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**MISSOURI PUBLIC SERVICE COMMISSION**

**FILE NO. EO-2023-0136**

**REBUTTAL TESTIMONY**

**OF**

**J. NEIL GRASER**

**ON**

**BEHALF OF**

**UNION ELECTRIC COMPANY**

**D/B/A AMEREN MISSOURI**

**St. Louis, Missouri  
April, 2024**

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**REBUTTAL TESTIMONY**

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1                                   **I.     INTRODUCTION**

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

3           A.     My name is J. Neil Graser. My business address is One Ameren Plaza, 1901  
4 Chouteau Ave., St. Louis, Missouri.

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

6           A.     I am the Manager, Energy Analytics, for Union Electric Company d/b/a  
7 Ameren Missouri ("Ameren Missouri" or "Company").

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

10          A.     I graduated from Saint Louis University with a Bachelor of Science in  
11 Business Administration with concentrations in Accounting and Management Information  
12 Systems. I worked at PricewaterhouseCoopers as an auditor for both information systems  
13 and financial statements, as well as Peabody Energy in several roles supporting commercial  
14 operations.

15          I joined Ameren Services Company in 2015 as Supervisor, Power Accounting, and  
16 was promoted to Manager, Power & Fuels Accounting, in 2019. In those roles, I led a team  
17 responsible for recording fuel and power transactions and associated regulatory  
18 mechanisms, including preparing various regulatory reconciliations and rate filings, for

1 Ameren Missouri, Ameren Illinois, and Ameren Transmission. In 2022, I joined Ameren  
2 Missouri as Manager, Energy Analytics.

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

4 A. I lead a team responsible for energy efficiency and demand response  
5 program evaluation, measurement, and verification ("EM&V"); forecasting; reporting;  
6 coordinating digital projects; creating purchase orders; and supporting payments to our  
7 vendors. We are responsible for ensuring customer rates are accurate through the annual  
8 Rider EEIC filing, along with providing support for the MEEIA Prudence Reviews. On a  
9 monthly basis, we are also responsible for compiling throughput disincentive ("TD")  
10 calculations and accrued expenses for financial closing.

11 **Q. To what testimony or issues are you responding?**

12 A. I am responding to the direct testimony of Dr. Geoffe Marke from the Office of  
13 Public Counsel ("OPC") and certain Staff witnesses regarding the Company's MEEIA 4  
14 Plan. Specifically, I will respond to various criticisms of the Company's MEEIA 4 Plan as  
15 described in the rebuttal testimonies of Staff Witnesses Brad Fortson, Hari Poudel, Justin  
16 Tevie and Marina Stever as well as the alternative view of energy efficiency and demand  
17 response and EM&V set forth in the direct testimony of these witnesses.

18 **II. EVALUATION, MEASUREMENTS, AND VERIFICATION**

19 **Q. Can you please provide your overall reactions to what amounted to an  
20 attack on the EM&V structure and process?**

21 A. I was surprised since Staff and OPC have participated at multiple points during  
22 the EM&V process in the past in such forums as previous MEEIA dockets and annual  
23 evaluation plan and report reviews, and to my knowledge Staff and OPC did not raise these

1 overarching issues. They make it seem as though all the energy and demand savings from each  
2 of the prior plan years are fictitious, and as a result our customers are receiving no benefits from  
3 our MEEIA programs. I recognize there are disagreements about contentious issues, such as  
4 attribution of savings, which are common across the industry, but neither Staff nor OPC outlined  
5 concerns that the entire EM&V process simply hasn't worked during the MEEIA 3 Plan. A  
6 decade plus of results and process show otherwise, of which Staff and OPC were involved  
7 throughout. The existing process allows for stakeholder feedback and can adopt changes  
8 moving forward, which I believe is the most constructive way to proceed.

