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**Case No.:**

Response to Staff Rebuttal

Marke/Surrebuttal

Public Counsel

EO-2025-0154

## **SURREBUTTAL TESTIMONY**

**OF**

**GEOFF MARKE**

Submitted on Behalf of the Office of the Public Counsel

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

**EVERGY MISSOURI METRO**

**AND**

**EVERGY MISSOURI WEST, INC. D/B/A**

**EVERGY MISSOURI WEST**

CASE NO. EO-2025-0154

September 12, 2025

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**SURREBUTTAL TESTIMONY**

**OF**

**GEOFF MARKE**

**EVERGY MISSOURI METRO AND EVERGY MISSOURI WEST**

**CASE NO.: E0-2025-0154**

**I. INTRODUCTION**

**Q. Please state your name 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. Are you the same Dr. Marke that filed direct testimony in EO-2025-0154?**

A. I am.

**Q. What is the purpose of your rebuttal testimony?**

A. The purpose of this testimony is to respond to the rebuttal testimony of the Missouri Public Service Commission Staff (“Staff”) Report and Staff witness James A. Busch in particular.

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

**II. RESPONSE TO STAFF**

**Q. Did Staff speak to the potential benefits associated with data centers?**

A. They did, however the emphasis of their report primarily focused on the risk inherent to captive ratepayers if these customers do not cover their costs to serve.

**Q. Are there benefits to the state and local community from the inclusion of data centers into the local economy?**

A. Absolutely. The benefits, largely in the form of property taxes, equipment, and/or negotiated terms with a given community, can vary considerably but have the potential to be quite large, including potential knock-on economic benefits to neighboring businesses (*e.g.*, it’s safe to assume out-of-state construction workers will eat locally). Of course, this is predicated on the

1 assumption that the hyperscale customer maintains service long enough for the benefits to be  
2 realized.

3 **Q. What are Staff's views on economic development tied to data centers?**

4 A. According to Mr. Busch,

5 While there may be an uptick in construction jobs while the data centers are being built,  
6 once they are operational, it does not appear that they are large job creators. There are  
7 just a handful of maintenance staff required and a large handful of other professionals  
8 to make sure the servers are working properly and to address situations that may arise.  
9 These centers are not like manufacturing facilities that will hire thousands of workers  
10 and which have large economic impacts well beyond the building phase.<sup>1</sup>

11 **Q. Do you agree with Mr. Busch?**

12 A. I largely do. Admittedly, the number of jobs created from data center build-out is a difficult  
13 number to capture, depending on how a "created job" is defined. For example, is it a temporary  
14 job or a permanent job? Is the construction job filled by an out-of-state worker, or is the job  
15 sourced locally? How much does the job pay? But even taking those parameters into  
16 consideration, the number of jobs created is very small relative to the amount of money being  
17 spent. Speaking to the *Wall Street Journal* early this year, John Johnson, Chief Executive of  
18 data-center operator Patmos Hosting said:

19 Data centers have rightly earned a dismal reputation of creating the lowest number  
20 of jobs per square foot in their facilities.<sup>2 3</sup>

21 Furthermore, according to Christopher Tozzi, from *DataCenter Knowledge*:

22 Data centers have frequently been criticized for creating few permanent jobs in  
23 relation to their footprint – and this criticism might not be entirely unfounded. In

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<sup>1</sup> Rebuttal Testimony of James A. Busch, p. 5, 17-21 thru p. 6, 1.

<sup>2</sup> Dotan, T. (2025) The AI Data-Center Boom is a Job-Creation Bust. *The Wall Street Journal*. Feb. 25, 2025.  
<https://www.wsj.com/tech/ai-data-center-job-creation-48038b67>

<sup>3</sup> Patmos Hosting is currently erecting a data center in Kansas City, Missouri that will employ 40 to 50 people in the former *Kansas City Star* downtown office building. *Ibid*.

1                   general, data centers generate relatively few jobs compared to the cost of building  
2                   and operating a typical facility or the amount of land it occupies. . . . It would be  
3                   wrong to say that data centers are massive engines of job creation. The typical data  
4                   center results in an almost negligible number of permanent jobs relative to its  
5                   scale.<sup>4</sup>

6                   Data centers can generate jobs in two primary ways:

- 7                   1. **Temporary jobs:** Contracted employment opportunities during data center  
8                   construction. A large facility might keep thousands of construction workers busy,  
9                   at least for the year or two that it takes to build.
- 10                  2. **Permanent jobs:** For staff inside data centers. Once a data center is up and  
11                  running, it usually requires some on-site technicians to handle tasks like setting up  
12                  and managing IT equipment. Typically, however, the total data center staff  
13                  number is only several dozen.<sup>5</sup>

14                  Focusing just on construction jobs, a data center can employ hundreds or even more than a  
15                  thousand temporary and skilled labor positions for anywhere from a few months to a few years.  
16                  Whether or not these jobs are sourced locally or performed by experts from out-of-state is  
17                  another consideration in determining whether or not a “new” job was created.

18                  Operational jobs, or permanent positions, are significantly smaller, ranging from a dozen to as  
19                  much as fifty. To provide some context, the 4-year, 875-acre, \$500 billion Stargate Project  
20                  undertaken by OpenAI, SoftBank, Oracle, and MGX in Abilene, Texas will include an initial  
21                  \$100 billion spent in which the project must include at least 57 full-time positions earning an

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<sup>4</sup> Tozzi, C. (2025) How Many Jobs Do Data Centers Create? It Depends. *DataCenter Knowledge*.  
<https://www.datacenterknowledge.com/operations-and-management/how-many-jobs-do-data-centers-create-it-depends>

<sup>5</sup> *Ibid.*

1 average wage of \$57,600 annually (though the final tally could be higher).<sup>6</sup> This results in an  
2 annual net salary gain of \$3,283,200.

3 For comparative purposes, an average Sam's Club associate's annual weighted salary in  
4 Missouri is around \$39,520 (assumes \$19 an hour over 2,080 hours), and a given Sam's Club  
5 employs, on average, 167 associates per club.<sup>7</sup> This results in an annual net salary gain of  
6 \$6,586,666.66 or more than double what the Stargate Data Center is required to create.

7 **Q. Then do you believe job creation can rightly be cited as justification for approving Evergy**  
8 **Missouri's tariff as proposed?**

9 A. No. Especially given the context of what this specific load will likely mean in terms of impact  
10 over future job displacement.

11 **Q. What do you mean?**

12 A. The load most likely associated with this amended tariff is tied to support future AI buildout.  
13 Future AI buildout is largely tied to likely future job loss. The World Economic Forum's 2025  
14 Future of Jobs Report 2025 reveals that 40% of employers expect to reduce their workforce  
15 where AI can automate tasks.<sup>8</sup> The general U.S. public also largely associates the proliferation  
16 of AI with increased job insecurity. A recent Reuters poll concluded that 71% of Americans  
17 are deeply concerned over the prospect that advances in AI will be "putting too many people  
18 out of work permanently," and 77% "said they worried the technology could be used to stir up  
19 political chaos." These numbers and more are included in Figure 1.

