Exhibit No.:
Issues: Demand-Side Programs
EM&V Reports
Witness: John A. Rogers
Sponsoring Party: MO PSC Staff
Type of Exhibit: Corrected Red-line
Rebuttal Testimony
File No.: EO-2012-0142
Date Testimony Prepared: November 17, 2014

MISSOURI PUBLIC SERVICE COMMISSION

REGULATORY REVIEW DIVISION

CORRECTED RED-LINE REBUTTAL TESTIMONY

OF

JOHN A. ROGERS

UNION ELECTRIC COMPANY d/b/a AMEREN MISSOURI

FILE NO. EO-2012-0142

Jefferson City, Missouri
November 2014

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Union Electric Company d/b/a Ameren Missouri's Filing to Implement Regulatory Changes Furtherance of Energy Efficiency as allowed by MEEIA	)))))	File No. EO-2012-0142

AFFIDAVIT OF JOHN A. ROGERS

STATE OF MISSOURI)
) **ss**
COUNTY OF COLE)

John A. Rogers, of lawful age, on his oath states: that he has participated in the preparation of the following Corrected Red-line Rebuttal Testimony in question and answer form, consisting of 19 pages of Corrected Red-line Rebuttal Testimony to be presented in the above case, that the answers in the following Corrected Red-line Rebuttal Testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true to the best of his knowledge and belief.

John A Rogers
John A. Rogers

Subscribed and sworn to before me this 23rd day of January, 2015.

Susan L Sundermeyer
Notary Public

Table of Contents

CORRECTED RED-LINE REBUTTAL TESTIMONY

OF

JOHN A. ROGERS

UNION ELECTRIC COMPANY d/b/a AMEREN MISSOURI

FILE NO. EO-2012-0142

CORRECTED RED-LINE REBUTTAL TESTIMONY

OF

JOHN A. ROGERS

UNION ELECTRIC COMPANY d/b/a AMEREN MISSOURI

FILE NO. EO-2012-0142

Q. Please state your name and business address.

A. My name is John A. Rogers, and my business address is Missouri Public Service Commission, P. O. Box 360, Jefferson City, Missouri 65102.

Q. What is your present position at the Missouri Public Service Commission ("Commission")?

A. I am a Utility Regulatory Manager in the Energy Unit of the Regulatory Review Division.

Q. Are you the same John A. Rogers that filed direct testimony in this case on October 22, 2014?

A. Yes, I am.

Q. Would you please summarize the purpose of your rebuttal testimony?

A. I discuss certain aspects of the direct testimony of Office of the Public Counsel ("OPC") witness Geoff Marke concerning the following:

1. Dr. Marke's proposed recalculation of annual net shared benefits to reflect inclusion of the utility's financial incentives as a cost;

2. Dr. Marke's recommendation that the Commission adopt Staff's original Change Request that calls for the elimination of market effects and accept the Auditor's spillover estimates; reject Ameren's downward adjustment of free

ridership; and include a 9% downward adjustment to the NTG ratio for the LightSavers Program to account for conservative direct rebound effect estimates;[1]

3. Dr. Marke's assertion that the joint position[2] does not address evaluation, measurement and verification ("EM&V") considerations going forward; and

4. Dr. Marke's characterization of the rate impact should the joint position be approved by the Commission.

Q. As a result of its review of other parties' direct testimony filed on October 22, 2014, has Staff altered – in any way - its position in direct testimony, which provides support for and recommends the Commission approve the terms of the joint position[3]?

A. No. Staff continues to recommend the Commission approve the joint position, which is now supported by Ameren Missouri, Staff and Missouri Division of Energy.

Recalculation of net benefits to reflect the utility's financial incentive

Q. Does Staff agree with Dr. Marke's assertion that "net shared benefits should not be calculated without an offsetting adjustment to reflect the performance incentive amount."[4]?

A. No.

[1] Marke direct testimony page 1, line 17 through page 2, line 3.

[2] Staff and Ameren Missouri filed separate Change Requests on July 3, 2014, and then filed their *Non-unanimous Stipulation and Agreement Settling the Program Year 2013 Change Requests* on September 19, 2014. On September 26, 2014, OPC objected to the non-unanimous stipulation. According to the Commission's rule for non-unanimous stipulations, 4 CSR 240-2.115(D), Staff and Ameren now jointly hold the compromise position described in the *Non-unanimous Stipulation and Agreement Settling the Program Year 2013 Change Requests*. Staff's and Ameren Missouri's original Change Requests, as filed, are no longer requested. No other party timely filed a Change Request. On October 6, 2014, Missouri Division of Energy filed its response to change requests stating its support for Staff's and Ameren Missouri's stipulated jointly held position, as a just and reasonable compromise of their Change Requests.

