

Exhibit No.:
Issue(s): Large Load Data Center
Financial Stability/AI
Witness: Darryl T. Sagel
Type of Exhibit: Surrebuttal Testimony
Sponsoring Party: Union Electric Company
File No.: ET-2025-00184
Date Testimony Prepared: November 3, 2025

MISSOURI PUBLIC SERVICE COMMISSION

FILE NO. ET-2025-0184

SURREBUTTAL TESTIMONY

OF

DARRYL T. SAGEL

ON

BEHALF OF

UNION ELECTRIC COMPANY

D/B/A AMEREN MISSOURI

**St. Louis, Missouri
November, 2025**

TABLE OF CONTENTS

I. INTRODUCTION 1

II. PURPOSE OF TESTIMONY 1

III. AI GROWTH AND SUSTAINABILITY 2

IV. HYPERSCALER FINANCIAL STABILITY 8

V. AI VALUE CREATION AND WORKFORCE IMPLICATIONS..... 14

SURREBUTTAL TESTIMONY

OF

DARRYL T. SAGEL

FILE NO. ET-2025-0184

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Darryl T. Sagel. My business address is One Ameren Plaza,
1901 Chouteau Ave., St. Louis, Missouri.

Q. By whom are you employed and what is your position?

A. I am employed by Ameren Services Company ("Ameren Services"), a
wholly-owned subsidiary of Ameren Corporation ("Ameren"), as Vice President,
Corporate Development and Acquisitions.

**Q. Please describe your educational background and employment
experience.**

A. See my Statement of Qualifications, which is attached as Appendix A to my
Surrebuttal Testimony.

II. PURPOSE OF TESTIMONY

Q. To what testimony or issues are you responding?

A. I am responding to testimony filed by the Office of Public Counsel ("OPC")
witness Geoff Marke related to certain direct and indirect risks posed by serving new large
load customers.

1 **III. AI GROWTH AND SUSTAINABILITY**

2 **Q. In his testimony, Dr. Marke highlights the massive capital cycle related**
3 **to data center development supporting the build-out of artificial intelligence ("AI"),**
4 **but calls into question the ultimate profit model, commenting "at some point,**
5 **investors are going to want to profit from their investment."¹ How do you respond?**

6 A. Recent innovations in AI are rapidly expanding AI use cases, and new
7 advancements in software, hardware, and algorithms are improving the capabilities of large
8 language models that power generative AI, including new classes of AI models that have
9 reasoning capabilities. It is abundantly clear that running new generative AI models, which
10 offer image generation, voice, and video capabilities, requires a massive amount of
11 computing power, which is driving demand for data center capacity, as well as electricity
12 supply to power the equipment within the data centers.

13 As the technology industry moves quickly to leverage the power of AI models,
14 there is an arms race underway to build the infrastructure that will power these models. In
15 a September 2025 earnings call, Nvidia CEO Jensen Huang estimated that between \$3
16 trillion and \$4 trillion² will be spent on AI infrastructure by the end of the decade, with
17 much of that money coming from the leading cloud service providers, or "hyperscalers."
18 Specifically, Amazon, Google, Meta, Microsoft, and Oracle are collectively spending
19 hundreds of billions of dollars annually on data centers and IT infrastructure in order to
20 increase the supply of AI computing capacity for their own and their clients' needs, but

¹ File, No. ET-2025-0184, Geoff Marke Rebuttal Testimony, p. 17, ll. 4-5.

² AI capital expenditures referred throughout this testimony typically include principal payments on data center finance leases.

