FILED
November 9, 2026
Missouri Public
Service Commission

Exhibit No. 202

OPC – Exhibit 202
Surrebuttal Testimony of Geoff Marke
Case No. EA-2026-0154

Exhibit No.:	_____
Issue(s):	Response to Commission Staff and Renew Missouri
Witness/Type of Exhibit:	Marke/Surrebuttal
Sponsoring Party:	Public Counsel
Case No.:	EA-2026-0154

SURREBUTTAL TESTIMONY

OF

GEOFF MARKE

Submitted on Behalf of the Office of the Public Counsel

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

CASE NO. EA-2026-0154

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

October 5, 2026

PUBLIC

ReTABLE OF CONTENTS

Testimony	**Page**
Introduction	1
Response to Commission Staff and Renew Missouri	2

SURREBUTTAL TESTIMONY

OF

GEOFF MARKE

EVERGY METRO

CASE NO. EA-2026-0154

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 where I am responsible for economic analysis and policy research in electric, gas, water, and sewer utility operations.

Q. Are you the same Dr. Marke who filed rebuttal testimony already in this docket?

A. I am.

Q. What is the purpose of your surrebuttal testimony?

A. I am responding to the rebuttal testimony of other parties' witnesses on select topics. The following is a list of those topics and witnesses:

- Missouri Public Service Commission Staff ("Staff") witnesses: Amanda Arandia, Trevor Rucker, Justin Tevie, and Randall Jennings; and
- Renew Missouri ("Renew") witness: Nicolas Johnson

My silence in regard to any issue should not be construed as an endorsement of any other party's position.

II. Response to Commission Staff and Renew Missouri

Q. What is Staff's position on the need for this investment?

A. Staff believes there is a need for this investment based on the Company's forecasted expectations of data center load projected to come online in the near future.

Q. Did Staff take a position on whether or not legacy ratepayers would be making this kind of investment if the data centers were not coming online?

A. Yes. Staff witness Trevor Rucker filed the following question and answer in rebuttal testimony:

> Q. Would EMM need the Project if there were no large load projects in EMM's service territory?
>
> A. No. If the large located in EMM's service territory were removed from Evergy Metro's forecasted peak demands used in Evergy Metro's capacity balance tables, EMM would have sufficient capacity without the Project for both the summer and winter planning sessions. This is illustrated in Figures 3 and 4 where the ramp schedules for the LLPS customers and winter planning seasons. This is illustrated in Figures 3 and 4 where the ramp schedules for the LLPS customer and non-LLPS customer could have been removed from Evergy Metro's forecasted peak demands.[1]

[1] EA-2025-0154 Rebuttal Testimony of Trevor Rucker p. 9, 20-23 thru p. 10, 1-9.

P

**

[redacted]

**

Q. What is your response?

A. There is no need for this investment absent the data center load. This conclusion is consistent with OPC's filed position.

P

Q. Did Staff perform a bill impact test?

A. They did. Staff witness Randall Jennings provided testimony supporting the results of Staff's ratepayer bill impact analysis.

Q. What assumptions did he use around cost allocation for this investment?

A. Staff utilized Evergy Metro's determinants, methods, and calculations as requested in the current rate case (Case No. ER-2026-0143) and held that (and a number of other things) constant to show what the annual impact would be for each customer class assuming a forty-year average depreciable life of this investment under two future scenarios: One scenario where the data center load materializes and another where it does not.

Restated, Staff provided analysis of what the cost impact for this investment would be across each customer class for forty years, assuming the Commission adopts Evergy Metro's recommendations with and without the data center load materializing.

Q. Can you provide a summation of the bill impact on the residential class?

A. Sure. With the caveat that these are directional estimates, residential cost responsibility with and without data center load is provided in Figure 1 below:

Figure 1: Mullin Creek #2 Residential Cost Responsibility with and without Data Center Load

	Without Data Center Load	With Data Center Load
40-year total across residential customer class responsibility	**_____	_____
Average 40-year residential bill responsibility	____	____
Average 480-month residential bill responsibility	____	____**

P

Q. Do you believe this is reasonable and helpful analysis?

A. Absolutely. The analysis provides meaningful directional guidance for the Commission and illustrates cost impact responsibility across classes under two different future demand realization assumptions. Pleasantly, this also provides a useful approximation of what the directional impact CWIP approval would have on existing customers who are being asked to pay for an investment they do not need before it is used and useful.

