Exhibit No. 70

Evergy Missouri Metro – Exhibit 70
Eric T. Peterson
Rebuttal Testimony
File Nos. ER-2022-0129 & ER-2022-0130

Exhibit No.:	
Issue:	Fuel Runs, Fuel Inventories, Fuel Prices, FAC
Witness:	Eric T. Peterson
Type of Exhibit:	Rebuttal Testimony
Sponsoring Party:	Evergy Missouri Metro and Evergy Missouri West
Case No.:	ER-2022-0129 / 0130
Date Testimony Prepared:	July 13, 2022

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO.: ER-2022-0129 / 0130

REBUTTAL TESTIMONY

OF

ERIC T. PETERSON

ON BEHALF OF

EVERGY MISSOURI METRO

AND

EVERGY MISSOURI WEST

Kansas City, Missouri
July 2022

REBUTTAL TESTIMONY

OF

ERIC T. PETERSON

Case No. ER-2022-0129 / 0130

Q: Please state your name and business address.

A: My name is Eric T. Peterson. My business address is 1200 Main Street, Kansas City, Missouri 64105.

Q: Are you the same Eric T. Peterson who submitted direct testimony in these dockets on January 7, 2022?

A: Yes.

Q: On whose behalf are you testifying?

A: I am testifying on behalf of Evergy Metro, Inc. ("Evergy Metro" or "EM") d/b/a Evergy Missouri Metro ("Evergy Missouri Metro" or "EMM") and Evergy Missouri West, Inc. d/b/a Evergy Missouri West ("Evergy Missouri West" or "EMW") (collectively, the "Company").

Q: What is the purpose of your rebuttal testimony?

A: The purpose of my rebuttal testimony is to address portions of the fuel and purchased power expense calculation performed by staff witness, Mr. Shawn E. Lange for EMM, and by staff witness, Mr. Charles T. Poston for EMW. Specifically, I will address the modeling of Unit 6/9 at the Hawthorn Generating Station in the production cost model, and the exclusion of the Purchase Power Agreement ("PPA") with Central Nebraska Public Power and Irrigation District ("CNPPID") from the calculation of variable fuel and purchased power expense for EMM. I will also address the revenue calculations for some wind farms performed by Mr. Lange and Mr. Poston, and the Transmission Congestion Right ("TCR"),

Revenue Neutrality Uplift ("RNU") and Ancillary Services ("A/S") adjustments performed by staff witness, Ms. Karen Lyons, for both EMM and EMW.

I. MODELING HAWTHORN 6/9 UNIT

Q: What is Unit 6/9 at the Hawthorn Generating Station?

A: Unit 6/9 at the Hawthorn Generating Station ("KCPLHAWTHORN6") is a 229-MW natural gas-fired combined cycle turbine owned and operated by EMM. The unit typically operates on a seasonal basis, from May to October, depending on ambient temperatures and market conditions.

Q: Why is KCPLHAWTHORN6 not available year-round?

A: KCPLHAWTHORN6 goes into "winter layup" annually, which typically begins late October and ends in late April/early May. The CROW events for the last five winters are listed below.

Season	CROW ID	Start Date	End Date
2017	1-00041262	10/26/2017	5/7/2018
2018	1-00041264	11/7/2018	6/25/2019
2019	1-00117122	10/29/2019	4/30/2020
2020	1-00098285	10/28/2020	4/28/2021
2021	1-00216732	11/15/2021	4/7/2022

There are two major reasons why the unit goes into winter layup each year:

1. Ambient air temperature: The KCPLHAWTHORN6 generator has cooling dampers that draw in atmospheric air for generator temperature control, and there is a certain temperature built into the controls logic that enables or disables the generator's ability to synchronize to the grid. This "temperature permissive" only

allows KCPLHAWTHORN6 to synchronize to the grid at 32 degrees or more, otherwise the unit will trip or not start.

2. Gas availability: As temperatures decrease in winter, gas demand rises. Gas companies curtail capacity in the lines to power plants as demand rises from their residential customers. These gas curtailments prevent KCPLHAWTHORN6 from operating in the winter.

Q: Is KCPLHAWTHORN6 represented appropriately in Staff's production cost model?

A: Based on witness Lange's workpapers, Staff's production cost model shows KCPLHAWTHORN6 to be producing energy during the months of March through October. This is a flawed representation of the unit. It is recommended that the unit be placed on outage from November 1st to April 30th, and only operating during the months of May through October, to mimic the operating restrictions described above. This is similar to how the Company models KCPLHAWTHORN6 in the Company's production cost model and how the unit actually operates.