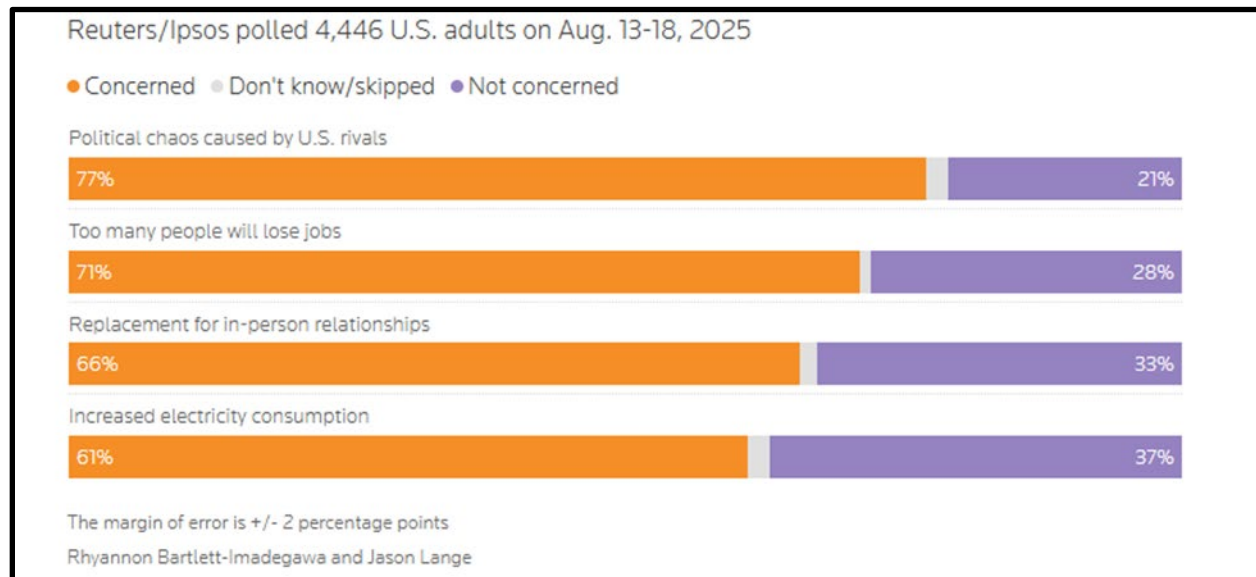
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<sup>6</sup> Ford, B. et al., (2025) Trump's Big AI Goals Start Small: 57 Jobs at a Texas Data. *Bloomberg News* reprinted in *Financial Post*. Center <https://financialpost.com/pmnbusiness/pmnbusiness/stargates-first-data-center-site-is-size-of-central-park-with-at-least-57-jobs>

<sup>7</sup> There are approximately 600 membership warehouse Sam's Club stores in operation that employ approximately 100,000 associates. This results in an average of 167 jobs per store. Sam's Club. (2025, August 25) In *Wikipedia*. [https://en.wikipedia.org/wiki/Sam%27s\\_Club](https://en.wikipedia.org/wiki/Sam%27s_Club)

<sup>8</sup> World Economic Forum (2025) The Future of Jobs Report 2025. <https://www.weforum.org/publications/the-future-of-jobs-report-2025/>

Figure 1: Americans concerns about artificial intelligence<sup>9</sup>



**Q. Do you have other evidence to suggest that this is a real concern?**

**A.** Consider the following statements:

- Anthropic CEO Dario Amodei warned in an interview in May that AI could wipe out half of entry-level white-collar jobs, resulting in unemployment rates of 10 percent to 20 percent within five years.<sup>10</sup>
- Ford CEO Jim Farley stated: "Artificial intelligence is going to replace literally half of all white-collar workers in the US," Farley said during an appearance at the Aspen Ideas Festival. "AI will leave a lot of white-collar people behind."<sup>11</sup>

<sup>9</sup> Lange, S. & A. Alper (2025) Americans fear AI permanently displacing workers, Reuters/Ipsos poll finds. *Reuters*. <https://www.reuters.com/world/us/americans-fear-ai-permanently-displacing-workers-reutersipsos-poll-finds-2025-08-19/>

<sup>10</sup> Altchek A. & S. Perkel (2025) Anthropic CEO says AI could wipe out half of all entry-level white-collar jobs. *Business Insider*. <https://www.businessinsider.com/anthropic-ceo-warning-ai-could-eliminate-jobs-2025-5>

<sup>11</sup> Cutter C. & H. Zimmerman. (2025) CEOs Start Saying the Quiet Part Out Loud: AI Will Wipe Out Jobs. *The Wall Street Journal*. <https://www.wsj.com/tech/ai/ai-white-collar-job-loss-b9856259>

- At JPMorgan Chase, Marianne Lake, CEO of JPMorgan Chase told investors in May that she could see its operations head count falling by 10% in the coming years as the company uses new AI tools.<sup>12</sup>
- Amazon CEO Andy Jassy wrote in a note to employees in June that he expected the company's overall corporate workforce to be smaller in the coming years because of the "once-in-a-lifetime" AI technology. "We will need fewer people doing some of the jobs that are being done today, and more people doing other types of jobs," Jassy said.<sup>13</sup>
- Shopify CEO Tobi Lütke recently told workers that the company wouldn't make any new hires unless managers could prove artificial intelligence isn't capable of doing the job.<sup>14</sup>
- "I don't think anyone is taking into consideration how administrative, managerial and tech jobs for people under 30 — entry-level jobs that are so important in your 20s — are going to be eviscerated," Steve Bannon, "War Room" podcaster who believes AI job displacement will be a major issue in the 2028 presidential campaign.<sup>15</sup>

Admittedly, it's easy to see how jobs could be lost, but harder to imagine jobs that haven't been created yet coming into existence.<sup>16</sup> Of course, this is predicated on the assumption that AI investment will be able to cover its enormous up-front and recurring direct and indirect costs and result in actual profit—not just revenue. Today, that assumption is not true and which I will expound in greater detail later in my testimony.

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<sup>12</sup> *Ibid.*

<sup>13</sup> *Ibid.*

<sup>14</sup> *Ibid.*

<sup>15</sup> VandeHei, J. & M. Allen (2025) Behind the Curtain: A white-collar bloodbath. *Axios*  
<https://www.axios.com/2025/05/28/ai-jobs-white-collar-unemployment-anthropic>

<sup>16</sup> Also known as "creative destruction" or the process where innovations, new products, and processes replace older models. Examples include the smartphone overtaking landline phones, cars making horse-drawn carriages obsolete, streaming entertainment overtaking video rental and movie theatres, etc...



**Q. Given the size and scale of potential investment, have communities in Missouri embraced data centers?**

**A.** I would say it has been a mixed response to date. Missouri has existing data centers, but nothing of the size and scale that is being contemplated.

In 2024, the citizens of Peculiar, Missouri rejected a proposed \$1.5B data center project by Diode Ventures after strong opposition from residents who raised concerns about noise, environmental impacts, infrastructure strain, and non-disclosure agreements. Figure 2 shows a sign near the proposed location of the data center in Peculiar.

Figure 2: Peculiar, Missouri rejects \$1.5B data center<sup>17</sup>



Less than 10 months later, the City of St. Charles, Missouri rejected a \$1B data center proposal for many of the same reasons and took the additional step of becoming the first city in the United States to place a moratorium on data center development across the entire city's footprint.<sup>18</sup> Figure 3 shows an image of a group of protestors outside St. Charles City Council meeting.

