

**FIRST PRUDENCE REVIEW FOR CYCLE 2 OF COSTS  
RELATED TO THE DEMAND-SIDE PROGRAMS  
INVESTMENT MECHANISM  
FOR THE ELECTRIC OPERATIONS  
OF  
UNION ELECTRIC COMPANY, d/b/a AMEREN MISSOURI**

**March 1, 2016 through October 31, 2017**

**MISSOURI PUBLIC SERVICE COMMISSION**

**STAFF REPORT**

**FILE NO. EO-2018-0155**

*Jefferson City, Missouri  
April 30, 2018*

**\*\* Denotes Confidential Information \*\***

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**I. EXECUTIVE SUMMARY**

On December 22, 2014, Union Electric Company, d/b/a Ameren Missouri (“Ameren Missouri” or “Company”) filed, in Case No. EO-2015-0055, its application under the Missouri Energy Efficiency Investment Act<sup>1</sup> (“MEEIA”) and the Missouri Public Service Commission’s (“Commission”) MEEIA rules<sup>2</sup> for approval of its *2016 – 2018 Energy Efficiency Plan*. On February 5, 2016, Ameren Missouri, the Commission’s Staff (“Staff”), the Office of the Public Counsel (“OPC”), NHT, NRDC, Renew Missouri, Tower Grove, and Missouri Division of Energy (“DE”) submitted a *Non-Unanimous Stipulation and Agreement Resolving Ameren Missouri’s MEEIA Filing* (“2016 Stipulation”).

Through its February 10, 2016 *Order Approving Unanimous Stipulation And Agreement* in Case No. EO-2015-0055 the Commission authorized Ameren Missouri to implement – beginning March 1, 2016 – the *2016 – 2018 Energy Efficiency Plan* as modified by the 2016 Stipulation (“Plan”) including: 1) eleven (11) energy efficiency programs (“MEEIA programs”), and 2) a demand-side programs investment mechanism (“DSIM”). The Plan<sup>3</sup> which was approved on February 10, 2016 included a total program cost budget of \$158,180,000 for all 11 MEEIA programs, a throughput disincentive (“TD”), an Earning Opportunity (“EO”)<sup>4</sup> of \$24.7 million at 100% performance, a technical reference manual (“TRM”) and a plan to perform evaluation measurement and verification of program cost effectiveness.

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<sup>1</sup> Section 393.1075, RSMo, Supp. 2013.

<sup>2</sup> 4 CSR 240-3.163, 4 CSR 240-3.164, 4 CSR 240-20.093, and 4 CSR 240-20.094 which all had an effective date of May 30, 2011.

<sup>3</sup> Subsequent to February 10, 2016, the Plan was modified by Commission orders in Case No. EO-2015-0055 on the following effective dates: April 23, 2017; June 17, 2017; July 29, 2017; October 7, 2017; and December 16, 2017.

<sup>4</sup> Tariff Sheet No. 91.9.

1 Through its February 10, 2016 order, the Commission finds:

2 The Signatories further agree the DSIM reasonably relies on  
3 retrospective EM&V to determine the actual Throughput Disincentive  
4 (“TD”) and Earnings Opportunity (“EO”) amounts. Ameren Missouri  
5 agrees to have its independent EM&V evaluator(s) perform annual  
6 EM&V process and impact evaluations, which will include both ex-  
7 post gross and net-to-gross (“NTG”) evaluations. Annual ex-post  
8 gross by measure will be used to adjust the TRM deemed annual  
9 energy and demand savings.

10 The program costs and TD are the subject of this prudence review, which is Staff’s third  
11 prudence review of Ameren Missouri’s Rider EEIC costs.<sup>5</sup> On January 3, 2014, the  
12 Commission approved Ameren Missouri’s Cycle 1 Rider EEIC in File No. EO-2014-0075,  
13 thereby, changing the Company’s Cycle 1 DSIM from a tracker to a rider which provides for  
14 periodic rate adjustments between general rate proceedings.<sup>6</sup> Ameren Missouri’s MEEIA  
15 Cycle 2 Rider EEIC is included as Addendum A to this Staff prudence review report  
16 (“Report”). The periodic rate adjustments for the Cycle 2 Rider EEIC are in File Nos.  
17 ER-2016-0131, ER-2017-0149 and ER-2018-0144.

18 Commission Rules 4 CSR 240-20.093(9) and 4 CSR 240-2.163(6) require that  
19 Ameren Missouri file quarterly a Surveillance Monitoring Report. Addendum B to this  
20 Report is Page 6 of Ameren Missouri’s highly confidential Surveillance Monitoring Report  
21 including status of the MEEIA programs and DSIM costs for 1) the quarter ended  
22 September 30, 2017, 12-months ended and cumulative total ended September 30, 2017, and  
23 2) for the quarter ended December 31, 2017, 12-months ended and cumulative total ended  
24 December 31, 2017. The line items and dollar amounts highlighted in yellow on Addendum B  
25 and included in Table 1 are the primary subject of Staff’s prudence review.<sup>7</sup>

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<sup>5</sup> Prior Staff prudence reviews of Ameren Missouri’s Rider EEIC costs are in File Nos. EO-2015-0029 and EO-2017-0023. This report, EO-2018-0155, is the First Prudence Review of Cycle 2 of Costs Related to the Demand-Side Programs Investment Mechanism.

<sup>6</sup> 4 CSR 240-20.093(2)(A)9.

<sup>7</sup> Staff’s prudence review is for the period of March 1, 2016 through October 31, 2017, and the program costs and throughput disincentive amounts for October 2017 are not included on the first page of Addendum B.