9 **Q. Please provide a short overview of the EM&V structure and process**  
10 **for MEEIA portfolios, including the parties involved and the roles they have.**

11 A. Our current structure is based on the Missouri Code of State Regulations  
12 ("CSR"), specifically 20 CSR 4240-20.093(8). The various parties involved include:

- 13 • The utility, who is responsible for designing and implementing programs in  
14 conjunction with the program implementers, along with hiring and overseeing  
15 the program evaluators.
- 16 • The program implementers, who are responsible for installing measures and  
17 tracking the details of savings associated with projects completed throughout  
18 the program year.
- 19 • The program evaluators, who are responsible for validating the savings claimed  
20 by the program implementers. They are hired by the utility and report EM&V  
21 of each program in accordance with 20 CSR 4240-20.094.

- 1                   • The independent auditor is responsible for assessing how the program evaluator  
2                   is performing. They are hired by the Missouri Public Service Commission  
3                   ("Commission") and report on the work of the program evaluator.
- 4                   • The state stakeholders (such as Staff and OPC) are responsible for reviewing  
5                   the evaluation plan and evaluation report prepared by the program evaluators.  
6                   For Staff specifically, they are responsible for overseeing the independent  
7                   auditor.

8                   **Q. To build on the last question, can you provide additional context as to**  
9                   **the history of EM&V as how it has evolved from the beginning of MEEIA to now?**

10                  A. While the overarching structure and goals of EM&V based on the  
11                  Commission's rules have not changed, there have been operational changes throughout the  
12                  cycles. For MEEIA cycles 1 (2013-2015) and 2 (2016-2018), Ameren utilized multiple  
13                  evaluators, each with responsibility for analyzing different portions of our portfolio. For MEEIA  
14                  1 and 2 Residential programs, the Company utilized Cadmus, and for the Business programs in  
15                  those cycles, the Company utilized ADM Associates.

16                  For MEEIA 3, Ameren decided to utilize a single evaluator for the entire program  
17                  portfolio, as a single evaluator allowed for improvements in reporting (consistent formats, easier  
18                  to have total portfolio summaries, etc.) and data governance. Program years 2019-2023 were  
19                  evaluated by Opinion Dynamics Corporation ("ODC").

20                  I note that the decisions to retain the aforementioned firms (which are widely known  
21                  and respected in the industry) were not made lightly. The team followed an established Request  
22                  for Proposal ("RFP") process led by the Sourcing function within the Company to solicit bids,

1 and experts across the Company analyzed each bid utilizing a scoring matrix to select the  
2 winner.

3 Outside of the independent evaluators, there have been other EM&V changes based on  
4 the programs offered. Logically, there is not a "one-size-fits-all" approach to measuring energy  
5 and demand savings, and as the Company has rolled out new and innovative programs (such as  
6 Home Energy Reports or Demand Response), adjustments in the evaluation approaches have  
7 been necessitated. These evaluation approaches followed the stakeholder review process and  
8 are detailed subsequently in my testimony.

9 Additionally, other changes in the operating environment have improved the evaluation  
10 approaches and techniques. One example of this is the continuing rollout of Advanced Metering  
11 Infrastructure ("AMI"), which has aided Demand Response evaluation by allowing the use of  
12 interval usage to more accurately measure the event impacts by customer.

13 Our evaluators have also become more involved in Technical Resource Manual  
14 ("TRM") updates in recent years. They have the detailed workpapers to update savings values  
15 and baselines based on results from the recent evaluations and changes in standards and can  
16 leverage knowledge from other jurisdictions to suggest relevant changes needed.

17 **Q. Multiple times in Staff's direct testimony, they explicitly and implicitly**  
18 **allude to the fact that the EM&V process is not appropriately independent enough.**  
19 **Can you speak to what issues they brought up and how it ties to the EM&V**  
20 **framework?**

21 A. Staff Witness Fortson testified that "The independence of EM&V is crucial to  
22 identifying net benefits achieved in a MEEIA cycle...It is hard, if not impossible, for  
23 EM&V not to be influenced by the utility when the utility is providing most of the

1 inputs the EM&V contractor is relying on for final EM&V results."<sup>1</sup> Mr. Fortson seems  
2 to be implying that the Company is able to provide inputs to our program evaluator that  
3 are at best, unsubstantiated, or at worst, materially skewed in such a way to benefit the  
4 Company.

