Exhibit No.:

Issue: Class Cost of Study, Revenue

Allocation, Rate Design

Witness: Kavita Maini
Type of Exhibit: Rebuttal Testimony

Sponsoring Parties: MECG
Case No.: ER-2024-0261
Date Testimony Prepared: August 18, 2025

# BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of The Empire District
Electric Company d/b/a Liberty for
Authority to File Tariffs Increasing Rates
for Electric Service Provided to
Customers in Its Missouri Service Area

)

Customers of The Empire District

File No. ER-2024-0261

Rebuttal Testimony and Schedules of

### Kavita Maini

On behalf of

#### MIDWEST ENERGY CONSUMERS GROUP

August 18, 2025



# BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of The Empire District	_ )	
Electric Company d/b/a Liberty for	)	
<b>Authority to File Tariffs Increasing Rates</b>	)	File No. ER-2024-0261
for Electric Service Provided to	)	
<b>Customers in Its Missouri Service Area</b>	)	

# TABLE OF CONTENTS

		Page
	INTRODUCTION	1
I.	CLASS COST OF STUDY	2
II.	REVENUE REQUIREMENT ALLOCATION	11
III.	RATE DESIGN	13

# BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of The Empire District	)	
Electric Company d/b/a Liberty for	)	
<b>Authority to File Tariffs Increasing Rates</b>	)	File No. ER-2024-0261
for Electric Service Provided to	)	
<b>Customers in Its Missouri Service Area</b>	)	

# **Rebuttal Testimony of Kavita Maini**

1

2

7

13

Q.

Q.

**INTRODUCTION** 

Please state your name and occupation.

Service ("TS") Schedules respectively.

	_	-
3	A.	My name is Kavita Maini. I am the principal and sole owner of KM Energy Consulting,
4		LLC.
5	Q.	Please state your business address.
6	A.	My office is located at 961 North Lost Woods Road, Oconomowoc, WI 53066.

Are you the same Kavita Maini that previously filed Direct Testimony in this case?

- A. Yes, I filed direct testimony on behalf of the Midwest Energy Consumers

  Group("MECG"). My direct testimony provided recommendations regarding Empire

  District Electric Company d/b/a Liberty's ("Liberty" or "Company") class cost of

  service study ("COSS"), revenue allocation to classes and rate design on its Large

  General Service ("NS-LG", "TC-LG") Large Power Service ("LP") and Transmission
- 14 Q. Having reviewed the testimony offered by other parties on CCOS, revenue 15 allocation, and rate design, have your recommendations changed?

- 1 A. No. I continue to support the methods and recommendations I make in my direct testimony. The Average and Excess method using four non-coincident peaks ("A&E 2 4NCP") is appropriate for allocating all fixed production plant-related costs. My 3 revenue allocation recommendation is careful to incorporate gradualism to temper the 4 5 rate impacts for some classes due to magnitude of the overall rate increase while also 6 incorporating fairness by making some movement towards cost of service. Lastly, on 7 rate design, my recommendations follow cost of service principles and will lead to more 8 efficient rate design.
- 9 Q. What is the purpose of your rebuttal testimony?
- 10 A. The purpose of my rebuttal testimony is to address Staff's and Consumer Council of
  11 Missouri's COSS methodology and revenue allocation recommendations as well as
  12 Staff's recommendations applicable to the rate design associated with the Large General
  13 Service, Large Power Service and Transmission Service respectively. The fact that I do
  14 not address any particular issue should not be interpreted as my implicit approval of any
  15 position taken by Staff or other intervening parties on that issue.

1617 I. COST OF SERVICE

18

24

A. Staff's Production Cost Allocator

- 20 Q. What is Staff's approach for functionalizing and allocating production costs?
- 21 A. I understand Staff's approach as described in Ms. Sarah Lange's direct testimony to be 22 as follows:
- 23 1. Staff first sub functionalizes generation resources as either Type 1 or Type 2:
  - Type 1 resources are those assets which have significant variable costs of operations;

1	•	Type 2 resources are those assets with no or minimal variable costs of operations,
2		where asset dispatch is often limited by weather conditions or other factors.

1.

