGREE WITH OPC'S STATEMENT THAT NEITHER THE COMPANY'S PROPOSED WNR NOR STAFF'S SRLE IS NEEDED FOR THE COMPANY TO EARN A FAIR RETURN?

A. No. First, the Company's revenues and earnings are volatile due to variations in weather. The premise of Section 386.266.3 RSMo recognizes that gas and electric utility revenues are subject to increases and decreases due to variations in weather. The statute accepts that utility revenues are subject to variations in weather and thus authorizes the Commission to approve rate adjustments to correct for the impact of weather variations outside of a general rate proceeding. Second, the mechanisms would mitigate customer bills as well as company revenues. In other words, customers would receive a credit under either the WNR or SRLE mechanism for higher revenues related to weather.

Q. WHAT IS THE COMPANY'S RESPONSE TO THE OTHER PARTIES' REBUTTAL TESTIMONIES REGARDING THE RESIDENTIAL CUSTOMER CHARGE?

A. The Company has two concerns related to maintaining the current customer charge: (1) the current customer charge does reflect the underlying customer-related costs; and (2) the current customer charge continues ongoing intraclass inequities between high use and low use customers.

First, the Company believes that the proposed increase in the residential customer charge better reflects the underlying customer-related costs. As noted in the Company's rebuttal testimony, the difference between the Company and Staff's calculation of customer-related costs is related to certain customer-related facilities.[9] Specifically, Staff does not believe that FERC accounts 364-370 should not be considered customer-related costs for purposes of setting customer charges. Among other things, Staff references the Regulatory Assistance Project's ("RAP") handbook that was published in January 2020.[10]

[9] Ibid, pgs. 17-18.
[10] Rebuttal Testimony of Robin Kliethermes, pg. 6.

While the Company appreciates that the RAP Handbook provides new guidance for electric cost allocation methodologies as the electricity system evolves, the Company believes that the RAP Handbook methodologies require further review and analysis before dismissing the longstanding approach described in the NARUC Handbook. Specifically, the NARUC Handbook states:

> Distribution Plant Accounts 364 through 370 involve demand and customer costs. The customer component of distribution facilities is that portion of costs which varies with the number of customers. Thus, the number of poles, conductors, transformers, services, and meters are directly related to the number of customers on the utility system.[11]

The Company's approach of including FERC accounts 364-370 recognizes, for example, that the cost associated with overhead conductors and devices (FERC account 365) is driven by two factors: (1) the length of the conductor; and (2) the size of the conductor. The length of the conductor is determined by the distance to connect customers to the electric grid, while the size of the conductor is determined by customer demand. Thus, there is some portion of the cost that is not related to customer demand. It is that portion that the Company believes should be considered customer-related and used to support the customer charge.

Second, Staff's proposed residential customer charge continues ongoing inequities between low-use and high-use customers. Specifically, the Company's study shows that customer-related costs to serve residential customers is $28.95 for basic customer costs and $53.81 for fully-load customer costs. To the extent that the residential customer charge is less than the customer-related costs, as would be the case

[11] NARUC Handbook, pg. 90.

under Staff's proposed customer charge, then the remaining amount would be recovered in the consumption charge. As a result, the recovery of customer-related costs would be transferred from the customer charge to the consumption charge resulting in a shift in cost recovery from low use customers to high use customers. Increasing the customer charge helps correct for this intraclass subsidy.

While we agree that lower volumetric rates, all other things remaining the same, reduces a customer's incentive to conserve, there are other principles that need to be considered in establishing the Company's rate design. For example, if the only goal of the rate design is to maximize a customer's incentive to conserve, then customer charges would be set at the lowest possible level and the consumption charges would be set at the highest possible level. This type of rate design, however, would be unjust and unreasonable, since there would be a misalignment between a customer's rate and its underlying cost of service.

We believe a better approach is to set rates that reflect the underlying cost of service.

In the absence of customer charges that reflect customer-related costs, the Company's declining block structure helps mitigate the intraclass subsidy between low use and high use customers, since low use customers pay a higher rate for a portion of their consumption (reflecting recovery of some fixed costs) than high use customers.

Q. WHAT IS THE COMPANY'S RESPONSE TO STAFF'S CONCERN THAT SECONDARY DISTRIBUTION PLANT IS CURRENTLY CLASSIFIED AS ONLY CUSTOMER-RELATED?

A. We agree with Staff's proposed change that secondary distribution plant should be classified as customer- and demand-related utilizing the results of the Company's minimum-system analysis.