II. CNPPID HYDRO CONTRACT

Q: Staff claims that the revenue and costs associated with the CNPPID Hydro PPA should be excluded when calculating variable fuel and purchased power expense due to a stipulation from the EMM's previous general rate case, ER-2018-0146. Do you agree?

A: No.

Q: Please explain.

A: The stipulation from the rate case ER-2018-0146 states that:

> *Kansas City Power & Light ("KCP&L") agrees to exclude the costs and revenues associated with the CNPPID Hydro PPA from KCP&L's Fuel*

Adjustment Clause ("FAC") calculations and shall file a separate tab in its FAC monthly reports showing the CNPPID hydro PPA, including monthly operating data, costs and revenues. Similar to this commitment, KCP&L and GMO shall file a separate tab in their FAC monthly reports showing, for each of its PPAs, monthly operating data, costs and revenues.

The stipulation does not exclude the CNPPID Hydro PPA from being included in base rates. The CNPPID Hydro PPA should be included when calculating variable fuel and purchased power expense in the general rate case for EMM.

Q: Has there been any cost disallowance ordered related to this contract in prior EMM rate cases?

A: No. This contract began in 2014 and was fully included in the cost of service in the rate cases filed in 2014 (ER-2014-0370) and 2016 (ER-2016-0285). The issue was settled in the last rate case, as described above, but the settlement does not exclude recovery of the contract in base rates.

III. WIND FARM SETTLEMENT LOCATIONS

Q: The Company has several Purchase Power Agreements ("PPA") with wind farms. How do these contribute to the variable fuel and purchase power expense calculation?

A: Typically, the Company purchases energy at a cost specified by the PPA from the wind farm, offers the energy to Southwest Power Pool ("SPP") and collects revenue that is determined by the Locational Marginal Price ("LMP") at the generator node associated with the wind farm. The costs and revenues associated with these transactions contribute to the fuel and purchase power expense calculation.

Q: Are there any wind farms that settle differently? Please explain.

A: Yes, there are two wind farm PPAs that are structured differently; Ponderosa Wind for EMM and Cimarron Bend III for EMW. The agreements for these two wind farms stipulate that the Company is not the market participant of the wind farms, and do not control the

offer to the market. The Company simply takes the Bilateral Settlement Schedule ("BSS") volumes at the load node, and the revenue is determined by the LMP at the load node instead of the generator node. Hence, Ponderosa Wind is settled at the KCPL_KCPL node, and Cimarron Bend III is settled at the MPS_MPS node.

Q: Why are these PPAs structured differently? Are they better than the other typical PPAs?

A: The PPAs for Ponderosa Wind and Cimarron Bend III are structured such that the congestion risk exposure between the generator node and the load location is assumed by the wind developer instead of the Company. These agreements are very favorable to the Company's customers and most wind developers have moved away from offering more PPAs like these.

Q: Are the revenues from these wind farms using the appropriate Settlement Locations in Staff's fuel and purchase power expense calculation?

A: No, the revenues in Staff's fuel and purchase power expense calculations are not using the right Settlement Locations to calculate revenue from Ponderosa Wind and Cimarron Bend III. The LMP at the KCPL_KCPL node should be used for Ponderosa Wind, and the LMP at the MPS_MPS node should be used for Cimarron Bend III.

Q: Do these different settlement locations impact other areas of the revenue requirement?

Yes. The change in settlement location for Ponderosa Wind impacts the Renewable Energy Rider Tariff calculation for EMM, and the change in settlement location for Cimarron Bend III impacts the Renewable Rider Tariff and NUCOR calculation for EMW.

IV. TRANSMISSION CONGESTION RIGHTS

Q: Do you agree with how Staff has calculated the level of TCR adjustments?

A: No.

Q: Please explain.

A: Referring to the workpapers provided by Staff witness Lyons, the level of TCR adjustments for EMM and EMW were calculated using the following formula:

	TCR Value
-	Congestion Charges
-	Cost of TCR Purchases
+	Revenue from TCR Sales
+	Revenue from ARR Sales
=	TCR Net Margin

Staff did not include ARR/TCR Uplift and Accrual values in their calculation of TCR adjustments. The ARR Yearly Closeout, and TCR Payback and Uplift need to be included in the calculation for total TCR Net Margin because those costs along with ARR Funding, TCR Funding, TCR Transactions and Congestion are the true representation of the costs and benefits of the TCR portfolio. Historical net values for the ARR Yearly Closeout and TCR Payback and Uplift have varied significantly, ranging from $7.8 million in 2018 to ($12.2) million in 2021. To not include those values can grossly over- or understate the actual value of the TCR portfolio, depending on the year.