- 2. Once the generation resources are sub functionalized into Type 1 and Type 2 resources,

  Staff uses different allocators to allocate the revenue requirements of Type 1 and Type

  2 resources to the classes:
- Type 1 resources are allocated based on an average and excess allocator with class contribution to two non-coincident peaks for the excess portion (or "A&E 2NCP).
- Type 2 resources are allocated to classes on the basis of the energy allocator.
- 9 Q. Do you have any concerns regarding Staff's approach to allocating production function related costs?
- 12 A. Yes. I do. Staff's method results in allocating costs inconsistent with cost causation. I
   13 have the following concerns:
  - Type 1 Resource Allocator and Type 2 Resource Allocator Issues. Staff did not provide adequate justification of why it was relevant from a cost causation perspective to divide the resource types into two different categories. Based on footnote 42 in Ms. Lange's testimony, it is my understanding that Staff found it necessary to sub functionalize generation and allocate using a different approach because Staff does not consider the traditional demand and energy classification of production costs to be representative of cost causation of the Company's production cost of service and revenues due to participation in the Southwest Power Pool (or "SPP") market. However, Staff does not adequately justify why participation in the SPP market necessitated sub functionalization and negated the long established and well recognized average and excess methodology.

2. Capacity Value of Type 2 Resource. By allocating all Type 2 resource related costs on the basis of energy consumption to classes, Staff failed to account for the capacity value associated with these resources. The Company relies in part on the accredited capacity associated with these resources to fulfill resource adequacy requirements.

Consequently, Staff's method deviates from cost causation by allocating these resources based on energy consumption.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

3.

Calculation of the Average and Excess 2 NCP (or "A&E 2NCP") allocator. A review of the working papers for the calculation of the A&E 2NCP allocator shown on page 5 of Dr. Hari Poudel's direct testimony shows that Staff incorrectly applies the same loss factor for the transmission class as is used for the residential and other classes that take service at the secondary voltage service level. Further, there appears to be an issue with the non-coincident demand peak data for the transmission service class since the average demand calculation is higher than 2NCP demand for this class. That the average demand would be higher than the highest demands seems unlikely. Given these discrepancies for just one class that are readily observable, I am concerned that Staff's data used in the class cost of service study may have other issues that are not as easily identifiable. Staff's working papers do not show the methodology used to adjust for losses for the demand data or how the demand data was produced. Further, the A&E allocator shows a separate allocator for an EV class. However, I do not see an EV class in the class cost of service study results. As a result of these issues, I am concerned about whether Staff's development of allocators are based on credible data and whether the derivations were accurate.

<sup>&</sup>lt;sup>1</sup> See A&E Workpaper Poudel.xlsx

1	Q.	Do you agree that the long standing and established COSS method for classifying
2		and allocating production costs no longer apply since Liberty is participating in
3		the SPP market?

- A. No, I do not agree. Liberty's participation in the SPP market does not invalidate the fact that the primary reasons it built or acquired generation capacity is sized to meet system peak demands and the type of capacity that was built is primarily a function of the load characteristics of the system.
- 8 Q. Is it necessary to sub functionalize generation into Type 1 and Type 2 resources?
- 9 No. Ultimately the allocation of production plant should be predicated on load A. 10 characteristics on the Company's system, not the operating characteristics of any one 11 or more generation resources. MECG's A&E 4NCP allocator is such an allocator 12 because it considers the load profile of customer classes by incorporating the 13 maximum demands, load factor and energy use. Consequently, the method inherently 14 considers cost causative drivers (i.e., load factor, class contributions to energy 15 consumptions and system peak demands) that result in constructing or acquiring a 16 resource.
  - Q. Have the other Missouri investor owned utilities such as Evergy or Ameren started using another method in lieu of the Average and Excess method to allocate production investment related costs due to participation in organized markets?

18 19

- A. No. as evidenced in the most recent rate cases filed in 2024, both Evergy and Ameren that participate in organized energy markets such as SPP and MISO, continue to use the Average and Excess methodology to allocate all fixed production plant related costs to customer classes.
- Q. What do you conclude regarding Staff's method to allocate production function related costs?

