Exhibit No.: _____
Issue(s): Market Failure:Information Asymmetry
Witness/Type of Exhibit: Marke/Surrebuttal
Sponsoring Party: Public Counsel
Case No.: EO-2024-0002

SURREBUTTAL TESTIMONY

OF

GEOFF MARKE

Submitted on Behalf of the Office of the Public Counsel

EVERGY METRO, INC. D/B/A EVERGY MISSOURI METRO AND EVERGY WEST, INC D/B/A EVERGY MISSOURI WEST

CASE NO. EO-2024-0002

** _____ **
Denotes Confidential Information that has been redacted

January 8, 2024

PUBLIC

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

CASE NO. EO-2024-0002

I. INTRODUCTION

Q. Please state your name, title and business address.

A. Geoff Marke, PhD, Chief Economist, Office of the Public Counsel (OPC or Public Counsel), P.O. Box 2230, Jefferson City, Missouri 65102.

Q. What are your qualifications and experience?

A. I have been in my present position with OPC since 2014. I am responsible for economic analysis and policy research in electric, gas, water, and sewer utility operations.

Q. Have you testified previously before the Missouri Public Service Commission?

A. Yes. A listing of the Commission cases in which I have previously filed testimony and/or comments is attached in Schedule GM-1.

Q. What is the purpose of your surrebuttal testimony?

A. I am responding to the rebuttal testimony of the Missouri Public Service Commission Staff ("Staff") witnesses Sarah L.K. Lange, J. Luebbert, Kim Cox, and Michael L. Stahlman regarding Evergy Missouri Metro and Evergy Missouri West's (collectively "Evergy") inability or unwillingness to provide empirical data that they agreed to produce as a result of the stipulation and agreement entered in Case Nos. ER-2022-0129 and ER-2022-0130.

My silence regarding any issue should not be construed as an endorsement of, agreement with, or consent to any party's filed position.

II. MARKET FAILURE: INFORMATION ASYMMETRY

Q. The four Staff witnesses you referred to in this case wrote testimony about the challenges inherent in performing their regulatory duties with incomplete information from the utility they are regulating. Is there a term of art for this?

A. Yes. What Staff is describing is the asymmetric informational advantage a natural monopoly has over the Commission and its Staff.

Q. Staff witness J. Luebbert spoke briefly about information asymmetry in his rebuttal testimony. Can you provide some further context on this issue?

A. Information asymmetry is an example of a market failure. It occurs when one party in a transaction has more or better information than the other regarding the issue at hand. Information asymmetry is inherent in most, if not all, markets to some degree. Hospitals, for example, typically have more information about illness, costs, and recovery options than the patient does. Markets compensate for this by developing agency relationships where both parties are incentivized to produce an efficient outcome. Repeat dealings demonstrate that both actors are better off in the long run if they deal fairly with one another.

Information asymmetry is at the heart of the economics of public utility regulation. A fully informed regulator with complete authority could simply order the utility to choose the first-best outcome. However, regulators are never fully informed and must rely on their staff to perform audits, issue discovery, and receive sufficient information from the utility to inform their independent decisions.

However, information asymmetry does not automatically lead to a negative outcome and may just mean one party needs to do more research or due diligence. If the less-informed party is not able to conduct that research, or if the utility is not transparent, information asymmetry can result in the exploitation of ratepayers. When asymmetric information results in customer exploitation, it creates adverse selection.

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Q. What is an example of adverse selection and how is it different from information asymmetry?

A. Imagine two people playing poker where one player knows all the cards in his opponent's hand, but his opponent has no such knowledge. This is asymmetric information. If that player uses their knowledge to manipulate the game and win unfairly, that's adverse selection. Stated differently, adverse selection is always a consequence of information asymmetry but not all cases of information asymmetry result in adverse selection. Adverse selection inherently leads to unfair or inefficient outcomes. The informed party (utility) exploits its knowledge advantage resulting in higher prices for the uninformed party (ratepayer).