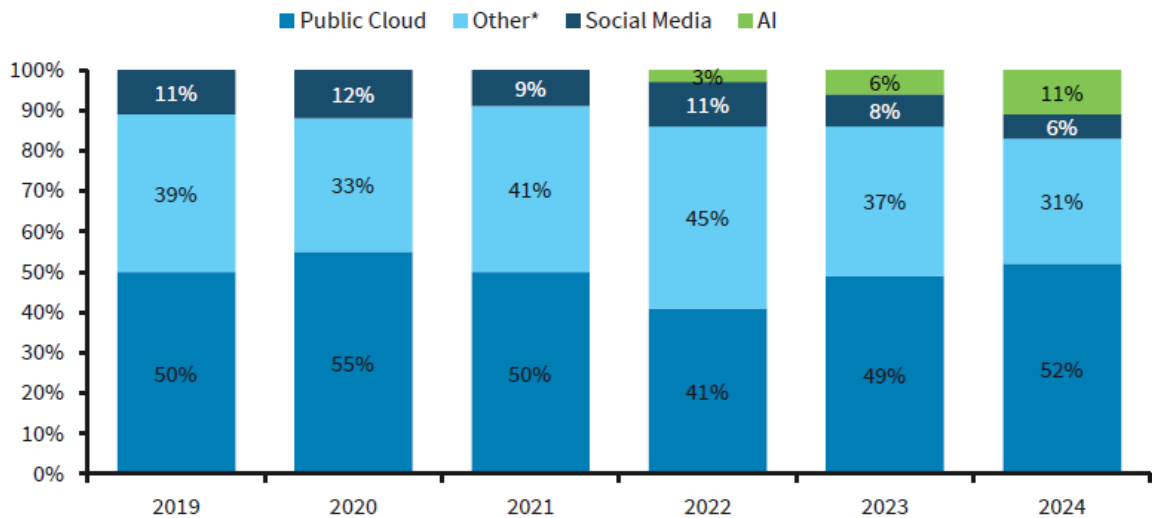
1 demand for computing capacity and new AI data center campuses continue to exceed
2 supply.

3 A common critique against AI spending and the hyperscale business model is that
4 total AI-related annual revenue from leading US participants is currently about \$50 billion,
5 a relatively small fraction of the trillions of dollars of investment in new data centers. And
6 while this direct revenue source is growing incredibly fast and may in and of itself justify
7 the massive sector investment over time, future AI revenue is not the only barometer of
8 value creation. Because AI is an embedded experience, its value may come in indirect
9 ways, through higher average revenue per user, lower platform churn, better advertising
10 yield, and more customer engagement, a large proportion of which flows into existing
11 revenue lines (e.g., search, advertisements, cloud computing) rather than a clean AI line
12 item. In addition, AI capital can also be monetized through margin expansion (unit cost
13 declines), defensive retention (avoided revenue loss) and real options on future project
14 lines, all of which can boost the economic return on capital. The point is that one cannot
15 judge whether hyperscaler capital deployment into data centers will obtain an acceptable
16 return on investment simply by comparing direct AI revenues to the investment. The
17 equation is far more complicated than that, a reality that is absent from Dr. Marke's
18 comments.

19 Another consideration is that data centers are not all about AI. Rather, conventional
20 cloud services continue to underpin data center demand. I note this because cloud
21 computing revenues are currently more stable than AI revenues given cloud maturity and
22 widespread adoption. Cloud computing has a long history, established revenue streams,
23 and has become an essential and predictable infrastructure backbone for businesses. While

AI currently gets much of the hype around future investment and revenue growth, many of the hyperscalers continue to point to strength in their conventional cloud businesses. For instance, Amazon indicated that 85-90% of worldwide IT spend is still with on-premise enterprise data centers. According to DC Byte, public cloud still accounts for ~50% of global data center capacity, whereas AI made up only 11% in 2024, up from 6% in 2023.³

Mix of Global Data Center IT Demand



*Other includes financial institutions, public sectors, MSP/SaaS, etc.
Source: DC Byte, Barclays Research

Q. So, while AI-related revenues are rapidly growing, Dr. Marke suggests that "the current subscription-based model employed by most AI firms is not sustainable."⁴ Do you agree?

A. As I suggested earlier, I believe that Dr. Marke is missing many of the myriad ways in which AI firms are able to monetize their AI products. Subscriptions, under which customers pay for cloud services via a monthly user fee (e.g., Google One has a basic monthly service fee of \$1.99 per month, but Google AI Ultra, which offers exclusive

³ DC Byte: 2025 Global Data Center Index, April 2025.

⁴ File No. ET-2025-0184, Geoff Marke Rebuttal Testimony, p. 19, l. 4.

1 access to cutting-edge AI products, costs \$249.99 per month) represent one meaningful
2 profit channel, but there are other paths to generating incremental revenue.

