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**MISSOURI PUBLIC SERVICE COMMISSION**

**FILE NO. ER-2024-0319**

**REBUTTAL TESTIMONY**

**OF**

**CLARK E. ALLEN**

**ON**

**BEHALF OF**

**UNION ELECTRIC COMPANY**

**D/B/A AMEREN MISSOURI**

**St. Louis, Missouri  
January 2025**

## TABLE OF CONTENTS

I.	INTRODUCTION .....	1
II.	FLAWED COST ESTIMATION LOGIC .....	3
III.	EXISTING DATA ACCESS CAPABILITIES ARE SUFFICIENT .....	7
IV.	CONCLUSION.....	9

**REBUTTAL TESTIMONY**

**OF**

**CLARK E. ALLEN**

**FILE NO. ER-2024-0319**

**I. INTRODUCTION**

1

**Q. Please state your name and business address.**

2

3 A. My name is Clark E. Allen. My business address is One Ameren Plaza, 1901  
4 Chouteau Ave., St. Louis, Missouri.

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4

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

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6 A. I am employed by Ameren Services Company (“the Company”), an affiliate  
7 of Ameren Missouri, as Director, Digital Smart Metering. Ameren Services Company  
8 provides various support service to Ameren Missouri and its affiliates at cost.

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

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11 A. I received a Bachelor of Science in Information Science and Technology  
12 from the University of Missouri-Rolla in 2008. I initially joined Ameren as a student/coop  
13 in 2007 serving as a network engineer and joined the company full time in 2008 in the same  
14 role. Since that time, I have held various positions with increasing responsibilities. I have  
15 previously held positions including Supervisor, Enterprise Architecture where I led a  
16 digital team responsible for establishing and driving enterprise architecture principles for  
17 operational technology and data center technology functional areas; and Senior Manager,  
18 Digital Portfolio Management where I led a digital program delivery team responsible for

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1 smart meter system integration, including program management, project management, and  
2 technical delivery.

3 **Q. What are your responsibilities in your current position?**

4 A. In my current role as Director, Digital Smart Metering, I lead a team of  
5 technologists and engineers supporting Ameren affiliates' advanced metering  
6 infrastructure ("AMI") projects and associated digital systems, including Ameren  
7 Missouri's. As part of my role, I lead the definition, planning, and execution of strategic  
8 digital projects that span customer technology verticals, including projects pertaining to  
9 customer data access technologies, such as Green Button Download My Data ("GBD") and  
10 Green Button Connect My Data ("GBC") that are enabled by AMI technology.

11 **Q. Is this the first time you have testified before the Missouri Public**  
12 **Service Commission?**

13 A. Yes.

14 **Q. In what other states have you testified before a public utility**  
15 **commission?**

16 A. I have testified before the Illinois Commerce Commission on topics  
17 pertaining to customer and third-party data access, including GBC technology, as part of  
18 recent multi-year grid plan<sup>1</sup> proceedings.

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

20 A. The purpose of my rebuttal testimony is to respond to Renew Missouri witness  
21 Michael Murray on topics pertaining to GBC. Company witness Steve Wills addresses the

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<sup>1</sup> ICC Consolidated Dockets 23-0082. Petition for Approval of a Multi-Year Rate Plan pursuant to 220 ILCS 5/16-108.18.

1 appropriateness of his proposed tariff as a regulatory mechanism to mandate this project in his  
2 rebuttal testimony.

3 **Q. Please summarize your rebuttal testimony.**

4 A. I recommend the Commission reject Mr. Murray's proposal in its entirety. Mr.  
5 Murray relies on a flawed approach to derive his proposed revenue requirement, which I will  
6 show substantially underestimates the total project costs. Furthermore, Mr. Murray discounts  
7 existing data access capabilities as being inadequate, without a point of reference on customer  
8 adoption and use of those technologies. Lastly, I will show that GBC is far from universally  
9 adopted and used by third parties even when made available by utilities.