A. Given the above mentioned concerns, I conclude that Staff's allocation of fixed 3 production plant related investment deviates away from cost causation. Consequently, 4 I am not supportive of Staff's method of sub functionalizing production investment 5 based on operational characteristics of generation resources. In contrast, the 6 A&E4NCP allocation methodology is a long standing and established approach that 7 considers class contributions to the load profile, system peak demands and energy 8 consumptions reasonably assigns costs to cost causation. Therefore, as discussed in 9 my direct testimony, I continue to recommend adoption of MECG's A&E4NCP 10 allocator.

B. Staff's Distribution Plant Related Classification and Allocation

Q. What is Staff's approach to classifying and allocating distribution plant related costs for FERC accounts 364-368?

14 15

16

17

18

A.

11

As indicated in the NARUC manual, equipment related costs booked in FERC accounts 364-368 can be classified as customer and demand related. Generally speaking, I understand that Staff's approach is aimed at demonstrating that Liberty's minimum distribution system over classified costs in these accounts as customer related.

Since Staff has made several changes to the minimum system related details in the class cost of service study, it would make sense to review the Company's rebuttal to Staff's assertions before weighing in. For instance, I suspect that there are likely many assumptions that require context regarding why a particular equipment or related cost was chosen as a minimum size which Staff may not have considered. Issues such as current standard sizes, engineering issues, cost effectiveness, market availability and safety standards could be some of the reasons why the equipment may not be the absolute minimum but is used to make the grid ready to provide customers with access to the distribution network.

A.

From an allocation perspective for costs classified as demand, Staff's use of class contribution to 12 coincident peaks to allocate distribution plant is inconsistent with cost causation. Since distribution infrastructure needs to be sized to meet maximum demands, a measure of non-coincident peaks is more appropriate. Further, in order to be able to accommodate the maximum demand, the one-NCP approach as used by the Company is more appropriate and tied to cost causation.

# Q. In your view, is the Company's classification and allocation of distribution plant related costs reasonable?

Yes. The Company's methodology for FERC accounts 364-368 is reasonable and consistent with guidance provided in Chapter six of the NARUC manual regarding classification and allocation of distribution plant including the minimum system approach. Further, as described in Mr. Timothy Lyons' direct testimony on pages 20-21, for distribution related investment in poles (FERC account 364) and underground conduits (FERC accounts 366), the Company conducted the minimum system and zero intercept methods and chose the lower percentage for customer related classification. Therefore, the Company adopted a relatively conservative approach to classifying certain distribution plant related cost as customer related.

C. Consumers Council of Missouri's Classification of Distribution System Costs Related to Minimum System

Q. What approach does the Consumers Council of Missouri recommend in lieu of the minimum system?

A. Ms. Caroline Palmer recommends the basic customer method where all costs in FERC
 accounts 364 through 368 are classified as demand related.

# Q, Do you support this approach?

A. No. I do not support the basic customer methodology as it fails to recognize the dual purpose of the distribution network and deviates from cost causation. Infrastructure is needed to provide access to the grid before electricity can flow into the distribution network.

On the other hand, the minimum system is a long established approach, widely used by utilities including the Company and recognized in the NARUC manual.<sup>2</sup> I support this approach as it recognizes the basic premise that that the distribution system exists to serve a dual purpose: 1) being capable of delivering service to customers' residences or businesses (customer costs), and 2) ensuring that the distribution system is large enough to provide reliable service (demand costs).

14 15

21

3

8

9

10

11

12

13

### D. Staff's Allocation of Administration and Overhead Function

# 16 Q. How did Staff allocate items that were functionalized as administrative and overhead costs?

As indicated in Ms. Lange's direct testimony on page 69, Staff allocated the administrative and general cost of service to the classes on the basis of the cost of service directly allocated to each class.

# Q. How do you interpret this recommendation?

<sup>&</sup>lt;sup>2</sup> See page 90 of the NARUC manual, which acknowledges that there are demand and customer related costs associated with certain distribution plant related costs. The NARUC manual describes the minimum size and minimum intercept or zero intercept as two methods to classify certain distribution investment into demand and customer components.