[3] Rogers direct testimony page 19, lines 12 through 33.

[4] Appendix to Marke direct testimony page 62, lines 13 through 14.

Q. Why not?

A. Dr. Marke incorrectly applies language from the MEEIA statute and Commission's MEEIA rules to form a conclusion that supports his assertion. However, Dr. Marke misinterprets the MEEIA statute and the MEEIA rules regarding the total resource cost ("TRC") test and annual net shared benefits. Also, Dr. Marke's interpretation is inconsistent with the binding terms and conditions of the *Unanimous Stipulation and Agreement Resolving Ameren Missouri's MEEIA Filing*[5] ("2012 Stipulation"). Finally, Dr. Mark's assertion is not supported by published literature regarding the definition of annual net shared benefits.

Q. Please explain your answer further.

A. Dr. Marke testifies: "The Total Resource Cost test is the preferred test in Missouri for the evaluation of the net shared benefits produced by energy efficiency programs,"[6] and "to utilize the TRC is consistent with the MEEIA statute to deduct incentives from the net shared benefits calculation and is consistent with Chapter 20 rules."[7] In support of his assertion, Dr. Marke takes out of context certain citations from parts of the MEEIA statute[8] and the Commission's MEEIA rules,[9] and then he adds emphasis to certain words in the citations without further explanation. A more thorough examination of the MEEIA statute and MEEIA rules reveals that <u>only</u> customer incentives, and <u>not</u> utility financial incentives, are to be a part of the calculation of annual net shared benefits. Contrary to Dr. Marke's assertion, there is no interdependency between the TRC test, which is a preferred cost-

[5] Filed in this case on July 5, 2012 and approved by the Commission on August 1, 2012.
[6] Appendix to Marke direct testimony page 62, lines 17 through 18.
[7] Appendix to Marke direct testimony page 63, lines 19 through 20.
[8] Section 393.1075, RSMo, Supp 2012.
[9] 4 CSR 240-3.163, 4 CSR 240-3.164, 4 CSR 240-20.093 and 4 CSR 240-20.094.

effectiveness test in Missouri (but not the only cost-effectiveness test in Missouri) and the definition of annual net shared benefits.

Ultimately, as I explain later in this testimony, the 2012 Stipulation provides that any performance incentive award amount is not included in the calculation of EM&V annual net shared benefits.

Q. Please respond to Dr. Marke's direct testimony on page 62, lines 17 through 18: "The Total Resource Cost test is the preferred test in Missouri for the evaluation of the net shared benefits produced by energy efficiency programs."

A. While Dr. Marke wants the reader to believe that the TRC is **the** preferred cost-effectiveness test, the TRC is by statute **a** preferred cost-effectiveness test, as evidenced by Dr. Marke's own citation of Section 393.1075.4., in part, with emphasis: **<u>The commission shall consider the total resource cost test a preferred cost-effectiveness test</u>**. The Commission acknowledged this statutory requirement (to consider the TRC ***a*** preferred cost effectiveness test) when it promulgated the following administrative rules:

- 4 CSR 240-20.093(1)(DD) Total resource cost test, or TRC, means the test of the cost-effectiveness of demand-side programs that compares the avoided utility costs to the sum of all incremental costs of end-use measures that are implemented due to the program (including both utility and participant contributions), plus utility costs to administer, deliver, and evaluate each demand-side program;

- 4 CSR 240-20.09~~3~~<u>4</u>(3)(A) For demand-side programs and program plans that have a total resource cost test ratio greater than one (1), the commission shall approve demand-side programs or program plans, and annual demand and energy savings targets for each demand-side program it approves, provided it finds that the utility has met the filing and submission requirements of 4 CSR 240-3.164(2) and the demand-side programs and program plans—
  1. Are consistent with a goal of achieving all cost-effective demand-side savings;
  2. Have reliable evaluation, measurement, and verification plans; and
  3. Are included in the electric utility's preferred plan or have been analyzed through the integration process required by 4 CSR 240-22.060 to determine the

> impact of the demand-side programs and program plans on the net present value of revenue requirements of the electric utility.

> - 4 CSR 240-3.164(2)(B) Demonstration of cost-effectiveness for each demand-side program and for the total of all demand-side programs of the utility. At a minimum, the electric utility shall include:
>   1. The total resource cost test and a detailed description of the utility's avoided cost calculations and all assumptions used in the calculation. To the extent that the portfolio of programs fails to meet the TRC test, the utility shall examine whether the failure persists if it considers a reasonable range of uncertainty in the assumptions used to calculate avoided costs;
>   2. The utility shall also include calculations for the utility cost test, the participant test, the non-participant test, and the societal cost test; and
>   3. The impacts on annual revenue requirements and net present value of annual revenue requirements as a result of the integration analysis in accordance with 4 CSR 240-22.060 over the twenty (20)-year planning horizon.