**Table 1**

<b>Item</b>	<b>Descriptor</b>
Program Costs	Billed
Program Costs	Actual
Program Costs	Variance
Program Costs	Interest
First Year Gross Annual Energy Savings	Deemed Actual
Throughput Disincentive Costs	Billed
Throughput Disincentive Costs	Actual
Throughput Disincentive Costs	Variance
Throughput Disincentive Costs	Interest

Staff reviewed and analyzed a variety of items while examining whether Ameren Missouri prudently incurred program costs, TD and interest costs associated with the Plan for the Review Period. Based on its review, Staff recommends the disallowance of costs in Table 2:

**Table 2**

<b>Costs</b>	<b>Explanation of Costs</b>	<b>Disallowed Cost</b>	<b>Interest</b>	<b>Total Disallowance</b>
Travel, Conferences, and Entertainment	Page 13	\$22,353	\$187	\$22,539
Advertising	Page 15	\$3,556	\$39	\$3,595
Membership and Trade Dues	Page 16	\$30,750	\$380	\$31,130
Amend 2014 Avoided Costs Report	Page 19	\$19,956	\$270	\$20,226
Purchasing Rate	Page 20	\$2,698	\$24	\$2,722
<b>Total Disallowed Costs</b>		<b>\$79,313</b>	<b>\$900</b>	<b>\$80,212</b>

## **II. INTRODUCTION**

### **A. Prudence Standard**

Commission Rule 4 CSR 240-20.093(10) requires that the Commission's Staff conduct prudence reviews of an electric utility's costs for its DSIM no less frequently than every twenty-four (24) months. This Report documents Staff's first review of the prudence of Ameren Missouri's MEEIA Cycle 2 program costs, Company TD and interest for the period March 1, 2016 through October 31, 2017 ("Review Period").

1 In evaluating prudence, Staff reviews whether a reasonable person making the same  
2 decision would find both the information the decision-maker relied on and the process the  
3 decision-maker employed to be reasonable based on the circumstances at the time the decision  
4 was made, *i.e.*, without the benefit of hindsight. The decision actually made is disregarded;  
5 instead, the review evaluates the reasonableness of the information the decision-maker relied  
6 on and the decision-making process the decision-maker employed. If either the information  
7 relied upon or the decision-making process employed was imprudent, then Staff examines  
8 whether the imprudent decision caused any harm to ratepayers. Only if an imprudent decision  
9 resulted in harm to ratepayers, will Staff recommend a refund.

#### 10 **B. Regulatory Accounting for Ameren Missouri's DSIM**

11 As a public utility, Ameren Missouri is required to maintain its books and records in  
12 accordance with the Federal Energy Regulatory Commission's ("FERC") Uniform System of  
13 Accounts ("USoA"). For the purpose of this MEEIA Prudence Review, Staff has focused its  
14 review on FERC Account 908 - Customer Assistance Expenses as defined by USoA;  
15 "Include the cost of labor, materials used and expenses incurred in providing instructions or  
16 assistance to customers, the object of which is to encourage safe, efficient and economical use  
17 of the utility's service".

#### 18 **C. Staff Review and Reconciliation of FERC Accounts**

19 Ameren Missouri provides its monthly General Ledger<sup>8</sup> to the Commission as ongoing  
20 surveillance data, which is a summary of all accounting transactions on a monthly basis.  
21 Staff filtered the General Ledger based on FERC Major Account 908 - Customer Assistance,  
22 Minor EED - Electric Energy Efficiency and Demand, Activity Code of MEPC<sup>9</sup> (MEEIA I)  
23 and M2PC<sup>10</sup> (MEEIA II), and the description where it contained references to MEEIA,  
24 MEPC, M2PC, Electric Energy Efficiency. The filtering process of the General Ledger  
25 provided by month, the total amount of transactions by Resource Type<sup>11</sup> that occurred during  
26 the month in FERC Account 908 and did not provide each individual transaction.

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<sup>8</sup> See Addendum C of this report for description of General Ledger.

<sup>9</sup> MEPC acronym for Missouri Energy Efficiency Energy Act Program Costs – Cycle 1.

<sup>10</sup> M2PC acronym for Missouri Energy Efficiency Energy Act Program Costs – Cycle 2.

<sup>11</sup> See Addendum D of this report for Major, Minor, Activity Code, Resource Type.

Staff took a two-fold approach to reconciling FERC Account 908 program costs provided by Ameren Missouri in response to Staff’s Data Request No. 0002.1. Staff pulled the detail backup in Data Request No. 0002.1 and sorted it by month, project number, activity code, and resource type then reconciled these individual line item transactions to the monthly totals found in the General Ledger FERC Account 908 by activity code and resource type. Staff next, took the detail pulled from Data Request No. 0002.1 and sorted it by just month and resource type and reconciled these individual line item transactions to the monthly totals by activity code and resource type found in the General Ledger FERC Account 908.<sup>12</sup>

#### **D. Staff Regulatory Accounting Summary**

Staff analyzed the transactions recorded in the General Ledger FERC Account 908 Customer Assistance, Minor EED - Electric Energy Efficiency and Demand and was able to reconcile the monthly totals by project number and resource type to the response provided by Ameren Missouri to Data Request No. 0002.1 as program costs.

### **III. ENERGY EFFICIENCY INVESTMENT RATE (EEIR) DETERMINATION**

#### **A. Overview of Program Costs**

##### **1. Description**

Ameren Missouri’s program costs include incentive payments and administrative cost. Administrative costs include the following: program administration, general, education, marketing and communication, market potential study, data tracking, and Evaluation Measurement and Verification ("EM&V") costs.

