

Exhibit No.:
Issue(s): Variable Fuel
Witness: Shawn E. Lange, PE
Sponsoring Party: MoPSC Staff
Type of Exhibit: Surrebuttal and True-Up
Direct Testimony
Case Nos.: ER-2022-0129 and
ER-2022-0130
Date Testimony Prepared: August 16, 2022

MISSOURI PUBLIC SERVICE COMMISSION

INDUSTRY ANALYSIS DIVISION

ENGINEERING ANALYSIS DEPARTMENT

**SURREBUTTAL AND
TRUE-UP DIRECT TESTIMONY**

OF

SHAWN E. LANGE, PE

**Evergy Metro, Inc., d/b/a Evergy Missouri Metro
Case No. ER-2022-0129**

**Evergy Missouri West, Inc., d/b/a Evergy Missouri West
Case No. ER-2022-0130**

*Jefferson City, Missouri
August 2022*

**** Denotes Confidential Information ****

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**SURREBUTTAL AND
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Case No. ER-2022-0129**

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**Evergy Missouri West, Inc., d/b/a Evergy Missouri West
Case No. ER-2022-0130**

9

Q. Please state your name and business address.

10

A. My name is Shawn E. Lange and my business address is Public Service

11 Commission, P.O. Box 360, Jefferson City, MO 65102.

12

Q. By whom are you employed and in what capacity?

13

A. I am employed by the Missouri Public Service Commission (“Commission”) as

14 a Senior Professional Engineer in the Engineering Analysis Department of the Industry

15 Analysis Division.

16

Q. Are you the same Shawn E. Lange who filed direct testimony in these cases on

17 June 8, 2022 and rebuttal testimony on July 13, 2022?

18

A. Yes, I am.

19

EXECUTIVE SUMMARY

20

Q. What is the purpose of your surrebuttal and true-up direct testimony?

21

A. My surrebuttal testimony addresses my response to Evergy witnesses

22 Eric T. Peterson, Jessica L. Tucker, and Midwest Energy Consumers Group witness

23 Greg R. Meyer concerning a number of issues they identified related to Staff’s Evergy Metro,

24 Inc., d/b/a Evergy Missouri Metro (“Evergy Metro”) production cost model. My true-up direct

1 testimony includes updated results to the variable fuel and purchased power expense for
2 Evergy Metro.

3 Q. Is your testimony applicable to the general rate case filed by Evergy Metro in
4 ER-2022-0129, or the general rate case filed by Evergy Metro in ER-2022-0130?

5 A. My surrebuttal and true-up direct testimony are only applicable to the general
6 rate case filed by Evergy Metro in ER-2022-0129.

7 **SURREBUTTAL TESTIMONY**

8 **WIND FARM SETTLEMENT LOCATIONS**

9 Q. In Mr. Peterson's rebuttal testimony he stated that Staff's production cost model
10 for Evergy Metro used an incorrect settlement location for the Ponderosa wind farm.¹ Was he
11 correct?

12 A. Yes. In Staff's direct filing an incorrect settlement node was used when
13 calculating market prices applicable to the Ponderosa wind farm. Staff's production cost model
14 for Evergy Metro has been corrected to use the KCPL_KCPL node for calculating revenue from
15 the Ponderosa wind farm.

16 Q. Did Mr. Peterson's rebuttal testimony identify any other issues or inadvertent
17 errors related to Staff's production cost model for Evergy Metro?

18 A. Mr. Peterson identified issues with the way that Staff modeled the
19 availability for Hawthorn 6/9.² He also cited inconsistencies between the production cost
20 models used by Staff for Evergy Metro and Evergy Missouri West, Inc., d/b/a Evergy Missouri

¹ ER-2022-0129/0130, Rebuttal Testimony of Eric T. Peterson, page 5, lines 12-17.

² ER-2022-0129/0130, Rebuttal Testimony of Eric T. Peterson, page 2, line 3 through page 3, line 14.

1 West (“Evergy West”) with regards to the operating assumptions for the Iatan Generating
2 Station.³

3 Q. How have you addressed those additional issues raised by Mr. Peterson?

4 A. Staff has changed its production cost model to adjust the available period for
5 Hawthorn 6/9 to the period May 1st through October 31st to match the period purported to be
6 used by Evergy Metro. Finally, Staff took additional measures to ensure that the operation
7 assumptions for the Iatan Generating Station were equivalent in its production cost models for
8 both Evergy Metro and Evergy West.