Q. Are annual net shared benefits a cost-effectiveness test as implied by Dr. Marke?

A. No. The MEEIA cost-effectiveness tests include the TRC test, participant test,[10] non-participant test[11] and societal test[12] as identified in 4 CSR 240-3.164(2)(B) and defined in the MEEIA rules. Annual net shared benefits is a term defined in 4 CSR 240-3.163(1)(A) and 4 CSR 240-20.093(1)(C) to mean "the utility's avoided costs measured and documented through evaluation, measurement, and verification (EM&V) reports for approved demand-side programs less the sum of the programs' costs including

[10] 4 CSR 240-3.164(1)(Q) Participant test means the test of the cost-effectiveness of demand-side programs that measures the economics of a demand-side program from the perspective of the customers participating in the program.

[11] 4 CSR 240-3.164(1)(P) Non-participant test (sometimes referred to as the ratepayer impact measure test or RIM test) is a measure of the difference between the change in total revenues paid to a utility and the change in total cost incurred by the utility as a result of the implementation of demand-side programs. The benefits are the avoided cost as a result of implementation. The costs consist of incentives paid to participants, other costs incurred by the utility, and the loss in revenue as a result of diminished consumption. Utility costs include the costs to administer, deliver, and evaluate each demand-side program.

[12] 4 CSR 240-3.164(1)(U) Societal cost test means the total resource cost test with the addition of societal benefits (externalities such as, but not limited to, environmental or economic benefits) to the total benefits of the total resource cost test.

design, administration, delivery, end-use measures, incentives, EM&V, utility market potential studies, and technical resource manual on an annual basis."

Q. What incentives are included in the 4 CSR 240-3.163(1)(A) and 4 CSR 240-20.093(1)(C) definitions of annual net shared benefits?

A. The incentives in the definition of annual net shared benefits are one component of program costs, or the customer incentives (direct or indirect payments or rebates to customers to encourage the installation of energy saving measures). As indicated in the rule, the components of program costs are program design, administration, delivery, end-use measures, incentives, EM&V, market potential studies and technical resource manual.

The performance incentive award is <u>not</u> a program cost; it is a financial incentive awarded to the utility. While 4 CSR 240-20.093(~~3~~<u>2</u>)(C)2. requires that the Commission provide financial incentives to electric utilities, such financial incentives are not considered a cost when calculating annual net shared benefits for the utility incentive component of a DSIM as described in 4 CSR 240-20.093(~~3~~<u>2</u>)(H).

> 4 CSR 240-20.093(~~3~~<u>2</u>)(C) The commission shall approve the establishment, continuation, or modification of a DSIM and associated tariff sheets if it finds the electric utility's approved demand-side programs are expected to result in energy and demand savings and are beneficial to all customers in the customer class in which the programs are proposed, regardless of whether the programs are utilized by all customers and will assist the commission's efforts to implement state policy contained in section 393.1075, RSMo, to—
>
> 1. Provide the electric utility with timely recovery of all reasonable and prudent costs of delivering cost-effective demand-side programs;
> 2. Ensure that utility financial incentives are aligned with helping customers use energy more efficiently and in a manner that sustains or enhances utility customers' incentives to use energy more efficiently; and
> 3. Provide timely earnings opportunities associated with cost-effective measurable and/or verifiable energy and demand savings.
>
> 4 CSR 240-20.093(~~3~~<u>2</u>)(H) Any utility incentive component of a DSIM shall be based on the performance of demand-side programs approved by the commission in accordance with 4 CSR 240-20.094 Demand-Side Programs

> and shall include a methodology for determining the utility's portion of annual net shared benefits achieved and documented through EM&V reports for approved demand-side programs. Each utility incentive component of a DSIM shall define the relationship between the utility's portion of annual net shared benefits achieved and documented through EM&V reports, annual energy savings achieved and documented through EM&V reports as a percentage of annual energy savings targets, and annual demand savings achieved and documented through EM&V reports as a percentage of annual demand savings targets.
>
> 1. Annual energy and demand savings targets approved by the commission for use in the utility incentive component of a DSIM are not necessarily the same as the incremental annual energy and demand savings goals and cumulative annual energy and demand savings goals specified in 4 CSR 240-20.094(2).
>
> 2. The commission shall order any utility incentive component of a DSIM simultaneously with the programs approved in accordance with 4 CSR 240-20.094 Demand-Side Programs.
>
> 3. Any utility incentive component of a DSIM shall be implemented on a retrospective basis and all energy and demand savings used to determine a DSIM utility incentive revenue requirement must be measured and verified through EM&V.