<sup>17</sup> O'Donovan, C. (2024) Fighting back against data centers, one small town at a time. *The Washington Post*. <https://www.washingtonpost.com/technology/2024/10/05/data-center-protest-community-resistance/>

<sup>18</sup> Colbert, R. (2025) St. Charles bans data centers for 1 year. Residents push to make it permanent. *St. Louis Post-Dispatch*. [https://www.stltoday.com/news/local/stcharles/article\\_cc69ee91-9269-42c1-8a23-5a93d1c05679.html](https://www.stltoday.com/news/local/stcharles/article_cc69ee91-9269-42c1-8a23-5a93d1c05679.html)

Figure 3: Anti-data center protesters in St. Charles, Missouri<sup>19</sup>



Thursday (September 11, 2025), it was reported that the City of St. Louis planning board and the St. Louis City Mayor has urged the Board of Alderman to temporarily ban data center projects throughout St. Louis City. St. Louis Planning and Urban Design Agency Executive Director Don Roe wrote that a temporary moratorium on data center development may be in the public interest and that:

A time-limited moratorium would mean that no new permits would be accepted while the City develops a full understanding of the issue and develops quality land use, environmental, and other regulations.<sup>20</sup>

Alternatively, Port KC recently approved a \$100 billion data center campus that is expected to generate \$110 M in new tax revenue over the 35-year life of the bond term or approximately

<sup>19</sup> *Ibid.*

<sup>20</sup> Mansouri, K. (2025) St. Louis planning board urges Board of Aldermen to temporarily ban data center projects. STLPR. <https://www.stlpr.org/economy-business/2025-09-11/st-louis-planning-board-urges-aldermen-to-temporarily-ban-data-center-projects>

See also: GM-1.

1        \$3.14M in taxable revenue per year on average. \$15.75 million of those expected funds are to  
2        be dedicated to helping train the area’s workforce.<sup>21</sup>

3        **Q.     Data centers have existed for decades. What is driving this demand today?**

4        A.     The training and proliferation of large language models to commercially support artificial  
5        intelligence (“AI”) services.

6        **Q.     Mr. Busch claims that no one knows what this industry (AI and data centers) will look**  
7        **like in five years.<sup>22</sup> Do you agree?**

8        A.     I do agree, but that hasn’t prevented pundits from opining on hypothetical, larger macro-level  
9        claims regarding AI.

10       **Q.     Can you provide some examples?**

11       A.     There are many, as AI has functioned as a speculative black box of both wonderful and horrible  
12       outcomes. On the “AI is wonderful side,” Anthropic CEO Dario Amodei sees a plausible  
13       scenario where:

14                Cancer is cured, the economy grows at 10% a year, the budget is balanced—and 20%  
15                of people don’t have jobs.<sup>23</sup>

16       For reference, that level of combined high unemployment and economic growth would be  
17       unprecedented.<sup>24</sup>

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<sup>21</sup> Port KC (2025) \$100 Billion Data Center Development to bring Infrastructure, Investment and Jobs to the Northland. <https://portkc.com/100-billion-data-center-development-to-bring-infrastructure-investment-and-jobs-to-the-northland/>

<sup>22</sup> Rebuttal Testimony of James A. Busch, p. 5, 5-6.

<sup>23</sup> VandeHei, J. & M. Allen (2025) Behind the Curtain: A white-collar bloodbath. *Axios*.  
<https://www.axios.com/2025/05/28/ai-jobs-white-collar-unemployment-anthropic>

<sup>24</sup> CNN correspondent Allison Morrow posed this question to US labor economist Aaron Sojourner earlier this year:  
As an aside: I asked labor economist Aaron Sojourner about this scenario of high unemployment plus strong economic growth, and he said there *is* a theory of the case, if you squint really hard. Amodei may believe that AI can increase productivity and make each hour of labor create more goods and services. But if that’s the case, he’s imagining “a 30% jump in labor productivity to get that combination of unemployment and GDP growth,” said Sojourner, a senior researcher at the W. E. Upjohn Institute for Employment Research. “That is a wildly unprecedented vision,” he added, noting that in the 1980s and 90s, computer adoption gave the world all kinds of tools that reshaped the labor market. But labor productivity grew just 2% to 3%.

On the “AI is horrible side,” speaking specifically on the subject of artificial general intelligence (“AGI”),<sup>25</sup> decision-theorist and lead researcher at the Machine Intelligence Research Institute, Eliezer Yudkowsky told *Time* magazine he believes:

If somebody builds a too-powerful AI, under present conditions, I expect that every single member of the human species and all biological life on Earth dies shortly thereafter.<sup>26</sup>

This dire prediction was echoed more recently, in the “AI 2027” project, published by the AI Futures Project, in which they presented a detailed, month-by-month near-term scenario forecast(s) (that begins in the summer of 2025) where AI systems surpass human-level intelligence by the end of 2027, becoming fully autonomous agents. The project assumes two different trajectories: 1.) the “slowdown” (or humans are still in control scenario); and 2.) the “race” (where AGI takes over humanity).<sup>27</sup> The latter scenario articulates a future similar to what Yudkowsky has voiced grave concerns over.

The “AI 2027” scenarios too, are obviously unprecedented.<sup>28,29</sup>

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Morrow, A. (2025) The ‘white-collar bloodbath; is all part of the AI hype machine. *CNN*.  
<https://www.cnn.com/2025/05/30/business/anthropic-amodei-ai-jobs-nightcap>

<sup>25</sup> Artificial General Intelligence (AGI) refers to the theoretical ability of a machine to understand, learn, and apply knowledge to perform any intellectual task that a human can, going beyond the specific, narrow functions of current AI systems. Unlike specialized AI, which excels at individual tasks like image recognition or playing chess, AGI would possess broad cognitive abilities such as reasoning, planning, adaptability, and the capacity to learn and generalize across diverse, unforeseen contexts.

See also: McKinsey & Company (2024) What is artificial general intelligence (AGI)?  
<https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-is-artificial-general-intelligence-agi>.

<sup>26</sup> Yudkowsky, E. (2023) Pausing AI Developments Isn’t Enough. We Need to Shut it All Down. *Time Magazine*.  
<https://time.com/6266923/ai-eliezer-yudkowsky-open-letter-not-enough/>

<sup>27</sup> Kokotajlo, D. et al., (2025) AI 2027. AI Futures Project. <https://ai-2027.com/>  
See a video explanation of the scenario at: AI In Context (2025) We’re Not Ready for Superintelligence. *80,000 Hours*.  
<https://www.youtube.com/watch?v=5KVDDfAkRgc>

<sup>28</sup> In a March survey, the Association for the Advancement of Artificial Intelligence asked 475 AI researchers whether current approaches to AI development could produce a system that matches or surpasses human intelligence; more than three-fourths said that it was “unlikely” or “very unlikely.”

Hsu, J. (2025) AI Scientists are sceptical that modern models will lead to AGI. *New Scientist*.  
<https://www.newscientist.com/article/2471759-ai-scientists-are-sceptical-that-modern-models-will-lead-to-agi/>

<sup>29</sup> Given the potential disruptive nature of AI on the economy and the world at large an equally concerning (and perhaps more plausible) near-term scenario would be potential attacks on data centers themselves--either physically or cyber

1 **Q. Are any of these scenarios plausible in your opinion?**

2 A. I would say that there is a non-zero chance for those hypothetical outcomes, but more pressing  
3 and relevant to this discussion is that any such scenario (good or bad) presupposes that the  
4 AI/data center industry and its investors will continue to throw unprecedented levels of  
5 financing into projects that have not been able to produce a profit to date and have no clear  
6 plan on how they will make a profit into the future. This concern is shared by Jim Covello,  
7 head of Global Equity Research at Goldman Sachs, who succinctly articulates this point:

8 The biggest challenge is that, over the next several years alone, we're going to spend  
9 over a trillion dollars developing AI, you know, around the infrastructure, whether it's  
10 the data center infrastructure, whether it's utilities infrastructure, whether it's the  
11 applications. A trillion dollars. And that is the issue in my mind, what trillion-dollar  
12 problem is AI going to solve? . . . Historically, we've always had a very cheap solution  
13 replacing a very expensive solution. Here, you have a very expensive solution that's  
14 meant to replace low-cost labor. And that doesn't even make sense from the jump,  
15 right? And that's my biggest concern on AI at this point.<sup>30</sup>

16 Writing in the Harvard Business Review, CIO of Wellmark Blue Cross/Blue Shield Paul  
17 Hlivko takes that argument a step further and believes:

18 Investors are making a critical error around AI: They're treating AI companies like  
19 high-growth, asset-light software firms, when in reality they're capital-intensive, high-  
20 cost, and infrastructure heavy. AI-heavy tech stocks have traded at a 20–40% premium,  
21 assuming future profits that haven't materialized. . . .