9 Q. In Ms. Tucker’s rebuttal testimony she stated that there was an error in Staff’s
10 fuel model results concerning LaCygne 1 coal.⁴ Was that correct?

11 A. Yes, Staff has corrected that issue.

12 Q. What was the magnitude of the impact to the results of Staff’s production cost
13 model from addressing the issues that Mr. Peterson and Ms. Tucker point out in their rebuttal
14 testimony?

15 A. Incorporating the corrections suggested by Mr. Peterson and Ms. Tucker
16 decreased the total fuel and purchases power cost filed in Staff’s rebuttal testimony by
17 approximately 1.51% or \$3,854,215 million.

18 Q. Do the errors that Mr. Peterson and Ms. Tucker identified call into question the
19 overall results of the production cost model that Staff developed for Evergy West?

20 A. No. The errors that were identified reflected inadvertent errors made by Staff.

³ ER-2022-0129/0130, Rebuttal Testimony of Eric T. Peterson, page 8, line 20 to page 9, line 4.

⁴ ER-2022-0129/0130, Rebuttal Testimony of Jessica L. Tucker, page 2, line 1 through page 3, line 5.

1 Q. Have the changes that you made to Staff's Evergy Metro production cost model
2 been carried forward into the model update presented in your true-up direct testimony?

3 A. Yes. The corrections that Staff made to its Evergy Metro production cost model
4 are all included in the calculation of trued-up variable fuel and purchased power expense
5 discussed in my true-up direct testimony.

6 **SALES FOR RESALE ADJUSTMENT**

7 Q. In Mr. Meyer's rebuttal he stated that Staff's value for sales for resale
8 was understated and included a table 1 showing the historical sales for resale from the
9 FERC Form 1. Do you have any concerns with Mr. Meyer's use of that data?

10 A. Yes. It appears that Mr. Meyer pulled account 447 information from Evergy's
11 FERC form 1, pages 310 and 311, an example is shown in the attached Schedule SEL-s1.
12 These values include demand charges and revenue from wholesale customers that he compares
13 to Staff's fuel modeling results. However, Staff's modeling reflects Day-Ahead costs
14 and revenues.

15 Q. Has Staff reviewed Evergy Metro's fuel expenses during the period 2019
16 through 2022?

17 A. Yes. Staff has reviewed Evergy Metro's fuel data reported with the
18 Fuel Adjustment Clause (FAC) reporting requirements over the period of January 2019 through
19 June 2022.

20 Q. What fuel data did Staff review?

1 A. Staff looked at Bulk Sales for Resale, Fuel Expense Steam Production, Nuclear
2 Fuel Expense, Other Production Fuel, and Purchased Power. Staff used these values to
3 determine a value of variable fuel expense.

4 Q. What was the result?

5 A. The table below shows the twelve-month aggregate value of Staff's review of
6 Evergy Metro's Fuel adjustment clause reporting requirements.

7 **



[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

8 **

9 Q. How do those values compare to Staff's corrected direct run?

10 A. Staff's corrected direct variable fuel result was \$252,060,455.98.

11 Q. What would Mr. Meyer's adjustment do?

12 A. If Mr. Meyer's adjustment is implemented, Staff's corrected direct level of total
13 variable fuel expense would be reduced by an additional \$73,032,459, to \$179,027,996.98. This
14 would be considerably less than the fuel expense shown in the data provided as part of the FAC
15 reporting requirements. Therefore, Staff has not included Mr. Meyer's adjustment going
16 forward.

17 Q. What would happen if Mr. Meyer's proposal is accepted and if the fuel costs
18 were more like what was seen in the 12 months ended 2022?

1 A. Ratepayers would be paying 95% of the difference in fuel costs modeled and the
2 prudently incurred actual fuel costs.

3 Q. Does this conclude your surrebuttal testimony?

4 A. Yes.

5 **TRUE-UP DIRECT TESTIMONY**

6 **VARIABLE FUEL & PURCHASED POWER EXPENSE (EVERGY METRO)**

7 Q. Has Staff's production cost model been revised for its true-up filing?

8 A. Yes. The time period under consideration for certain model assumptions has
9 been changed to reflect the true-up date of May 31, 2022. The model inputs updated for known
10 and measurable changes includes net system input and the generation from renewable energy
11 sources.