While the Company's Direct Filing also erroneously omitted the ARR/TCR Uplift and Accrual values, an explanation, and corrected calculations for EMM and EMW were provided in the response to Data Request 103.1 in case number ER-2022-0129. It is

recommended that the ARR/TCR Uplift and Accrual values be included in the TCR adjustment calculations for the True Up filing.

Q: Staff has not included any adjustments for TCRs for EMW. Do you agree?

A: No.

Q: Were TCRs included in the previous EMW rate cases? Why or why not?

A: TCRs were not included in previous EMW rate cases. This was because during the early stages of the Southwest Power Pool ("SPP") TCR market, the Company assumed a zero net revenue from holding TCRs. In addition to that, the relative size of the EMW TCR portfolio was not significant and TCRs for EMW's gen-to-load paths were not difficult to obtain.

Q: Why should TCRs be included in the current EMW rate case, ER-2022-0130?

A: As the SPP market has matured, congestion in the EMW area has increased due to wind generation additions in the SPP system. Realized congestion for EMW has increased more than three-fold, from $11,066,026 in 2018 to $40,899,469 in 2021. Realized congestion for EMW in the first six months of 2022 has already reached $37,614,778 and is expected to continue upwards for the foreseeable future. Since TCRs are a financial instrument meant to be used as a hedge against transmission congestion charges, including the revenue and costs from obtaining and holding TCRs will provide a more accurate account of the overall congestion incurred by EMW. This is consistent with the methodology used in EMM's current rate case, ER-2022-0129.

V. REVENUE NEUTRALITY UPLIFT

Q: Are there concerns with how Staff has calculated RNU charges?

A: Yes.

Q: Please explain.

A: Witness Lyons' testimony states that Staff annualized the RNU charges for the 12-month period ending December 31, 2021 and included them in Staff's off-system sales adjustments. However, witness Lyons' workpapers demonstrate different approaches for EMM and EMW. The workpaper for EMM uses the 12-month reported values of January through December 2021, while the workpaper for EMW uses the 3-year average of 2019-2021 reported values. It is unclear which method Staff intends to use for True Up filing or if the different approach in each jurisdiction is intentional.

VI. ANCILLARY SERVICES

Q: Are there concerns with how Staff has calculated A/S charges?

A: Yes.

Q: Please explain.

A: The concerns are similar to that of the RNU charges for EMM and EMW, where witness Lyons' testimony recommends an annualized level of A/S charges based on the 12-months ending December 31, 2021 that includes using the costs incurred in February 2020 as a surrogate for February 2021 to account for Winter Storm Uri. The workpapers show distinctly different calculations for each jurisdiction that do not align with testimony and consequently, it is unclear which method Staff intends to use for True Up filing.

VII. OTHER

Q: Are there any other concerns with Staff's calculation and adjustments made to fuel and purchase power expense?

A: Yes. The Company has identified several other issues and inadvertent errors that have been brought to Staff's attention and is working with Staff to address them during True Up filing.

These include the PPA cost of Gray County Wind for EMW, the revenue calculations of the Lake Road 1-2, 6-7 units, the Nevada station and the St Joseph Landfill Gas station for EMW, and the consistency of operating assumptions for the Iatan Generating Station that are owned by both EMM and EMW. Other concerns are the calculation of border customers, Revenue Neutral Uplift adjustments, Ancillary Service adjustments, and SPP Administrative Fees.

Q: Does that conclude your 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-2022-0129
In the Matter of Evergy Missouri West, Inc. d/b/a Evergy Missouri West's Request for Authority to Implement A General Rate Increase for Electric Service	))))	Case No. ER-2022-0130

AFFIDAVIT OF ERIC T. PETERSON

STATE OF MISSOURI)
) ss
COUNTY OF JACKSON)

Eric T. Peterson, being first duly sworn on his oath, states:

1. My name is Eric T. Peterson. I work in Kansas City, Missouri, and I am employed by Evergy Metro, Inc. as Director, Analytics & Shared Services.

2. Attached hereto and made a part hereof for all purposes is my Rebuttal Testimony on behalf of Evergy Missouri Metro and Evergy Missouri West consisting of nine (9) pages, having been prepared in written form for introduction into evidence in the above-captioned docket.

3. I have knowledge of the matters set forth therein. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded, including any attachments thereto, are true and accurate to the best of my knowledge, information and belief.

Eric T. Peterson

Subscribed and sworn before me this 13th day of July 2022.

Notary Public

My commission expires: 4/26/2025

ANTHONY R. WESTENKIRCHNER
NOTARY PUBLIC - NOTARY SEAL
STATE OF MISSOURI
MY COMMISSION EXPIRES APRIL 26, 2025
PLATTE COUNTY
COMMISSION #17279952

Only