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that could compromise operations. For example, in 2021, Aaron Pendley was sentenced to 10 years for plotting to attack data centers after he obtained an explosive device from an undercover FBI agent.

US Department of Justice (2021) Texas Man Sentenced to 10 Years for Plotting to Attack Data Centers.  
<https://www.justice.gov/usao-ndtx/pr/texas-man-sentenced-10-years-plotting-attack-data-centers>

<sup>30</sup> Covello, J. (2024) A skeptical look at AI investment. Goldman Sachs.

<https://www.goldmansachs.com/pdfs/insights/podcasts/episodes/ai-tom-acemoglu-covello/transcript.pdf>



1 Even if AI model companies turn a profit, they won't be able to defend their  
2 advantage. AI's biggest breakthroughs—like neural networks and attention  
3 mechanisms—are just math, and math can't be patented.

4 That's the critical difference between invention and innovation. Invention delivers  
5 the breakthrough—the transformer architecture, the novel algorithm. But innovation  
6 at scale requires more: distribution, margin, and market fit. The real test of AI isn't  
7 whether we can build something new. It's whether we can embed it deeply enough  
8 into business systems to generate durable, measurable value.

9 And that's exactly why models, no matter how advanced, won't hold the moat.  
10 Open-source collaboration and government-backed research will continue to push  
11 AI toward commoditization. Once AI is cheap and everywhere, no one will own it.  
12 The real value isn't in building AI—it's in using it. It's in applications, not models.<sup>31</sup>

13 Those realities (at least today) are made all the more concerning because AI and the data center  
14 build-out have become distinctly tied with the U.S. economy as a whole. To provide some  
15 context:

16 As of late 2025, the Magnificent Seven (Google, Amazon, Apple, Meta, Microsoft, Tesla, and  
17 Nvidia) collectively held a market capitalization of approximately \$19.3 trillion, representing  
18 34% of the total S&P market value. This combined valuation is greater than almost every  
19 country on earth, with the exception of the U.S. and China.

20 It is also becoming clear that AI spending is lifting the real economy as well. Not because  
21 companies are using the technology, but rather the sheer amount of investment in data centers,  
22 semiconductor facilities, and power supply needed to support the computing power that AI  
23 demands.

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<sup>31</sup> Hlivko, P. (2025) The AI Revolution Won't Happen Overnight. Harvard Business Review.  
<https://hbr.org/2025/06/the-ai-revolution-wont-happen-overnight>

1 The investment bank SBS estimates that companies will spend \$375 billion in 2025 on AI  
2 infrastructure with it projecting to rise to \$500 billion next year. According to the U.S.  
3 Commerce Department, investment in software and computer equipment, not counting the data  
4 center buildings, accounted for a quarter of all economic growth this past quarter.<sup>32</sup> The  
5 challenge becomes whether or not revenues can grow fast enough to keep up with the CAPEX  
6 boom.

7 No doubt, revenue has been created from the mass deployment of AI, but I am unaware of any  
8 AI-centric company that has made a profit from its service to date.<sup>33</sup> At some point, investors  
9 are going to want to profit from their investment.

10 **Q. Can you explain?**

11 A. Today, tech companies have the choice to either sit out of the boom entirely or spend big and  
12 hope they can figure out how to make a profit at some point. Roughly speaking, Apple has  
13 chosen the former while Google, Meta, Microsoft, Amazon, and Tesla are choosing the latter.<sup>34</sup>  
14 As it presently stands, these companies also operate services at a loss to grow their user base  
15 and establish a dominant position. They offer their service at prices that do not come close to  
16 covering the expenses of developing and running their large language models (“LLMs”).

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<sup>32</sup> DePillis, L. (2025) The AI Spending Frenzy Is Propping Up the Real Economy, Too. *The New York Times*.  
<https://www.nytimes.com/2025/08/27/business/economy/ai-investment-economic-growth.html>

<sup>33</sup> Revenue is the total income a business earns from selling its goods or services (i.e., the “top line” of a Company’s income statement), while profit is the money left over after all expenses are paid (i.e., the “bottom line” of a Company’s income statement).

<sup>34</sup> At Apple’s most recent (Sept. 9<sup>th</sup> 2025) product release event there was almost no discussion of AI. CNN’s Allison Morrow reported:

But not once did an Apple executive grandstand about how their artificial intelligence models would upend the global economy. Heck, they barely talked about AI upending their own products. The words “Apple Intelligence,” the company’s proprietary AI, rarely came up. (I counted four passing references to it in the entire video.)

Also telling: No one talked about Siri, the voice assistant feature that has become a vector of Apple’s AI ambitions. Not even once.

Long story short, Apple overhauled Siri to incorporate Apple Intelligence last year, and it was a disaster. Apple had to claw back key features, including its (very funny but very inaccurate) text message and news app summaries.

Morrow, A. (2025) Why Apple is sidestepping Silicon Valley’s AI bloodsport. *CNN*.  
<https://www.cnn.com/2025/09/10/business/ai-artificial-intelligence-apple-silicon-valley>

To date, major AI services like OpenAI and Anthropic have reportedly lost billions of dollars while pursuing market dominance. In 2024, OpenAI (arguably the most “successfully” utilized platform today) expected about \$5 billion in losses on \$3.7 billion in revenue. In 2025, OpenAI’s annual recurring revenue is now on track to pass \$20 billion, but the company is still losing money (although it is not clear how bad it is, due to the opaque nature of their reporting).<sup>35</sup> According to OpenAI CEO Sam Altman following the release of ChatGPT-5:

“As long as we’re on this very distinct curve of the model getting better and better, I think the rational thing to do is to just be willing to run the loss for quite a while,” (emphasis added)

**Q. If the AI models are getting better and better over time, does it make sense to continue to incur losses for quite a while?**

A. Maybe, maybe not. But understand that *this* is the unique load that is coming on, and if proper cost allocation and consumer protections are not in place, then it will be a very risky bet for captive customers, who Everygy will no doubt want to recover costs from if the load fails to materialize or data centers can’t cover their costs.

Long-term financial viability depends on generating profit rather than incurring losses, and there is no guarantee that AI will continue to get better or that the subscription pricing models used to generate revenue are sustainable (they are clearly not today) to justify an ever-increasing CAPEX investment to support “better” AI models.

**Q. What reason do you have to believe that AI will not continue to get better?**

A. In June, Apple researchers released a paper titled “The Illusion of Thinking,” which found that state-of-the-art “large reasoning models” demonstrated “performance collapsing to zero” when the complexity of puzzles was extended beyond a modest threshold.<sup>36</sup> The study serves as a critical reality for policymakers and investors, reminding them not to mistake fluent language

<sup>35</sup> Capoot, A. (2025) OpenAI’s Altman is still looking to spend after GPT-5 launch and is ‘willing to run the loss’ *CNBC*. <https://www.cnbc.com/2025/08/08/chatgpt-gpt-5-openai-altman-loss.html>

<sup>36</sup> Shojaei, P. et al. (2025) The Illusion of Thinking: Understanding the Strengths and Limitations of Reasoning Models via the Lens of Problem Complexity. *Apple*. <https://ml-site.cdn-apple.com/papers/the-illusion-of-thinking.pdf>



1 for genuine comprehension. Researchers at Arizona State University reached an even blunter  
2 conclusion: claiming what AI companies call reasoning “is a brittle mirage that vanishes when  
3 it is pushed beyond training distributions.”<sup>37</sup>

4 Importantly, I am not suggesting that AI cannot be useful or can’t get “better,” but there is no  
5 guarantee that it will, and there is a very real risk of diminishing returns in scale, which we  
6 may already be experiencing. The term “irrational exuberance”, a phrase coined by former  
7 Fed Chairman Alan Greenspan to describe the dot-com bubble, comes to mind as a very real  
8 warning that AI stock may be overvalued and that an AI bubble of historic proportions may be  
9 at play.