10 **II. FLAWED COST ESTIMATION LOGIC**

11 **Q. Please summarize Mr. Murray's proposed GBC project cost and logic**  
12 **driving his cost estimates.**

13 A. Mr. Murray proposed a total revenue requirement addition of \$851,000 for  
14 Ameren Missouri to implement GBC, with \$751,000 allocated for initial implementation and  
15 \$100,000 designated for studying participation in a regional data hub. His estimates are based  
16 on average cost per meter from jurisdictions that implemented GBC between 2017 and 2020.  
17 He discards data for GBC programs prior to 2017, stating that technology has matured over time  
18 leading to decreased costs to implement. He surmises that \$0.60 per meter would be adequate  
19 for Ameren Missouri to deploy GBC.

20 **Q. Do you have concerns with the approach used by Mr. Murray to determine**  
21 **the revenue requirement and associated project costs?**

22 A. Yes. Mr. Murray's approach fails to consider major differences amongst GBC  
23 implementations that drastically affect the total project cost. For instance, if a utility already has

1 a technology partner providing customer data presentment capabilities, and that partner already  
2 has access to necessary data sets required for GBC, costs to implement GBC will be  
3 significantly lower as will ongoing hosting/support costs for that utility. If a new technology  
4 partner is required, along with new integrations, and testing, costs will be markedly higher for  
5 the utility.

6 Further, Mr. Murray's analysis discards all projects prior to 2017 and fails to provide  
7 data for more recent projects after 2020. In doing so, the range of costs is artificially limited to  
8 exclude projects that are assumed to be custom built (pre-2017) or more recent projects that  
9 would be impacted by significant inflationary pressures for both software and labor costs (post-  
10 2020). In effect, he ignores that software and labor costs significantly more today than it did  
11 several years ago.

12 **Q. Mr. Murray states that the cost to implement GBC should decrease over**  
13 **time as the technology matures and becomes more commonplace. In your experience, is**  
14 **this conclusion reasonable?**

15 A. While I generally agree with Mr. Murray's assessment that the cost to  
16 implement early custom-built GBC solutions would be somewhat higher than the cost to  
17 implement a mature GBC product, his overly broad generalization regarding cost decreases fails  
18 to account for several key factors that must be considered.

19 Mr. Murray disregards one key aspect of GBC projects: whether the project is a  
20 capability expansion with an existing technology partner, or net-new capabilities with a new  
21 technology partner. This distinction helps explain the high degree of variability in costs shared  
22 by Mr. Murray. Leveraging existing partners will result in substantially lower costs while  
23 engaging with a new partner will result in significantly higher project costs.



1 significantly less than that of a regional data hub where multiple utilities participate. Given the  
2 differences, it's highly likely that additional investment, if not total redesign of a GBC solution,  
3 would be required to integrate into a regional data hub after the fact.

4 **Q. Has Ameren Missouri evaluated the cost to implement a Green Button**  
5 **Connect solution?**

6 **A.** No.

7 **Q. Have any Company affiliates implemented GBC?**

8 **A.** Yes. Ameren Illinois implemented an early version of GBC under the  
9 program name Share My Usage in 2017 as a result of a third-party data access docket<sup>3</sup>  
10 approved by the Illinois Commerce Commission (“ICC”).

11 **Q. What were Ameren Illinois’ costs for the Share My Usage program?**

12 **A.** \*\* \_\_\_\_\_  
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<sup>3</sup> ICC Docket 15-0073. Investigation into Customer Authorization Required for Access by Third Parties Other Than Retail Electric Suppliers to Advanced Metering Infrastructure Interval Meter Data.



1           **Q.     If the Commission orders Ameren Missouri to implement GBC, what**  
2 **would be a reasonable cost estimate?**

3           A.     Ameren Illinois recently developed a cost estimate to modernize its Green  
4 Button Connect solution as part of their Multi-Year Grid Plan<sup>4</sup> proceeding. The total revenue  
5 requirement for this project was estimated at \$4.76M,<sup>5</sup> which included consideration of the  
6 complex nature of the Company’s back-office IT systems, leveraging third-party technical  
7 expertise and implementation support, establishing a new technology partner relationship, and  
8 the impacts of inflation on overall implementation costs. To develop an accurate estimate,  
9 Ameren Missouri would need time to adapt this proposal to match its requirements. This  
10 approach would be more prudent for both the Company and its customers. But the Ameren  
11 Illinois cost estimate strongly suggests that Mr. Murray’s estimate is far too low.