Staff reviewed all actual program costs, provided in response to Data Request No. 0002.1, which Ameren Missouri is seeking to recover through its “Energy Efficiency Investment Charge” to insure only prudently incurred costs are recovered through the Rider EEIC. Staff reviewed and analyzed for prudence Ameren Missouri’s adherence to contractual obligations, resolutions of problems, adequacy of controls, and compliance with approved tariff sheets. Upon Staff’s request, Ameren Missouri did provide documentation to support program costs incurred during the Review Period. Staff categorized these costs by program and segregated them between incentives payments and program administrative costs. Staff also reconciled program costs to the General Ledger FERC account 908 by month, project number, and resource type; see the Staff Review and Reconciliation of FERC Accounts section for further explanation of process and review.

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<sup>12</sup> Reconciliation of General Ledger to Data Request No. 0002.1 detail can be found in Staff workpapers – Catherine F. Lucia.

The results of Staff categorizing program costs are in Table 3<sup>13</sup>.

**Table 3**

<b>Programs' Costs March 1, 2016 through October 31, 2017</b>			
<b>Program Description</b>	<b>Total for the 18 Months Ending October 31, 2017</b>	<b>Administrative Costs</b>	<b>Incentives Paid</b>
<b>Residential Program</b>			
Res Lighting J06DF	\$ 5,629,861.47	\$ 2,296,983	\$ 3,332,878.11
Res Energy Efficient Products J06DG	\$ 3,183,466.57	\$ 774,227	\$ 2,409,240.00
Res HVAC J06DH	\$ 18,617,917.74	\$ 6,266,843	\$ 12,351,075.00
Res Low Income J06DK	\$ 2,570,092.14	\$ 1,432,128	\$ 1,137,964.56
Res Kits J06DL	\$ 1,138,959.13	\$ 377,201	\$ 761,758.14
Res Program Gen Expense J06DM	\$ 5,216.77	\$ 5,217	\$ -
Res Smart Thermostat J0C9S	\$ 658,119.66	\$ 461,920	\$ 196,200.00
Home Energy Reports J0005	\$ 1,155,871.62	\$ 1,155,872	\$ -
<b>Subtotal Residential Programs</b>	<b>\$ 32,959,505</b>	<b>\$ 12,770,389</b>	<b>\$ 20,189,116</b>
<b>Business Program</b>			
Biz Standard J06D8	\$ 10,056,881	\$ 3,215,461	\$ 6,841,419.59
Biz Custom J06D9	\$ 10,692,597	\$ 4,125,182	\$ 6,567,414.46
Biz Retro-Commissioning J06DB	\$ 169,721	\$ 71,910	\$ 97,810.92
Biz New Construction J06DC	\$ 2,476,370	\$ 776,273	\$ 1,700,097.67
Biz Program Gen Expense J06DD	\$ 1,280,844	\$ 1,280,844	\$ -
Biz Benchmarking J0DH0	\$ 30,370.00	\$ 30,370	\$ -
Small Business Direct J0006	\$ 1,055,396.03	\$ 208,339	\$ 847,056.87
<b>Subtotal Business Programs</b>	<b>\$ 25,762,178</b>	<b>\$ 9,708,379</b>	<b>\$ 16,053,800</b>
Education J06D3	\$ 45,500.04	\$ 45,500	\$ -
Marketing J06D4	\$ 201,750.50	\$ 201,751	\$ -
Potential Study J06D5	\$ 471,700.82	\$ 471,701	\$ -
Data Tracking J06D6	\$ 181,574.80	\$ 181,575	\$ -
General Expense J06D7	\$ 197,340.72	\$ 197,341	\$ -
Communications J06DR	\$ 1,580,898.00	\$ 1,580,898	\$ -
Research and Development J000P	\$ 130,857.45	\$ 130,857	\$ -
EMV Gen Expense J06DQ	\$ 25,496.11	\$ 25,496	\$ -
EMV Res Programs J06DN	\$ 1,628,822.87	\$ 1,628,823	\$ -
EMV Biz Programs J06DP	\$ 1,558,127.50	\$ 1,558,128	\$ -
<b>Subtotal Overhead Costs</b>	<b>\$ 6,022,069</b>	<b>\$ 6,022,069</b>	<b>\$ -</b>
<b>Total Program Costs</b>	<b>\$ 64,743,752</b>	<b>\$ 28,500,837</b>	<b>\$ 36,242,915</b>

<sup>13</sup> Table 3 was created from the information Ameren provided in Data Request No. 0002.1, detail can be found in Staff workpapers - Brooke Richter.



1 Ameren Missouri incurs administrative costs, directly related to the implementation of  
2 its approved energy efficiency programs. Staff uses the term administrative to mean all costs  
3 other than incentives.<sup>14</sup> Staff reviewed each administrative category of cost to determine the  
4 reasonableness of each individual item of cost and if the costs were directly related to energy  
5 efficiency programs.