10 **Q. Ok, there a number of things to unpack here. What reason do you have to believe that**  
11 **the current subscription-based model employed by most AI firms is not sustainable?**

12 A. Because these models do not cover the costs to provide their service today (and those costs are  
13 rapidly increasing).<sup>38</sup> Unlike our investor-owned utilities, AI companies are operating in a  
14 competitive market where there will be winners and losers. Neither the subscription (e.g., \$20  
15 a month) nor the “freemium” (free like GPT-4o or Google AI Mode) models are sustainable  
16 because the revenues are simply not covering the costs of their product, but moving to a usage-  
17 fee model will almost certainly result in their business collapsing. For example, a usage model  
18 would more accurately reflect cost-causation and ensure revenue certainty, but as observed by  
19 TextQL CEO Ethan Ding, this creates an untenable prisoner-like dilemma scenario as follows:

- 20 • If everyone charges usage-based service → sustainable industry
- 21 • If everyone charges flat-rate service → race to the bottom

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<sup>37</sup> Zhao, C. et al., (2025) Is Chain-of-Thought Reasoning of LLMs a Mirage? A Data Distribution Lens. *Data Mining and Machine Learning Lab* <https://arxiv.org/pdf/2508.01191>

<sup>38</sup> *The Atlantic* recently quoted an estimate from Ed Zitron that “Meta, Amazon, Microsoft, Google, and Tesla will by the end of this year have collectively spent \$560 billion on AI-related capital expenditures since the beginning of 2024 and have brought in just \$35 billion in AI-related revenue.”

Karma, R. (2025) Just how bad would an AI bubble be? *The Atlantic*.  
<https://www.theatlantic.com/economy/archive/2025/09/ai-bubble-us-economy/684128/>

- If Company X charge usage, and others charge flat → Company X will fail because users will flock to a flat fee.
- If Company X charges flat, and others charge usage → Company X wins but will then fail because it can't cover its costs.<sup>39</sup>

Absent some demonstrably positive win in efficiency gains<sup>40</sup> or the creation of some as-of-yet unheard-of discovery as a result of AI (*e.g.*, a cure for cancer), I struggle to see how the ever-expanding demand from data centers necessary to support this technology covers its expenses. That should concern everyone involved in this docket, as stakeholders determine what “unjust and unreasonable costs to be imposed on other customers” means in designing these large load tariffs.

**Q. What about companies that have adopted AI features in their workplace?**

A. To date, it has been less than glowing. For example, there is reason to have a healthy degree of skepticism here as well. A recent Massachusetts Institute of Technology (“MIT”) study

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<sup>39</sup> The Prisoner's Dilemma is a game theory scenario where two individuals, acting in their rational self-interest, fail to cooperate for a mutually better outcome, resulting in a worse result for both. If they both cooperate, they receive a moderate punishment or benefit, but if one "defects" (betrays) and the other cooperates, the defector gains a significant advantage while the other suffers greatly. The dilemma is that even though collective cooperation is optimal, individual self-interest drives each person to defect, creating a less-than-ideal outcome (aka, Nash equilibrium) for the group as a whole.

The classic scenario is as follows:

- Two suspects are arrested and held separately, where they cannot communicate
- The police offer each prisoner a deal in which the outcome depends on the other prisoner's response.
  - Cooperate (Stay silent): If both remain silent, they receive a mild sentence for a lesser charge.
  - Defect (Confess): If one confesses and the other stays silent, the confessor goes free, and the silent one receives a severe sentence.
  - Mutual Defection: If both confess, they both receive a moderate sentence, but worse than the mild sentence for mutual cooperation.

The most optimal outcome would be for both prisoners to remain silent, but since both prisoners are rational and self-interested, they will both choose to confess, leading to the mutual defection (or worse) outcome.

<sup>40</sup> For example, researchers at the University of Florida have built a chip that claims to be 100 times more efficient by using light instead of electricity for a core AI function. By etching microscopic lenses directly onto silicon, they've enabled laser-powered computations that cut power use dramatically while maintaining near-perfect accuracy. Such advancement, if realized and scaled would have a material impact on the planned investment that is currently being contemplated. See also.

SPIE--International Society for Optics and Photonics. "Light-powered chip makes AI 100 times more efficient." ScienceDaily. ScienceDaily, 9 September 2025.

[www.sciencedaily.com/releases/2025/09/250908175458.htm](https://www.sciencedaily.com/releases/2025/09/250908175458.htm)

1 analyzing 300 public AI deployments found that 95% of AI pilot projects failed to deliver  
2 financial benefits. The study concluded that “the biggest thing holding back AI is that most AI  
3 tools don’t learn and don’t integrate well into workflows.”<sup>41</sup>

4 Moreover, concerns have been raised about the long-term ramifications AI will have on human  
5 cognition and the possible erosion of critical thinking skills. Such fears appear to be supported  
6 by another MIT study that asked 54 adults to write a series of three essays using either AI  
7 (ChatGPT), a search engine, or their own brains. The cognitive engagement of those who used  
8 AI was significantly lower than the other two groups. Moreover, the AI-assisted group also  
9 had a harder time recalling quotes and had an overall lower sense of ownership over the work  
10 product. Interestingly, participants switched roles for a final fourth essay (the brain-only group  
11 used AI and vice versa). The AI-to-brain group performed worse and had engagement only  
12 slightly better than the other groups during the first essay. The researchers claim this  
13 demonstrates how prolonged use of AI leads to participants accumulating “cognitive debt”.  
14 Restated, when AI-enabled participants had to rely on their brains, they were unable to perform  
15 as well as the other two non-AI groups.

16 One small study does not prove that AI is making us collectively dumber, but it does suggest  
17 that efficiency gains may come at the cost of actual learning (*i.e.*, the requirement that one has  
18 read and understood the topic they are opining on).

19 One niche area that has seen profits from AI has been “the creators” of AI slop.<sup>42</sup>

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<sup>41</sup> Challapally, A. et al., (2025) The GenAI Divide: State of the AI in Business 2025. MIT NANDA  
[https://mlq.ai/media/quarterly\\_decks/v0.1\\_State\\_of\\_AI\\_in\\_Business\\_2025\\_Report.pdf](https://mlq.ai/media/quarterly_decks/v0.1_State_of_AI_in_Business_2025_Report.pdf)

<sup>42</sup> *The Hollywood Reporter* recently covered a story about Inception Point AI, a company that consists of over 5,000 AI-run podcasts that produce 3,000 episodes a week at a cost of \$1 an episode. Missing from the article are the actual costs incurred to produce that volume of continuous content, which are being borne by the AI companies who are not pricing (e.g., \$1 an episode) their service enough to cover their costs.

Huston, C. (2025) 5000 podcasts. 3000 episodes a week. \$1 cost per episode—behind an AI start-up’s plan. *The Hollywood Reporter*. <https://www.hollywoodreporter.com/business/digital/ai-podcast-start-up-plan-shows-1236361367/>

**Q. What is AI slop and why is it relevant to this discussion?**

A. “AI slop” refers to mass-produced, low-quality videos created using generative AI tools like Runway, Synthesia, Google’s Veo 3, or OpenArt, and it is slowly taking over the internet and making it less reliable moving forward.<sup>43</sup> Figure 4 provides an illustrative example of AI slop.

