

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

In the Matter of Union Electric Company d/b/a            )  
Ameren Missouri's 2nd Filing to Implement            )            File No. EO-2015-0055  
Regulatory Changes in Furtherance of Energy        )  
Efficiency as Allowed by MEEIA.                        )

**NON-UNANIMOUS STIPULATION AND AGREEMENT SETTling FINAL EM&V  
FOR THE 2016 MEEIA CYCLE 2 PROGRAM YEAR**

**COMES NOW** Union Electric Company d/b/a Ameren Missouri (Ameren Missouri or Company), Staff of the Missouri Public Service Commission (Staff), and the Office of the Public Counsel (OPC) (collectively, the Signatories), and, under 4 CSR 240-2.115, hereby file this Non-Uniform Stipulation and Agreement (PY2016 Stipulation) regarding the results of evaluation, measurement, and verification (EM&V) for the 2016 program year (PY2016) of Ameren Missouri's Missouri Energy Efficiency Investment Act (MEEIA) Cycle 2 demand-side programs, as follows:

**Background**

1. On February 5, 2016, Ameren Missouri and other interested parties to this case submitted to the Commission for its approval a Non-Uniform Stipulation and Agreement (Cycle 2 Stipulation) related to the Company's implementation of its second, three-year cycle (Cycle 2) of MEEIA programs. The Cycle 2 Stipulation was unopposed by any party, and the Commission issued an order approving it on February 10, 2016. The Cycle 2 Stipulation contained provisions related to EM&V of the Cycle 2 demand-side programs and included procedures whereby a party may request changes (a change request) to the EM&V final reports for each program year.

2. Ameren Missouri engaged The Cadmus Group, Inc. (Cadmus) to evaluate its residential energy efficiency programs, and ADM Associates, Inc. (ADM) to evaluate its business energy efficiency programs. On July 14, 2017, Cadmus and ADM (the Evaluators)

filed their PY2016 EM&V final reports in this case. On July 25, 2017, Cadmus filed a revised PY2016 EM&V final report to correct minor mathematical errors.

3. In accordance with 4 CSR 240-20.093(7), the Commission hired Evergreen Economics to serve in the capacity of its independent contractor (Auditor) to audit and report on the work of each independent EM&V contractor hired by utilities with Commission-approved MEEIA programs. On July 31, 2017, the Auditor filed its PY2016 EM&V final report respecting Ameren Missouri's programs in this case.

4. On August 14, 2017, the Staff and OPC filed change requests seeking certain changes to Cadmus' PY 2016 EM&V final report, as contemplated by the Cycle 2 Stipulation. The Staff's change request was based (with one exception) on certain recommendations from the Auditor. OPC's change request was also based largely on the Auditor's recommendation; OPC also raised one issue not raised by the Auditor.

5. Thereafter, Ameren Missouri, Staff, and OPC (without objection from any other party to this docket) filed a Jointly Proposed Procedural Schedule which, except for the proposed hearing dates, was adopted by the Commission by order dated August 25, 2017.<sup>1</sup>

**Ameren Missouri Cycle 2 Rider EEIC**

6. In compliance with the terms of Ameren Missouri's Cycle 2 Rider EEIC, Ameren Missouri shall use the Evaluators' PY2016 EM&V final reports and any changes to the Evaluators' PY2016 EM&V final reports required by the terms of this PY2016 Stipulation to:

- a. Update the ex-post gross annual energy and demand savings amounts for measures in the TRM;<sup>2</sup>

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<sup>1</sup> The originally-adopted hearing dates were changed by the Commission's August 31, 2017, *Order Modifying Procedural Schedule* because of a conflict of counsel for the Staff with those originally-adopted hearing dates.

<sup>2</sup> See definition of TRM on 1st Revised Sheet No. 91.2.

- b. Determine prospectively each month the amount of throughput disincentive (TD) Ameren Missouri is allowed to include in its Energy Efficiency Investment Charge on customers' bills;<sup>3</sup>
- c. Determine retrospectively, following completion of Cycle 2, an adjustment to the TD based upon the portfolio net-to-gross factor (NTGF)<sup>4</sup> used for Ameren Missouri's Cycle 2 earnings opportunity (EO); and
- d. Determine retrospectively, following completion of Cycle 2, Ameren Missouri's Cycle 2 EO.<sup>5</sup>

**Settled Terms**

7. This PY2016 Stipulation is being filed solely to settle the issues resulting from differences in the Cadmus PY2016 EM&V final report and the change requests filed by Staff and OPC on August 14, 2017. This PY2016 Stipulation is the result of extensive review and analysis by Ameren Missouri, Staff, and OPC of the various findings contained in the PY2016 EM&V final reports of the Auditor and the Evaluators. As a result of settlement discussions, the Signatories agree to the following terms to settle the PY2016 EM&V issues:

- a. Except as set forth in subparagraphs b. to d. of this paragraph 7, the kilowatt-hour (kWh) and kilowatt (kW) savings reflected in Cadmus' PY2016 EM&V final report filed July 25, 2017, along with the kWh and kW savings reflected in ADM's PY2016 EM&V final report, shall be the kWh and kW savings used to determine those parts of Ameren Missouri's Rider EEIC arising from final PY2016 EM&V.