A. While it was not clear what Staff meant by "cost of service directly allocated to each class", a review of the working papers shows that she calculated the allocation based on each class's share of the total cost of service responsibility after excluding revenues that are not subject to adjustment.

### Q. Please comment on Staff's recommended approach.

It is important to note at the outset that I do not support Staff's administrative and general cost allocation as a whole because the allocation for such costs is derived from Staff's other cost allocations to classes (such as generation investment) that I do not support. Further, it is not clear why Staff failed to develop and use composite allocators internal to the cost of service study model and instead chose to conduct the allocation of administrative and general costs outside of the model. In order to prevent any unintended issues in the allocation or other steps, it would be more reasonable to implement the Company's approach of developing composite allocators <sup>3</sup> instead of treating administrative and general services as a separate class in the model.

Regarding the items functionalized as administrative and general, I do not take a position at the present time. I have submitted a discovery request to the Company regarding this matter and may provide further feedback in surrebuttal testimony. Finally, assuming for argument's sake that all the costs have been appropriately functionalized administrative and general costs, Staff's current approach of allocation deviates from cost causation as it does not differentiate allocation to classes between rate based related administrative cost and expense related costs.

A.

<sup>&</sup>lt;sup>3</sup> See Timothy Lyons Direct Testimony page 27.

<b>E</b> .	Staff's	Cost of	Service	Study –	Other	Issues

# Q. Do you have any other comments or concerns about Staff's cost of service study?

# A. Yes. I note the following:

First, Staff's class cost of service study is not complete as it does not show the impacts of the full revenue requirement reductions recommended by Staff. While Staff has recommended a revenue requirement increase of \$121.8 or 23.7%, the class cost of study is based on a revenue requirement increase of \$139.5 million or 27.16%. In my view, the class cost of service study should be fully reflective of all of staff's revenue requirement reductions for consistency and to avoid creating and embedding additional cross subsidies in an opaque fashion.

Second, I have not been able to locate Staff's recommended treatment of interruptible credits associated with the transmission service customer class. I believe that the revenues associated with the transmission service class are underestimated and do not properly reflect the interruptible credit. The improper treatment of interruptible credits is one of the factors for Staff's class cost of service study showing an above average increase for the transmission class.

Since all the fixed production plant-related costs were allocated to interruptible load as though it is receiving firm service, the base revenues need to be firmed up to match up the revenues with the costs. Failure to do so would result in a mismatch between revenues and costs for such load because, for costing purposes, the treatment assumes that interruptible load is receiving firm service. However, the revenues do not account for the interruptible credit. This mismatch results in underestimating the

revenues and the rate of return earned from classes with interruptible load such as the transmission service class.<sup>4</sup> Staff needs to address this discrepancy.

# II. REVENUE REQUIREMENT ALLOCATION

# Q. What is Staff's recommended revenue allocation to classes?

- A. Staff has a primary recommendation and an alternative recommendation with regards
   to revenue allocation to classes:
  - 1. The primary recommendation consists of two steps. In the <u>first</u> step, assign an equal percent increase to all classes based on a revenue requirement increase of \$139,529,409 or 27.16% over current rate revenues. This revenue requirement increase is a higher increase than Staff's actual recommended revenue requirement since it excludes Staff's Customer First disallowance of \$17,726,292. In the <u>second</u> step, use all of Staff's recommended Customer First disallowance of \$17,726,292 to offset the increase to the residential class only. This results in an increase of 20.13% for the residential class with other classes above the 27% increase.
  - 2. Staff's alternative recommendation is to follow its class cost of service study results associated with a revenue requirement increase of \$139,529,409 or 27.16% over current rate revenues which, as noted above, does not include the Customer First disallowance. Staff's cost of service study shows an above average increase of 36%, 34%, and 29% for the residential, transmission service and lighting classes respectively. All other classes show a below average increase. In the first step on this alternative approach,

<sup>&</sup>lt;sup>4</sup> Both the Company and MECG's COSS includes a firming up revenue adjustment for the transmission service class. This is done by increasing the transmission service class revenue by the amount of the interruptible credit and allocating the credit to firm load only. For example, since the Company's COSS model, rows128-130 in the input revenues tab.

