Exhibit No.:
Issues: Class Cost of Service Study, Rate Design, and Cash Working Capital/Lead-Lag Study
Witness: Timothy S. Lyons
Type of Exhibit: Surrebuttal Testimony
Sponsoring Party: The Empire District Electric Company
Case No.: ER-2021-0312
Testimony Prepared: January 2022

Before the Public Service Commission
of the State of Missouri

Surrebuttal Testimony

of

Timothy S. Lyons

on behalf of

The Empire District Electric Company

January 2022

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THE EMPIRE DISTRICT ELECTRIC COMPANY
BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION
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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 Testimony and Rebuttal Testimony in this proceeding?

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

Q. What is the purpose of your Surrebuttal Testimony?

A. The purpose of this surrebuttal testimony is to address recommendations by the Staff of the Commission ("Staff") in the rebuttal testimonies of Sarah L. K. Lange related to the Company's proposed class cost of service study and Courtney Horton related to Cash Working Capital. In addition, this surrebuttal testimony will address the recommendations of the Office of the Public Counsel ("OPC") in the rebuttal testimonies of Dr. Geoff Marke related to the Company's proposed class cost of service study and rate design and John S. Riley related to Cash Working Capital.

II. RECOMMENDATIONS REGARDING RATE DESIGN

Q. What is the Company's response to Staff's recommendation to replace the GP and TEB rate schedules?[1]

A. The Company does not oppose Staff's recommendation to replace the GP and TEB rate schedules with two new rate schedules: Large General Secondary Service and Small General Primary Service. The Company agrees with Staff that the rates for the Primary and Secondary schedules should differ by the energy losses experienced in the transformations from primary to secondary voltage. The difference in energy losses is approximately 1.84 percent, based on the Company's Tariff Sheet No. 17, Fuel and Purchase Power Adjustment Clause.

Q. Does the Company agree with Staff's concern regarding the demand data used to derive the cost allocators in the CCOS study?[2]

A. No. There are no data, analyses or studies that support their concern that the data does not reflect class demands and should not be used to derive the cost allocators in the CCOS study. The Company's load research data has been used consistently in prior CCOS studies and has generally been accepted as a reasonable basis to allocate costs. Furthermore, there is no better data available to the Company to allocate costs.

While the Company agrees that rate switching occurred in the test year, rate switching generally occurs in any year – and the level that occurred in the test year did not appear to be extraordinary. Furthermore, the rate switching that occurred in the test year did not impact the overall results of the CCOS study since the results of the CCOS study are generally consistent with prior studies, as discussed below.

[1] Lange Rebuttal Testimony at p. 2.
[2] Lange Rebuttal Testimony, pp. 17-18.

Q. Does the Company agree with Staff's concern about selection of the production allocator?

A. No. Staff's concern appears based on an assumption that the production allocator allocates production costs largely based on peak capacity requirements. However, that is not the case. The Company's selection of the Average and Excess ("A&E") production allocator allocates production costs based on energy <u>and</u> peak capacity requirements. It is one of the methods recognized by NARUC. The NARUC Electric Utility Cost Allocation Manual states:

> The average and excess method is an appropriate method for the analyst to use. The method allocates production plant costs to rate classes using factors that combine the classes' average demands and non-coincident peak (NCP) demands.[3]

The A&E allocator consists of two demand components: average demand and peak demand. The first component of the A&E allocator is average demand, which represents the energy portion of production plant. It represents each rate class's share of the system average demand. This component is calculated as each class's share of total kWh sales. The average demand component is weighted by the system load factor representing that portion of the utility's generating capacity that would be needed if all customers used energy at 100.0 percent load factor.

The second component of the A&E allocator is excess demand, which represents the peak demand portion of production plant. It represents each rate class's share of the peak demand – i.e., the demand that exceeds the average demand. This component is

[3] Electric Utility Cost Allocation Manual, NARUC, p. 49.

calculated as each rate class's share of the excess demand – or the difference between the class peak demand and the class average demand.

The excess demand component is weighted by the remaining portion of production plant – i.e., by 1 minus the system load factor – and then added to the average demand component to derive the A&E allocator.