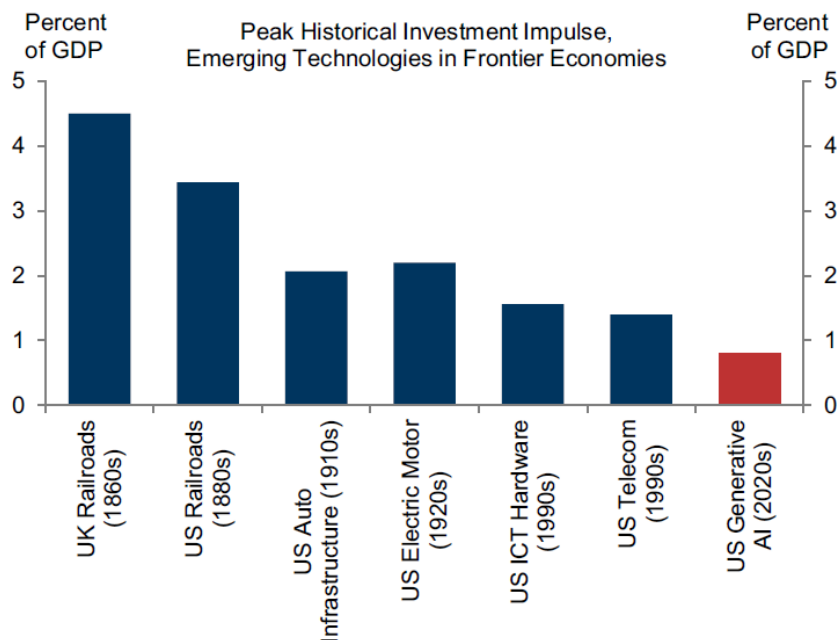
3 For instance, upselling will be a key element of the hyperscalers' cloud strategy.
4 Thomas Kurian, CEO of Google Cloud, in a September 2025 speech at the Goldman Sachs
5 Communicopia and Technology Conference, said that once customers use Google's AI
6 services, they wind up using more of the company's products. "That leads the customers
7 who sign a commitment or contract to spend more than they contracted for, which drives
8 more revenue growth." he added.

9 AI companies are also generating consumption-based revenue from enterprise
10 customers, a pricing model under which these customers pay for AI services based on their
11 actual usage, rather than a fixed subscription. For large language models, pricing is
12 typically based on the number of tokens (words or parts of words) in the input prompt and
13 the output generated by the AI model. For example, OpenAI, whose consumer product
14 ChatGPT is offered with a subscription or freemium model, also offers a separate pay-as-
15 you-go model for its access to advanced AI services, charging developers per token for
16 models like GPT-4 and GPT-3.5 turbo. Anthropic also uses a token-based pricing model
17 for its Claude language models, with tiered plans based on usage and features. The
18 consumption-based rates are priced based on the business value the customers receive,
19 allowing these customers to scale their expenses with demand.

20 OpenAI, which derives its revenues predominantly through a combination of
21 subscription fees and usage-based pricing, has also alluded to the possibility of pursuing
22 an advertising-oriented revenue model, which presents an additional compelling means by
23 which the company can monetize its large consumer base.

1 **Q. The size of this projected AI investment could potentially present**
2 **macroeconomic risk. How does this AI investment buildout compare to previous**
3 **large infrastructure spending cycles?**

4 A. Without a doubt, the AI infrastructure buildout is nominally larger than
5 previous sizable investment spending cycles. However, when scaled appropriately relative
6 to the size of the economy at the time, the AI investment buildout appears less extreme,
7 thereby representing a lower relative risk to the overall economy. AI investment in the US
8 over the past 12 months has been less than 1% of gross domestic product ("GDP") as
9 compared to historical investment catalysts during emerging technology phases that
10 generally peaked at 2% to 5% of GDP (see graphic below).



Source: Goldman Sachs Global Investment Research, Bureau of Economic Analysis

11
12 While AI infrastructure spending is expected to continue to grow over the next
13 several years, its investment cycle peak is unlikely to exceed 2% of GDP in the future.

1 **Q. Dr. Marke suggested that "there are signs the US economy may be in**
2 **an AI bubble."**⁵ **What are your thoughts?**

3 A. There are certainly characteristics of recent investor conduct and market
4 behavior that comport with previous market bubbles, including the fast rise in technology
5 sector valuations, significant AI market concentration, increased capital intensity of key AI
6 participants, and the advent of vendor financing transactions. AI-related growth,
7 innovation and associated operating efficiencies have attracted immense excitement among
8 the investor community, which is driving significant capital outlay by existing and new
9 companies. And generative AI appears to be at a critical inflection point in its
10 commercialization life cycle, similar to the experience of the commercialization of the
11 internet in the late 1990s, bringing the potential for future growth. These phenomena have
12 hardly gone unnoticed by the equity markets. Today, the 10 largest US stocks (eight of
13 which are technology companies) are worth approximately \$25 trillion and account for
14 nearly 25% of the global equity market value.