5 Staff Witness Poudel testifies that "The expected cost-effectiveness of a  
6 demand-side program relies heavily on estimated net savings calculated by Ameren  
7 Missouri itself."<sup>2</sup> This implies that the net savings passed along to the program  
8 evaluators is simply used in the cost effectiveness calculations, without any verification  
9 done whatsoever.

10 **Q. Are they correct?**

11 A. No. With regards to Staff witness Fortson's testimony, the primary inputs to the  
12 evaluation process are project-specific data, the TRM, and avoided costs. Analyzing the actual  
13 realized savings based on that project data is one of the primary responsibilities of the evaluator.  
14 If the Company claimed savings (referred to as "ex ante") that were too high, these are "caught"  
15 and adjusted as part of the evaluation (reported as "ex post"). The avoided costs provided to the  
16 evaluator are pulled directly from the Integrated Resource Plan ("IRP"). Refer to the Company's  
17 Witness Michels for more discussion around the IRP process and avoided cost calculations.

18 These suggestions call into question the ability of our program evaluators to  
19 satisfactorily perform their job, along with their integrity should they discover inappropriate  
20 inputs or savings values and agree to go along with them. Not only would this be highly  
21 unethical, but these circumstances would also adversely affect the program evaluator's  
22 reputation within the industry and lead to declining prospects with other potential utility clients.

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<sup>1</sup> File No. EO-2023-0136, Direct Testimony of Brad J. Fortson, page 6 lines 10 – 15.

<sup>2</sup> File No. EO-2023-0136, Direct Testimony of Hari K. Poudel, PhD, page 15 lines 8 – 9.



1           We certainly do not agree with all of the conclusions reached by the program evaluator,  
2 as evidenced by the comments submitted for the draft evaluation report as part of the annual  
3 process. However, just as with other comments submitted by stakeholders, the evaluator is under  
4 no pressure to accept or accommodate those comments.

5           We do set the scope of each year's evaluation as defined in the evaluation plan, although  
6 stakeholders and others review and comment on it as well. Impact evaluations to measure  
7 program energy and demand savings are always one of the primary objectives of the evaluation,  
8 so to suggest that the ex ante savings originally submitted to the evaluator are somehow taken  
9 at their face value and included in the annual evaluation report is simply untrue.

10           For planning purposes, Ameren Missouri relies on our own assumptions about the  
11 estimated net savings that we believe can be achieved. These estimates are developed in  
12 conjunction with our primary program implementers and depend on prior year evaluation  
13 results for key inputs (such as the TRM and net-to-gross ratios). However, final ex post  
14 savings results are based on evaluation work performed (including activities such as  
15 reviewing engineering algorithms and building simulation modeling, as well as on-site  
16 inspections and analysis) and incorporate numerous adjustments, as detailed in the  
17 evaluation plans and reports, which again are reviewed by both stakeholders and the  
18 independent auditor retained by Staff.

19           **Q.     In looking at the recent MEEIA portfolio years for Ameren Missouri,**  
20 **has Staff had an opportunity to be involved in the EM&V structure and process you**  
21 **described above?**

22           A.     Yes, Staff has had multiple opportunities in the process to participate in EM&V.  
23 This begins by reviewing the MEEIA cycle plan filings that explain EM&V approaches, along

1 with negotiating individual Stipulations and Agreements ("S&A") that can detail specific  
2 EM&V considerations (e.g., prospective net-to-gross research within the PY23 S&A). Staff also  
3 has the opportunity each year to review and provide feedback on the annual evaluation plans in  
4 advance of the EM&V work for that program year, along with the draft evaluation reports and  
5 independent auditor's reports afterward. Our program evaluator also hosts annual meetings or  
6 conference calls to present the results of their evaluation to Staff and provide another  
7 opportunity to solicit any feedback on the evaluation. Staff also has an opportunity to file change  
8 requests if they do not agree with the final results of the evaluation and the independent auditor's  
9 report. Finally, Staff is also supplied with our TRM updates in advance of filing with the  
10 Commission to provide any feedback on our proposed changes.