Q. Have other regulatory commissions weighed in on cost responsibility before the planned investments?

A. Yes, two recent examples come to mind. On September 17th the Arkansas Public Service Commission denied Entergy Arkansas's initial payment structure for a proposed 600 MW solar and 350 MW battery storage facility, ruling that the accounting model prioritized the interests of Entergy Arkansas and Google over the general public. Under the proposed agreement, Google had agreed to pay $526 million upfront to fund construction, alongside $190 million for transmission and substation upgrades. However, regulators largely rejected the application because Entergy Arkansas simultaneously tried to introduce a "strategic investment rider" to shift the remaining financing costs onto general ratepayers. This rider would have increased average residential electricity bills by an estimated $2.02 to $8.35 per month.[2]

One day later, on September 18th the North Carolina Utilities Commission denied Duke Energy's proposal to build a 255-megawatt natural gas combustion turbine at the Smith Energy Complex for $584 million, citing staggering costs and uncertain project necessity. North Carolina Commissioners emphasized that the utility failed to adequately demonstrate

[2] Sasser, S. (2026) Public Service Commission denies Entergy Arkansas request to purchase power from Big Island Solar facility. *Arkansas Democrat Gazette*. https://www.arkansasonline.com/news/2026/sep/17/public-service-commission-denies-entergy-arkansas/; and Sasser, S. (2025) Entergy Arkansas estimates price for Cypress Solar Plant to be $1.6 billion. *Arkansas Democrat Gazette*. https://www.arkansasonline.com/news/2025/dec/01/entergy-arkansas-estimates-price-for-cyprus-solar/

P

actual demand or shield everyday ratepayers from financial risk related to anticipated data center growth.[3]

Although not explicitly ruled on by a regulatory body, arguably a third example occurred in Wisconsin on October 1st when Oracle and We Energies (the largest investor-owned electric utility in Wisconsin) announced an agreement for Oracle to absorb $300 million in existing nuclear fuel costs and commit to full cost responsibility for the investment necessary for Oracle's Project Lighthouse data Center. As quoted in the We Energies Press Release:

> According to Oracle, the planned commitment builds on Oracle's broader investment in Wisconsin through Project Lighthouse, its data center development in Port Washington. Project Lighthouse is expected to generate more than $11 billion for the local economy, create more than 4,000 skilled construction jobs over three years, support 1,000 ongoing operations positions, launch workforce development programs, and invest in local infrastructure. In addition, Oracle will fully fund Project Lighthouse's energy costs to protect ratepayers' electricity bills and support grid reliability. Oracle is committed to working closely with the community, local businesses, and public agencies to build responsibly in Wisconsin.[4]

Q. What is Staff's position on whether or not the Commission should rely on Evergy Metro's IRP assumptions to justify this investment?

A. Staff recommends that the Commission not use the IRP as grounds for approving this investment. Staff witness Justin Tevie filed the following question and answer in rebuttal testimony as follows:

[3] DiGangi, D. (2026) North Carolina regulators deny Duke Energy gas turbine request over 'staggering' cost, uncertain need. *Utility Dive*. https://www.utilitydive.com/news/north-carolina-regulators-deny-dukes-gas-turbine-request-over-staggering/831015/

[4] We Energies (2026) We Energies agreement with Oracle expected to save customers approximately $300 million. WE News Center. https://news.we-energies.com/we-energies-agreement-with-oracle-expected-to-save-customers-approximately-300-million/

P

Q. What conclusions do you draw based upon the current CCN application and the Staff 2026 Annual Update IRP Memorandum?

A. Given the relative cost per MW of a combined cycle generator and a combustion turbine generator, it may have been more cost-effective for Evergy to plan to build a combined-cycle generator. A more efficient of the same fuel type would generally be dispatched more frequently by SPP, increasing the opportunity to flow marginal revenue back to ratepayers through the Fuel Adjustment Clauses. The IRP analysis may have understated the cost to transport fuel, and may not have appropriately addressed dispatch of the proxy unit for Mullin Creek 2, ultimately impacting the assumed level of revenue and cost of the unit. Given the flaws identified in the Staff memorandum in Case No. ER-2026-0188, Staff does not recommend reliance on the IRP results to conclude that Mullin Creek is economically feasible.[5]

Q. What is your response?

A. I agree that this investment has very little appeal in a vacuum, with its primary value dependent on capacity resource accreditation rather than actual energy production. This is also consistent with the analysis of Renew Missouri's witness Dr. Nicholas Johnson as seen in the following Question and Answer from his rebuttal testimony:

Q. What significance do you attached to those utilization levels?

A. The low capacity factors suggest that the combustion turbine's primary value in Evergy's planning models was its contribution to accredited capacity rather than its production of energy. In other words, the resource appears to have been selected principally to satisfy reserve-margin and resource-adequacy requirements rather than to generate significant amounts of

[5] EA-2025-0154 Rebuttal Testimony of Justin Tevie p. 7, 9-20.