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<sup>3</sup> See definition of ME on Original Sheet No. 91.6.

<sup>4</sup> See definition of NTGF on 1st Revised Sheet No. 91.8 and item (2) on 1st Revised Sheet No. 91.9.

<sup>5</sup> See 1st Revised Sheet No. 91.9.

- b. The Auditor's recommended energy efficiency measures for non-like<sup>6</sup> non-participant spillover (NPSO<sup>7</sup>) shall be used to establish the energy and demand savings arising from non-like NPSO for final PY2016 EM&V. This reduces the net kWh by 7,697,681 and the kW by 2,829.
- c. The Auditor's free ridership recommendation shall be utilized for the Company's Heating and Cooling Program. This reduces the net kWh by 1,122,248 and the kW by 846.<sup>8</sup>
- d. The kWh savings recommended by the Auditor for pipe wrap shall be used, except that it is agreed that the Auditor's PY2016 EM&V final report, which reports those savings as 8.6 kWh, should have reported the savings as 17.4 kWh for PY2016.<sup>9</sup> This reduces the net kWh by 95,720 and the kW by 8.0.
- e. For those parts of the Cycle 2 Rider EEIC arising from final PY2017 and PY2018 EM&V, the only NPSO kWh and kW savings that shall be used will be savings from like measures.<sup>10</sup>
- f. The throughput disincentive component in Rider EEIC (Cycle 2) arising from measures deployed during PY2016 will be adjusted in the first Rider EEIC adjustment filing made after approval of this PY2016 Stipulation (to occur in

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<sup>6</sup> "Non-like" energy efficiency measures are energy efficient measures that a non-participant installs that are different than the energy efficiency measures offered by the utility through its energy efficiency programs.

<sup>7</sup> "NPSO" are savings generated when non-MEEIA program participants install energy efficient measures outside the utility's demand-side programs in whole or in part because of the existence and operation of the utility's MEEIA programs.

<sup>8</sup> Increasing kWh and kW savings attributable to free ridership lowers the kWh and kW savings for which the Company is given credit for operating its programs because free riders are, by definition, participants in the Cycle 2 programs that take advantage of the programs but who would have installed the measures even if the programs did not exist.

<sup>9</sup> The example included in the Auditor's report was for pipe wrap in the school kit. Following the same formula, the pipe wrap for the multi-family kit would result in 15.1 kWh, reflecting a lower temperature set point that was not disputed.

<sup>10</sup> "Like" measures are energy efficient measures installed by non-participants that are the same as (like) energy efficiency measures offered by the utility's MEEIA programs.

late-November, 2017) to reflect kWh savings from Home Energy Reports (HER) sent during PY2016 of 6.2 kWh per year per HER recipient. The adjustment will be an Ordered Adjustment (OA) in the Rider EEIC adjustment filing.

- g. As soon as reasonably possible, the Company will convene a series of meetings with Staff, OPC, the other Cycle 2 regulatory stakeholders, Cadmus, ADM, and the Auditor with the goal of the meetings being to reach agreement on the following: (i) the size of EM&V survey samples, EM&V survey questions, and how EM&V survey responses will be applied in the determination of kWh and kW savings; (ii) the baseline for all heating and cooling measures offered in the Heating and Cooling Program; and (iii) the meaning of “early replacement” versus “replace on burnout” in the Heating and Cooling Program. The Signatories agree the survey-related discussions should occur first given their relevance to EM&V for PY2017, which will soon be underway.
- h. The contribution to the Earnings Opportunity Award arising from the HERs program for PY2016 (\$666,666.67) shall be included in the Earnings Opportunity Award received by the Company after final determination of the remainder of the Earnings Opportunity Award after the end of PY2018.
- i. At least two weeks prior to sending any future HER to selected residential customers, the Company will provide the draft HER to Staff, OPC, and the other Cycle 2 regulatory stakeholders to afford them the opportunity to provide suggestions on the HER.