11 **Q. Did Staff express any concerns with the structure and process during**  
12 **that time?**

13 A. Not at a broad level. There have been limited instances of Staff taking exception  
14 to how this process has played out regarding specific issues. For instance, as part of our MEEIA  
15 cycle 2, the Company performed our own cost effectiveness testing using DSMore. Staff  
16 objected to this approach as part of their Rebuttal testimony for our MEEIA cycle 3, indicating  
17 that calculating the cost effectiveness for ourselves removed a level of independence from the  
18 process. Although it entailed incurring additional costs, the Company agreed to have our  
19 program evaluators perform the calculation for us, and we have been using this process ever  
20 since.

21 As mentioned earlier, it is not uncommon to have specific disagreements around  
22 contentious issues, such as net-to-gross. During the PY24 extension negotiations, the Company  
23 and stakeholders negotiated deemed values that were lower than historical results, such that non

1 income-eligible programs received 65% attribution of savings and 100% for the income-  
2 eligible. Similarly, due to comments received from the independent auditor, as reflected by  
3 a Change Request for the PY20 evaluation report, additional research around net-to-gross  
4 was agreed-upon for PY21's evaluation. This is a good example of the process working  
5 well; a specific disagreement was resolved through negotiations and future research to  
6 arrive at updated values to be used in the portfolio.

7 **Q. In fact, what trends has the Company seen over the recent years as it**  
8 **relates to EM&V and stakeholders' interactions?**

9 A. Stakeholder engagement and collaboration are strong. The number of change  
10 requests for evaluation reports have fallen over the past several years. Additionally, feedback  
11 from our program evaluators has indicated a declining level of comments, feedback, and  
12 questions received from stakeholders during annual evaluation plan and report reviews. Both of  
13 these trends suggest to me that stakeholders are comfortable with the overarching EM&V  
14 process as it currently stands, along with the results that it produces.

15 **Q. Staff attempts yet another way to cast doubt on EM&V and overall**  
16 **benefits by discussing how accurate savings are not being realized. Please discuss**  
17 **what their points were.**

18 A. Staff Witness Poudel testifies until the sample size is sufficient to represent  
19 all strata of the population, the inference of the statistical outcomes does not sufficiently  
20 speak to the robustness of the energy efficiency evaluation and further claims Ameren  
21 Missouri did not have enough sample size to represent entire electric consumers in the  
22 previous EM&V<sup>3</sup>. Dr. Poudel also claims highly precise and updated savings data are

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<sup>3</sup> File No. EO-2023-0136, Direct Testimony of Hari K. Poudel, PhD, page 12 lines 11 – 16.

1 necessary to determine more realistic net impacts, and that Ameren Missouri's baselines  
2 are outdated and biased<sup>4</sup>.

3 Staff Witness Tevie claims the TRM assumes a fixed level of energy savings for  
4 each measure, regardless of when the measure is installed, plus a static avoided cost  
5 structure. He concludes this results in incentivizing Ameren Missouri to always promote  
6 energy efficiency measures without regard to overall program cost, and not focusing on  
7 where demand side investments would have the largest impact.<sup>5</sup>

8 **Q. Is there a basis for these claims within the Company's current MEEIA**  
9 **portfolios?**