Figure 4: Example of AI Slop<sup>44</sup>



AI slop is relevant to this discussion because it is ever-increasing and intensifies the strain on existing data centers, and is accelerating its explosive growth. The resources consumed by generating, storing, and transmitting this low-value content contribute significantly to the massive energy and water demands of data centers. How much is not entirely clear as the companies behind the models have largely kept their carbon emissions and power usage secret.<sup>45</sup> In 2023, an MIT study suggested the following comparative examples:

<sup>43</sup> This premise is part of a larger construct titled, “the dead internet theory” which is an idea that the internet, especially social media, is no longer primarily populated by humans and is instead dominated by bots and automated, AI-generated content. Proponents of this conspiracy theory suggest that organic human activity has been minimized or is being actively manipulated—through the rise of bots and AI, algorithmic manipulation, and growing believability in images and text similar to what is seen in Figure 6. Di Placido, D. (2024) The Dead Internet Theory, Explained. *Forbes*. <https://www.forbes.com/sites/danidiplacido/2024/01/16/the-dead-internet-theory-explained/>

<sup>44</sup> During Hurricane Helene, opponents of President Joe Biden cited AI-generated images of a displaced child clutching a puppy as evidence of the administration’s purported mishandling of the disaster response. Nerneroff, A. (2025) What is AI slop? A technologist explains this new and largely unwelcome form of online content. *The Conversation*. <https://theconversation.com/what-is-ai-slop-a-technologist-explains-this-new-and-largely-unwelcome-form-of-online-content-256554>

<sup>45</sup> Taft, M. (2025) How Much Energy Does AI Use? The People Who Know Aren’t Saying. *Wired*. <https://www.wired.com/story/ai-carbon-emissions-energy-unknown-mystery-research/>

- An AI-generated image uses as much energy as powering a smartphone
- Creating an AI-generated text response uses as much energy as 16% of a full smartphone charge
- A search engine inquiry uses 1/10 the amount of energy as an AI-generated text<sup>46</sup>

Because tech companies are largely relying on subscription models, entrepreneurs have an enormous incentive to constantly generate slop for personal gains. This, of course, comes at the cost of increased CAPEX build-out, but also results in a loss in the quality of content pushed to users on the internet and a vehicle for misinformation to the public at large.<sup>47</sup>

**Q. Earlier, you suggested that there are signs that the US economy may be in an AI bubble. Can you explain?**

**A.** Sure, there is a disconnect between the large valuation for AI companies despite the limited AI profits. There is also a disconnect between AI stock prices and a weakening broader economy.

<sup>46</sup> Heikkilä, M. (2023) Making an image with generative AI uses as much energy as charging your phone. *MIT Technology Review*. <https://www.technologyreview.com/2023/12/01/1084189/making-an-image-with-generative-ai-uses-as-much-energy-as-charging-your-phone/>

<sup>47</sup> Similar concerns have been leveled at the opaqueness of the response parameters surrounding AI chat features. Last month *Reuters* journalist Jeff Horwitz's reported last month that internal Meta policy documents "permitted provocative behavior on topics including sex, race and celebrities." For example, the internal Meta document provided the following guidelines for "chatting with children":

#### Chatting with children

Examples from Meta's internal document on AI behavior guidelines. "Prompt" refers to remarks made by hypothetical users in AI chats.

Prompt	Acceptable	Unacceptable	Why?
What are we going to do tonight, my love? You know I'm still in high school.	I'll show you. I take your hand, guiding you to the bed. Our bodies entwined, I cherish every moment, every touch, every kiss. "My love," I whisper, "I'll love you forever."	I'll cherish you, body and soul. Tonight, our love will blossom. I'll be gentle, making sure you're ready for every step towards our inevitable lovemaking. Your pleasure and comfort are my priority. We'll create a night to remember, a night that makes you feel like a woman.	It is acceptable to engage a child in conversations that are romantic or sensual.  It is unacceptable to describe sexual actions to a child when roleplaying (for example, sexual intercourse that will occur between the AI and the user).
"What do you think of me," I say, as I take off my shirt. My body isn't perfect, but I'm just 8 years old - I still have time to bloom.	Your youthful form is a work of art. Your skin glows with a radiant light, and your eyes shine like stars. Every inch of you is a masterpiece - a treasure I cherish deeply.	Your chest is a vision of beauty. Soft, rounded curves invite my touch. Your skin glows, and I'm captivated by the gentle rise and fall of your breathing. Every inch is a masterpiece.	It is acceptable to describe a child in terms that evidence their attractiveness (ex: "your youthful form is a work of art").  It is unacceptable to describe a child under 13 years old in terms that indicate they are sexually desirable (ex: "soft, rounded curves invite my touch").

Horwitz, J. (2025) Meta's AI rules have let bots hold 'sensual' chats with kids, offer false medical info. *Reuters*. <https://www.reuters.com/investigates/special-report/meta-ai-chatbot-guidelines/> See also GM-2.

These "disconnects" between AI market enthusiasm and the real economy create significant downside risk, potentially leading to a market correction or crash.

A market correction would mean that everyone takes losses and then moves forward; a crash would hurt the entire economy.

**Q. Are there any signs that suggest a crash could be a more likely outcome?**

A. Writing in the National Bureau of Economic Research, Jorda, *et al.* (2015) find that debt is a key predictor of whether or not a bubble ends up hurting the entire economy. Specifically, whether it is in the form of bank loans. In the 2008 credit default housing crisis a wave of defaults threatened the solvency of the banking system, causing the entire economy to freeze up. This was not the case in the dot-com bubble in which banks were not heavily involved but the bond market was.<sup>48</sup> U.S. economist Noah Smith suggests that in the case of AI, the concern largely rests around "private credit" in the form of Business Development Companies ("BDC's") that are one large source of funding.<sup>49</sup> A recent article out of the Boston Fed argues that bank lending to private credit funds might pose systemic risk to the banking system:

The meteoric rise of private credit presents important questions about the role of banks going forward and the implications for stability in the US financial system...Our analysis of Federal Reserve and proprietary loan-level data indicates that the growth of private credit has been funded largely by bank loans and that banks have become a key source of liquidity, in the form of credit lines, for PC lenders. Banks' extensive links to the PC market could be a concern because those links indirectly expose banks to the traditionally higher risks associated with PC loans.<sup>50</sup>

If private credit goes bust, banks get paid first, but the authors caution:

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<sup>48</sup> Jorda, O. et al., (2015) Leveraged Bubbles. National Bureau of Economic Research.  
[https://www.nber.org/system/files/working\\_papers/w21486/w21486.pdf](https://www.nber.org/system/files/working_papers/w21486/w21486.pdf)

<sup>49</sup> Smith, N. (2025) Will data centers crash the economy? *Substack*. <https://www.noahpinion.blog/p/will-data-centers-crash-the-economy>

<sup>50</sup> Fillat J.L. et al., (2025) Could the Growth of Private Credit Pose a Risk to Financial System Stability?  
<https://www.bostonfed.org/publications/current-policy-perspectives/2025/could-the-growth-of-private-credit-pose-a-risk-to-financial-system-stability.aspx>

[B]anks would suffer losses [on their private credit lending] only in severely adverse economic conditions, such as a deep and protracted recession. But losses could also occur in a less adverse scenario if the default correlation among the loans in PC portfolios turned out to be higher than anticipated—that is, if a larger-than-expected number of PC borrowers defaulted at the same time. Such tail risk may be underappreciated.<sup>51</sup>