6 The Plan budgeted for Administrative and Incentive program costs.<sup>15</sup> Table 4 provides  
7 a comparison for the 3-year Plan in total, 2016-2018 for Administrative and Incentive  
8 program costs. The results in Table 4 show Ameren Missouri's plan is for 52%<sup>16</sup> of the total  
9 program costs will be allocated towards incentives, and the other 48%<sup>17</sup> towards  
10 administrative costs. The results in Table 3 indicate that Ameren Missouri improved this ratio,  
11 as it shows actual incentives of the total program costs being 56%<sup>18</sup> during the Review Period.  
12 Delivering more incentives with less administrative costs is good thing and Staff will continue  
13 to monitor Ameren Missouri's progress through the conclusion of Cycle 2. The results of  
14 Ameren Missouri's 2016 through 2018 Energy Efficiency Plan of categorizing program costs,  
15 administrative and incentives are provided in Table 4 below.

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24 continued on next page

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<sup>14</sup> Incentives are program costs for direct and indirect incentive payments to encourage customer and/or retail partner participation in programs and the costs of measures which are provided at no cost as a part of a program.

<sup>15</sup> Revised Appendix B and Appendix H of the February 5, 2016 Non-Unanimous Stipulation and Agreement. Details can be found in Staff workpapers - Brooke Richter.

<sup>16</sup> This percentage is calculated from total incentives over total portfolio in Table 4. Details can be found in Staff workpapers - Brooke Richter.

<sup>17</sup> This percentage is calculated from total administrative costs over total portfolio in Table 4. Details can be found in Staff workpapers - Brooke Richter.

<sup>18</sup> This percentage is calculated from actual incentives over total program costs, in Table 3. Details can be found in Staff workpapers - Brooke Richter.

Table 4

Ameren Missouri 2016-2018 plan for Administrative and Incentive Program Costs (in millions)			
MEEIA Programs	Administrative	Incentives	Total
Res. Lighting	\$6.65	\$7.64	\$14.29
Res. Efficient Products	\$2.53	\$2.53	\$5.06
Res. HVAC	\$12.28	\$13.01	\$25.29
Learning Thermostats*	\$1.07	\$2.81	\$3.88
Res. Low Income	\$3.94	\$6.81	\$10.75
Res. EE Kits	\$2.54	\$1.60	\$4.14
Res. Home Energy Reports	\$4.30	\$0.00	\$4.30
<b>Total Residential Programs</b>	<b>\$33.31</b>	<b>\$34.40</b>	<b>\$67.71</b>
Bus. Standard	\$10.50	\$11.53	\$22.03
Bus. Custom	\$24.71	\$27.27	\$51.98
Bus. Retro Commissioning	\$2.94	\$3.98	\$6.92
Bus. New Construction	\$2.08	\$2.74	\$4.82
Bus. Small Business Direct Install	\$4.03	\$5.70	\$9.73
<b>Total Business Programs</b>	<b>\$44.26</b>	<b>\$51.22</b>	<b>\$95.48</b>
<b>Total Portfolio</b>	<b>\$77.57</b>	<b>\$85.62</b>	<b>\$163.19</b>
*Learning Thermostats will be incorporated into the Efficient Products and HVAC programs instead of being implemented as a separate program			

Ameren Missouri provides incentive payments to its customers as part of its Plan. Incentive payments are an important instrument for encouraging investment in energy efficient technologies and products by lowering higher upfront costs for energy efficiency measures compare to the cost of less efficient measures. Incentive payments can also complement other efficiency policies such as appliance standards and energy codes to help overcome market barriers for cost-effective technologies. Staff also reviewed these incentive payments to Ameren Missouri's Vision<sup>®</sup> software monthly activity reports and Staff was unable to reconcile the incentive payments in the detail backup from Data Request No. 0002.1 to the reports generated from VisionDSM (VISION).

Based on communication with Ameren Missouri, journal entries made by Ameren Missouri into the General Ledger and related to residential program costs are not recorded in VISION<sup>19</sup> because only the contracted vendors enter data into VISION. As a result, VISION reports do not contain all the information that affects residential program costs. Therefore,

<sup>19</sup> Communication indicating general ledger entries are not included in VISION located in Staff workpapers – Catherine F. Lucia.

1 Staff concludes the difference in incentive payments of \$79,338 between the General Ledger  
2 and VISION are due to these adjustments made to the General Ledger, which is not in  
3 VISION. Upon request from Staff, a partial reconciliation was received from  
4 Ameren Missouri which brought the difference between the program costs provided in Data  
5 Request No. 0002.1, which includes the General Ledger adjusting entries, and the VISION  
6 reports to \$630.90. In the time available for this prudence review, Staff was not able to  
7 replicate Ameren's reconciliation based on the information they provided<sup>20</sup>. Due to the  
8 difference in residential incentive payments between VISION and Data Request No. 0002.1,  
9 Staff recommends as a Best Business Practice that Ameren Missouri periodically reconcile  
10 internal general ledger entries to VISION. This reconciliation would increase internal control  
11 over program costs and create a clear audit trail to verify total program costs during a  
12 prudency review.

13 Staff found in the general ledger and in the response to Data Request No. 0002.1  
14 transactions coded with the resource type C1 - Charitable Trust Contributions; the  
15 accumulated total for these transactions was \$262,600.96.<sup>21</sup> Staff found entries in the general  
16 ledger that transferred \$171,924.98<sup>22</sup> of costs from the resource type CI - Customer  
17 Incentives to the resource type C1 - Charitable Trusts Contributions within FERC  
18 Account 908. Staff questioned whether Charitable Trust Contributions are recoverable as  
19 program costs under MEEIA. Therefore, Staff requested additional documentation  
20 and explanation to clarify the validity of these costs and Ameren Missouri complied with  
21 Staff's request.