Q. Do any of the MEEIA rules require the utility to include financial incentives for its demand-side programs when analyzing alternative resource plans during the utility's electric utility resource planning?

A. Yes. 4 CSR 240-20.093(~~3~~4)(A)~~2~~3. requires that demand-side program plans are included in the electric utility's preferred plan or have been analyzed through the integration process required by 4 CSR 240-22.060 to determine the impact of the demand-side programs and program plans on the net present value of revenue requirements of the electric utility. Further, 4 CSR 240-22.060(4)(C) requires that the utility provide:

> (C) The analysis of economic impact of alternative resource plans, calculated with and without utility financial incentives for demand-side resources, shall provide comparative estimates for each year of the planning horizon—
>
> 1. For the following performance measures for each year:
>
> A. Estimated annual revenue requirement;
>
> B. Estimated annual average rates and percentage increase in the average rate from the prior year; and
>
> C. Estimated company financial ratios and credit metrics.

Q. Do the requirements of 4 CSR 240-20.093(~~3~~4)(A)~~2~~3. and 4 CSR 240-22.060(4)(C) result in a requirement that financial incentives be included in the calculation of annual net shared benefits as a result of EM&V for program year 2013?

A. No. Staff can find no such requirement in the MEEIA statute or the Commission's MEEIA rules on this question. Ultimately, for Ameren Missouri and the stakeholders, paragraph 5.b.ii and Example Nos. 1 and 2 in Appendix B of the 2012 Stipulation clearly show that the utility performance incentive award amount is not to be included in the calculation of annual net shared benefits.[13] While the annual net shared benefits for each of the three (3) program years is determined at the conclusion of each program year, the performance incentive award amount is determined following the conclusion of the third and final program year using the previously determined annual net shared benefits for each of the three program years.[14] Appendix B is provided as Schedule JAR-1.

Q. Is Dr. Marke's assertion that the utility performance incentive award should be included as a cost when calculating annual net shared benefits supported by any literature on this subject?

A. Not any literature relevant to Ameren Missouri's program year 2013 ("PY2013") programs. Staff has been able to locate only one instance - in California - for which financial incentives are included as a cost when calculating net benefits and that instance is described on pages 6-9 of *Aligning Utility Incentives with Investment in Energy*

[13] Also see the definition of Performance Incentive Award on Original Sheet No. 90.1 of Rider EEIC, which is Schedule JAR-4-2 of the direct testimony of John Rogers.

[14] Paragraph 11.b. of the 2012 Stipulation specifies the process for EM&V reports and begins with paragraph 11.b.i. "45 days after the end of each program year … ", then describes the process for finalizing each program years EM&V in paragraphs 11.b.ii through paragraphs 11.b.iv, and concludes with paragraph 11.b.v. "All Signatories will be bound by the impact evaluation portion of the Final EM&V Report, as it may be modified by the Commission's resolution of issues related to the impact evaluation portion of the Final EM&V Report."

Efficiency, A Resource of the National Action Plan for Energy Efficiency, November 2007[15] in 6.3.3 Case Study: The California Utilities:

> CPUC also adjusted the basic cost-effectiveness calculation for purposes of determining net benefits. The estimated value of the performance incentive must be treated as a cost in the net benefits calculation, both during the program planning process to determine overall cost-effectiveness of the utilities' energy efficiency portfolios, and when the value of net benefits is calculated for purposes of reward determinations subsequent to program implementation.

Q. Did Ameren Missouri treat an estimate of its performance incentive as a cost when estimating annual net shared benefits in its *2013 – 2015 Energy Efficiency Plan* for this case?

A. No.

Q. In Staff's opinion, why do the MEEIA statute and the Commission's MEEIA rules require that the TRC be a preferred cost-effectiveness test?

A. To answer this question, I cite part of sections 6.4 from *Understanding Cost-Effectiveness of Energy Efficiency Programs: Best Practices, Technical Methods, and Emerging Issues for Policy Makers, A Resource of the National Action Plan for Energy Efficiency, published November 2008*.[16]

> The primary purpose of the TRC is to evaluate the net benefits of energy efficiency measures to the region as a whole. Unlike the tests describe above, the TRC does not take the view of individual stakeholders. It does not include bill savings and incentive payments, as they yield an intra-regional transfer of zero ("benefits" to customers and "costs" to the utility that cancel each other on a regional level). For some utilities, the region considered may be limited strictly to its own service territory, ignoring benefits (and costs) to neighboring areas (a distribution-only utility may, for example, consider only the impacts to its distribution system). In other cases, the region is defined as the state as a whole, allowing the TRC to include benefits to other stakeholders (e.g., other utilities, water utilities, local communities). The TRC is useful for jurisdictions wishing to value energy efficiency as a resource not just for the utility, but for

---

[15] http://epa.gov/cleanenergy/documents/suca/incentives.pdf
[16] http://www.epa.gov/cleanenergy/documents/suca/cost-effectiveness.pdf

the entire region. Thus the TRC is often the primary test considered by those states seeking to include the benefits not just to the utility and its ratepayers, but to other constituents as well.

