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Staff – Exhibit 124
Direct Testimony of Sarah L. K. Lange
Case No. ER-2026-0143

Exhibit No.:	
Issue(s):	*Rate Design and Tariff Recommendations*
Witness:	*Sarah L.K. Lange*
Sponsoring Party:	*MoPSC Staff*
Type of Exhibit:	*Direct Testimony*
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MISSOURI PUBLIC SERVICE COMMISSION

INDUSTRY ANALYSIS DIVISION

TARIFF / RATE DESIGN DEPARTMENT

DIRECT TESTIMONY
RATE DESIGN

OF

SARAH L.K. LANGE

EVERGY METRO, INC. d/b/a
EVERGY MISSOURI METRO

CASE NO. ER-2026-0143

Jefferson City, Missouri
July 2026

*** Denotes Highly Confidential Information ***

TABLE OF CONTENTS OF

RATE DESIGN DIRECT TESTIMONY OF

SARAH L.K. LANGE

EVERGY METRO, INC. d/b/a EVERGY MISSOURI METRO

CASE NO. ER-2026-0143

SUMMARY 1

STAFF RATE DESIGN REPORT 1

ALLOCATION ISSUES RELATED TO LARGE LOADS 3

RECOMMENDED LLPS TARIFF CHANGES AND CLARIFICATIONS 5

CORRECTION 8

CONCLUSION 11

DIRECT TESTIMONY

OF

SARAH L.K. LANGE

EVERGY METRO, INC. d/b/a EVERGY MISSOURI METRO

CASE NO. ER-2026-0143

Q. Are you the same Sarah Lange who provided revenue requirement direct testimony in this matter?

A. Yes.

SUMMARY

Q. What is the purpose of this rate design direct testimony?

A. In this testimony, I will:

- Sponsor the Rate Design Report of the Staff ("Staff") of the Missouri Public Service Commission ("Commission") for the implementation of the recommended increase for Evergy Missouri Metro ("EMM").
- Discuss how the treatment of large load revenue impacts class cost of service allocation results,
- Recommend changes to tariffs related to Schedule LLPS, Large Load Power Service:
    - Commencement date clarification, and
    - Clarification of the application of Contract Demand.
- Provide correction of the tables in my June 30, 2026, testimony at pages 13 and 15.

STAFF RATE DESIGN REPORT

Q. Could you summarize Staff's rate design recommendations provided in the Rate Design Report?

A. Yes. Staff's Rate Design Report generally recommends equal percentage increases to all customer classes and all rate components. Consistent with Evergy Missouri Metro's ("EMM") request to restructure its non-residential non-lighting rates, Staff recommends restructuring those rates.[1] However, Staff recommends that the implementation of that restructuring be delayed until November 1, 2027, to facilitate continued work on rate calculation, robust customer education, and detailed billing system work. Staff also recommends creation of a new Critical Peak Rate ("CPR"), to encourage conservation and mitigate Fuel Adjustment Clause ("FAC") impacts related to severe weather events.

The Rate Design Report also provides specific recommended tariff changes.

Q. Did Staff perform a Class Cost of Service ("CCOS") study in this case?

A. No. It is not feasible in this case to conduct a reliable Class Cost of Service study due to EMM's class restructuring, and due to the incorporation of new load, capacity requirements, and revenue associated with large customers. A robust CCOS study is a useful tool for consideration in developing reasonable rates for customer classes. However, a CCOS study is only as reliable as the data it evaluates. In this case, it is not possible for any party to produce a useful CCOS study due to movement of customers between classes as a consequence of class restructuring and the incorporation of significant new load without information concerning that load's usage profile.

[1] This is also consistent with the *Staff Report on Distributed Energy Resources*, filed April 5, 2018, in File No. EW 2017-0245, concerning residential and utility-wide rate design.

ALLOCATION ISSUES RELATED TO LARGE LOADS

Q. If there are two CCOS studies prepared, with the first study allocating the full cost of serving a large load and the full revenue of the large load, and the second study allocating the net revenue of the large load, will the results be the same?