10 A. No. Staff's claims are unsupported. Our program evaluators tailor their gross  
11 impact analyses for each program to adequately measure the savings achieved, and those  
12 specific approaches for each program are again detailed out within the annual evaluation  
13 plan that is reviewed by all stakeholders. For instance, in the PY23 evaluation plan for the  
14 Business Custom programs, our program evaluator indicated they will "...determine the  
15 optimal sampling approach based on the number, type, and size of projects completed in  
16 PY2023, and target 10% relative precision at 90% confidence (90/10), by end use."<sup>6</sup> This  
17 is a common industry-wide sampling technique designed to provide reliable results for a  
18 statistically-significant sampling of projects that can then be extrapolated to the entire  
19 population of completed projects. Dr. Poudel only speaks in generalizations about sample  
20 sizes and provides no concrete examples of his concerns with any particular program or  
21 measure evaluation that has occurred, or discussion of what precision and confidence levels

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<sup>4</sup> File No. EO-2023-0136, Direct Testimony of Hari K. Poudel, PhD, page 14 lines 16 – 17 and lines 22 – 23.

<sup>5</sup> File No. EO-2023-0136, Direct Testimony of Justin Tevie, page 2 lines 7 – 11.

<sup>6</sup> PY23 evaluation plan, page 37.

1 would constitute a satisfactory evaluation standard. Certainly, Staff could provide input to  
2 the evaluation plans on a forward looking basis and consideration would be given to Staff's  
3 recommendations regarding sample sizes, recognizing that there is a tradeoff between  
4 larger sample sizes and higher costs. I would also refer to the rebuttal testimony of  
5 Company witness Wills for a discussion of the relative importance of precision versus  
6 accuracy in evaluated results.

7 In terms of Dr. Poudel's example of energy savings from appliance recycling using  
8 a baseline from a 2010 report, I note that this selected example is for a program that is not  
9 included in our current application to be offered to customers, and should it be offered  
10 again, we agree that assessing whether a revised baseline is necessary would be  
11 appropriate. However, Dr. Poudel has also mischaracterized how energy savings from this  
12 particular program were actually calculated. Per our PY19 final evaluation report,  
13 specifically the appendix for volume 2<sup>7</sup>, on page 89 of the pdf file, the regression analysis  
14 approach to calculate the evaluated savings is detailed out. As per our TRM (Appendix I),  
15 the second method that is permissible to be used is to base claimed savings on deemed  
16 values, and per our Deemed Savings Table (Appendix F), the savings that would be  
17 claimed were last updated in December 2020 based on the results of that PY19 evaluation.  
18 Therefore, the reference to a baseline from a 2010 report represents an incorrect  
19 understanding of savings that were actually evaluated in our prior appliance recycling  
20 program and how savings associated with any future program would be derived.  
21 Furthermore, Mr. Tevie's characterization of each measure having a fixed level of savings  
22 is not correct, as there are many algorithms for measures throughout the TRM that take

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<sup>7</sup> <https://efis.psc.mo.gov/Document/Display/15876>

1 project-specific data to calculate a specific level of energy savings (especially those with  
2 parameters that allow for variability in models, sizes, etc.).

3 In terms of Staff's comments around the TRM, this document has grown and evolved  
4 from its original inception, which was based on the initial statewide effort. Similar to cost  
5 effectiveness, in recent years we have tasked our program evaluator with updating the TRM  
6 based on the results of their evaluations, such that their expertise in calculating the actual  
7 realized savings accurately from our program and other similar programs across the country to  
8 update deemed measure savings and revised baselines if necessary for use in future years. More  
9 broadly speaking, simply because a number hasn't been updated within a certain period of  
10 time does not mean it is automatically no longer appropriate to use. To help reduce costs  
11 and the burden of an annual update process that already takes several months to prepare, we  
12 focus our updates on the assumptions and baselines for measures most impactful to our  
13 programs. As noted above, Staff is provided with the opportunity to review and opine on these  
14 updates prior to filing with the Commission.

15 **Q. As contemplated earlier, has Staff brought up any of these specific**  
16 **concerns at any time through the EM&V structure and process?**

17 A. There have certainly been questions around specific topics, such as lighting  
18 standards, net-to-gross/attribution, but nothing close to the extent of the issues Staff raises in its  
19 direct testimony. We believed we had adequately addressed all prior questions and issues as  
20 they were raised (such as changing survey questions and/or scoring and agreeing to program  
21 changes or future research needed) during the EM&V process.