Dr. Marke recommendation that the Commission adopt Staff's original Change Request that calls for the elimination of market effects and accept the Auditor's spillover estimates; reject Ameren's downward adjustment of free ridership; and include a 9% downward adjustment to the NTG ratio for the LightSavers Program to account for conservative direct rebound effect[17]

Q. What issues require Commission decisions in this case to determine PY2013 EM&V for the Ameren Missouri demand-side programs?

A. In Staff's opinion the Commission would need to rule on whether the joint position of Ameren Missouri and Staff is supported by competent and substantial evidence and is a just and reasonable resolution of this case.

Should the Commission not decide in favor of the joint position, a Commission decision on each of the following issues concerning the PY2013 EM&V for the Ameren Missouri demand-side programs would be necessary in order to determine the PY2013 annual energy savings and PY2013 annual net shared benefits for the Ameren Missouri performance incentive award amount determination to be made in 2016:

1. Whether the free rider adjustment to NTG ratio for the residential Appliance program should be 38.6% as recommended by Cadmus or 22.0% as recommended by Ameren Missouri;
2. Whether the free rider adjustment to NTG ratio for the residential Community program should be 4.2% as recommended by Cadmus or 2.0% as recommended by Ameren Missouri;

[17] Marke direct testimony page 2, line 17 through page 2, line 3.

3. Whether the free rider adjustment to NTG ratio for the residential Construction program should be 72.1% as recommended by Cadmus or 72.0% as recommended by Ameren Missouri;
4. Whether the free rider adjustment to NTG ratio for the residential Cool program should be 25.2% as recommended by Cadmus or 14.0% as recommended by Ameren Missouri;
5. Whether the free rider adjustment to NTG ratio for the residential LightSavers program should be 21.0% as recommended by Cadmus or 20.0% as recommended by Ameren Missouri;
6. Whether the free rider adjustment to NTG ratio for the residential Performance program should be 16.5% as recommended by Cadmus or 7.0% as recommended by Ameren Missouri;
7. Whether the free rider adjustment to NTG ratio for the residential Rebate program should be 14.7% as recommended by Cadmus or 8.0% as recommended by Ameren Missouri;
8. Whether the free rider adjustment to NTG ratio for the business Custom program should be 7.0% as recommended by ADM or 6.5% as recommended by Ameren Missouri;
9. Whether the free rider adjustment to NTG ratio for the business Standard program should be 5.0% as recommended by ADM or 4.0% as recommended by Ameren Missouri;

10. Whether the free rider adjustment to NTG ratio for the business Construction program should be 6.0% as recommended by ADM or 5.0% as recommended by Ameren Missouri;

11. Whether the free rider adjustment to NTG ratio for the business Retro-Commissioning program should be 33.0% as recommended by ADM or 27.4% as recommended by Ameren Missouri;

12. Whether the participant spillover adjustment to NTG ratio for the residential LightSavers program should be 25.0% as recommended by Cadmus or 7.5% as recommended by the Auditor;

13. Whether the nonparticipant spillover adjustment to NTG ratio for the residential Appliance program should be 12.6% as recommended by Cadmus or 3.0% as recommended by the Auditor;

14. Whether the nonparticipant spillover adjustment to NTG ratio for the residential Community program should be 0.0% as recommended by Cadmus or 3.0% as recommended by the Auditor;

15. Whether the nonparticipant spillover adjustment to NTG ratio for the residential Construction program should be 0.0% as recommended by Cadmus or 3.0% as recommended by the Auditor;

16. Whether the nonparticipant spillover adjustment to NTG ratio for the residential Cool program should be 19.2% as recommended by Cadmus or 3.0% as recommended by the Auditor;

17. Whether the nonparticipant spillover adjustment to NTG ratio for the residential LightSavers program should be 0.8% as recommended by Cadmus or 3.0% as recommended by the Auditor;

18. Whether the nonparticipant spillover adjustment to NTG ratio for the residential Performance program should be 1.7% as recommended by Cadmus or 3.0% as recommended by the Auditor;

19. Whether the nonparticipant spillover adjustment to NTG ratio for the residential Rebate program should be 1.7% as recommended by Cadmus or 3.0% as recommended by the Auditor;

20. Whether the market effects adjustment to the NTG ratio for the residential LightSavers program should be 18.0% as recommended by Cadmus, 5.4% as recommended by the Auditor or 0.0% as recommended by Dr. Marke;

21. Whether the rebound effect adjustment to the NTG ratio for the residential LightSavers program should be 9.0% as recommended by Dr. Marke or 0.0% as recommended by Cadmus and the Auditor; and

22. Whether the calculation of annual net shared benefits through EM&V should include financial incentives as a cost as recommended by Dr. Marke.