Staff removes 5% of return on rate base from the total cost of service increase for each class. In the second step, it applies the entire Customer First disallowance to the residential class only. This option results in a 26.88% increase for the residential class, no increase to the lighting class, below average increases to other classes and the highest and above average increase going to the transmission service class which provides interruptible service to benefit the system. The table below is copied and pasted from Ms. Lange's testimony on page 73.

	Residential	GS	LGS	SPS	LPS	Transmisison	Lighting
Retail Rates Subject to Adjustment	\$248,723,854	\$ 61,348,830	\$113,803,768	\$ 10,627,572	\$ 68,014,268	\$ 4,674,852	\$ 6,537,778
Required Revenue	\$337,044,437	\$ 69,899,603	\$136,292,514	\$ 11,943,112	\$ 83,413,729	\$ 6,230,146	\$ 8,436,792
Revenue Responsibility Adjusted for Customer First	\$315,570,519	\$ 71,075,289	\$139,206,022	\$ 11,977,731	\$ 83,592,758	\$ 6,177,749	\$ 8,318,331
Increase	\$ 66,846,665	\$ 9,726,459	\$ 25,402,255	\$ 1,350,158	\$ 15,578,489	\$ 1,502,897	\$ 1,780,553
Percent Increase to "Average" Customer Bill	26.88%	15.85%	22.32%	12.70%	22.90%	32.15%	27.239

# Q. How do you respond to Staff's revenue allocation recommendations?

A. I do not support Staff's revenue allocation recommendations for the following reasons:

1. First, it is neither fair nor equitable to allocate Customer First disallowance to only one customer class. All customers should benefit from any disallowance associated with Customers First since all customers are being asked to pay for this investment. Not just the residential class as Staff proposes.

by any study including Staff's own class cost of service study results. Further, Staff's

2. Second, Staff's primary recommendation of an equal percent increase is not supported

primary recommendation does not actually result in an equal percent increase for all

increase compared to other classes. It is notable that Staff's own cost of service study

shows an above average increase for the residential class.

classes because the residential class receives a much lower and below system average

- Third, even if the proposed Customer First disallowance was applied in an equitable
   fashion in the alternative recommendation, I oppose this recommendation because it is
   based on Staff's cost of service study and methods which I do not support.
- 4 Q. Do you support the revenue allocations recommendations submitted by the Consumers Council of Missouri (or "CCM")?
- 7 A. No. since CCM's revenue allocation recommendations are based on a COSS approach that deviates from cost causation, I do not support this recommendation.

## 10 III.RATE DESIGN

6

- 11 Q. What recommendations does Staff have for non-residential rate classes in this rate case?
- 13
  14 A. Staff recommends an equal percent approach to all components of the rate design. In
  15 addition, Staff is recommending a time differentiated demand charge and has provided
  16 high and low end estimates of the rates customers could expect based on the
  17 Company's proposed revenue requirement.
- 18 Q. Please comment on Staff's proposal.
- I do not support an equal percent increase as I previously discussed in the rate design section starting on page 24 of my direct testimony. In my direct testimony, aside from a recommended increase to the interruptible credit applicable to the transmission service class, I provided specific recommendations for energy and demand charges applicable to the LGS and LPS rate classes respectively. Staff's equal percent approach would be inconsistent with cost of service guidance and perpetuate inefficient rates.

With regards to Staff's recommendation for a time differentiated demand charge, while I am supportive of such a concept, I am highly concerned about the lack of confidence with the billing determinants and the resulting uncertainty in the demand charges.<sup>5</sup> Further, I question whether the Company is able to accommodate additional billing challenges at the present time. Therefore, I am not supportive of implementing a time differentiated demand charge in the current case.

Instead of implementing any time variant changes in this case, I would like to work in collaboration with the Company and other interested parties to develop and evaluate a proper time variant rate which encompasses energy and demand charges that are time differentiated in advance of the Company's next rate case.

- 11 Q. Does this conclude your rebuttal testimony?
- 12 A Yes.

<sup>&</sup>lt;sup>5</sup> Staff provides a wide range of demand charges especially for the Large Power class as shown in her schedule SLKL-d4.