1           **Q. Staff mentions that program evaluation must be designed as a**  
2 **continuous improvement process and not a static process. Can you discuss this a bit,**  
3 **both the comment from Staff and what is in place in the EM&V process?**

4           A. Staff Witness Tevie testified that "Program evaluation must be designed as a  
5 continuous improvement process and not as a static process."<sup>8</sup> I could not agree more with  
6 this statement, and our EM&V process has done exactly that. Based on the results of  
7 evaluations, we have discontinued incentives for individual measures that were not cost  
8 effective for our customers. For instance, ECM motors were removed from the Residential  
9 HVAC and pool pumps from the Efficient Products programs when standards changed,  
10 and restrictions were placed on the number of thermostats a customer is allowed to  
11 purchase, all as recommended by the evaluator.<sup>9</sup>

12           **Q. How are benefits established in the EM&V framework?**

13           A. The benefits are derived from the aforementioned avoided costs, which are  
14 established as part of the IRP, and are comprised of avoided energy, capacity, and transmission  
15 & distribution costs. The net savings from the individual measures installed within the programs  
16 are applied against the avoided costs to arrive at the benefits of the programs.

17           **Q. Staff has concerns with this?**

18           A. Staff Witness Fortson testifies that "...the calculation of net benefits is very  
19 subjective, based on assumptions, and it has never been verified that the benefits ever  
20 really happened."<sup>10</sup> Later on he states that "...after final EM&V reports are filed for

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<sup>8</sup> File No. EO-2023-0136, Direct Testimony of Justin Tevie, page 2 lines 17 – 18

<sup>9</sup> See File No. EO-2018-0211, [Ameren Missouri Program Year 2020 Annual EM&V Report, Volume 2: Residential Portfolio](#) Report at page 30, footnote 23 and page 31 filed on July 11, 2021, [11-Step Process Change filed on December 13, 2020](#), and the 11-Step Process Change sent to Stakeholders on October 27, 2021.

<sup>10</sup> File No. EO-2023-0136, Direct Testimony of Brad. J. Fortson, page 6 lines 7 – 8.

1 any given program year, there is not a process in place to ensure those evaluated savings  
2 actually occurred as they were deemed to have."<sup>11</sup>

3 **Q. How do you respond to these claims?**

4 A. Our evaluation process is designed to measure, and has measured, the actual  
5 savings achieved by measures installed during the plan year. We have a limit per 20 CSR  
6 4240.20-094(8)(A) to keep evaluation costs under 5% of the total approved budget for the  
7 program costs. Re-evaluating measures installed in prior years, in addition to those installed  
8 during the current year, would likely pressure that cap as the work required from the evaluators  
9 would rapidly scale up. Furthermore, these EM&V costs are all considered administrative in  
10 nature, and so the amount of our approved budget being taken away from customer incentives  
11 would have to increase as compared to our current allocations.

12 **Q. OPC and Staff testify to the rebound effect and asserts that it has not**  
13 **been properly factored into EM&V to date. Can you speak to this?**

14 A. OPC Witness Marke asserts the rebound effect is a very real phenomenon  
15 and claims the rebound effect has not been properly factored into any EM&V study in  
16 Missouri to date. To the extent any MEEIA portfolio is approved, OPC recommends  
17 either: (1) an across-the-board 10% reduction in energy savings be applied to any future  
18 EM&V filings to account for the rebound effect or (2) that future EM&V studies  
19 specifically analyze the rebound effect for households participating in the EM&V  
20 report.<sup>12</sup>

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<sup>11</sup> File No. EO-2023-0136, Direct Testimony of Brad. J. Fortson, page 7 lines 5 – 6.

<sup>12</sup> File No. EO-2023-0136, Direct Testimony of Geoff Marke, page 21 lines 18 – 23.