- j. Ameren Missouri has provided to Staff and OPC a disc containing workpapers detailing the adjustments set forth in subparagraphs b. to d.
- k. The Signatories agree that the kWh and kW savings reflected in the tables in Appendix A, which is attached hereto and incorporated herein by reference, reflect the kWh and kW savings that will be utilized to determine those parts of Ameren Missouri's Rider EEIC arising from PY2016 EM&V. These savings are taken from ADM's PY2016 EM&V final report and Cadmus' PY2016 EM&V final report, as modified to account for the Settled Terms set forth in subparagraphs a through i, above.<sup>11</sup>

### **General Provisions**

8. Except as otherwise specifically agreed herein, the Signatories agree that the terms of this PY2016 Stipulation do not establish a precedent for the resolution of EM&V for PY2017 and PY2018. The Signatories further agree that agreement to the terms of this PY2016 Stipulation does not constitute a waiver of the Signatories' right to take a different position regarding EM&V for PY2017 or PY2018.

9. This PY2016 Stipulation is being entered into for the purpose of disposing of the issues arising from PY2016 EM&V. In presenting this PY2016 Stipulation, none of the Signatories shall be deemed to have approved, accepted, agreed, consented or acquiesced to any ratemaking principle or procedural principle, including, without limitation, any method of cost or revenue determination or cost allocation or revenue related methodology, and none of the Signatories shall be prejudiced or bound in any manner by the terms of this PY2016 Stipulation

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<sup>11</sup> For ease of reference, Appendix A includes tables from ADM's business program evaluation, for which change requests were not filed; the business program savings in those tables match the savings determined by ADM.

(whether it is approved or not) in this or any other proceeding, other than a proceeding limited to enforce the terms of this PY2016 Stipulation, except as otherwise expressly specified herein.

10. This PY2016 Stipulation has resulted from extensive negotiations and the terms hereof are interdependent. If the Commission does not approve this PY2016 Stipulation, or approves it with modifications or conditions to which a party objects, then this PY2016 Stipulation shall be void and no Signatory shall be bound by any of its provisions.

11. If the Commission does not unconditionally approve this PY2016 Stipulation without modification, and notwithstanding its provision that it shall become void, neither this PY2016 Stipulation, nor any matters associated with its consideration by the Commission, shall be considered or argued to be a waiver of the rights that any Signatory has for a decision in accordance with Section 536.080, RSMo 2000, or Article V, Section 18 of the Missouri Constitution, and the Signatories shall retain all procedural and due process rights as fully as though this PY2016 Stipulation had not been presented for approval, and any suggestions or memoranda, testimony or exhibits that have been offered or received in support of this PY2016 Stipulation shall become privileged as reflecting the substantive content of settlement discussions and shall be stricken from and not be considered as part of the administrative or evidentiary record before the Commission for any further purpose whatsoever.

12. If the Commission unconditionally accepts the specific terms of this PY2016 Stipulation without modification, the Signatories waive, with respect to the issues resolved herein: their respective rights (1) to call, examine and cross-examine witnesses pursuant to Section 536.070(2), RSMo 2016; (2) their respective rights to present oral argument and/or written briefs pursuant to Section 536.080.1, RSMo 2016; (3) their respective rights to seek rehearing pursuant to Section 386.500, RSMo 2016; and (4) their respective rights to judicial

review pursuant to Section 386.510, RSMo 2016. These waivers apply only to a Commission order respecting this PY2016 Stipulation issued in this above-captioned proceeding, and do not apply to any matters raised in any prior or subsequent Commission proceeding, or any matters not explicitly addressed by this PY2016 Stipulation.

13. This PY2016 Stipulation contains the entire agreement of the Signatories concerning EM&V for PY 2016.

14. This PY2016 Stipulation does not constitute a contract with the Commission. Acceptance of this PY2016 Stipulation by the Commission shall not be deemed as constituting an agreement on the part of the Commission to forego the use of any discovery, investigative or other power which the Commission presently has. Thus, nothing in this PY2016 Stipulation is intended to impinge or restrict in any manner the exercise by the Commission of any statutory right, including the right to access information, or any statutory obligation.

15. Additionally, the Signatories agree that subject to the rules governing practice before the Commission and without waiving the confidentiality of the facts and positions disclosed in the course of settlement, Staff shall have the right to provide an oral explanation to support its entering into this PY2016 Stipulation, if the Commission requests one at any agenda meeting at which this case is noticed to be considered by the Commission. Subject to the rules governing practice before the Commission and without waiving the confidentiality of the facts and positions disclosed in the course of settlement, Staff will be available to answer Commission questions regarding this PY2016 Stipulation. To the extent reasonably practicable, Staff shall provide the Signatories with advance notice of any such agenda meeting so that they may have the opportunity to be present and/or represented at the meeting so that they can answer or otherwise address Commission questions.

16. The Signatories inquired of all parties to this case that are not signatories to this PY2016 Stipulation and are not aware of any party opposing it.