A. No, different results would be expected.

Q. Can you walk through an example using illustrative allocators and amounts?

A. Yes. Shown below are determinants for a hypothetical utility, with demand in MW and energy in MWh, and with the LLPS class fully reflected in the calculation of the allocators:

	Residential	General Service	Large Power	LLPS
Demand	100	30	40	100
Energy	350,400	131,400	210,240	613,200
Customer Count	20,000	600	10	1

Example allocators calculated using these determinants and including the LLPS are as follows:

	Residential	General Service	Large Power	LLPS
A&E with LLPS	37.04%	11.11%	14.81%	37.04%
Simple Energy with LLPS	26.85%	10.07%	16.11%	46.98%
Simple Transmission with LLPS	31.69%	10.56%	15.49%	42.25%
Simple Distribution	82.50%	14.89%	2.60%	0%

The CCOS results are set out below. Note, in this calculation, "Other" is allocated based on the allocation of previously allocated amounts:

Example CCOS with LLPS		Residential	General Service	Large Power	LLPS
$ 58,735,800	Generation	$ 21,754,000	$ 6,526,200	$ 8,701,600	$ 21,754,000
$ 48,946,500	Energy	$ 13,140,000	$ 4,927,500	$ 7,884,000	$ 22,995,000
$ 19,578,600	Transmission	$ 6,204,486	$ 2,068,162	$ 3,033,304	$ 8,272,648
$ 39,157,200	Distribution	$ 32,306,610	$ 5,831,400	$ 1,019,190	$ -
	Direct Allocated Total	$ 73,405,096	$ 19,353,262	$ 20,638,094	$ 53,021,648
$ 29,367,900	Other	$ 12,953,841	$ 3,415,281	$ 3,642,017	$ 9,356,761
	Total Allocated	$ 86,358,937	$ 22,768,543	$ 24,280,111	$ 62,378,409
	% Allocated	44.11%	11.63%	12.40%	31.86%
	% of Non-LLPS Allocated	64.73%	17.07%	18.20%	

In the following example, the LLPS customer is not included in the allocator calculation or in the actual cost of service study, but revenue from the customer that exactly equals the customer's cost of service is introduced as an offset to the cost of service of the other customers.

The calculated allocators are set out below:

	Residential	General Service	Large Power
A&E without LLPS	58.82%	17.65%	23.53%
Simple Energy without LLPS	50.63%	18.99%	30.38%
Simple Transmission without LLPS	54.88%	18.29%	26.83%
Simple Distribution	82.50%	14.89%	2.60%

Below, the cost of service is allocated using these allocators, and the cost of service that had been allocated to the LLPS class is removed from the revenue responsibility of each class, using the same allocation approach as was used for "Other".

Example CCOS without LLPS		Residential	General Service	Large Power
$ 58,735,800	Generation	$ 34,550,471	$ 10,365,141	$ 13,820,188
$ 48,946,500	Energy	$ 24,783,038	$ 9,293,639	$ 14,869,823
$ 19,578,600	Transmission	$ 10,744,354	$ 3,581,451	$ 5,252,795
$ 39,157,200	Distribution	$ 32,306,610	$ 5,831,400	$ 1,019,190
	Direct Allocated Total	$ 102,384,472	$ 29,071,631	$ 34,961,996
$ 29,367,900	Other	$ 18,067,848	$ 5,130,288	$ 6,169,764
	Total Allocated	$ 120,452,321	$ 34,201,919	$ 41,131,760
	% Allocated	61.52%	17.47%	21.01%
	Reallocate LLPS Responsibility	$ 38,376,718	$ 10,896,904	$ 13,104,787
	Net Allocated	$ 82,075,602	$ 23,305,015	$ 28,026,973

Q. What does this example illustrate?

A. This example illustrates that different CCOS results will be produced if an LLPS customer is in the allocation process from the beginning, versus removing the revenue provided by an LLPS customer at the conclusion of a CCOS study. The classes benefited and harmed by the different approaches will vary based on the allocators and cost of service amounts in a given case.