1           Staff Witness Poudel also asserts that rebound effects may lead to less energy  
2   savings than would be expected by simply multiplying the change in energy efficiency by  
3   the energy use prior to the change and needs to be factored into policy assessments.<sup>13</sup>

4           This argument has been raised before (over a decade ago as part of the MEEIA 1  
5   case<sup>14</sup>) and has not been a reason to put the MEEIA programs on-hold or cripple them. We  
6   don't believe it's a valid reason to do so now either. There is certainly no evidence in this  
7   case that would justify making a blanket forward-looking adjustment to all savings based  
8   on rebound effect in this case. Dr. Marke's alternative proposal to study the effect could, at  
9   least theoretically, be undertaken as a part of future EM&V efforts. While I am not an  
10   expert in this area, I understand in general that this is a complex issue with a tremendous  
11   amount of uncertainty, so we would need to leverage the expertise from the evaluator,  
12   along with input from the independent auditor and other stakeholders, to come to a  
13   reasonable method to estimate what this impact would be in the future. I would caution that  
14   any potential benefits and risks be weighed against one another, such as the level of EM&V  
15   costs relative to the program budgets. Additionally, should we begin down the path of  
16   investigating the impacts of the rebound effect on our portfolio savings, it would be fair  
17   that we also include study of other complex, difficult to measure impacts affecting our  
18   portfolio savings, such as nonparticipant non-like spillover.

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<sup>13</sup> File No. EO-2023-0136, Direct Testimony of Hari K. Poudel, PhD, page 15 line 21 and page 16 lines 1 – 2.

<sup>14</sup> File No. EO-2012-0142, Direct Testimony of Geoff Marke, pages 5 – 17.

1           **Q.     Federal Funding Impact continues to be a prominent topic. OPC**  
2 **discusses this and potential solutions. Please talk about how funding from other**  
3 **programs is considered in the EM&V process.**

4           A.     The presence of additional funding opportunities outside of MEEIA are  
5 reflected in the EM&V process as part of the attribution of savings, or how much credit  
6 and savings we should appropriately claim from the impacts of our programs.

7           **Q.     Does the EM&V structure and process appropriately attribute impacts**  
8 **of MEEIA program incentives?**

9           A.     Yes. This is primarily achieved through customer surveys designed by our  
10 program evaluators and reviewed by stakeholders, which ask about the influence of our  
11 programs on their customer's decision to install the efficient measure. This is referred to as a  
12 "net to gross" ratio ("NTG"), which is typically portrayed as a decimal between 0 and 1. The  
13 formula is  $1 - \text{free riders} + \text{spillover} = \text{NTG}$ . Free riders are those that would have installed the  
14 efficient measure being incentivized even without our program, and spillover is additional  
15 purchases of efficient measures due to program influences where they did not take advantage  
16 of our program's incentives.

17           **Q.     If that is the case, is there a need to artificially layer an attribution**  
18 **change on top of it?**

19           A.     No. This is not a new issue and is a challenge recognized across the industry,  
20 which is understandable considering each individual customer receiving a rebate has their own  
21 unique situation and financial circumstances that drive whether a utility incentive was necessary  
22 for their installation of a particular efficient measure. However, attempting to actually measure  
23 participants in any given year will always be preferable to making general across-the-board

1 assumptions, especially if those are not developed through rigorous analysis. An incorrect  
2 assumption on net-to-gross ratios would result in programs either being shown as not cost  
3 effective, which could eliminate a program when we shouldn't have, or vice versa, where we  
4 keep around a program that should be cut.

5 **Q. Are there benefits to this approach? Challenges?**

6 A. Surveys have to be conducted regardless for other impact and process  
7 evaluation purposes, so the additional net-to-gross questions do not have a large impact on the  
8 costs to implement or effort required from participants. Challenges of this approach are  
9 developing appropriate questions that can be easily understood and answered by the  
10 participants, along with obtaining a sufficient number of responses to make accurate  
11 extrapolations to the entire program or portfolio.