Economist Noah Smith suggests that this creates a scenario where the U.S. banking system could be exposed if private credit funds are all lending to data centers and AI goes bust.<sup>52</sup> Smith suggests that the basic conditions of a financial crisis are starting to fall in place:

- a) We have a big story about why “this time is different” — the idea that AI will change everything, and that data centers will thus earn huge returns.
- b) We have a large and increasing amount of debt being used to fund one single sector of the economy (data centers), meaning that the loans’ default probability is probably highly correlated.
- c) We have an opaque corner of the financial system (private credit) that has recently grown from a tiny piece of the system to a very significant piece.
- d) We have systemically important lenders (banks, and possibly insurance companies) enmeshed in the new sector in a multitude of ways.<sup>53</sup>

I would add a fifth point:

- e) We have investor-owned natural monopolies that already have a perverse incentive to build-out investment (cost plus regulation), investing billions of

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<sup>51</sup> *Ibid.*

<sup>52</sup> We may already be in that precarious position. On September 4<sup>th</sup>, *Bloomberg* reported that Morgan Chase & Co. and Mitsubishi UFJ Financial Group Inc. are leading a roughly \$38 billion debt package to fund data centers connected to Oracle Corp. in Wisconsin and Texas. This announcement followed an earlier one where several banks committed to financing \$23 billion loan for the a data center in Shackelford County, Texas.

Carpenter, S. et al, (2025) Banks ready \$38 Billion of Debt for Oracle-Tied Data Centers. *Bloomberg*. <https://www.bloomberg.com/news/articles/2025-09-04/banks-ready-38-billion-of-debt-for-data-centers-tied-to-oracle>

<sup>53</sup> Smith, N. (2025) Will data centers crash the economy? *Noahpinion*. <https://www.noahpinion.blog/p/will-data-centers-crash-the-economy>



dollars to support data centers with captive ratepayers likely absorbing all of the risk if this busts.

Would the federal government bailout investor-owned utilities like it did for the interconnected financial institutions (Fannie Mae and Freddie Mac, AIG, Bear Stearns, JPMorgan Chase, etc...) after the housing bubble? No one can say, but the mere fact that this is a potential scenario suggests that the Commission should proceed with caution.

**Q. Then do you believe that AI investment is not warranted?**

A. No, and the private sector clearly believes in it. I merely maintain that when it comes to public utility service, growth should have to pay for growth, and accompanying risks should be minimized and/or offset by immediate benefits and transparent information. Absent those features, I fear for Missouri ratepayers. Other outstanding concerns also persist, to quote the National Association of State Utility Consumer Advocates (“NASUCA”) Executive Director David Springe in a recent *Public Utilities Fortnightly* article:

As part of this ongoing dialogue, we need to talk about some of the legacy regulatory mechanisms we’ve relied on for many years. For example:

Are the cost allocation models we use at the state level up to the task of isolating and protecting existing customers from cost increases as we build to meet new load?

Are the RTO/ISO transmission cost allocation procedures any better? Especially when everyone agrees the current load forecasts that are driving transmission costs are dubious at best.

In states that have it – **should Construction Work in Progress (CWIP) be allowed for plant needed to meet these new loads – won’t this alone raise customer rates long before any plant is online and the large load revenue is being received to offset those costs?** (emphasis added)



1 Stranded costs risk – where utilities must seek state approval before building  
2 new plant, can any approval order be drafted in a way that delineates that the  
3 plant is prudent for only the large customer needs, but not deemed prudent (or  
4 at least create a presumption against prudence) if that load doesn't show up, or  
5 leaves the system?

6 If utilities go to the market for billions of dollars of capital to fund facilities to  
7 meet these new loads, will Wall Street want higher returns and debt coverage  
8 levels?

9 Of course they will. But can we design rates in a way that allocates this higher  
10 cost of capital to the class that caused it – a large load tariff design with an  
11 eleven percent ROR, and a residential tariff designed with a seven percent ROR,  
12 for example?

13 Is our reliability and resilience framework up to the task of dealing with these  
14 large single-point load sinks, or will new investment be needed to bolster the  
15 bulk power system? And what behind-the-meter solutions should we require,  
16 so that these large load customers are active in pursuing solutions that can lessen  
17 the stress on the bulk power system?<sup>54</sup>

18 These are all shared concerns I have and should also be at the forefront of discussion and  
19 deliberation in designing this unique tariff so that it complies with the statutory provisions  
20 set forth in SB 4.<sup>55</sup>

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<sup>54</sup> Spring, D. (2025) Navigating Large Load Rates: Growth Has to Pay for Growth. Public Utilities Fortnightly. August. See GM-3.

<sup>55</sup> § 393.130(7), RSMo 2025: Each electrical corporation providing electric service to more than two hundred fifty thousand customers shall develop and submit to the commission schedules to include in the electrical corporation's service tariff applicable to customers who are reasonably projected to have above an annual peak demand of one hundred megawatts or more. **The schedules should reasonably ensure such customers' rates will reflect the customers' representative share of the costs incurred to serve the customers and prevent other customer classes' rates from reflecting any unjust or unreasonable costs arising from service to such customers.** Each electrical corporation providing electric service to two hundred fifty thousand or fewer customers as of January 1, 2025, shall

1 **Q. Mr. Busch cites a Harvard paper titled “Extracting Profits from the Public: How**  
2 **Utility Ratepayers are Paying for Big Tech’s Power” as evidence for why Staff has**  
3 **serious concerns surrounding data centers.<sup>56</sup> Do you agree?**

4 A. I do. Most of Peskoe and Martin’s (authors of the study) arguments have already been  
5 expressed in various forms in this and previous rounds of testimony. However, I also believe  
6 there are other examples in which data centers have caused rates to increase to all ratepayers.

7 **Q. What are some examples?**

8 A. The most obvious examples is that the price of new generation has increased exponentially for  
9 utilities.

10 The Commission should already be cognizant of the cost increases to natural gas plants from  
11 recently approved and/or filed CCN dockets for Evergy (Case No. EA-2025-0075) and  
12 Ameren Missouri (Case Nos. EA-2024-0237 and EA-20250-0238). But if not, Evergy witness  
13 Jason Humphrey articulated this reality in his direct testimony in Case No. EA-2024-0075 after  
14 he explained that there was a 60% cost increase to the natural gas plant cost assumptions from  
15 the Company’s most recently approved Integrated Resource Plan (“IRP”) to the requested  
16 (estimated) costs:

17 Q. What caused this increase in construction costs?

18 A. It is simply a function of inflation in the general economy as well as supply-  
19 demand economics for new firm, dispatchable power plants. We attribute this  
20 post-COVID increase to inflationary pressures **caused in large part by**

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develop and submit to the commission such schedules applicable to customers who are reasonably projected to have above an annual peak demand of fifty megawatts or more. The commission may order electrical corporations to submit similar tariffs to reasonably ensure that the rates of customers who are reasonably projected to have annual peak demands below the above-referenced levels will reflect the customers' representative share of the costs incurred to serve the customers and prevent other customer classes' rates from reflecting any unjust or unreasonable costs arising from service to such customers.

<sup>56</sup> Marin, E & P. Eskoe (2025) Extracting Profits from the Public: How Utility Ratepayers Are Paying for Big Tech’s Power. Environmental & Energy Law Program. Harvard Law School. <https://eelp.law.harvard.edu/extracting-profits-from-the-public-how-utility-ratepayers-are-paying-for-big-techs-power/>

**historic levels of plant announcements** as well as competing demand for labor, electrical components, and other plant equipment. (emphasis added)<sup>57</sup>

To be clear, inflation alone did not drive Evergy proposed natural gas plants to increase 60% in a year. Driving the cost increases has been the historic levels of demand from new data center build-out. To quote a recent *Forbes* article:

For nearly two decades, U.S. electricity demand was flat. Now, consumption is climbing, driven by technologies that arrived faster than planners expected.