	Residential	General Service	Large Power
Revenue Responsibility when LLPS net revenue is Allocated at the End	$ 82,075,602	$ 23,305,015	$ 28,026,973
Revenue Responsibility when LLPS Determinants are included in Allocator Calculation	$ 86,358,937	$ 22,768,543	$ 24,280,111

RECOMMENDED LLPS TARIFF CHANGES AND CLARIFICATIONS

Q. How does EMM's LLPS tariff address construction power?

A. On Sheet 76, under the provision "Term," the EMM LLPS tariff states, "Schedule LLPS Customers shall take service for a minimum term that includes up to five (5) years of an optional transitional load ramp period plus twelve (12) years.

The Term shall commence on the date permanent service begins, or as set forth in the LLPS Service Agreement. During the transitional load ramp period, the Customer's maximum load may be lower than seventy-five megawatts (75 MW). Specific details of the Customer's Load Ramp may be addressed in the LLPS Service Agreement."

Q. What clarification is necessary?

A. The tariff should be clarified to make clear that the ramp period includes provision of construction power. Without this clarification, the effective ramp period could extend in excess of the five years contemplated by the Commission in approving the LLPS tariffs.

Q. As noted in the Direct Testimony of Claire Eubanks, PE, the Electric Service Agreement ("ESA") with *** [redacted] ***.

Q. What is non-firm service?

A. Non-firm Transmission Service is defined in the Southwest Power Pool, ("SPP") Open Access Transmission Tarff Business Practices, attached as Schedule SLKL-RD-d1. Essentially, it is point-to-point transmission service which is subject to displacement by higher priority or longer term transmission service requests.

Q. What are "CHILLS" and "HILLS"?

A. "CHILLs" is Conditional High Impact Large Load Services, and "HILLs" are High Impact Large Loads. SPP's CHILLS will allow HILLs to be served with non-firm conditional transmission service. As discussed in the June 30 testimony of Claire Eubanks, PE, FERC approved SPP's CHILLS tariffs to be effective on July 1, 2026.[2]

Q. Are transmission constraints the only limitations on a utility's ability to serve new large loads?

A. No. Resource adequacy is a concern for the provision of service to large loads in Missouri at retail.

Q. Is transmission service the same as generation capacity or resource adequacy?

A. No. Generation capacity is the amount of energy that a utility can generate with its resources or resources it has contracted with. Transmission service is related to moving energy from the location at which it is generated to the location at which it is needed. Resource adequacy combines both concepts and is the ability of the electric system to meet the energy needs of consumers by having sufficient and deliverable generation to meet projected electric demand.

Q. What LLPS tariff changes are necessary to address potential issues of demand exceedance in light of the availability of non-firm service to HILLs under CHILLS?

A. Language should be included to explicitly state that:

[2] A corrected version including the FERC Order was filed in EFIS on July 10, 2026.

(1) exceedance of the contract demand is not allowed and that EMM should take reasonable steps to ensure that the contract demand is not exceeded, including during the ramp period,

(2) if the contract demand is exceeded that non-LLPS ratepayers will be held harmless from any and all costs associated with that exceedance, and

(3) if the contract demand is exceeded, that level of demand is the new basis for calculation of the minimum demand charge.

CORRECTION

Q. Have you been made aware of an error in your cost of service direct testimony filed June 30, 2026?

A. Yes. There was a formula error in the tables on page 13 and page 15, for each of the "Net Amount" rows. The calculations of net revenue provided by these customers used in the calculation of the True Up plug did not contain the formula error.

The corrected table for Customer A is provided on the following page.