Q. Does Dr. Marke's direct testimony demonstrate that Dr. Marke has performed any EM&V for Ameren Missouri's PY2013 demand-side programs as support for his recommendation?

A. No, it does not.

Q. Please explain.

A. 4 CSR 240-20.093(3)(C) requires that:

> The commission shall approve the establishment, continuation, or modification of a DSIM and associated tariff sheets if it finds the electric utility's approved demand-side programs are expected to result in energy and demand savings and are beneficial to all customers in the customer class in which the programs are proposed, regardless of whether the programs are utilized by all customers and will assist the commission's efforts to implement *state policy contained in section 393.1075, RSMo, to—*
> 1. Provide the electric utility with timely recovery of all reasonable and prudent costs of delivering cost-effective demand-side programs;
> 2. Ensure that utility financial incentives are aligned with helping customers use energy more efficiently and in a manner that sustains or enhances utility customers' incentives to use energy more efficiently; and
> 3. *Provide timely earnings opportunities associated with cost-effective <u>measurable and/or verifiable</u> energy and demand savings*. [Emphasis added]

4 CSR 240-20.093(3)(H) requires that:

> "[a]ny utility incentive component of a DSIM shall be based on the performance of demand-side programs approved by the commission in accordance with 4 CSR 240-20.094 Demand-Side Programs and shall include a *<u>methodology</u> for determining the utility's portion of annual net shared benefits achieved and <u>documented through EM&V reports</u> for approved demand-side programs*." [*<u>Emphasis added</u>*]

4 CSR 240-3.164(1)(L) defines evaluation, measurement, and verification, or EM&V, to mean:

> "[t]he performance of studies and activities intended to evaluate the process of the utility's program delivery and oversight and *to estimate and/or verify the estimated actual energy and demand savings*, utility lost revenue, cost effectiveness, and other effects *from demand-side programs*." [*Emphasis added*]

Dr. Marke has not performed any studies and activities required by the rule *to evaluate and to estimate and/or verify the estimated actual energy and demand savings*, cost effectiveness, and other effects *from Ameren Missouri's PY2013 demand-side programs*. As part of the Appendix to his direct testimony, Dr. Marke presents "additional examples that contradict

Ameren's market effect assertion" concerning Wal-Mart's influence on the retail market,[18] California and Previous Utility-Sponsored Energy Efficiency Programs,[19] The Energy Independence and Security Act of 2007 (EISA),[20] Ameren Illinois' upstream lighting rebate program,[21] and Home Depot and Kansas City.[22] Dr. Marke then includes in his direct testimony "additional examples" concerning his proposed rebound effect adjustment[23] to the residential LightSavers program. While all of Dr. Marke's "additional examples" that allegedly "contradict Ameren's market effect assertion" are interesting, none of the "additional examples" listed by Dr. Marke are relevant to *cost-effective measurable and/or verifiable energy and demand savings* which are the result of EM&V performed *for the PY2013 demand-side programs of Ameren Missouri*. All of Dr. Marke's "additional examples" relate to experiences of other utilities in other states during periods of time other than 2013 and are not supported by EM&V performed in compliance with the Commission's rules 4 CSR 240-20.093(3)(C), 4 CSR 240-20.093(3)(H) and 4 CSR 240-3.164(1)(L).

Q. Does Dr. Marke claim or demonstrate that the EM&V performed and reported by Cadmus, ADM, Auditor and, to a limited degree, Ameren Missouri was not performed and reported in compliance with the Commission's rules 4 CSR 240-20.093(~~3~~2)(C)3, 4 CSR 240-20.093(~~3~~2)(H) and 4 CSR 240-3.164(1)(L)?

A. No.

Q. Can the Commission rule in favor of Dr. Marke's recommendations for items 20, 21 and 22 in the list of 22 issues concerning the PY2013 EM&V for the Ameren Missouri

[18] Appendix to Marke direct testimony at page 46, line 12 through page 50, line 10.
[19] Appendix to Marke direct testimony at page 50, line 12 through page 52, line 3.
[20] Appendix to Marke direct testimony at page 52, line 5 through page 54, line 20.
[21] Appendix to Marke direct testimony at page 55, line 1 through page 56, line 10.
[22] Appendix to Marke direct testimony at page 56, line 12 through page 58, line 1.
[23] Marke direct testimony at page 5, line 1 through page 17, line 2.

demand-side programs in order that PY2013 annual energy savings and PY2013 annual net shared benefits can be determined for the Ameren Missouri performance incentive award amount determination to be made in 2016?