12           **III.    EXISTING DATA ACCESS CAPABILITIES ARE SUFFICIENT**

13           **Q.     Does the Company offer existing data access capabilities to customers?**

14           A.     Yes. As Mr. Murray highlights, the Company implemented GBD functionality  
15 in 2023. This functionality enables customers to retrieve usage data in both Green Button  
16 extensible markup language (“XML”) format and comma-separated value (“CSV”) format as  
17 part of the My Energy Manager solution on its customer portal.

18           **Q.     Have customers widely adopted the use of the GBD functionality?**

19           A.     Not yet. Throughout last year, only 1.5% of active users on the My Energy  
20 Manager platform took advantage of the GBD functionality. When considering the Company’s  
21 1.2M electric customer count, the engagement rate, per customer, is less than 0.1%.

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<sup>4</sup> ICC Consolidated Dockets 23-0082/22-0487 (cons.) Petition for Approval of a Multi-Year Rate Plan pursuant to 220 ILCS 5/16-108.18.

<sup>5</sup> ICC Consolidated Docket 23-0082/22-0487 (cons.) Ameren Brief on Exception. Section II Sub H. P.53.

1    Table 1. My Energy Manager Active Users and Total Downloads.

Month	Downloads	Active Users	Download %
2024-01	691	50,935	1.36%
2024-02	593	36,151	1.64%
2024-03	531	34,731	1.53%
2024-04	588	31,135	1.89%
2024-05	547	38,666	1.41%
2024-06	658	39,228	1.68%
2024-07	815	55,383	1.47%
2024-08	711	42,772	1.66%
2024-09	448	32,278	1.39%
2024-10	564	33,651	1.68%
2024-11	405	37,949	1.07%
2024-12	549	39,152	1.40%
<b>Total</b>	<b>7,100</b>	<b>472,031</b>	<b>1.50%</b>

2                    **Q.     What observations regarding customer and third-party participation do**  
3 **you have regarding Ameren Illinois' Share My Usage program?**

4                    **A.     \*\*** \_\_\_\_\_  
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11                   **Q.     Given the limited customer engagement with existing data access**  
12 **functionality, would you expect adoption of GBC to be different at this time?**

13                   **A.     No.** Given the low adoption of GBD in Ameren Missouri, and low participation  
14 in GBC in Ameren Illinois, I would not expect a high rate of adoption of a GBC solution at this  
15 time. However, the Company will continue to monitor broader industry trends related to

1 customer data access technologies (i.e., GBC and GBD) and adapt its long-term strategy as  
2 needed if and when those dynamics change.

3 **IV. CONCLUSION**

4 **Q. Please summarize your rebuttal testimony.**

5 A. I recommend the Commission reject Mr. Murray's proposed tariff and his  
6 mandate that the Company implement GBC. Mr. Murray's cost estimates have  
7 considerable flaws and fail to account for actual project costs that would be borne by  
8 ratepayers. Customers have access to a robust data access platform today in GBD, but  
9 customer engagement with that platform remains low, despite high customer engagement  
10 rates overall with My Energy Manager customer portal. Furthermore, experience with  
11 Ameren Illinois Share My Usage program indicates that even though GBC is implemented  
12 and available for third parties to use, demand for the capability remains nearly nonexistent.

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

14 A. Yes, it does.

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

In the Matter of Union Electric Company )  
d/b/a Ameren Missouri's Tariffs to Adjust )  
Its Revenues for Electric Service. )

Case No. ER-2024-0319

**AFFIDAVIT OF CLARK E. ALLEN**

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

Clark E. Allen, being first duly sworn states:

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

*/s/ Clark E. Allen*  
Clark E. Allen

Sworn to me this 16<sup>th</sup> day of January, 2025.