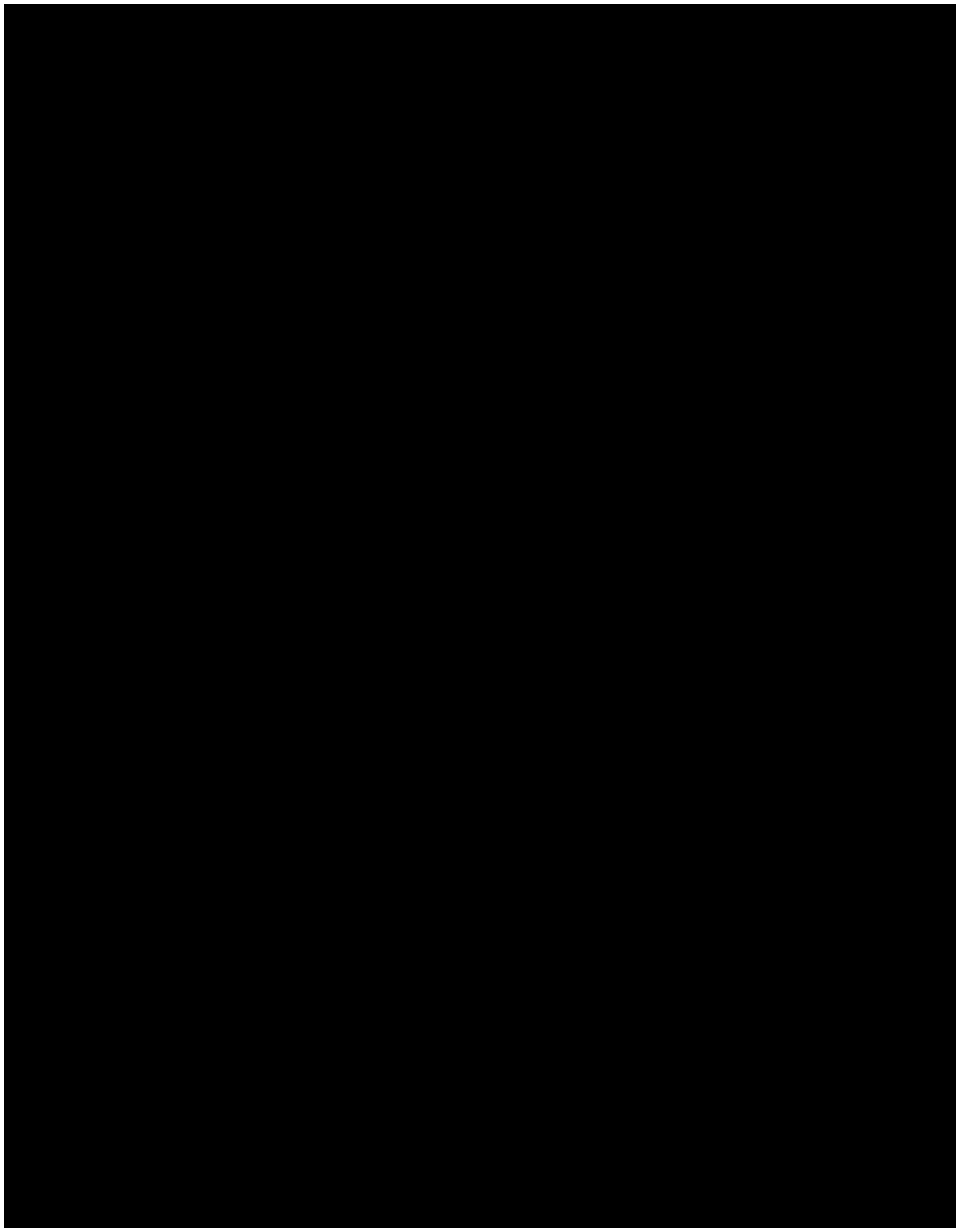
***

[redacted]

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The corrected table for Customer B is provided below:

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CONCLUSION

Q. Does this conclude your rate design direct testimony?

A. Yes it does.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Evergy Metro, Inc. d/b/a Evergy Missouri Metro's Request for Authority to Implement a General Rate Increase for Electric Service	))))	Case No. ER-2026-0143

AFFIDAVIT OF SARAH L.K. LANGE

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW SARAH L.K. LANGE and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing *Direct Testimony*; and that the same is true and correct according to her best knowledge and belief.

Further the Affiant sayeth not.

Sarah L.K. Lange
SARAH L.K. LANGE

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 10th day of July 2026.

Dianna L. Vaught
Notary Public

DIANNA L. VAUGHT
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: July 18, 2027
Commission Number: 15207377

Southwest Power Pool, Inc.