22 An explanation provided to Data Request No. 0018 by Ameren Missouri states  
23 initially it was a coding error but then adopted its continued use as a resource type for  
24 program costs through the recovery period to record customer incentives instead of  
25 administrative expenses. Staff notes another resource type, CI - Customer Incentives, was  
26 utilized to record the majority of customer incentives.

27 Due to the total amount of customer incentives recorded to C1 - Charitable Trust  
28 Contributions, Staff recommends as a Best Business Practice to discontinue the use of an

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<sup>20</sup> Spreadsheet of Ameren and Staff reconciliations located in Staff workpapers – Catherine F. Lucia.

<sup>21</sup> Spreadsheet of C1- Charitable Trust Contributions located in Staff workpapers – Catherine F. Lucia.

<sup>22</sup> Documentation of the entry transferring costs to a non-recoverable resource type per the MEEIA Rider located in Staff workpapers – Catherine F. Lucia.

erroneous resource type that categorizes program costs as not recoverable. This practice creates a clear audit trail to verify program costs during a prudence review.

Ameren Missouri and Staff held in-person meetings on January 22, 2018, at Ameren Missouri's St. Louis office. Ameren Missouri and Staff discussed the topics identified in Addendum E. Ameren Missouri made available each of its program managers to Staff, and each program manager provided detailed actions they take to confirm the accuracy of the information provided.

## **2. Summary of Cost Implications**

If Ameren Missouri was imprudent in its decisions relating to the administration and implementation of the Residential and Business Energy Efficiency Programs, ratepayer harm could result in an increase in future Energy Efficiency Investment Charges.

## **3. Conclusion**

Staff found Ameren Missouri did act imprudently by including inappropriate costs associated with its Energy Efficiency Programs resulting in ratepayer harm and adjustments for these inappropriate costs are detailed in Sections C through G of this report.

Staff found Ameren Missouri did act imprudently by not routinely reconciling the internal general ledger entries made by Ameren Missouri affecting program costs to the data entered in VISION by the contracted vendors and recommends a periodic reconciliation of program costs. Staff notes ratepayer harm did not occur; therefore, no disallowance of costs.

Staff found Ameren Missouri did act imprudently by adopting the use of accounting resource type, C1 – Charitable Trust Contributions, for customer incentives which categorizes those costs in the general ledger as not recoverable per the MEEIA Rider and recommends the use of a resource types that will categorize program costs as recoverable. Staff notes ratepayer harm did not occur; therefore, no disallowance of costs.

## **4. Documents Reviewed**

- a. Ameren Missouri's *2016 – 2018 Energy Efficiency Plan*;
- b. Approved MEEIA Energy Efficiency and Demand Side Management Programs Tariff Sheets;
- c. Staff Data Requests: 0001, 0002, 0002.1, 0002.9, 0002.10, 0009, 0014, 0018 and 0019;

- d. January 22, 2018 in-person meetings and interviews with Ameren Missouri;
- e. Emails with Tom Thompson;
- f. Telecommunication with Tom Thompson;
- g. VISION; and,
- h. General Ledger FERC Account 908.

*Staff Experts/Witnesses: Brooke Richter (Program Costs) and Catherine F. Lucia (General Ledger- FERC Account 908)*

## **B. St. Louis Cardinals Sponsorship Costs**

### **1. Description**

Ameren Missouri engages in advertising activities to deliver its approved DSM programs to its customers. During its prudence review, Staff identified costs related to Ameren Missouri's sponsorship of the St. Louis Cardinals baseball team. Similar costs for St. Louis Cardinals sponsorship were identified in Staff's last prudence review for MEEIA Cycle 1, Case No. EO-2017-0023, in which the Commission ordered on April 19, 2017:

In its next Rider EEIC filing to adjust its EEIR, Ameren Missouri shall include a \$60,000 credit to customers as an "ordered adjustment" in the "Net Ordered Adjustment" component of its EEIR calculation. The \$60,000 reflects the removal of certain expenses for marketing and an employee recognition event, as well as the recognition of program costs from the 3rd Qtr of 2016.

In this prudence review, Staff questioned the amount of the Cardinals sponsorship costs, and received additional information from the Company to confirm it had already identified these costs and made a reversal for them in November 2017, which is outside of the review period. These costs were specifically for the outfield sign at Busch Stadium, which was completely removed as program costs for MEEIA Cycle 2, and Energy Efficiency radio advertising, which was partially removed as well in November 2017. The partial removal was based on the agreed upon percentage for radio advertising in Case No. EO-2017-0023. The entries for removing these charges did not fall within the March 1, 2016 through October 31, 2017 prudence review time frame, but were reflected in the November 2017 rate adjustment filing for the Rider EEIC.

1                   **2. Summary of Cost Implications**

2                   If Ameren Missouri was imprudent in its decisions relating to the determination of the  
3 Cardinals sponsorship costs billed to customers, ratepayer harm could result in an increase in  
4 Energy Efficiency Investment Charge billed amounts.

5                   **3. Conclusion**

6                   Staff found Ameren Missouri has not acted imprudently when accounting for costs  
7 related to its sponsorship of the St. Louis Cardinals.

8                   **4. Documents Reviewed**

- 9                   a. Ameren Missouri's 2016-2018 Energy Efficiency Plan;  
10                  b. Approved MEEIA Energy Efficiency and Demand Side Management  
11                  Programs Tariff Sheets;  
12                  c. Rider EEIC; and,  
13                  d. Staff Data Requests: 0002, 0002.1, and 0002.3.