Q. What is the portion of average demand in the production allocator?

A. The portion of average demand in the production allocator is 57.30 percent. This represents the energy portion of the production allocator. The portion of excess demand in the production allocator is 42.70 percent.[4]

Q. Does the Company agree with Staff that it is unfair to allocate SPP revenues to each rate class based on the energy allocator?

A. No. The Company allocates SPP revenues to each rate class based on the energy allocator because there are operating costs associated with generating SPP revenues that are also allocated to each rate class based on energy.

Q. Does the Company agree with Staff regarding the allocation of the EV charging station?[5]

A. Yes. The Company agrees with Staff's recommendation that an allocator that includes both primary and secondary demands would be reasonable; however, the Company notes that such change would not substantially impact the CCOS study nor its results since the EV charging station investment represents less than 0.1 percent of total utility plant.

[4] Please refer to Schedule TSL-7.
[5] Lange Rebuttal Testimony, p. 21.

Q. Does the Company agree with Staff regarding allocation of the community solar investments?

A. Yes. The Company agrees with Staff's recommendation that an allocator that aligns the community solar revenues and investments would be reasonable; however, the Company notes that such change does not substantially impact the CCOS study nor its results since the solar facility investment represents less than 0.1 percent of total utility plant.

Q. Does the Company agree with Staff regarding allocation of regulatory expense?[6]

A. Partially. First, the allocation of regulatory expense is not based on labor expenses alone but on a composite allocator of non-A&G O&M expenses. It is a method recognized by NARUC.[7] Labor is a component of the composite allocator as well as other components, such as the number of customers. Nevertheless, the Company does not object to using revenues to allocate regulatory expenses, it is an accepted approach for allocation of regulatory expenses. According to the Regulatory Assistance Project ("RAP"),

> "Depending on the jurisdiction and the distribution of the regulator's efforts, the most equitable allocator may be class revenues or energy consumption."[8]

Q. Does the Company agree with Staff's concerns regarding the financial assumptions in the Company's CCOS study?[9]

A. No. The financial assumptions used to develop the CCOS study, such as capital structure and cost rates and income taxes, are reflective of the revenues, expenses and rate base costs allocated to each rate class. This approach is generally accepted in the industry.

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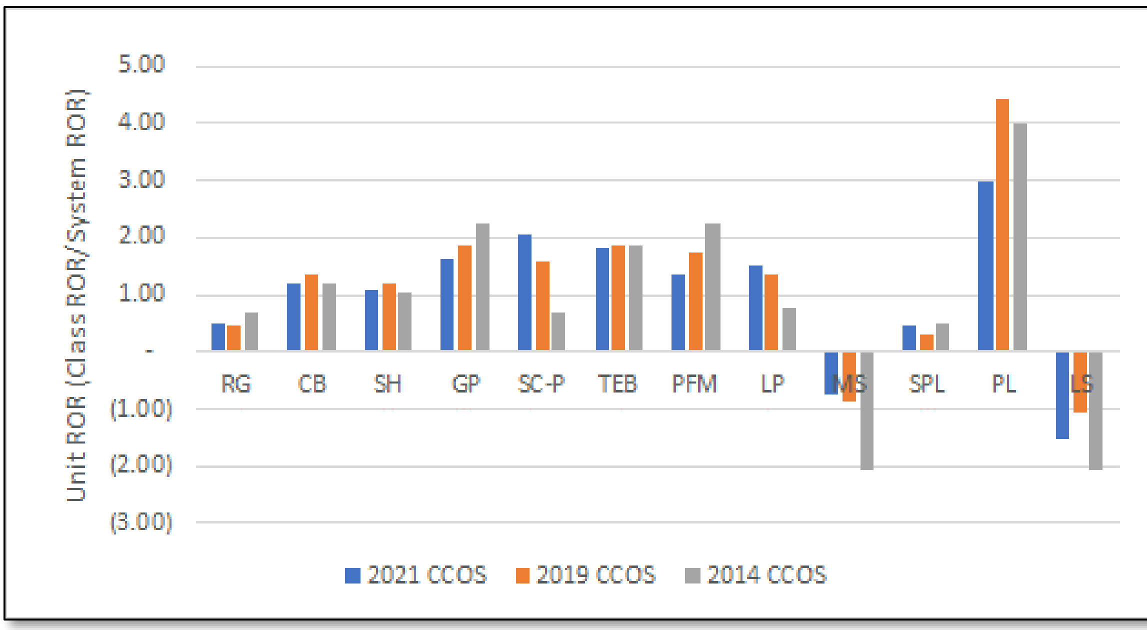
[6] Id., p. 22.
[7] Electric Utility Cost Allocation Manual, NARUC – p. 107.
[8] Electric cost allocation for a new era: A manual. Regulatory Assistance Project. – p. 166.
[9] Lange Rebuttal Testimony, p. 3.