15 Yet, there are also key disparities relative to previous market bubbles to call out.
16 Notably, market value appreciation within the technology sector has, to date, largely been
17 driven by fundamental growth rather than "irrational exuberance" about future growth
18 prospects, and current market valuations are not as rich as the most recent bubble in the
19 late 1990s. Furthermore, the leading companies that have experienced the most impressive
20 investment returns during the recent AI value surge also happen to have, for the most part,
21 extraordinarily strong balance sheets.

⁵ File No. ET-2025-0184, Geoff Marke Rebuttal Testimony, p. 22, l. 13.

1 Just recently, Federal Reserve Chair Jerome Powell was quoted in Fortune,
2 addressing the very question of whether there will be an AI bubble:

3 Federal Reserve Chair Jerome Powell doesn't think the AI boom
4 is another dotcom bubble. In fact, he made that distinction explicit on
5 Wednesday, arguing that the current wave of artificial intelligence
6 investment is grounded in profit-making firms and real economic
7 activity rather than speculative exuberance...“These companies ...
8 actually have business models and profits and that kind of thing. So
9 it's really a different thing” from the dotcom bubble, he added.

10 The comments mark what seems like Powell's most direct
11 acknowledgment yet that AI's corporate build-out—spanning
12 hundreds of billions of dollars in data center and semiconductor
13 investments—has become a genuine engine of U.S. growth.⁶

14 **IV. HYPERSCALER FINANCIAL STABILITY**

15 **Q. Can you speak to the fundamental growth exhibited by the technology**
16 **sector?**

17 A. The technology sector has delivered remarkable earnings growth relative to
18 all other sectors, and that differential has increased since the financial crisis in 2008-2009.
19 Indeed, most of the profits in the technology space have been created by US technology
20 players – in large part explaining US equity market outperformance over the past 15+ years.

21 This earnings momentum has clearly been an important driver of recent technology
22 sector valuation, but it is also crucial to recognize that the US technology sector market
23 rally we have experienced is considerably dependent on prospective earnings growth
24 performance, and that future earnings growth is supported by a significant rise in capital
25 spending by the dominant companies – the hyperscalers. It is true that swelling investment
26 has been a factor in technology bubbles in the past – companies at the center of major

⁶ <https://fortune.com/2025/10/29/powell-says-ai-is-not-a-bubble-unlike-dot-com-federal-reserve-interest-rates/>

1 technological innovation failing to achieve the returns that their high valuations imply.
2 And there is certainly risk of over-investment by the current hyperscalers who have
3 generated tremendous profit growth and returns in recent years while adopting a relatively
4 light capital intensity model, but have reacted to the emergence of ChatGPT with rapidly
5 increasing capital investment. Indeed, Moody's Ratings ("Moody's") highlighted in a May
6 2025 report that **

7
8
9
10
11

7**

12 With the fundamental growth experienced by the technology sector, current market
13 valuations, while arguably full, are still materially lower (and, by extension, less
14 speculative) than during the late 1990s dot-com bubble. As of the end of the third quarter
15 2025, the Nasdaq 100 traded at a trailing-12-month ("TTM") price-to-earnings ("P/E")
16 multiple of approximately 37x versus a TTM P/E multiple of over 68x, at the end of 1999.
17 Focusing exclusively on the technology stocks that have driven the lion's share of market
18 appreciation over the past several years, "the median 24m [month] forward P/E ratio across
19 the 'Magnificent 7' is 27x, or 26x if we exclude Tesla (which has a much higher multiple
20 than the other companies). This is roughly half the equivalent valuation of the biggest 7
21 companies in the late 1990s."⁸ Contrary to the impression Dr. Marke's testimony gives,

⁷ Moody's Ratings – *AI innovations point to strong spending on IT infrastructure despite macro turmoil*, May 15, 2025.

⁸ Goldman Sachs Portfolio Strategy "Why we are not in a bubble... yet", October 8, 2025.

1 the quantitative measures do not support the notion that the AI market has risks consistent
2 with those that led to the dot-com bubble of the late 1990s/early 2000s.