P

> electricity on an annual basis. That distinction is important because the economic justification for the resource depends heavily on the assumptions used to value its capacity contribution.[6]

Paraphrased, both Staff and Renew Missouri believe that this investments primary value is based on meeting SPP resource adequacy requirements that are dependent on the Company's forecasted data center load.

Q. Do you agree with that position?

A. I agree that Mullin Creek 2 has diminished comparable value relative to other resource selections and would likely not be selected as planned investment but for the unique circumstances and expedited timing surrounding this expensive planned investment needed to serve a couple of data center customers.

Q. Both Staff and Renew Missouri identify the risk associated with locking into an increasingly globally traded, volatile fossil fuel investment. Do you share these concerns?

A. Yes. As identified by Evergy Metro witness Jason Humphrey's in his direct testimony, the United States is planning for more than 155 GW of planned natural gas power generation investment.[7]

Consistent with the concerns I raised in my rebuttal testimony as well as the public's ever-expanding hostile position on AI, data centers, and utilities in general, I struggle to see a future scenario where that level of investment is realized or not subject to massive, stranded asset risk.

[6] Case No. EA-2025-0154 Rebuttal Testimony of Dr. Nicolas Johnson p. 12, 5-11..
[7] See Case No. EA-2025-0154 Direct Testimony of Jason Humphrey, Schedule JH-1

P

Q. Is that because of the identified risks related to circular financing, massive off balance sheet debt, and lack of return on investment to date that you cited in rebuttal testimony?

A. It is. There is no shortage of profound risk to legacy ratepayers if they are forced to socialize these costs as Evergy Metro intends. Consider for a moment the September 27th conclusion drawn from Bain Consulting who concluded that the global artificial intelligence industry will need to generate $6 trillion in revenue by 2031 to justify the current scale of capital being deployed for data center construction and infrastructure buildout.

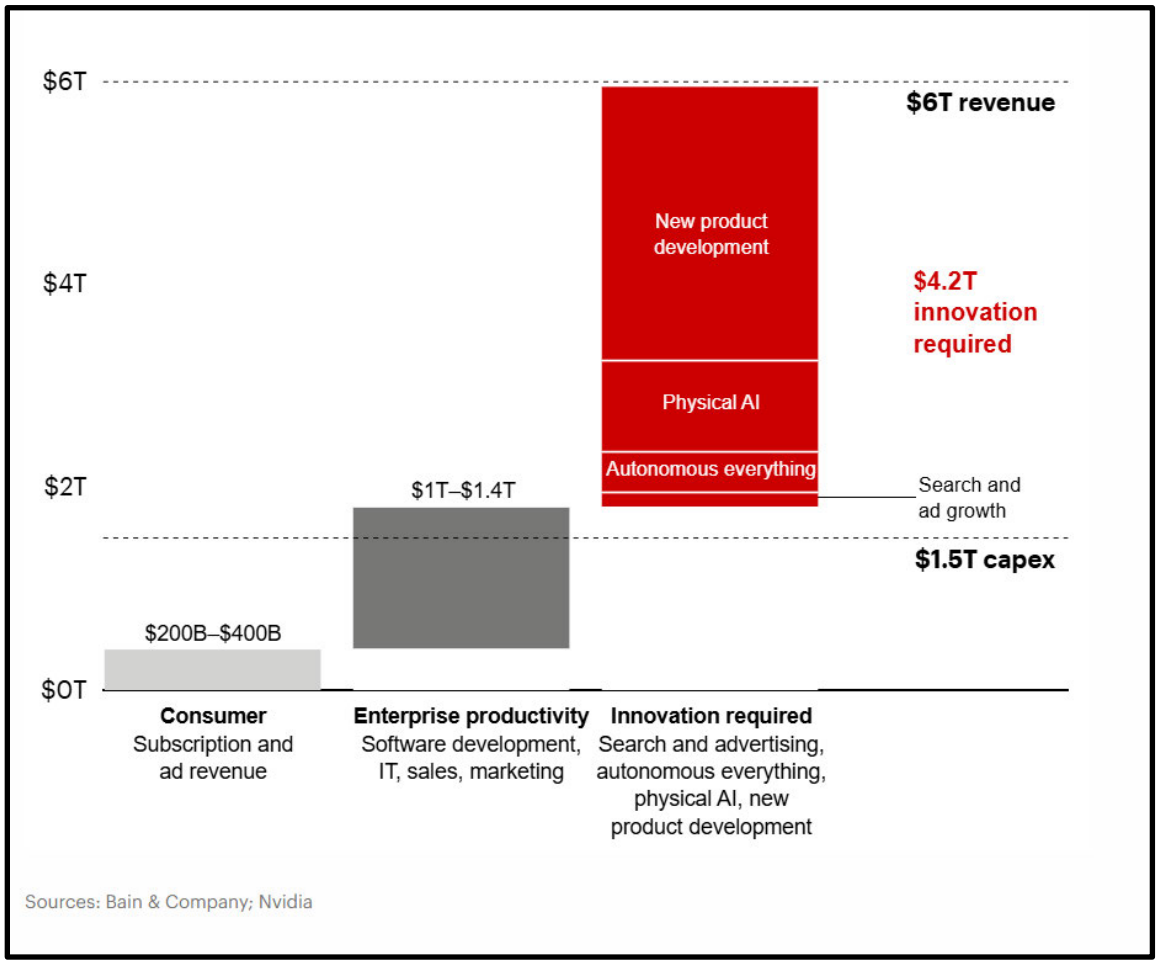
Bain estimates that current and reasonably projected revenue streams only cover between $1.2 to $1.8 trillion of the $6 trillion CAPEX projected investment levels, leaving an immense $4.2 trillion revenue gap that must be filled by unknown and/or unproven technologies like robotics, autonomous vehicles, and advanced drug discovery.