Q. You stated earlier that information asymmetry is inherent in most markets, how is a public utility different?

A. Because there is no market for utility service. Customers are largely captive and cannot exercise agency by choosing a substitute.[1] A public utility operates as a natural monopoly without the need for market discipline that is necessary to survive under competition. To ensure just and reasonable rates, economic regulators seek to replicate the outcomes of effective competition by serving as a proxy for the market. Information asymmetry poses a significant challenge for economic regulators to achieve this goal due to the inherent power imbalance between regulators and utilities.

Utilities control the flow of data and have the knowledge of their costs, efficiency, and investment plans. This knowledge includes internal operational data, cost structures, and future projections – crucial for regulators to assess rate setting, service quality, and investment needs. Utilities have a natural incentive to manipulate information they present

[1] The exception here would be natural gas customers who could switch to an electric heat pump or possibly propane to heat their homes or businesses.

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to regulators and to over-invest under cost-plus regulation because the utilities' profits are directly tied to capital expenditure.[2]

Q. Has there been any peer-reviewed work to substantiate the credibility of this issue?

A. Yes, information asymmetry is a well-documented and heavily researched area of economics and public utility regulation. Academically, the issue of information asymmetry is probably best known through the work of economist George Akerlof's seminal economics article on the market for "lemons" (i.e., defective products) which concludes that in markets plagued by information asymmetry, the market player holding an information advantage will likely dominate the outcome at the expense of others.[3]

[2] This is also known as the Averch-Johnson effect in economics and explains why a regulated company will tend to over-invest in capital in order to expand the volume of their profits. Per the New Palgrave Dictionary of Economics: "The Averch–Johnson effect is produced when fair rate of return regulation encourages a firm to invest more than is consistent with the minimization of its costs. This can happen when the allowed rate of return exceeds the cost of capital, since the difference between the two represents pure profit." See also Averch, H.A., and L.L. Johnson. 1962. Behavior of the firm under regulatory constraint. American Economic Review 52: 1052–1069.

[3] Akerlof, G. (1970) "The Market for 'Lemons': Quality Uncertainty and the Market Mechanism," *The Quarterly Journal of Economics*, Volume 84, Issue 3, pages 488-500. See also: https://viterbi-web.usc.edu/~shaddin/cs590fa13/papers/AkerlofMarketforLemons.pdf

In his paper, Akerlof examined the used car market and illustrated how the asymmetry of information between the seller and buyer could cause the market to collapse, getting rid of any opportunity for profitable exchange and leaving behind only "lemons," or poor products with low durability that the buyer purchased without sufficient information. The market for "lemons" refers to a situation where sellers are better informed than buyers about the quality of the good or sale, like used cars.

Akerlof's original example of the purchase of a used car noted that the potential buyer of a used car cannot easily ascertain the true value of the vehicle. Therefore, they may be willing to pay no more than an average price, which they perceive as somewhere between a bargain price and a premium price.

Adopting such a stance may at first appear to offer the buyer some degree of financial protection from the risk of buying a lemon. Akerlof pointed out, however, that this stance actually favors the seller, since receiving an average price for a lemon would still be more than the seller could get if the buyer had the knowledge that the car was a lemon. Chen, J. (2023) Investopedia. "Understanding the Lemons Problem and How to Solve It" The Market for 'Lemons': Quality Uncertainty and the Market Mechanism https://www.investopedia.com/terms/l/lemons-problem.asp#:~:text=In%20his%20paper%2C%20Akerlof%20examined,durability%20that%20the%20buyer%20purchased

Q. Can you point to any specific study that measured information asymmetry and its impact on rates across public utilities and time?

A. Yes, at least in part. Fremeth and Holburn (2010) performed a longitudinal study examining the relationship between regulatory informational environments and changes to regulated rates for all investor-owned utilities in the United States from 1980 to 2000.[4,5] Although the data is a bit dated, the study's results are informative and can be seen in Table 1.