14                  *Staff Expert/Witness: Brooke Richter*

15                  **C. Travel, Conferences, and Entertainment**

16                  **1. Description**

17                  Ameren Missouri attended several conferences in locations such as Napa Valley,  
18 California; San Diego, California; Miami, Florida; Denver, Colorado; etc. Staff requested the  
19 Company provide agendas and receipts related to these conferences. After reviewing these  
20 agendas for the conferences, and receipts, Staff has found that while part of some conferences  
21 were related to energy efficiency, other parts were related to renewables, websites of the  
22 future, multicultural growth; and one trip was solely for an awards ceremony. Staff also found  
23 there were brewery and wine tasting tours on an agenda, and expensive resorts, such as Hotel  
24 Del Coronado in San Diego, CA. While Staff is aware part of these conferences were in  
25 relation to energy efficiency; however, other parts were clearly not MEEIA related and were  
26 excessively expensive.

27                  Staff also wanted to point out that some of the conferences held out-of-state, were held  
28 by or sponsored by ICF. ICF is one of Ameren Missouri's implementation contractors, and  
29 ICF has an office in St. Louis, Missouri. Staff believes if ICF wanted to hold a training

1 session for Ameren Missouri, they could have done so in St. Louis. Ameren Missouri spends  
2 millions of dollars on all their implementation contractors and EM&V implementers;  
3 they should not have to spend money on additional training for Ameren Missouri employees  
4 as well.

5 Ameren Missouri does not include any direct labor costs in MEEIA, as all MEEIA  
6 direct labor is included in permanent rates. Staff believes any out-of-state travel and training  
7 should be considered an indirect labor cost which should not be recovered in MEEIA.

8 As a result of this review, Staff recommends a disallowance including interest of  
9 \$22,539.34<sup>23</sup> towards any out-of-state travel for conferences and some in-state travel costs for  
10 entertainment. Staff's initially reviewed receipts for out-of-state and in-state travel for a total  
11 of \$25,619.57. Staff considers that in-state travel is appropriate for meetings and conferences,  
12 but any out-of-state travel is not appropriate as these same conferences and trainings could be  
13 attended much closer to Ameren Missouri's St. Louis office at a less expensive cost, therefore  
14 these costs do not belong in MEEIA. Staff does not have an opinion if this type of travel  
15 should be recovered in base rates.

## 16 **2. Summary of Cost Implications**

17 If Ameren Missouri was imprudent in its decision relating to employee out-of-state  
18 travel and training, ratepayer harm could result in an increase in Energy Efficiency  
19 Investment Charge billed amounts.

## 20 **3. Conclusion**

21 Staff finds it is imprudent for Ameren Missouri to include \$22,539.34 related to  
22 out-of-state travel costs and certain in-state entertainment in its Rider EEIC. The Staff  
23 recommends the Commission order an adjustment in the amount of \$22,539.34 plus  
24 future interest.

## 25 **4. Documents Reviewed**

- 26 a. Ameren Missouri's 2016-2018 Energy Efficiency Plan;
- 27 b. Approved MEEIA Energy Efficiency and Demand Side Management
- 28 Programs and Tariff Sheets;

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<sup>23</sup> This disallowance for travel, conferences, and entertainment is itemized in Staff's workpapers - Brooke Richter.

1 c. Rider EEIC; and,

2 d. Staff Data Requests: 0001, 0002, 0002.1, 0002.2, 0002.8, and 0016.

3 *Staff Expert/Witness: Brooke Richter*

4 **D. Advertising**

5 **1. Description**

6 Ameren Missouri engaged in advertising activities in order to effectively deliver its  
7 approved DSM programs to customers. Staff reviewed costs categorized by Ameren Missouri  
8 in the general ledger as BX – Purchases Other incurred during the review period for a total of  
9 \$31,804.32<sup>24</sup> which included Purchases Other – Advertising in the total amount of \$5,804.32,  
10 2016 Green Homes Festival Sponsorship in the amount of \$13,000.00, and Earthways  
11 Sponsorship in the amount of \$13,000.00.

12 In its evaluation of allowable advertising costs, Staff relied on the principles that the  
13 Commission previously had determined appropriated in KCPL Case No. EO-85-185, et al.<sup>25</sup>  
14 As a result of the decision in that case, the Commission has subsequently recognized five  
15 categories of advertisements, and specific rate treatment for each of the following categories:

- 16 1. General: information advertising that is useful in the provision of adequate  
17 services;
- 18 2. Safety: advertising which conveys the ways to safely use electricity and to  
19 avoid accidents;
- 20 3. Promotional: advertising used to encourage or promote the use of  
21 electricity
- 22 4. Institutional: advertising used to improve the company's public image;
- 23 5. Political: advertising associated with political issues.

24 The Commission adopted these categories of advertising costs and provided the rationale that  
25 a utility's revenue requirement should: 1) always include the reasonable and necessary costs  
26 of general and safety advertisements; 2) never include the cost of instructional or political  
27 advertisements; and 3) include the cost of promotional advertisements only to the extent that  
28 the utility can provide cost-justification for the advertisement.

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<sup>24</sup> Spreadsheet of advertising costs located in Staff workpapers – Catherine F. Lucia.

<sup>25</sup> Re: Kansas City Power and Light Company, 28 Mo.P.S.C. (N.S.) 228,269-71 (1986).



1 Based upon Staff's review, Staff has determined the costs associated with certain  
2 Ameren Missouri advertising costs of \$3,556.10<sup>26</sup> should be disallowed because they are  
3 categorized as institutional and promotional advertising as it seeks to promote Ameren  
4 Missouri's public image and not energy efficiency.