3 **Q. You earlier alluded to the fact that the AI market leaders currently**
4 **have strong balance sheets. Can you expand on this and speak to how AI capital**
5 **investment will be funded in the future?**

6 A. The hyperscalers today are among the world's most strongly capitalized
7 companies and are financially well-equipped to take on the substantial future investment.
8 The rating agencies that rate the credit quality of these companies and their financing
9 instruments are certainly not troubled by the multi-billion dollar spend cycle. In its May
10 2025 report on data centers and AI, Moody's stated that **

11 _____
12 _____
13 _____
14 _____ 9**

15 As highlighted in the following table courtesy of the Moody's report, the hyperscalers'
16 financial profile, as demonstrated by their solid credit ratings, cash position and free cash
17 flow position, shows the broad wherewithal to contend with risks associated with the
18 unpredictable rate of AI adoption, the rapid pace of AI innovation and intensifying
19 competition that bring uncertainty about the eventual return on investment.

⁹ Moody's Ratings – *AI innovations point to strong spending on IT infrastructure despite macro turmoil*, May 15, 2025.

Surrebuttal Testimony of
Darryl T. Sagel

Hyperscalers have strong financial profiles
Cash balances, free cash flow and total debt to EBITDA of hyperscalers

	Microsoft	Alphabet	Meta Platforms	Amazon.com	Oracle
	Aaa, Stable	Aa2, Stable	Aa3, Stable	A1, Positive	Baa2, Stable
	12/31/2024	12/31/2024	12/31/2024	12/31/2024	2/28/2025
Cash and free cash flow in \$ billions					
Cash & short-term investments	\$72	\$95	\$78	\$101	\$18
Free cash flow [1], [2]	\$48	\$66	\$47	\$31	\$1
Total debt to EBITDA [2]	0.7x	0.2x	0.6x	1.3x	4.1x

[1] Free cash flow after dividends; [2] Metrics incorporate Moody's standard analytical adjustments
Source: Company filings and Moody's Ratings

These dominant AI companies today are financing most of their near-term capital expenditures via cash on hand and free cash flow, rather than debt, and their balance sheets remain extraordinarily solid. With strong free cash flows and low financial leverage, it is unlikely that these companies, even if they do not achieve adequate returns on their AI investment, would have a systemic impact on the broader economy as we have seen in past market bubbles.

That said, we are beginning to see a shift toward more debt financing among the hyperscalers as cash reserves dry up and some are evaluating and pursuing bespoke financing structures that offload meaningful financial risk to third party investors and thereby reduce substantive balance sheet impacts.

Oracle was the first hyperscaler to move toward more aggressive debt financing, having recently issued \$18 billion to fund its refinancing and capital expenditure needs, with an expectation of debt funding to continue. J.P. Morgan Asset Management recently noted, **

10** There is evidence across credit markets of this shift away from corporate cash-funded investments,

¹⁰ J.P. Morgan Credit Research, "Hallucinating about the AI footprint in HG credit", October 6, 2025.

1 with the asset-backed securities market funding billions of dollars of data center deals over
2 the past several years, and private credit and vendor financing more evident in the AI / data
3 center ecosystem. This is an evident trend for major AI participants, particularly those
4 with more levered balance sheets currently. Over time, we expect prominent AI
5 participants to vet creative financing solutions like private credit, project financing and
6 hybrid structures in order to preserve balance sheet health. For instance, in October 2025,
7 Meta struck a \$27 billion financing deal with alternative asset manager Blue Owl Capital
8 to fund its biggest data center project globally, the Louisiana planned data center known as
9 Hyperion, which is projected to deliver more than 2 GW of computing capacity to support
10 training of large language models. It has also been reported that investment banks J.P.
11 Morgan and Mitsubishi UFJ Financial Group ("MUFG") are preparing a \$38 billion debt
12 package to fund the development of data centers in Wisconsin and Texas linked with
13 Oracle. These types of highly-structured financing transactions essentially allow the
14 hyperscalers to offlay risk to private investors and preserve balance sheet capacity.