Table 1: Results of Fremeth & Holburn (2010) Multinomial Logit Model of Electric Utilty Rate Changes, 1980-2000[6]

	Model 1		Model 2 (IV)	
DV = rate change (j = 0, 1, 2)	Rate increase (j = 1)	Rate decrease (j = 2)	Rate increase (j = 1)	Rate decrease (j = 2)
Average Commissioner Tenure (Hypothesis 1)	−0.0545** (0.0279)	0.1247*** (0.0488)	−0.0494** (0.0276)	0.1216*** (0.0486)
PUC Staff (Hypothesis 1)	2.4651 (2.7967)	5.2013* (3.1781)	3.3425 (2.9233)	5.8595** (3.2256)
NRC Penalty × Nuclear (Hypothesis 2)	−0.3263** (0.1931)	0.5776 (0.3785)	−0.3229** (0.1927)	0.5388 (0.3766)
Nuclear Generator (Hypothesis 2)	−0.1368 (0.2367)	−0.1409 (0.4445)	−0.2686 (0.2296)	−0.1595 (0.4586)
Other State Rate Increase (Hypothesis 2)	0.0026*** (0.0007)	−0.0024 (0.0025)	0.0024*** (0.0007)	−0.0025 (0.0024)
Other State Rate Decrease (Hypothesis 2)	−0.0020 (0.0059)	0.0054** (0.0028)	−0.0030 (0.0061)	0.0049** (0.0027)
Utility Share of Total Electricity Sales within State	1.5804 (1.7912)	5.4689 (7.5023)	3.7605** (2.0017)	7.7639 (6.8942)
Consumer Advocate (Hypothesis 3)	−0.7100*** (0.2863)	1.2667 (0.8131)	−0.6149** (0.2851)	1.2175 (0.8036)
Sierra Club Membership (Hypothesis 3)	−0.2971** (0.1664)	0.1799 (0.2200)	−0.3250** (0.1746)	0.1714 (0.2209)
Urbanization (Hypothesis 3)	−0.3637 (4.4998)	9.5943 (7.4446)	−0.8435 (4.4139)	9.2248 (7.3384)
Industrial Sales (Hypothesis 3)	−8.5266*** (2.6000)	10.8962** (5.8319)	−8.2267*** (2.5872)	10.7493** (5.7784)
Legislature Party Competition (Hypothesis 4)	−2.2476*** (0.4704)	1.5530 (1.0377)	−2.0723*** (0.4618)	1.5728 (1.0232)
Governor Competition (Hypothesis 4)	−0.0767 (0.3851)	0.7290 (0.7677)	0.0204 (0.3801)	0.8093 (0.7783)
Change in Interest Rate	0.1218*** (0.0250)	−0.3347*** (0.0668)	0.1092*** (0.0254)	−0.3468*** (0.0665)
Change in Fuel Cost	0.0069** (0.0041)	−0.3925** (0.2171)	0.0559 (0.0623)	−0.3333* (0.2061)
Change in Net Utility Plant	0.8321*** (0.2712)	0.8033 (0.5679)	3.0566*** (0.8199)	1.9006 (1.4934)
Deregulation	−1.4566** (0.7671)	0.9341** (0.4186)	−1.5367** (0.7690)	0.9353** (0.4140)
Election Year	0.0534 (0.0945)	0.0952 (0.1675)	0.0581 (0.0944)	0.0994 (0.1673)
Merger and Acquisition	−0.3799 (0.3135)	−0.0167 (0.3700)	−0.4313 (0.3078)	−0.0225 (0.3691)
Other Utility Rate Increase	0.0016*** (0.0003)	−0.0015** (0.0007)	0.0016*** (0.0003)	−0.0015** (0.0007)
Other Utility Rate Decrease	−0.0042** (0.0019)	0.0047*** (0.0016)	−0.0049*** (0.0020)	0.0045*** (0.0016)
Fuel Cost	−0.1173** (0.0524)	−0.0801 (0.1298)	−0.0898** (0.0517)	−0.0577 (0.1230)
1990s Decade	−0.5131*** (0.1526)	−0.8137*** (0.2628)	−0.5631*** (0.1550)	−0.8639*** (0.2707)