Q. WHAT IS THE COMPANY'S RESPONSE TO MECG'S CONCERN REGARDING THE ALLOCATION OF PRODUCTION AND DISTRIBUTION COSTS?

A. The Company addressed these issues in rebuttal testimony, except the load factor calculation.[12] The NARUC Manual shows a load factor calculation based on 1CP because the example reflects a single system peak. The NARUC Manual does not show a load factor calculation based on 12CP (i.e., twelve system peaks). Consequently, we assumed for consistency purposes to use a load factor calculation based on 12CP. This approach is consistent with the Company's CCOS study in its last rate case filing in Docket No. ER-2014-0351.

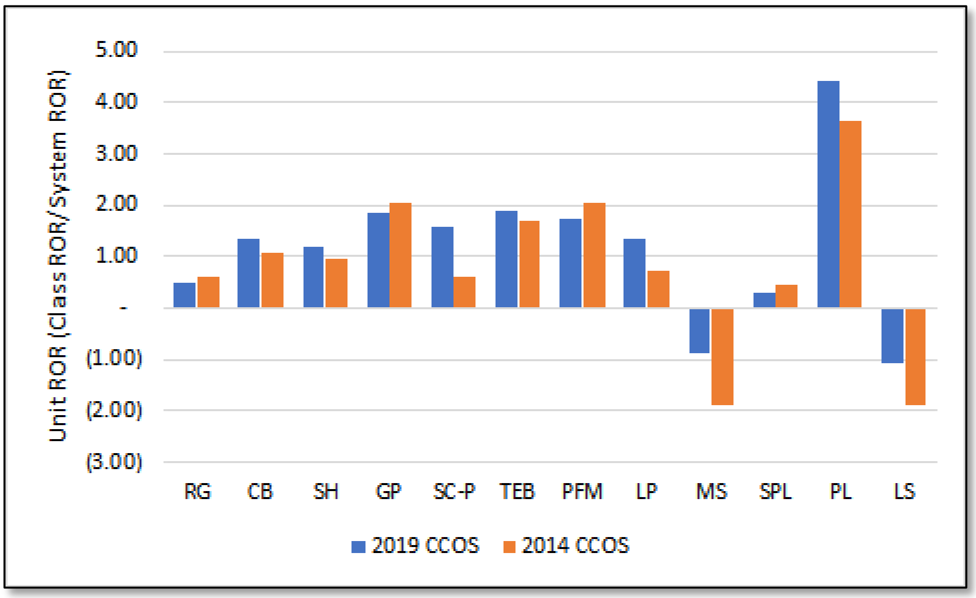
Q. DOES THE COMPANY AGREE WITH STAFF'S STATEMENT THAT "…NO PARTY'S CCOS IS OF PARTICULARLY HIGH QUALITY…."?[13]

A. No. We appreciate Staff's concerns regarding the data quality issues; however, the Company believes that the data quality issues do not result in a material impact on the results of the CCOS nor render them unreliable. The CCOS relies on aggregate customer data rather than individual customer data, and any concerns with individual customer data do not appear to impact the results of the CCOS.[14] This is substantiated by the results of the Company's CCOS in this proceeding which are generally consistent with the results

[12] Rebuttal Testimony of Timothy S. Lyons, pgs. 22-24, 27-29, 35-38.
[13] Rebuttal Testimony of Sarah L. K. Lange, pg. 21, lines 5-6.
[14] This may occur due to offsetting variances within the individual customer data, or variances within the individual customer data may be minimized when blended with actual meter reads.

of the Company's CCOS in its prior rate case proceeding in 2014, as shown in Figure 1 (below). The Figure shows the unit rate of return for each rate class in this proceeding is generally consistent with the unit rate of return in the prior rate case proceeding in 2014.[15]

Figure 1: Comparison of Unit Rate of Return



Q. DOES THIS CONCLUDE YOUR SURREBUTTAL AND TRUE-UP DIRECT TESTIMONY?

A. Yes.

[15] The Unit Rate of Return is calculated as the class ROR divided by the overall or system ROR. The Unit Rate of Return is an appropriate tool to compare two CCOS studies based on different system RORs.

VERIFICATION OF TIMOTHY S. LYONS

Timothy S. Lyons, under penalty of perjury, declares that the foregoing surrebuttal and true-up direct testimony is true and correct to the best of her/his knowledge, information, and belief.