15 **Q. There is a growing focus on the tangle of financing dynamics among**
16 **technology giants driving AI infrastructure buildout that could be signs of dangerous**
17 **overinvestment in the technology and a potential bubble. Do you have any thoughts**
18 **on this topic?**

19 **A.** It is apparent that the lines between revenue and equity are becoming less
20 transparent among a small group of influential technology companies. OpenAI has
21 announced that it is acquiring a potential stake up to 10% in Advanced Micro Devices
22 ("AMD") through a strategic partnership (under which OpenAI will purchase multiple
23 generations of AMD's AI chips to power its data centers), while Nvidia is investing \$100

1 billion in OpenAI to help fund a massive data center buildout, with OpenAI in turn
2 committing to purchase millions of Nvidia chips. OpenAI also counts Microsoft as one of
3 its major shareholders and recently announced a new agreement under which Microsoft
4 will hold a 27% interest in OpenAI's for-profit public benefit corporation while OpenAI
5 has committed to purchase \$250 billion worth of Microsoft's Azure services. But Microsoft
6 is also a key customer of AI cloud computing company CoreWeave, which is another
7 company in which Nvidia holds a significant equity stake. Specifically, Nvidia supplies
8 graphic processing units (GPUs) to CoreWeave, which finances data centers partly using
9 Nvidia stock or backed credit. CoreWeave, in turn, provides compute capacity to OpenAI,
10 whose massive model training spend is underwritten by Microsoft's cloud capacity. If this
11 all sounds confusing and somewhat incestuous to you, you are not alone. Critics have
12 argued that these firms have created a circular financing loop, recycling capital among a
13 small ecosystem of counterparties that reeks of financial engineering. These
14 interdependent relationships, which the equity investor community has largely cheered to
15 date, certainly reinforces near-term growth visibility and supply security. But the concern
16 is that this interdependence amplifies valuation risk as inflated compute demand "funded
17 by itself" leads to overcapacity and artificial revenue recognition. J.P. Morgan credit
18 research responds that, **

19 _____
20 _____
21 _____

11**

¹¹ J.P. Morgan Credit Research, "Hallucinating about the AI footprint in HG credit", October 6, 2025.

1 **V. AI VALUE CREATION AND WORKFORCE IMPLICATIONS**

2 **Q. Dr. Marke also questions whether adoption of generative AI in the**
3 **workplace (i.e., enterprise adoption) will ultimately translate into significant value.**
4 **What are your thoughts?**

5 A. Information and research that I have reviewed seems to suggest that
6 generative AI is well positioned to create and accelerate process automation that will
7 ultimately result in productivity enhancements and relatively reduced labor costs. For
8 instance, Goldman Sachs, in a recent Global Economics research report¹² stated that its
9 baseline estimates suggest a 15% uplift to economy-wide US labor productivity following
10 full AI adoption over a period of the next 10 years. The report even suggests that its
11 baseline estimates may be conservative, as "academic studies and company anecdotes point
12 to 25-30% average productivity gains following the deployment of AI applications."¹³
13 Goldman Sachs' analysis supports an estimated present-discounted value of the capital
14 revenue unlocked by AI productivity gains in the US of \$8 trillion, within plausible
15 outcomes of \$5 trillion to \$19 trillion, in all cases exceeding current cumulative AI
16 investment forecasts even before considering foreign profits, new profit pools, or the
17 potential of artificial general intelligence ("AGI"). The logical takeaway of this analysis is
18 that current and prospective level of AI capital expenditures appear justified.

19 **Q. But Dr. Marke cites a recent Massachusetts Institute of Technology**
20 **("MIT") study of AI deployments that found that 95% of AI pilot programs had**
21 **failed to deliver measurable business value.¹⁴ Do you have a reaction?**

¹² Goldman Sachs Economics Research, Global Economics Analyst, "The AI Spending Boom Is Not Too Big", October 15, 2025.

¹³ Ibid.

¹⁴ File No. ET-2025-0184, Geoff Marke Rebuttal Testimony, p. 20, ll. 9-12.

1 A. Not surprisingly, as this new technology tool emerges, there has been some
2 inconsistency in terms of enterprise approach to deployment and oversight. At some point,
3 we would expect to see enterprise experimentation translate into value creation,
4 particularly for larger, more technology-adept companies. Again, I would reference the
5 recent Goldman Sachs Economics Research report¹⁵ that specifically addresses the
6 concerns raised by this MIT study. The report states that:

7 We see the details of the MIT study as less concerning for two reasons. First, the
8 key takeaway that only 5% of AI tools had reached the production stage is similar
9 to our tracking estimate from the Census Business Trends and Outlook survey that
10 less than 10% of US businesses have adopted AI for regular production. Second,
11 the study also concluded that businesses derived significant value when they 1)
12 bought applications rather than built tools in house, 2) sourced AI automation
13 projects from frontline managers rather than central labs, and 3) targeted
14 automation of specific tasks with integrated tools rather than generic AI
15 applications. Our overall takeaway is that effective AI adoption may take time as
16 companies figure out how to incorporate specific applications into business
17 processes, but that AI can deliver sizable productivity gains once this occurs.