12 Q. How did Staff address the fuel prices (coal, natural gas, oil, nuclear) and market
13 prices used in Staff's true-up production cost model?

14 A. Staff used the same fuel prices and market prices in its true-up production cost
15 model that it used in its direct filing. This was done to minimize the effects of recent price
16 volatility. Staff witness Matthew R. Young also addresses recommendations related to true-up
17 fuel prices, in his True-up direct testimony.

18 Q. What is the true-up level of Staff's variable fuel and purchased power expense
19 for Evergy Metro?

20 A. For known and measurable changes through May 31, 2022, Staff determined the
21 variable fuel and purchased power expense for Evergy Metro to be \$252,156,694.98.

22 Q. Does this conclude your true-up direct testimony?

23 A. Yes.

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) Case No. ER-2022-0129
Implement a General Rate Increase for Electric)
Service)

In the Matter of Evergy Missouri West, Inc.)
d/b/a Evergy Missouri West's Request for) Case No. ER-2022-0130
Authority to Implement a General Rate)
Increase for Electric Service)

AFFIDAVIT OF SHAWN E. LANGE, PE

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW SHAWN E. LANGE, PE and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Surrebuttal / True-Up Direct Testimony of Shawn E. Lange, PE*; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

Shawn E. Lange
SHAWN E. LANGE, PE

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 11th day of August 2022.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: April 04, 2025
Commission Number: 12412070

D. Suzie Mankin
Notary Public

Name of Respondent Eversky Metro, Inc.	This Report Is: (1) <input checked="" type="checkbox"/> An Original (2) <input type="checkbox"/> A Resubmission	Date of Report (Mo, Da, Yr) / /	Year/Period of Report End of 2019/Q4
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SALES FOR RESALE (Account 447)

1. Report all sales for resale (i.e., sales to purchasers other than ultimate consumers) transacted on a settlement basis other than power exchanges during the year. Do not report exchanges of electricity (i.e., transactions involving a balancing of debits and credits for energy, capacity, etc.) and any settlements for imbalanced exchanges on this schedule. Power exchanges must be reported on the Purchased Power schedule (Page 326-327).

2. Enter the name of the purchaser in column (a). Do not abbreviate or truncate the name or use acronyms. Explain in a footnote any ownership interest or affiliation the respondent has with the purchaser.

3. In column (b), enter a Statistical Classification Code based on the original contractual terms and conditions of the service as follows:
 RQ - for requirements service. Requirements service is service which the supplier plans to provide on an ongoing basis (i.e., the supplier includes projected load for this service in its system resource planning). In addition, the reliability of requirements service must be the same as, or second only to, the supplier's service to its own ultimate consumers.
 LF - for long-term service. "Long-term" means five years or Longer and "firm" means that service cannot be interrupted for economic reasons and is intended to remain reliable even under adverse conditions (e.g., the supplier must attempt to buy emergency energy from third parties to maintain deliveries of LF service). This category should not be used for Long-term firm service which meets the definition of RQ service. For all transactions identified as LF, provide in a footnote the termination date of the contract defined as the earliest date that either buyer or setter can unilaterally get out of the contract.
 IF - for intermediate-term firm service. The same as LF service except that "intermediate-term" means longer than one year but Less than five years.
 SF - for short-term firm service. Use this category for all firm services where the duration of each period of commitment for service is one year or less.
 LU - for Long-term service from a designated generating unit. "Long-term" means five years or Longer. The availability and reliability of service, aside from transmission constraints, must match the availability and reliability of designated unit.
 IU - for intermediate-term service from a designated generating unit. The same as LU service except that "intermediate-term" means Longer than one year but Less than five years.