The Journal of Law, Economics, & Organization

[4] Fremeth, A. & G.L.F. Holburn (2010) Information Asymmetries and Regulatory Decision Costs: An Analysis of U.S. Electric Utility Rate Changes 1980-2000. *Journal of Low, Economics, and Organization* , 28(1), 127-162. https://www.ivey.uwo.ca/media/3780247/regulatory-decision-costs.pdf

[5] A longitudinal study is a type of research design that involves repeated observations of the same variables over an extended period of time. This can be contrasted with cross-sectional studies, which collect data from a different group of people at a single point in time.

[6] Modeled results with a single asterisk (or P-value less than 0.05) signifies there's a 5% chance or less that the observed relationship or difference occurred by chance. Double asterisk (or P-value less than 0.01) signifies there's less than 1% probability that the results is due to chance. A triple asterisk (or P-value less than 0.001) is the highest level of significance among the commonly used asterisks and signifies there's less than a 0.1% chance of random occurrence.

Readers are encouraged to see GM-2 for a copy of the study and a greater explanation of the independent variable descriptions and results.

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Fremeth & Holburn concluded:

> When regulators are less knowledgeable about the firms they regulate, they incur greater costs of collecting and assessing information, constructing logical arguments, and documenting the evidence necessary to support their policy position such that it will subsequently withstand judicial review. Such decision costs insulate policies against regulator-initiated change [e.g., rate reductions] but make firm-induced proposals [e.g., rate increases] more likely. . . .
>
> Regulatory agencies with more experienced commissioners, with larger staffs, and with the ability to observe other agencies' related rate rulings on the same utility all tended to implement more frequent rate reductions. Similarly, our results suggest that utilities behave strategically in their decisions to initiate policy reviews: they were significantly less likely to request and obtain rate increases in environments where regulatory agencies were arguably better informed, notably those agencies with more experienced commissioners and when there was publicly available evidence from other agencies of asset mismanagement.[7]

Q. How can Commissioners mitigate the challenge of information asymmetry?

A. Having a healthy degree of skepticism is the first step. As a rule, Commissions should apply caution in interpreting information that is asymmetrical, insufficient, uncertain, and/or originating from one party with definite self-interest motivations. That is why parties have to scrutinize the utility's filing and frequently supplement it with information from other sources.

The next step would be to empower the Commission's Staff. Building regulatory capacity through specialized training and ensuring regulators have access to the data they need to do their job are fundamental to ensuring just and reasonable rates. Additional actions the

[7] Fremeth, A. R., & Holburn, G. L. (2012). Information asymmetries and regulatory decision costs: an analysis of US electric utility rate changes 1980–2000. *The Journal of Law, Economics, & Organization*, *28*(1), 127-162. https://www.ivey.uwo.ca/media/3780247/regulatory-decision-costs.pdf See also GM-2.

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Commission should take, above and beyond this docket, include requiring increased transparency in utility filings and disclosures, and engaging public participation in regulatory proceedings. Further, the Commission should focus on ensuring sufficient time for parties to conduct independent audits and verify least cost planning and proper cost allocation. All of these actions can help mitigate the inherent information asymmetry of natural monopolies that economic regulation is, in part, designed to combat.

Q. What areas of concern does Staff raise regarding information asymmetry in this case?

A. The issue before the Commission here is a lack of data transparency and retention as it pertains to Evergy's captive customers. Staff is limited in multiple areas of regulatory analysis due to Evergy's inability and/or unwillingness to retain and provide the data necessary for Staff to perform its job. These handicaps include (but are not limited to) the ability to accurately calculate:

- Annualized and normalized billing determinants;
- Weather normalization;
- Energy efficiency lost revenues;
- Class cost of service studies; and
- Rate design to ensure the proper recovery of the Company's cost of service.