18 **Q. What about consumer adoption (non-enterprise) of AI tools?**

19 A. Consumer AI use has anecdotally grown faster than enterprise use and
20 continues to increase quickly. ChatGPT hit 800 million weekly average users, as
21 announced by OpenAI CEO Sam Altman in mid-October 2025 after surpassing 700 million
22 weekly average users in July, just three months prior. This growth is occurring as
23 consumers are getting increasingly comfortable using AI and becoming more sophisticated
24 in their use. Admittedly, AI companies' ability to monetize consumer services and
25 ultimately generate revenue lags behind the growth of AI infrastructure spending.
26 However, as AI capabilities mature and there is enhanced productization of AI – and here

¹⁵ Goldman Sachs Economics Research, Global Economics Analyst "The AI Spending Boom Is Not Too Big", October 15, 2025.

1 we would reference a recent wave of new product announcements from several key players
2 (OpenAI's Sora 2 and Sora Social App and its Instant Checkout platform; Google's visual
3 and conversational search update; and Meta's Vibes AI short-form video feed and AI-
4 powered smart glasses) – user experience will be enhanced, providing new avenues for
5 monetization that do not require subscriptions.

6 **Q. What about Dr. Marke's warning of job loss stemming from AI use?**

7 A. AI is fundamentally altering how companies can create value for their
8 customers in a manner that is less constrained by production costs, including employee-
9 related expenses. In particular, service-oriented business models are being reshaped by AI
10 to extend expertise and support without having to add new employees, thereby reducing
11 the cost per additional unit of service. We are already beginning to see some workforce
12 impact even as AI adoption broadly remains relatively muted. Leaders across sectors such
13 as finance and technology have noted an ability to slow hiring, particularly in operations
14 and back-office positions, as they experience efficiency gains from generative AI.
15 Unemployment among young workers in technology-exposed occupations has risen almost
16 3% during 2025, and AI is reportedly contributing to hiring headwinds in the technology
17 field facing recent college graduates. A key question, and obvious source of concern, is
18 what will the corporate workforce look like in the future when humans and AI agents,
19 which respond to inputs, proactively solve problems, coordinate tasks and continuously
20 learn through their work, coexist side-by-side? In a 2024 interview, OpenAI founder Sam
21 Altman mused about a new type of business startup – the single person unicorn – and said
22 "in my little group chat with my tech CEO friends, there's this betting pool for the first year
23 that there is a one-person billion dollar company, which would have been unimaginable

1 without AI and now will happen."¹⁶ While this anecdote is an extreme example of a staff-
2 less organization, it calls into question how disruptive AI will be in respect to the workforce
3 of the future. But there are also separate schools of thought that AI technologies and
4 robotics will create many new vocations that will assist in solving complex problems and
5 bring efficiency and convenience to our everyday lives. This can occur via new jobs that
6 emerge from technology changes or indirectly by triggering an overall improvement in
7 worker output and demand. For instance, it is instructive to recognize that about 60% of
8 US workers currently are in occupations that did not exist in the mid-1900s.

9 According to a comprehensive Goldman Sachs research report on AI impacts on
10 the workforce,¹⁷ in which the firm is skeptical that AI will translate into substantial job
11 reductions over the next decade, "Innovation related to artificial intelligence could displace
12 6-7% of the US workforce if AI is widely adopted. But the impact is likely to be transitory
13 as new job opportunities created by the technology ultimately put people to work in other
14 capacities." Goldman Sachs further posits that "only 2.5% of employment is at risk of
15 automation from current [AI] applications, which primarily focus on coding, customer
16 service, and consulting support – and the average impact will likely moderate as
17 applications broaden to job functions that are harder to automate."¹⁸

18 **Q. In summary, how should the Commission think about the risks raised**
19 **in Dr. Marke's rebuttal testimony?**

20 **A.** While Dr. Marke raises a number of cautionary implications of the global
21 AI rollout, we have no reason to believe at this time that AI is a broken business model that

¹⁶ Sam Altman speaking during an interview with Reddit cofounder Alexis Ohanian.

¹⁷ Goldman Sachs Investment Research, "How Will AI Affect the Global Workforce?", August 13, 2025.

¹⁸ Goldman Sachs Economics Research, Global Economics Analyst "The AI Spending Boom Is Not Too Big", October 15, 2025.