Q. Does the Company agree with Staff's concerns regarding the reliability of the Company's CCOS study? [10]

A. No. The results of the Company's CCOS study in this proceeding are generally consistent with the results of the Company's CCOS study in its two most recent rate case proceedings in 2014 and 2019, 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 and 2019.[11]

Figure 1: Comparison of Unit Rate of Return



Moreover, the Company's approach to develop the CCOS study in this proceeding was generally consistent with the approach followed in the most recent rate case proceedings, which is based on the relationship between the service requirements for each

[10] Id., p. 23.
[11] 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.

rate class and their respective cost drivers. The approach is well established in industry literature.

While the Company recognizes the benefits of certain refinements to the CCOS study, such as consolidating rate classes and changes in specific cost allocators, the Company believes the Company's CCOS study provides important guidance on how to apportion the revenue requirement across the rate classes. As RAP states,

> Ultimately, the purpose of a cost of service study is to inform utility regulators about the relative contribution to costs by the various customer classes as one element in the decision on how to apportion the revenue requirement among classes.[12]

Q. What is the Company's response to OPC's recommendation to maintain the residential customer charge at $13.00 per month?[13]

A. The Company believes that maintaining the current residential customer charge maintains the current intraclass inequities between high use and low use residential customers. Specifically, the Company's study in direct testimony showed that customer-related costs to serve residential customers are $27.47 for basic customer costs and $55.15 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 in maintaining the $13.00 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

[12] Electric cost allocation for a new era: A manual. Regulatory Assistance Project. – p. 230.
[13] Rebuttal Testimony Marke, p. 50.

consumption charge, resulting in a shift in cost recovery from low use customers to high use customers. Increasing the customer charge helps correct this intraclass subsidy.

Q. What is the Company's response to OPC's recommendations regarding the CCOS study?[14]

A. The Company agrees with OPC regarding the principle of gradualism – it is consistent with the Company's approach used in direct testimony. However, the Company also recognizes the principles of fairness and equity and would support some level of revenue neutral shift based on the outcome of the Company's overall cost of service, subject to customer bill impacts consistent with the Company's filed position.

III. RECOMMENDATIONS REGARDING CASH WORKING CAPITAL

Q. Does the Company agree with Staff's recommended lead days for federal and state income tax expenses?[15]

A. No. As stated in my Rebuttal Testimony, the Company believes that lead days of 365 days are not appropriate, even if the Commission accepts the position that Empire will have no income tax liability in the foreseeable future. Lead days of 365 days assumes the Company would receive on the first day of the year money "earmarked" for its income tax expenses. This is not accurate – the Company would not receive money on the first day of the year for its income tax expenses. Rather, the Company would receive money over the course of the year for its income tax expenses, consistent with the Company's billing practices of issuing bills monthly. Thus, even if the Commission accepts the position that Empire will have no income tax liability in the foreseeable future, lead days of 182.5 days would be more appropriate.

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[14] Id., p. 42.
[15] Rebuttal Testimony Horton – p. 2.

Q. Does the Company agree with OPC's recommendation of 365 lead days for federal and state income tax expense?

A. No. As stated in rebuttal testimony, the Company continues to expect to be in a taxable position for calendar 2022.

However, accepting for the moment OPC's position that Empire has no income tax liability in the foreseeable future, the Company does not agree that lead days for federal and state income tax expenses should be 365 days. As stated in response to Staff's recommendation, lead days of 365 days assumes the Company would receive on the first day of the year money "earmarked" for its income tax expenses. This is not accurate. The more appropriate lead days would be 185.2 days which reflects that the Company would receive money over the course of the year for its income tax expenses.