Staff witness Sarah L.K. Lange's rebuttal testimony provided one (of many) illustrative examples of impediments based on information asymmetry:

> However, it is Staff's understanding based on Evergy's testimony in this case and prior rate cases, and data requests (DR) responses in this case and prior rate cases, that Evergy literally cannot retrospectively determine how many customers were on a given rate schedule as of a given date in the past, and that Evergy is not taking simple steps to record that information in real time when it is available to them.

If true, this outcome is very disturbing.

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Q. Do you agree with Staff that this is an issue?

A. Yes. I am very familiar with challenges inherent in the discovery process, but this is another level of obstructionist behavior. If the Commission does not support its own Staff in this basic verification process the net result most certainly will be more financial harm to the Company's ratepayers as a result of purported AMI benefits that have never materialized.[8]

Q. More financial harm? How have customers already been harmed by Evergy's AMI investment?

A. It would be far easier to identify the things that have gone correct and in the best interest of captive ratepayers with Evergy's AMI investment than it would be to list everything that has gone wrong and resulted in questionable and/or imprudent costs with AMI and AMI deployment to date; however, it would not be nearly as illuminating, even if it would also be less depressing. There is no order here, nor is this list exhaustive—just a running list off the top of my head after hundreds of millions of dollars of investment that the Company is earning a healthy profit from:

- Conducting sixteen ratepayer-funded studies on time-of-use rates.
- Attempting to put into rate base a second generation of AMI hardware for the sole benefit of remotely shutting off customers despite the first generation of AMI hardware investment just going into rate base and nowhere near the end of its useful or depreciated life.
- Targeting customers with bad debt for that replacement of the second-generation AMI hardware as opposed to a more efficient and ordered deployment.

[8] To be fair, most utilities have failed to produce espoused benefits for ratepayers to date. A 2022 analysis from the Mission: Data Coalition found that 97% of smart meters fail to provide promised customers benefits. Mission: Data (2022) Deactivated: How Electric Utilities Turned Off the Data-Sharing Features of 14 Million Smart Meters. https://static1.squarespace.com/static/52d5c817e4b062861277ea97/t/631253069bdd82629d3ea079/1662145291709/Deactivated_white_paper.pdf See also GM-4.

As a result, alternative approaches have emerged to reduce or even eliminate the need for new AMI infrastructure going forward. See also: Copper Labs (2023) Falling out of love with AMI: Why we need a new approach to smart metering. *Utilitydive*. https://www.utilitydive.com/spons/falling-out-of-love-with-ami-why-we-need-a-new-approach-to-smart-metering/642212/ See also GM-5.

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- Litigating consecutive rate cases in which the Company either did not intend to introduce TOU rates or sought to offset AMI benefits by introducing non-AMI rate design (pre-pay and subscription service).
- AMI software (One CIS) has proven to be unreliable and resulted in several prolonged shutdowns. The most notorious resulted in a public apology from the Company because of two separate Change.org petitions that included over 70,000 signatures demanding the Missouri Public Service Commission take action. Evergy's mismanagement of the issue lead to the Company taking out a full-page apology in the Kansas City Star.[9]
- And refusing (due to unwillingness or inability) to retain and disclose data in a transparent, uniformed, accessible, and timely manner to the MO PSC Staff to allow them to do their job and independently verify the data.

Q. What is the argument against providing the requested data?

A. Evergy has put forward a very wide range of cost estimates from **_____ _____ ** depending on the specific request. Evergy has also suggested that its solution would not be an immediate fix depending on the specific data that Staff is asking it to retain. According to Evergy, in some instances, Staff's requests are further complicated because the data can only be obtained through manual recording.

Q. Do you agree with these estimates?

A. I maintain a healthy degree of skepticism when I see such a huge cost range without any documentation to substantiate it. I have attempted to verify these assumptions through discovery, but the Company asked (and we acquiesced) for a delay in the response due to the holiday break. As such, I may expound on my answer to this question if this docket proceeds to an evidentiary hearing. This is of course, assuming I receive full and accurate answers to my questions.