A. No. Dr. Marke has not complied with the MEEIA statute, the MEEIA rules and the terms of the 2012 Stipulation when making his recommendations.

Joint position addresses EM&V considerations going forward

Q. Please respond to the statements beginning at page 61, line 20 and ending at page 62, line 3 of the Appendix to Dr. Marke's direct testimony:

> For numerous reasons stated above, Public Counsel believes that market effects within this context overstate the benefits accrued to ratepayers. Coming to a black box determination at some level slightly less than what Ameren has proposed does absolutely nothing to address the exaggeration of these benefits for this evaluation and for future program years.
>
> Additionally, the black box agreement does not address EM&V considerations moving forward and undermines the process currently in place by minimizing the evaluation and results of the Commission's independent auditor.

A. "Black box" is a term OPC uses to describe the compromise achieved by the joint position which falls nearly in the middle of the established range of EM&V values as determined by the Evaluators, the Auditor, and the initial Change Request positions of Staff and Ameren Missouri which were later abandoned. By itself, the joint position (or "black box") cannot address determination of EM&V for future program years, since the joint position addresses only the settlement of PY2013 annual energy savings and PY2013 annual net shared benefits. Unfortunately, Dr. Marke's testimony completely ignores the benefits that could be obtained for all stakeholders should the Commission approve the portion of the joint position as described below and in my direct testimony (and paragraph 9 of the non-unanimous stipulation). The joint position represents a great opportunity for improving the efficiency and effectiveness of the entire EM&V process – including the role of the Auditor – for future program years beginning with EM&V for program year 2014.

> The parties will work together to address revisions to the MEEIA rules such that any proposed revisions to the MEEIA rules are provided to the Missouri Public Service Commission no later than July 1, 2015. Further, the parties agree that the components of net-to-gross ("NTG") ratios for purposes of calculating EM&V results, including for the performance incentive component of Ameren Missouri's MEEIA programs, are free ridership, participant spillover, nonparticipant spillover and market effects, and also agree that the formula for determining NTG ratios is as follows: NTG = 1.0 – Free Ridership + Participant Spillover + Nonparticipant Spillover + Market Effects. The agreement in the preceding sentence does not bind any party to how any component of NTG ratios should be calculated, but the parties agree to make a best effort to determine how such components should be calculated through EM&V for the EM&V to be conducted for PY2014 and PY2015, and also agree to make a best effort to address the calculation of the NTG ratio components as part of the process of developing proposed revised MEEIA rules. In addition, the parties will make a best effort to agree by April 1, 2015 on how the EM&V contractors and the Commission's Auditor should participate in any future Change Request dockets.

While a just and reasonable outcome may be possible through a time consuming and expensive hearing process, it is Staff's opinion that it will be more productive to engage Cadmus, ADM, Auditor, Ameren Missouri, Staff and other interested stakeholders in less formal, but more constructive meetings to discuss and agree, if possible, on how the components of the net-to-gross ratios should be calculated through EM&V for PY2014 and for PY2015. The process will also inform the MEEIA rulemaking review which must be completed by July 1, 2015.

Rate impacts should the joint position of Ameren Missouri and Staff be approved by the Commission

Q. Please comment on the testimony at page 61, lines 12 through 19 of the Appendix to the direct testimony of Geoff Marke:

> Public Counsel believes the performance amount attributable to the black box non-unanimous stipulation and agreement for PY2013 would be calculated as follows:
>
> 6.19% of $20,322,039 = $1,257,934
>
> That would be the performance incentive amount under the black box agreement and would assume that Ameren Missouri would reach their 130% target.

A. The $20,322,039 amount in Dr. Marke's direct testimony assumes that the Commission's final determination of the PY2013 net benefits is the Auditor 1 annual net shared benefits in Dr. Marke's Table 10, which is the same as the Staff's initial Change Request (since abandoned by Staff in support of the joint position), which is also the Auditor's PY2013 EM&V final report's net benefits but without any market effects.[24]

Q. What is the incremental rate impact on individual customers of Ameren Missouri relative to the joint position should the Commission ultimately decide to approve the Auditor's PY2013 EM&V final report but without any market effects adjustments (recommended by OPC)[25]?