IV. UPDATE TO CCOS STUDY AND RATE DESIGN

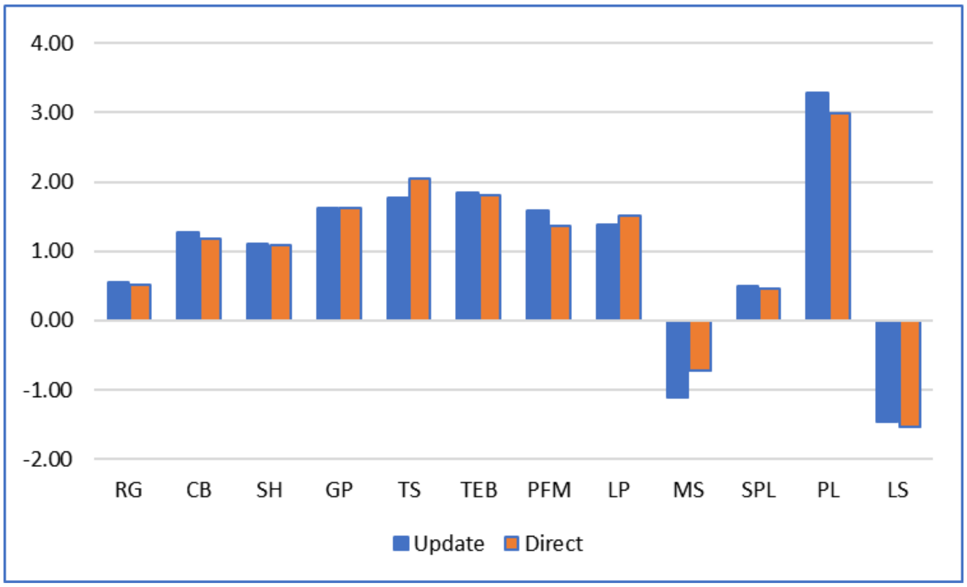
Q. Has the Company updated the CCOS and rate design as part of the update filing?

A. Yes. Specifically, the Company made the following changes to the CCOS study:

1. Incorporated Update Filing Revenue Requirements, including the updated proforma adjustments;
2. Allocated the Wind Partner Contribution/Distributions revenues based on the Production Cost Allocator, consistent with how wind generation plant costs are allocated; and
3. Revised allocation of Interruptible Credits, consistent with the Company's position in the Rebuttal filing.

The updated results of the Company's updated CCOS study are shown in Figure 2 (below). The Figure shows the unit rate of return for each rate class in the update filing compared to the unit rate of return in the Direct filing.

Figure 2: Comparison of Unit Rate of Return



Q. How have the customer bill impacts changed in the Company's Update Filing?

A. A comparison of customer bill impacts in the Update Filing and the Direct Filing is shown in Figure 3 (below). The bill impacts in the Direct Filing were presented in the MFR Schedule 3 filed as Schedule TSL-10.

Figure 3: Comparison of Customer Bill Impacts

Rate Class	Average Customer Impact (w/o Storm Uri) Update	Direct	Difference %
RG	9.8%	9.3%	0.5%
CB	12.8%	12.3%	0.6%
SH	13.2%	12.7%	0.5%
GP	10.8%	10.4%	0.4%
TS	4.1%	4.1%	0.0%
TEB	10.6%	10.3%	0.4%
PFM	12.8%	11.8%	0.9%
LP	10.8%	10.5%	0.3%
MS	13.1%	12.9%	0.1%
SPL	17.9%	16.9%	1.0%
PL	9.1%	8.7%	0.4%
LS	15.6%	11.8%	3.8%

Q. Does this conclude your Surrebuttal Testimony?

A. Yes.

VERIFICATION

I, Timothy S. Lyons, under penalty of perjury, on this 20th day of January, 2022, declare that the foregoing is true and correct to the best of my knowledge and belief.

/s/ Timothy S. Lyons