1 will fail to generate adequate returns for its investors and that could have broad negative
2 macroeconomic and market impacts in the future. The hyperscalers that are playing a
3 dominant role in the data center buildout, some of which could be among Ameren
4 Missouri's largest future customers, have incredibly strong financial positions and the
5 wherewithal to contend with the risks associated with the unpredictable rate of AI adoption,
6 the rapid pace of AI innovation, and intensifying competition. Even recognizing these
7 strong current hyperscaler financial profiles, Ameren Missouri is incorporating risk-
8 mitigating terms and conditions within its proposed large load tariff structure to address
9 the potential for these counterparties to change course or experience a deterioration in their
10 financial position. What is clear is that we are still in the early innings of the AI
11 phenomenon, with the technology already beginning to show transformational promises,
12 but with its full potential and value creation opportunity yet to be significantly realized.

13 **Q. Does this conclude your surrebuttal testimony?**

14 **A.** Yes, it does.

APPENDIX A
STATEMENT OF QUALIFICATIONS

DARRYL T. SAGEL

1 My name is Darryl T. Sagel. My business address is One Ameren Plaza, 1901
2 Chouteau Avenue, St. Louis, Missouri, 63103. I am employed by Ameren Services
3 Company as Vice President, Corporate Development and Acquisitions. In this role, I
4 oversee strategic initiatives designed to drive long-term company growth and shareholder
5 value, while helping to achieve corporate sustainability goals. My core responsibilities
6 include monitoring and evaluating corporate development opportunities and structuring
7 effective transactions and counterparty agreements to facilitate growth through mergers
8 and acquisitions, strategic divestitures, renewable energy development, energy storage
9 deployment, new nuclear development, the additional of new data center and other large
10 load customers, and other economic development opportunities.

11 I received my Bachelor of Arts degree in Quantitative Economics in 1994 from
12 Stanford University.

13 I have more than 30 years of experience in various finance and strategy roles. Upon
14 graduating from college in 1994, I joined the Investment Research Department at Goldman
15 Sachs, & Co. based in New York City, where I aided in the research coverage of
16 approximately 100 domestic and international electric and gas utility companies. In 1996,
17 I transferred to Goldman Sachs' Investment Banking Division, within which I advised
18 energy and utility clients in the U.S. and internationally in raising capital and structuring
19 merger and acquisition (M&A) transactions. In 2000, I took a position at Morgan Stanley
20 & Co., working within the company's Mergers & Acquisitions group and focusing

1 predominantly on assisting global power and utilities clients on M&A-related matters.
2 After over three years on the Morgan Stanley investment banking platform, in 2003, I
3 moved to Lazard Freres & Co. (Lazard), where I continued to originate and execute
4 financial advisory assignments for a broad range of domestic and international power and
5 utility companies and alternative energy companies. For several years during my tenure, I
6 was a Partner and co-head of Lazard's North American Power & Utilities practice. In 2010,
7 I left Lazard to join Rothschild Inc. to head its North American Power & Utilities group.
8 In total, I amassed over 18 years of experience as an investment banker covering the broad
9 power and utilities sector, working on a wide array of transformative and incremental
10 M&A transactions, corporate restructurings and capital raising initiatives. In mid-2012, I
11 joined Ameren Services as Director of Corporate Development, overseeing the company's
12 M&A functional area, as well as originating and executing direct investment and corporate
13 partnership opportunities. I was promoted to Assistant Vice President, Corporate
14 Development in 2016 and again promoted to Vice President, Corporate Development in
15 2017. In July 2018, I inherited oversight of all of Ameren's treasury functions and my title
16 changed to Vice President and Treasurer. In August 2025, I moved into a newly created
17 position of Vice President, Corporate Development and Acquisitions.

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

In the Matter of the Application of Union)
Electric Company d/b/a Ameren Missouri)
for Approval of New or Modified Tariffs)
for Service to Large Load Customers.)

File No. ET-2025-0184

AFFIDAVIT OF DARRYL T. SAGEL

STATE OF MISSOURI)
) ss
CITY OF ST. LOUIS)

Darryl T. Sagel, being first duly sworn states:

My name is Darryl T. Sagel and on my oath declare that I am of sound mind and lawful age; that I have prepared the foregoing *Surrebuttal Testimony*; and further, under the penalty of perjury, that the same is true and correct to the best of my knowledge and belief.

/s/ Darryl T. Sagel
Darryl T. Sagel

Sworn to me this 3rd day of November, 2025.