5 Staff recommends in addition to the disallowance of \$3,556.10 for advertising costs  
6 the Commission seek recovery of \$39.07 for interest, for a combined disallowance of  
7 \$3,595.17.

## 8 **2. Summary of Cost Implications**

9 If Ameren Missouri was imprudent assigning institutional goodwill costs as MEEIA  
10 costs, ratepayer harm could result in an increase in Energy Efficiency Investment Charge  
11 billed amounts.

## 12 **3. Conclusion**

13 Staff finds it is imprudent for Ameren Missouri to seek recovery of \$3,556.10 of  
14 institutional goodwill costs as MEEIA costs. The Staff recommends the Commission order an  
15 adjustment in the amount of \$3,595.17 which includes interest in the amount of \$39.07.

## 16 **4. Documents Reviewed**

- 17 a. Ameren Missouri's 2016-2018 Energy Efficiency Plan;
- 18 b. Approved MEEIA Energy Efficiency and Demand Side Management  
19 Programs and Tariff Sheets;
- 20 c. Rider EEIC;
- 21 d. The Staff Accounting Position on Advertising Paper;
- 22 e. Telecommunication with Tom Thompson;
- 23 f. Data provided through emails with Tom Thompson; and,
- 24 g. Staff Data Request: 0022.

25 *Staff Expert/Witness: Catherine F. Lucia*

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<sup>26</sup> Detail explanation of disallowance of advertising costs located in Staff workpapers – Catherine F. Lucia.

**E. Membership and Trade Dues**

**1. Description**

Ameren Missouri incurred costs related to membership and trade dues during this review period. Staff reviewed these costs categorized by Ameren Missouri in the general ledger with the resource type MD - Dues and Membership Other recorded during the review period for a total of \$25,750.00. These costs involved the following organizations/associations; Consortium for Energy Efficiency in the amount of \$10,000.00, Facility Operators and Service Providers Association in the amount of \$500.00, Peak Load Management Alliance in the amount of \$4,950.00, and Prepay Energy Working Group Corporate Membership in the amount of \$10,000.00.

Also, Staff reviewed costs categorized by Ameren Missouri in the general ledger as MT - Membership Trade recorded during the review period for a total of \$5,000.00 which included one organization, the U.S. Green Building Council.

In its evaluation of costs related to membership and trade dues, Staff relied on the following categories recognized by the Commission:

- 1) Business and Professional: assist company employees in maintaining and expanding their level of knowledge in their respective fields;
- 2) Industry: function of these organizations is the performance of research and development activities or lobbying activities;
- 3) Economic and civic: activities of these organizations include attracting new businesses to areas in which the utility operates, retaining and encouraging growth of existing companies and fostering an overall business and economic climate;
- 4) Social: utilities see membership in these organizations as a means to promote their image in the community.

The Commission adopted these categories of membership and trade dues and provided the rationale to apply when reviewing these costs: 1) no direct, quantifiable benefit to the ratepayer, 2) were not necessary in providing safe and adequate service to the ratepayer, or 3) represent an involuntary contribution on the part of the ratepayer to an organization.

Based upon Staff's review, Staff has determined the costs associated with membership and trade dues for the amount \$30,750.00,<sup>27</sup> should be disallowed based on the rationale provided.

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<sup>27</sup> Spreadsheet of Membership and Trade Dues located in Staff workpapers – Catherine F. Lucia.

1 Staff recommends a disallowance of \$30,750.00 for purchasing rate transactions plus  
2 \$380.03 for interest, for a total disallowance of \$31,130.03.

## 3 **2. Summary of Cost Implications**

4 If Ameren Missouri was imprudent in its decisions membership and trade dues  
5 ratepayer harm could result in an increase in Energy Efficiency Investment Charge  
6 billed amounts.

## 7 **3. Conclusion**

8 Staff believes Ameren Missouri was imprudent when it included membership and  
9 trade dues as MEEIA costs. The Staff recommends the Commission order an adjustment in  
10 the amount of \$30,750.00 plus interest of \$380.03.

## 11 **4. Documents Reviewed**

- 12 a. Ameren Missouri's 2016-2018 Energy Efficiency Plan;
- 13 b. Approved MEEIA Energy Efficiency and Demand Side Management
- 14 Programs and Tariff Sheets;
- 15 c. Rider EEIC;
- 16 d. Staff Accounting Position Paper on Dues and Donations;
- 17 e. Telecommunication with Tom Thompson;
- 18 f. Data provided through emails with Tom Thompson; and,
- 19 g. Staff Data Request: 0022.

20 *Staff Expert/Witness: Catherine F. Lucia*

## 21 **F. Costs to correct 2014 EM&V reports**

### 22 **1. Description**

23 During the review of the Ameren Missouri's response to Data Request No. 0002.4  
24 Staff chose to review an amount identified as Cadmus in the amount of \$11,616.00 recorded  
25 in the month of August 2016 and an amount identified as ADM in the amount of \$8,340.00  
26 recorded in the month of September 2016. Cadmus and ADM are under contract with  
27 Ameren Missouri as the EM&V contractors. The Cadmus invoice (#228128) dated July 5,  
28 2016 and assigned to purchase order #758088 reflected the cost to run the DSMore analysis

1 with correct avoided costs. The ADM amount involved two invoices (#1607-1.1 and 1607-2)  
2 dated September 19, 2016 and September 12, 2016 (respectively) and both assigned to  
3 purchase order #759846. The ADM invoice 1607-1.1 was in the amount of \$7,440.00 and  
4 invoice 1607-2 in the amount of \$900.00 for a combined total of \$8,340.00. These two ADM  
5 invoices reflected the cost to correct the 2014 EM&V reports for 2014 avoided costs and the  
6 DSMore analysis.