12 **Q. Ultimately, how is the company proposing to handle attribution?**

13 A. We are proposing to follow this existing process, where we expect our  
14 independent, third-party program evaluator to develop appropriate survey questions, which will  
15 be reviewed by stakeholders in advance of deployment. These surveys would identify the  
16 influence of our program and its incentives versus other programs and apply attribution of  
17 savings accordingly. As noted within the Company's January 2024 application, the calculated  
18 NTG for a year would then be rolled into an average of the past three to five years and be used  
19 prospectively in the next plan year.

20 Furthermore, depending on how the IRA offerings are rolled out in the state of Missouri,  
21 it's possible that the considerable network of implementers and trade allies and marketing  
22 capabilities built up by the Company through the previous three MEEIA cycles could  
23 enhance the effectiveness of the IRA programs, which should also be captured within any

1 attribution analysis. We don't believe the existence of these IRA funds should be a reason  
2 to hamstring our MEEIA programs or not have them at all, as they can be complimentary  
3 to one another and ultimately to the customers' benefit.

4 **Q. Can you summarize what you heard as it relates to EM&V in Staff and**  
5 **OPC's direct testimony, and your overall response?**

6 A. Staff and OPC apparently do not believe that the EM&V process that has been  
7 established consistent with the Commission's rules is functioning properly after over a decade  
8 of implementing programs and evaluating them under those rules. Therefore, Staff and OPC  
9 recommend that our MEEIA programs be discontinued.

10 I believe this is an unreasonable approach that ignores the significant checks and  
11 balances in place throughout the EM&V process and opportunities for stakeholders to voice  
12 their opinions at multiple points. As documented in every annual evaluation plan and report,  
13 the methods currently in place provide for objectively fair and reasonable net savings  
14 calculations and cost effectiveness results using common industry practices and sampling  
15 techniques. Our program evaluations seek to balance measuring and verifying the accuracy of  
16 actual savings achieved with the cost and effort of conducting these evaluation activities so that  
17 the Company can continue to refine our program offerings to help customers use energy more  
18 efficiently.

1 **II. Rider EEIC**

2 **Q. There was a recommendation in direct testimony from Staff to move**  
3 **the filing date for Rider EEIC. Please explain the recommendation.**

4 A. Staff recommends moving the filing date for Rider EEIC to November 1st  
5 to allow for a proper evaluation of the Company's submission. Witness Stever testified that  
6 the current schedule competes with multiple reoccurring cases as well as multiple holidays.

7 **Q. What are the benefits and detriments to making this change?**

8 A. As Ms. Stever indicated, the primary benefit would be providing Staff with an  
9 additional 30 days to review our filing.

10 There would be one significant detriment to making this filing earlier. At a minimum,  
11 this change would require one additional month of forecasts to be included, as currently for the  
12 reconciliation factors (e.g., PCR, TDR, EOR) we use actual results through October and project  
13 the costs and revenues for November through January. Moving the filing date to November 1  
14 would result in actuals through September theoretically being available and require October to  
15 be forecasted. However, given that September is the end of a fiscal quarter for Ameren, the  
16 monthly closing and reporting process in October typically takes longer than in "non-quarter"  
17 month ends (such as October close in November). The co-workers that compile our rider filing  
18 are also heavily involved in quarterly close, reporting, and analysis, and so it is unlikely we  
19 would have the capacity to have September results finalized and incorporated into the filing by  
20 November 1. Instead, we would use actual results through August and perform much of the  
21 rider documentation compilation during September, which would require forecasts for  
22 September through January. Given the large volume of projects that close near year-end, I  
23 expect the forecasting performed during November (as in the current process) would be more

1 accurate as compared to forecasting performed during September. Additionally, contractors  
2 may have difficulty in projecting future year costs (for the PPC and PTD components of the  
3 rider) that early, potentially resulting in us having to use filed budget amounts instead of actual  
4 contractor forecasts. This could lead to larger future reconciliation balances and more variability  
5 in customer rates.

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

7 A. Yes, it does.