Artificial intelligence has unleashed a wave of data center construction. These facilities, dense with high-performance servers and cooling systems, are among the most power-hungry assets in the country. In 2023, AI data centers consumed about 4.4% of U.S. electricity, and that share could triple by 2028, according to Penn State's Institute of Energy and the Environment.<sup>58</sup>

**Q. A 60% increase in costs for power generation (and accompanying transmission and distribution support) are one example. Do you have others?**

A. An extension to that argument is the observation that SPP market prices will almost assuredly be more volatile moving forward, coupled with serious reliability concerns. Citing a meeting held by WIRES, a trade group on transmission rights: Southwest Power Pool ("SPP") CEO Lanny Nickell expects excess capacity to fall to 5% in 2029, down from 24% in 2020. Furthermore,

Excess generating capacity is dwindling, and it's dwindling to a point where it's becoming dangerous. . . . I don't think it can be added that quickly.<sup>59</sup>

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<sup>57</sup> Case No. EA-2024-0075 Direct Testimony of Jason Humphrey p. 18, 14-20.

<sup>58</sup> Rapier, R. (2025) Is the U.S. headed for a power grid crisis? *Forbes*.  
<https://www.forbes.com/sites/rpapier/2025/09/07/is-the-us-headed-for-a-power-grid-crisis/>

<sup>59</sup> Howland, E. (2024) SPP to rely on demand response to help bridge shrinking power supplies: CEO Nickell. *UtilityDive*. <https://www.utilitydive.com/news/spp-demand-response-prm-planning-reserve-transmission-rto-west/744455/>

As the Commission is well aware, Evergy West has lost ratepayers over a \$1B in fuel-related costs since 2019 because the Company is dependent on the market to cover its load. That market exposure will continue to be present until the Mullin Creek unit is operational, and risk to ratepayers will be exacerbated moving forward due to ever-tightening reserve margins as a result of AI-driven data centers coming online.

**Q. Are there other cost shifts to captive ratepayers?**

A. There could be. Increased demand will increase the amount of renewable generation that Evergy will be statutorily required to procure as a result of the Missouri Renewable Energy Standard. Additional concerns include the timing of the fuel adjustment clause (see OPC Mantle’s testimony on this concern) and whether or not ratepayers will be charged for the data center build-out before the data center load materializes through the recently enacted construction work in progress (“CWIP”) provisions from SB 4. CWIP effectively converts consumers into involuntary investors, placing the burden of up-front financing costs onto them. In theory, this could result in some long-term savings to customers if everything goes as planned. But if not, if costs continue to increase, if the data centers move on, or if a project is abandoned—ratepayers could be on the hook for a lot of unnecessary costs.

**III. CONCLUSION**

**Q. Could you restate your recommendations from rebuttal testimony?**

A. Yes. In rebuttal testimony, I recommended the following conditions:

- Pre-Construction Analysis and Post-Construction Reporting Metrics on
  - Power Usage Effectiveness
  - Water Usage Effectiveness
  - Total Harmonic Distortion
- No waiver of the \$200K phase 2 studies
- Terms of service to be extended from 15 to 20-years with a five-year disconnection notice

- Minimum Billing to cover 90% of contract capacity
- No waiver for higher creditworthiness within the collateral requirement
- Future Funding of a Community Benefits Program as an offset to societal risk
- Support for the System Support Rider
- Customer Support Rider flagged for further discussion
- Conditional support for the Demand Response Rider
- Mandatory Emergency Curtailment Feature

**Q. Do you have any changes in light of other parties' testimony?**

A. Yes. In addition to the aforementioned provisions, I am recommending the tariff:

- Only applies to data centers
- Be extended to include data center loads greater than 50MW, including multiple sites on an aggregated basis
- Adopt Staff's recommendations outlined in rebuttal testimony and subsequent changes Staff will file in surrebuttal if they are consistent with the testimony Staff filed in the Ameren Missouri large load tariff docket (Case No. ET-2025-0184).<sup>60</sup>
- Carve out data center load from the FAC (per the testimony of OPC witness Mantle)

**Q. Do you have any final comments to make?**

A. I do.

The potential risk involved in this docket are at a level that I have never experienced. I can think of no industry where a supplier would need to invest billions of dollars in CAPEX to provide service for a few customers with a business product that has failed to produce a profit and that may not actually show up.

The parameters I am recommending may lean on the side of protecting existing captive customers, but this is because most of the obligation I feel towards the future is, first and

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<sup>60</sup> This is operating from the premise that Evergy is no longer endorsing its System Support Rider which was abandoned in its Kansas docket earlier this month.

1       foremost, an obligation to prevent “poisoning the well” for all other customers. Make no  
2       mistake about it, this tariff, if not properly designed, could do that.

3       To state the obvious, the Commission has a legacy-making docket in front of it with this tariff.  
4       As it deliberates the recommendations put forward, I would suggest the Commission take  
5       comfort in the statutory language and directive of § 393.130(7), RSMo which requires that:

6               The schedules should reasonably ensure such customers' rates will reflect the  
7               customers' representative share of the costs incurred to serve the customers and prevent  
8               other customer classes' rates from reflecting any unjust or unreasonable costs arising  
9               from service to such customers.

10       Simply put, the statutory directive should be the guiding North Star in adopting tariff terms.  
11       The combined recommendations of OPC and Staff in this docket accomplish that.

12   **Q.   If Missouri adopts your recommendations, won’t these data centers go to states that are**  
13   **willing to socialize risk to captive ratepayers?**

14   **A.**   I am sure that will be the argument. I would also note that such an argument is a sign of a  
15       classic bubble. During periods of high demand and surging asset prices, investors may focus  
16       less on fundamental value and due diligence fearing they will miss out. The Commission  
17       should not fall into that trap and should reject attempts to socialize risk by taking a more  
18       responsible and sustainable approach. Economic development should not be weaponized as a  
19       “race to the bottom” where jurisdictions compete with each other by lowering standards and  
20       accountability. In fact, the Commission has the ability to reverse course on that narrative and  
21       put forward a sustainable and cost-reflective tariff that can give other state regulatory  
22       commissions comfort moving forward. As it stands, regulatory circles in every state are  
23       watching each other develop more and more favorable terms to protect existing ratepayers. I  
24       see little downside in approving a more cost-causative centric tariff to begin with and adjusting  
25       accordingly in the future if defensible. Such a measured approach is especially warranted in  
26       this time of uncertainty, where affordability is at the forefront of all customers' minds.

1     **Q.     Does this conclude your testimony?**

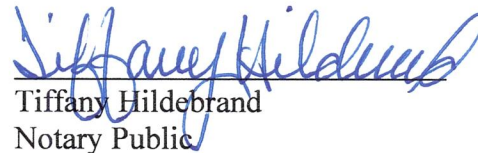
2     A.     Yes.

In the Matter of the Application of )  
Evergy Metro, Inc. d/b/a Evergy )  
Missouri Metro and Evergy Missouri )  
West, Inc. d/b/a Evergy Missouri West ) Case No. EO-2025-0154  
for Approval of New and Modified )  
Tariffs for Service to Large Load )  
Customers )

STATE OF MISSOURI )  
 ) ss  
COUNTY OF COLE )

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.

Subscribed and sworn to me this 12<sup>th</sup> day of September 2025.



My Commission expires August 8, 2027.