[9] Caisley, C. (2018) KCP&L is committed to helping customers understand their bills. *The Kansas City Star* August 31, 2018. https://www.kansascity.com/article217671510.html

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Q. What if the Commission dismisses Staff's requests? Will there be unintended consequences as a result?

A. It would be inevitable.

To put it bluntly, the workload and complexity of public utility regulation has increased in orders of magnitude since I started working in this field. This trend is not going to abate. The introduction of risk-shifting surcharges and special legislation (MEEIA, RESRAM, FAC, PISA, Securitization, etc.) that has stream-lined regulation have come at a great expense to customers. Regulatory oversight has become compartmentalized and expedited to such a degree that the outcomes will most certainly not be just or reasonable if the Commission's Staff cannot verify basic customer information.

Missouri will not be able to adapt or successfully integrate distributed energy resources ("DERs") without basic customer information or distribution system costs and expense. No long-term planning is possible without accurate and up-to-date information. This is on top of the issues that Staff has struggled to verify in their independent audits.

A Commission order dismissing Staff's request to obtain the information to effectively do its job would also have a knock-on effect for other utilities' relationships with the Staff, OPC, and other interveners moving forward whether it be on disclosing proper and timely discovery requests or entering into stipulation and agreements.

Q. What is Staff's "path forward" as articulated by Ms. Lange?

A. It consists of a combination of requesting the Commission order the Company to comply or requesting that this docket remain open so that there can be continued dialogue.

Q. Do you agree with this sentiment?

A. I support Ms. Lange's recommendations that consists of having the Commission order the Company to comply. I am less enamored with the "let's keep talking" approach Ms. Lange advocates for in this docket given Evergy's poor track record to date. It has now been 473 days since the Commission approved the Stipulation and Agreement that formally instigated

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this dialogue, and we are now set to go to hearing at the end of the month with little to no progress. I struggle to see how this issue will reconcile itself without the Commission providing more guidance.

Q. Both Evergy and Staff appear to acknowledge that Staff's request will cost some amount of money. Is there a price where data becomes cost prohibitive?

A. Of course there is. Unfortunately, consistent with the theme of this testimony, I am operating with incomplete information. I am cautiously optimistic that the Company will reply with better information both in surrebuttal to Staff's response and to OPC's discovery and that we can find a path forward. If not, then OPC will update its position accordingly.

Q. Do you have any final observations to make on Staff's rebuttal?

A. I do. I would like to make the observation that the Commission's Staff is operating exactly how it should in this context. It is attempting to verify and extrapolate cost and customer information to inform just and reasonable rates. It is a credit to the Staff that it is actively seeking out data that will necessarily result in more work for its members when they could have just as easily relied on methodologies and guesswork that pre-date AMI data.

Consider for a moment that some states do not even have a regulatory staff that can conduct a class cost of service study. If the Commission does not order this data to be made available to allow the Commission Staff to execute its job, then Missouri will join those states and further unintended consequences will follow across other dockets.

Q. Does this conclude your testimony?

A. Yes.

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BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of Requests for Customer Account Data Production from Evergy Metro, Inc. d/b/a Evergy Missouri Metro and Evergy Missouri West, Inc. d/b/a Evergy Missouri West	)))))	Case No. EO-2024-0002

AFFIDAVIT OF GEOFF MARKE

STATE OF MISSOURI)
) **ss**
COUNTY OF COLE)

Geoff Marke, of lawful age and being first duly sworn, deposes and states:

1. My name is Geoff Marke. I am a Chief Economist for the Office of the Public Counsel.

2. Attached hereto and made a part hereof for all purposes is my surrebuttal testimony.

3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.

Geoff Marke
Chief Economist

Subscribed and sworn to me this 8th day of January 2024.

TIFFANY HILDEBRAND
NOTARY PUBLIC - NOTARY SEAL
STATE OF MISSOURI
MY COMMISSION EXPIRES AUGUST 8, 2027
COLE COUNTY
COMMISSION #15637121

Tiffany Hildebrand
Notary Public

My Commission expires August 8, 2027.