This $6 trillion revenue target is essentially a sustainment or break-even metric for the projected infrastructure rather than a high-return ROI scenario.

Figure 2 provides a visualization of that gap.

P

Figure 2: Projected annual revenue in trillions needed to justify AI investment and where it would come from



To be clear, everything in the third column above in red, representing $4.2 trillion in global costs by 2031, is categorized under "Innovation required" which is a gentle way of saying "it does not exist today." Importantly, this "break-even" threshold does not include the approximate $3 trillion in off-balance-sheet debt identified in my rebuttal testimony.

P

The off-balance debt alone ($3 trillion[8]) is more than all but 7 countries entire gross domestic product ("GDP"). Adding the entirety of the realized and planned investment would be more than every countries GDP outside of China and the United States. [9]

In other words, there has to be an unprecedented economy-wide AI-induced growth to justify the projected level of CAPEX and it has to happen right now in the midst of the Iran War, persistent inflation, record-level fuel and energy costs, high-yield Treasury bonds, and growing hostility towards artificial intelligence.

I am highly skeptical such an outcome can be realized and therefore cannot support legacy ratepayers backstopping this investment. The 440 MW Mullin Creek #2 simple cycle natural gas plant only makes sense for an investment with the full financial support of the data center customers who need it.

Q. Can you summarize the conclusions from the Staff and Renew Missouri testimony that you highlighted in this testimony?

A. Sure. Non-Company party rebuttal testimony highlighted the following terms:

- Mullin Creek #2 is not needed to serve existing customers;
- Evergy Metro wants all customer classes, but especially residential customers, to be responsible for the costs;
- The 2026 Annual IRP update should not be used as justification for approving this investment;
- Mullin Creek #2 is being built to meet resource adequacy requirements tied to large load data centers. The investment is designed not to operate often and will likely not generate the level of revenue that would be expected from other baseload or renewable generation types; and

[8] Rudegeair, P & P. Santilli (2026) hy Big Tech's AI Spending Is $3 Trillion Higher Than It Seems. *The Wall Street Journal*. https://www.wsj.com/tech/ai/why-big-techs-ai-spending-is-3-trillion-higher-than-it-seems-e1067bb2?eafs_enabled=false

[9] Worldometer (2026) GDP by Country – IMF. https://www.worldometers.info/gdp/gdp-by-country/

P

- Price volatility and the specter of future environmental costs create considerable long-term risk.

Importantly, this list is not all encompassing of the concerns raised by non-company parities in rebuttal testimony, but these five points underscore the need to protect legacy customers moving forward.

Q. Do you have any final thoughts?

A. I do.

I would like the Commission to know that the mere presence of a large load tariff does not ensure that data centers are paying their fair share or that legacy ratepayers are held harmless from stranded asset risk.