/s/*Timothy S. Lyons*

Timothy S. Lyons

Line	Ref#	Description	Revenue Requirement Amount	Average Daily Amount	Revenue Lag	Expense Lead	Net (Lead)/Lag Days	Working Capital Requirement
1		Operation and Maintenance Expenses						
2	1	Payroll Expense	$ 31,374,040	85,956	42.13	(12.00)	30.13	$ 2,589,863
3	2	Federal Income Tax Withheld	7,322,076	20,060	42.13	(15.50)	26.63	534,211
4	2	State Income Tax Withheld	2,369,931	6,493	42.13	(20.06)	22.07	143,300
5	2	FICA Tax Withheld	4,068,147	11,146	42.13	(15.50)	26.63	296,808
6	**	Accrued Vacation	1,566,966	4,293	42.13	(182.50)	(140.37)	(602,616)
7	3	Fuel - Coal	25,059,943	68,657	42.13	(25.11)	17.02	1,168,549
8	3	Fuel - Gas	38,355,495	105,084	42.13	(37.17)	4.96	521,214
9	3	Fuel - Purchased Oil	1,750,437	4,796	42.13	(21.47)	20.66	99,080
10	3	Purchased Power	60,538,039	165,858	42.13	(34.95)	7.18	$ 1,190,858
11	4	401K	1,361,407	3,730	42.13	(11.06)	31.07	115,887
12	5	Life Insurance and AD&D	280,686	769	42.13	(25.75)	16.38	12,596
13	6	Employers Healthcare/Dental/Vision	6,682,463	18,308	42.13	(11.29)	30.84	564,622
14	7	Pension and OPEB Expense	19,685,896	53,934	42.13	(60.75)	(18.62)	(1,004,250)
15	8	PSC Assessment	1,145,025	3,137	42.13	25.50	67.63	212,159
16	9	Incentive Compensation	3,483,679	9,544	42.13	(290.50)	(248.37)	(2,370,524)
17	10	Bad Debt Expense	1,962,831	5,378	42.13	0.00	42.13	226,559
18	11	Cash Vouchers	132,537,183	363,116	42.13	(29.21)	12.92	$ 4,691,453
19		Total O&M Expenses	$ 339,544,244	$ 930,258				$ 8,389,767
20		Taxes Other Than Income Taxes						
21	12	FICA - Employer Portion	$ 2,451,154	6,715	42.13	(15.50)	26.63	$ 178,834
22	13	Federal Unemployment Taxes	18,808	52	42.13	(75.20)	(33.07)	(1,704)
23	14	State Unemployment Taxes	$ 93,876	257	42.13	(75.20)	(33.07)	(8,505)
24	15	MO Gross Receipts Tax	-	-	26.92	(16.90)	10.02	-
25	16	Property Tax	$ 25,985,842	71,194	42.13	(204.80)	(162.67)	(11,581,142)
26	**	Sales Tax	13,581,160	37,209	26.92	(4.53)	22.39	833,102
27		Total Taxes Other Than Income Taxes	$ 42,130,840	$ 115,427				$ (10,579,416)
28		Tax Offset From Rate Base						
29	17	Federal Tax Offset	$ 3,822,518	10,473	42.13	(39.38)	2.75	$ 28,800
30	17	State Tax Offset	5,328,194	14,598	42.13	(39.38)	2.75	40,144
31		City Tax Offset	$ -	-	0.00	0.00	0.00	$ -
32	18	Interest Expense Offset	32,105,752	87,961	42.13	(91.11)	(48.98)	(4,308,328)
33		Total Offset From Rate Base	$ 41,256,464	$ 113,031				$ (4,239,384)
34		Total	$ 422,931,548	$ 1,158,717				$ (6,429,033)

** Adopting Staff's numbers
1 From Payroll and Overtime adjustments.
2 From DR 25
3 From WP IS ADJ 12 - Fuel and PP - True-Up x the proration calculated within tab "B".
4 Account 926555
5 Account 926222
6 Accounts 926201, 926202, 926329
7 Accounts 426581, 426582, 426585, 926145, 926146, 926147, 926148, 926149, 926197, 926326, 926327, 926328
8 Account 928000
9 Incentive pay pulled from the Payroll adjustment.
10 Account 904037
11 Cash Vouchers is the difference between the true-up O&M minus all other categories in this CWC model.
12 Account 408141
13 Account 408511
14 Account 408512
15 Account 408930
16 Account 408610
17 From "Taxes Support" which can be found in the support folder for RB ADJ 12 - CWC
18 Synchronized Interest Expense from WP 8.1 (Rate Base x Weighted Cost of Debt)