**WHEREFORE**, the undersigned Signatories respectfully request the Commission issue its order approving this Stipulation and Agreement on the specific terms and conditions contained herein.

Respectfully submitted,

**/s/ James B. Lowery**

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**CERTIFICATE OF SERVICE**

The undersigned certifies that a true and correct copy of the foregoing document was sent by electronic transmission, facsimile or email to counsel for parties in this case on this 13<sup>th</sup> day of September, 2017.

/s/ James B. Lowery

Appendix A – Revised and Agreed Upon Results for Program Year 2016

Revised Savings (MWh) - Residential Programs						
Program	Ex Ante Gross Savings (MWh/Yr)	Ex Post Gross Savings (MWh/Yr)	Participant Net Savings (MWh/Yr)	NPSO (MWh/Yr)	Total Net Savings (MWh/Yr)	NTG Ratio
Efficient Products	2,883	2,940	2,004	115	2,119	72%
Energy Efficiency Kits	4,773	5,368	4,116	3	4,119	77%
Heating and Cooling	49,539	44,661	39,344	10,861	50,205	112%
Lighting	27,810	38,439	24,418	691	25,109	65%
Smart Thermostats	3,788	3,732	3,071	78	3,149	84%
<b>Residential Subtotal</b>	<b>88,793</b>	<b>95,139</b>	<b>72,953</b>	<b>11,748</b>	<b>84,702</b>	<b>89%</b>

Revised Savings (MW) - Residential Programs						
Program	Ex Ante Gross Savings (MW)	Ex Post Gross Savings (MW)	Participant Net Savings (MW)	NPSO (MW)	Total Net Savings (MW)	NTG Ratio
Efficient Products	0.655	0.748	0.459	0.048	0.507	68%
Energy Efficiency Kits*	1.201	0.995	0.811	0.001	0.812	82%
Heating and Cooling	32.578	30.328	26.062	4.556	30.618	101%
Lighting	4.151	5.782	3.673	0.290	3.963	69%
Smart Thermostats	3.589	3.535	2.910	0.033	2.943	83%
<b>Residential Subtotal</b>	<b>42.174</b>	<b>41.388</b>	<b>33.915</b>	<b>4.928</b>	<b>38.843</b>	<b>94%</b>

\*Pipe wrap, which has a useful life of 6 years, was excluded from the kW savings as it does not count towards the approved earnings opportunity

Revised Portfolio Totals							
Program	Ex Ante Gross Savings (MWh/Yr)	Revised Ex Post Gross Savings (MWh/Yr)	Revised Total Net Savings (MWh/Yr)	Ex Ante Gross Savings (MW)	Revised Ex Post Gross Savings (MW)	Revised Total Net Savings (MW)	NTG Ratio
Efficient Products	2,883	2,940	2,119	0.655	0.748	0.507	72%
Energy Efficiency Kits*	4,773	5,368	4,119	1.201	0.995	0.812	77%
Heating and Cooling	49,539	44,661	50,205	32.578	30.328	30.618	112%
Lighting	27,810	38,439	25,109	4.151	5.782	3.963	65%
<b>Residential EO Subtotal</b>	<b>85,005</b>	<b>91,407</b>	<b>81,552</b>	<b>38.585</b>	<b>37.853</b>	<b>35.900</b>	<b>89%</b>
Smart Thermostats	3,788	3,732	3,149	3.589	3.535	2.943	84%
Low Income	2,099	2,350	2,350	0.619	0.725	0.725	100%
Home Energy Report	33,750	NA	NA	15.720	NA	NA	NA
<b>Residential Total</b>	<b>124,642</b>	<b>97,488</b>	<b>87,051</b>	<b>58.513</b>	<b>42.113</b>	<b>39.568</b>	<b>89%</b>
Custom	41,568	41,412	39,410	12.185	12.292	11.486	95%
Standard	29,681	31,144	31,712	5.596	5.865	5.971	102%
New Construction	1,838	1,573	1,415	0.347	0.297	0.264	90%
RCx	113	24	24	0.016	0.003	0.003	100%
SBDI	2,366	2,762	2,667	0.449	0.522	0.504	97%
<b>Business Total</b>	<b>75,566</b>	<b>76,914</b>	<b>75,228</b>	<b>18.593</b>	<b>18.979</b>	<b>18.228</b>	<b>98%</b>
<b>Portfolio EO Subtotal</b>	<b>160,571</b>	<b>168,321</b>	<b>156,780</b>	<b>57.178</b>	<b>56.832</b>	<b>54.128</b>	<b>93%</b>

\*Pipe wrap, which has a useful life of 6 years, was excluded from the kW savings as it does not count towards the approved earnings opportunity

\*\*EO – Earnings Opportunity, those programs that count towards the kWh and kW earnings metrics