In an era of rapid uncertainty and rising costs, it is both economically unsustainable and profoundly unfair to expect Missouri citizens to backstop the capital required for massive grid expansion and cost-prohibitive generation investment to serve data centers. This is the exact rationale behind the Trump Administration's Ratepayer Pledge (which both Ameren and Evergy voluntarily signed on to) and Governor Kehoe's Executive Order 26-02.

Currently, three interconnected pressure points are shaping the economy and driving up costs for nearly everything. Those include:

1.) Record High Fuel Costs: Fuel costs reached unprecedented highs this September, with diesel setting four separate price records and increasing 89% since January.[10] This surge has ignited cost-push inflation, rapidly escalating the cost of goods and services nationwide.

[10] USA Facts (2026) Diesel prices rose 89% from January low to September record high. https://usafacts.org/articles/diesel-prices-rose-89-from-january-low-to-september-record-high/

P

2.) Nineteen-Year High on 10-year U.S. Treasury Yields (5.337%[11]): High yields raise corporate borrowing costs and make funding the expensive artificial intelligence infrastructure boom (and anything else) much harder.

3.) The Massive AI Infrastructure Buildout: Bain suggests there is a $4.2 trillion dollar revenue shortfall for AI investments through 2031 based on current annual revenue streams. This shortfall does not include the more than $3 trillion in off-balance sheet debt. [12] That financial gap needs to close all the while it deals with intense mounting public resistance,[13] weaker credit ratings,[14] interdependent circular financing,[15] and an unproven record of showing a positive return on investment (ROI).[16]

To protect the public interest and comply with Missouri statute, I believe the best and possibly only appropriate path forward is to require data centers to finance these investments in their entirety from day one. Anything less would not be fair or appropriate to legacy ratepayers who did not cause these costs, who do not need this investment, and who should not bear the attendant financial risks tied to it. As Governor Mike Kehoe emphasized in the recently released 2026 Missouri State Energy Plan:

> Growth should not come at the expense of the families and communities companies call home. In 2025, I was proud to sign Senate Bill 4 into law, which, along with provisions for building more reliable generation in Missouri and attracting new large loads, includes consumer protections to ensure that customers only pay for their own

[11] As of 11:07AM, 10/5/26. See also U.S. 10 Year Treasury Note. *The Wall Street Journal*. https://www.wsj.com/market-data/quotes/bond/BX/TMUBMUSD10Y

[12] Price, G. & M. Dettwiler. (2026) Webs of AI debt. Union Bank of Switzerland: Asset Management. https://www.ubs.com/us/en/assetmanagement/insights/investment-outlook/the-red-thread/trt-end-year-2026/articles/webs-of-ai-debt.html#ai

[13] According to a recent NBC poll, nearly 70 percent of Americans oppose the construction of a data center in their area. NBC News Decision Desk (2026) Survey Monkey Poll Results August 20 – Sept. 1, 2026. https://s3.documentcloud.org/documents/28601712/nbc-news-decision-desk-poll-september-ai-topline.pdf

[14] See also EA-2026-0154 Rebuttal Testimony of Geoff Marke, p. 13-15.

[15] O'Brient, S. (2026) 'Big Short' investor Steven Eisman says Enron-era tricks are cropping up in the AI trade. Business Insider. https://www.businessinsider.com/big-short-steve-eisman-enron-ai-trade-meta-oracle-nvdia-2026-9

[16] Rai, S. (2026) AI Faces $6 Trillion Test to Justify Data Centers, Bain Says. *Bloomberg*. https://www.bloomberg.com/news/articles/2026-09-29/ai-faces-6-trillion-test-to-justify-data-centers-bain-says

P

power. This year, we built on this commitment to growth and affordability by signing onto President Trump's Ratepayer Protection Pledge.[17]

Q. Does this conclude your testimony?

A. Yes.

[17] Missouri Department of Natural Resources (2026) State Energy Plan and Policy Brief. Letter from Mike Kehoe., p. 3. https://dnr.mo.gov/document-search/missouri-state-energy-plan-state-energy-plan-policy-brief-volume-1-sept-30-2026

P

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Application of Evergy Metro, Inc., d/b/a Evergy Missouri Metro for Permission and Approval of a Certificate of Convenience and Necessity Authorizing It to Construct, Install, Own, Operate, Manage, Maintain, and Control a Natural Gas Electrical Production Facility	))))))	Case No. EA-2026-0154

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 5th day of October 2026.

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.