Line No.	Name of Company or Public Authority (Footnote Affiliations) (a)	Statistical Classification (b)	FERC Rate Schedule or Tariff Number (c)	Average Monthly Billing Demand (MW) (d)	Actual Demand (MW)	
					Average Monthly NCP Demand (e)	Average Monthly CP Demand (f)
1	City of Slater, MO	RQ	WSPP, Sch A			
2	Independence Power & Light	RQ	WSPP, Sch A			
3	Eversky Missouri West	RQ	WSPP, Sch A			
4						
5	Associated Electric Cooperative, Inc	OS	WSPP, Sch A			
6	Big Rivers Electric Corp	LF	EEI Agreement			
7	City of Eudora, KS	LF	EEI Agreement			
8	Eversky Missouri West	OS	WSPP, Sch A			
9	Kansas Municipal Energy Agency	OS	EEI Agreement			
10	MidContinent Independent System Oper	OS	MISO RTO			
11	Southwest Power Pool	OS	SPP RTO			
12	Union Electric Company	OS	IA Emergency			
13						
14						
	Subtotal RQ			0	0	0
	Subtotal non-RQ			0	0	0
	Total			0	0	0

Name of Respondent Evergy Metro, Inc.	This Report Is: (1) <input checked="" type="checkbox"/> An Original (2) <input type="checkbox"/> A Resubmission	Date of Report (Mo, Da, Yr) / /	Year/Period of Report End of 2019/Q4
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SALES FOR RESALE (Account 447) (Continued)

OS - for other service. use this category only for those services which cannot be placed in the above-defined categories, such as all non-firm service regardless of the Length of the contract and service from designated units of Less than one year. Describe the nature of the service in a footnote.

AD - for Out-of-period adjustment. Use this code for any accounting adjustments or "true-ups" for service provided in prior reporting years. Provide an explanation in a footnote for each adjustment.

4. Group requirements RQ sales together and report them starting at line number one. After listing all RQ sales, enter "Subtotal - RQ" in column (a). The remaining sales may then be listed in any order. Enter "Subtotal-Non-RQ" in column (a) after this Listing. Enter "Total" in column (a) as the Last Line of the schedule. Report subtotals and total for columns (9) through (k)

5. In Column (c), identify the FERC Rate Schedule or Tariff Number. On separate Lines, List all FERC rate schedules or tariffs under which service, as identified in column (b), is provided.

6. For requirements RQ sales and any type of-service involving demand charges imposed on a monthly (or Longer) basis, enter the average monthly billing demand in column (d), the average monthly non-coincident peak (NCP) demand in column (e), and the average monthly coincident peak (CP) demand in column (f). For all other types of service, enter NA in columns (d), (e) and (f). Monthly NCP demand is the maximum metered hourly (60-minute integration) demand in a month. Monthly CP demand is the metered demand during the hour (60-minute integration) in which the supplier's system reaches its monthly peak. Demand reported in columns (e) and (f) must be in megawatts. Footnote any demand not stated on a megawatt basis and explain.

7. Report in column (g) the megawatt hours shown on bills rendered to the purchaser.

8. Report demand charges in column (h), energy charges in column (i), and the total of any other types of charges, including out-of-period adjustments, in column (j). Explain in a footnote all components of the amount shown in column (j). Report in column (k) the total charge shown on bills rendered to the purchaser.

9. The data in column (g) through (k) must be subtotaled based on the RQ/Non-RQ grouping (see instruction 4), and then totaled on the Last -line of the schedule. The "Subtotal - RQ" amount in column (g) must be reported as Requirements Sales For Resale on Page 401, line 23. The "Subtotal - Non-RQ" amount in column (g) must be reported as Non-Requirements Sales For Resale on Page 401, line 24.

10. Footnote entries as required and provide explanations following all required data.

MegaWatt Hours Sold (g)	REVENUE			Total (\$) (h+i+j) (k)	Line No.
	Demand Charges (\$) (h)	Energy Charges (\$) (i)	Other Charges (\$) (j)		
20,593	109,067	1,503,260		1,612,327	1
1,026		64,396		64,396	2
1,748		21,845		21,845	3
					4
		3,830		3,830	5
	350,000			350,000	6
42,773	373,875	1,625,363		1,999,238	7
	2,610,020			2,610,020	8
20,304	972,000	914,262		1,886,262	9
1					10
6,011,630		121,664,785		121,664,785	11
		57,256		57,256	12
					13
					14
23,367	109,067	1,589,501	0	1,698,568	
6,074,708	4,305,895	124,265,496	0	128,571,391	
6,098,075	4,414,962	125,854,997	0	130,269,959	