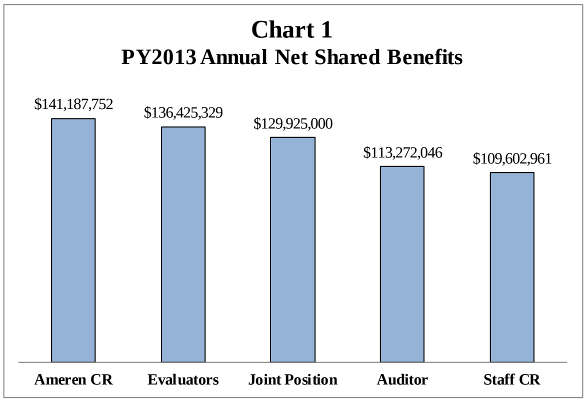
A. Instead of working through all of the rate analysis necessary to provide a precise answer consistent with Rider EEIC, I provide only an order of magnitude answer of roughly a savings of $0.52 per customer per year for two years based on Ameren Missouri having approximately 1.2 million customers[26] and the Rider EEIC's specification that the amortization of any performance incentive award amount be over a period of two years.

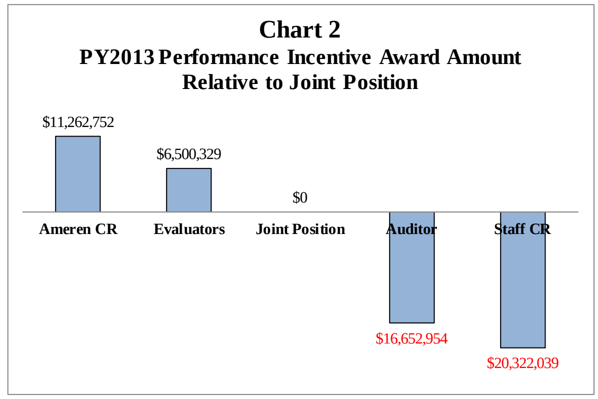
Q. Please present the results of Staff's similar analyses of the incremental PY2013 performance award amount relative to that of the joint position should the Commission

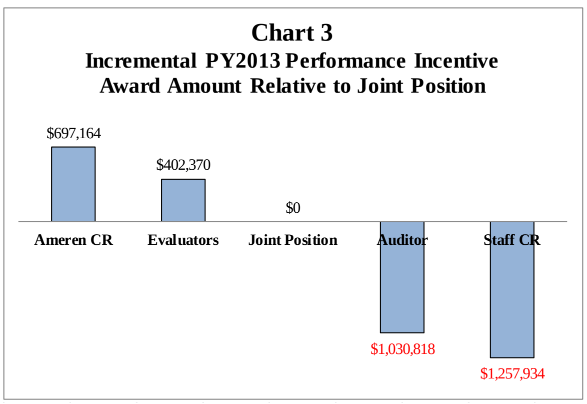
[24] Although the Auditor quantified the impact of no market effects, the Auditor is recommending that there be a market effects adjustment of 5.4% to the NTG ratio of the residential LightSavers program.
[25] Auditor 1 in Table10 of Marke direct testimony.
[26] Direct testimony of Michael Moehn at page 4, line 5.

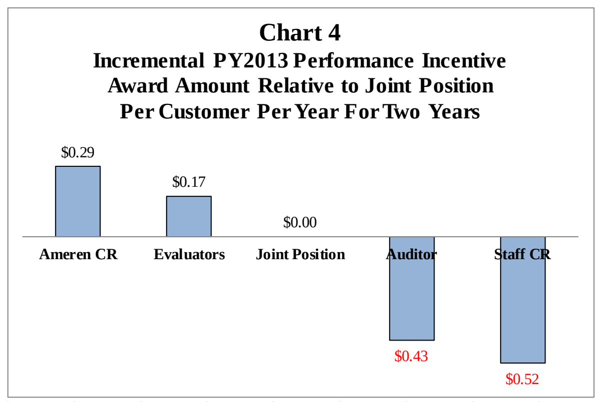
approve either: Ameren Missouri's initial change request ("Ameren CR"), the PY2013 EM&V final reports of Cadmus and ADM ("Evaluators"), the joint agreement, the Auditor's PY2013 EM&V final report, or the Staff's initial change request ("Staff CR").[27]

A. Following charts are provided to answer the question:









Q. Should the Commission find that the joint position of Ameren Missouri and Staff is just and reasonable, what is rate impact from the joint position as a result of this case?

A. Zero.

Q. Does this conclude your testimony?

A. Yes, it does.

[27] Staff's analyses do not include the impacts of: 1) OPC's 9% rebound effects adjustment to the NTG ratio of the LightSavers program upon PY2013 annual net shared benefits or 2) OPC's recalculation of PY2013 annual net shared benefits to include financial incentives as a cost. OPC's adjustments do not comply with Commission rules or the 2012 Stipulation and Dr. Marke's direct testimony does not quantify either of these impacts.