OPEN ACCESS TRANSMISSION TARIFF BUSINESS PRACTICES

Business Practice 1050
Types of Point-to-Point Transmission Service

MAINTAINED BY
SOUTHWEST POWER POOL STAFF

PUBLISHED: 2/2/2001
LATEST REVISION 1/13/2026

Business Practice

SPP offers the following types of point-to-point transmission service:

Firm Transmission Service *- SPP Firm Transmission Service is available for increments ranging from one day to multiple years. Firm service has two distinct classes called short-term firm and long-term firm. These are discussed below.*

> ***Long Term Firm Transmission Service*** *- Long Term Firm point-to-point transmission service is available for increments of one year or longer and is available on a first-come, first-served basis, in the chronological sequence in which each Transmission Customer requests service. Long-term Firm service requires a specific Service Agreement application (SPP OATT Attachment A[1]) to be filed with SPP for each request, as well as a SPP OASIS request.*
>
> ***Short Term Firm Transmission Service*** *- Short Term Firm point-to-point transmission service is available for increments of less than one year. Service increments are designated as daily, weekly, or monthly. Eligible customers may [OATT Section 16.1 (e)[2]] complete an umbrella agreement (SPP OATT Attachment A[3]) for short-term firm service and may make a specific OASIS request for this service only after the umbrella agreement has been executed, except under those conditions specified in Section 15.3 of the OATT. Short-term firm service is conditional based upon service increment, duration and relative impact on Available Transfer Capability (ATC). Short-term firm requests will be processed on a first-come, first-served basis, but subject to displacement by higher priority service increment or longer duration firm requests received later. Right of first refusal will be extended to any short-term firm customer subject to such displacement by another short-term firm request. Right of first refusal will not be extended in cases where a short-term firm request is displaced by a long-term firm request.*

Non-Firm Transmission Service *- SPP Non-firm Transmission Service is available in increments of hourly, daily, weekly, and monthly. Eligible customers may complete an umbrella agreement for non-firm service (SPP OATT Attachment B[4]) and may submit a specific OASIS request for this service only after the Umbrella Agreement has been executed, except under those conditions specified in Section 15.3 of the OATT. Non-firm requests will be processed on a first-come, first-served basis, but subject to displacement by higher priority service increment or longer duration non-firm requests received later. Right of first refusal will be extended to any non-firm customer subject to such displacement by another non-firm request. Right of first refusal will not be extended in cases where a non-firm request is displaced by a firm request.*

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1 SPP OATT - https://sppviewer.etariff.biz/dashboard

2 SPP OATT - https://sppviewer.etariff.biz/dashboard

3 SPP OATT - https://sppviewer.etariff.biz/dashboard

4 SPP OATT - https://sppviewer.etariff.biz/dashboard

Service Increments - Service Types are further distinguished by Service Increments, as defined in FERC Order 638, Section 2.1[5]. SPP offers the following Service increments.

Fixed Hourly *- The service starts at the beginning of a clock hour and stops at the end of a clock hour.*

Fixed Daily *- The service starts at 00:00 and stops at exactly 24:00 of the same calendar day (same as 00:00 of the next consecutive calendar date).*

Fixed Daily On-Peak Hours *- The service starts at 06:00 and stops at 22:00 of the same calendar day.*

Fixed Daily Off-Peak Hours *- The service starts at 00:00 and stops at 06:00 and then resumes at 22:00 and stops at 24:00 of the same calendar day (same as 00:00 of the next consecutive calendar date).*

Extended Weekly *- The service starts at 00:00 of any date and stops at 00:00 one week or more later, but less than four weeks later.*

Extended Monthly *- The service starts at 00:00 of any date and stops at 00:00 one month or more later, but less than twelve months later.*

Extended Yearly *- The service starts at 00:00 of any date and stops at 00:00 more than one year later.*

Service types available can be viewed on the SPP OASIS home page[6] under Transactions.

[5] FERC Order 638 Section 2.1 - http://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=8087220

[6] SPP OASIS home page - https://www.oasis.oati.com/SWPP/index.html