7 As a result of this review, Staff recommends a disallowance for these combined  
8 invoices in the amount of \$19,956.00<sup>28</sup> related to correct the 2014 EM&V reports for 2014  
9 avoided costs as they are related to case EC-2015-0315 and the opinion filed as WE79406 by  
10 the Western Court of Appeals. Staff also recommends the disallowance of \$269.49 for interest  
11 associated with this proposed disallowance of costs which results in a combined disallowance  
12 of \$20,225.49.

## 13 **2. Summary of Cost Implications**

14 If Ameren Missouri was imprudent when it provided its EM&V contractors with  
15 noncompliant avoided costs, ratepayer harm could result in an increase in Energy Efficiency  
16 Investment Charge billed amounts.

## 17 **3. Conclusion**

18 Staff finds it is imprudent for Ameren Missouri to include \$19,956.00 related to the  
19 repair amended 2014 EM&V reports for 2014 avoided costs and DSMore analysis. The Staff  
20 recommends the Commission order an adjustment in the amount of \$19,956.00 plus interest  
21 amount of \$269.49 for a total disallowance of \$20,225.49.

## 22 **4. Documents Reviewed**

- 23 a. Ameren Missouri's 2016-2018 Energy Efficiency Plan;
- 24 b. Approved MEEIA Energy Efficiency and Demand Side Management
- 25 Programs and Tariff Sheets;
- 26 c. Rider EEIC;

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<sup>28</sup> Disallowance of costs to repair amended 2014 report for 2014 avoided costs located in Staff workpapers – Catherine F. Lucia.

- d. Telecommunication with Tom Thompson;
- e. Data provided through emails with Tom Thompson; and,
- f. Staff Data Requests: 0002.1, 0002.4, and 0014.

*Staff Expert/Witness: Catherine F. Lucia*

## **G. Purchasing Rate**

### **1. Description**

During the review of Ameren Missouri's response to Data Request No. 0002.4, Staff found three transactions recorded with the description "Purchasing Rate". The first transaction was recorded in August 2016 for \$580.80, the second transaction was recorded in September 2016 for \$417.00, and the third transaction was recorded in June 2017 for \$1,700.00. These transactions were included in a group of several transactions entered through the general ledger as MEEIA 1 costs that were being re-classed, carried forward as MEEIA Cycle 2 costs. During the review of these transactions and through additional communication with Ameren Missouri, it was stated multiple times transactions related to "purchasing rate" were not to be included in the re-class of costs from MEEIA Cycle 1 to MEEIA Cycle 2.

Staff recommends a disallowance of \$2,697.80<sup>29</sup> for purchasing rate transactions and recovery of \$23.65 for interest, for a combine disallowance of \$2,721.45.

### **2. Summary of Cost Implications**

If Ameren Missouri was imprudent in its decisions relating to the determination of the costs billed to customers, ratepayer harm could result in an increase in Energy Efficiency Investment Charge billed amounts.

### **3. Conclusion**

Staff finds it is imprudent for Ameren Missouri to include \$2,697.80 for purchasing rate transactions as MEEIA costs. The Staff recommends the Commission order an adjustment of \$2,697.80 plus interest of \$23.65 for a total disallowance of \$2,721.45.

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<sup>29</sup> Disallowance purchasing rate transactions located in Staff workpapers – Catherine F. Lucia.

1                   **4. Documents Reviewed**

- 2                   a. Ameren Missouri’s 2016-2018 Energy Efficiency Plan;
- 3                   b. Approved MEEIA Energy Efficiency and Demand Side Management
- 4                   Programs and Tariff Sheets;
- 5                   c. Rider EEIC;
- 6                   d. Data provided through emails with Tom Thompson;
- 7                   e. Telecommunication with Tom Thompson; and,
- 8                   f. Staff Data Requests: 0002.1, 0002.4, and 0014.

9                   *Staff Expert/Witness: Catherine F. Lucia*

10                   **H. Implementation Contractors**

11                   **1. Description**

12                   Ameren Missouri hired business partners for design, implementation and delivery of

13                   its portfolio of residential and business energy efficiency programs to customers. Contracting

14                   with competent, experienced and reliable program implementers is extremely important to the

15                   success of Ameren Missouri’s energy efficiency programs and for affording Ameren

16                   Missouri’s customers the greatest benefits.

17                   Ameren Missouri issued RFPs for program implementers to directly administer one or

18                   more of Ameren Missouri’s energy efficiency programs. Ameren Missouri selected and

19                   contracted with the organization identified in Table 5<sup>30</sup> to implement individual MEEIA

20                   programs. All of the implementers identified on Table 5 are national recognized contractors

21                   that have solid histories of energy efficiency programs’ design and implementation.

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27                   continued on next page

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<sup>30</sup> Table 5 was created by using planned kWh and kW provided in Table 6, and program implementers and EM&V contractors were provided in an email to Staff on April 24, 2018. Details are provided in Staff workpapers - Brooke Richter.

Table 5

Cumulative Totals for March 1, 2016 through October 31, 2017				
MEEIA Programs	Planned Annual Energy Savings (kWh)	Planned Annual Demand Savings (kW)	Program Implementers	Program EM&V Contractors
Res. Lighting	42,012,139	6,259	ICF	Cadmus Group
Res. Efficient Products	7,614,644	2,366	ICF	Cadmus Group
Res. HVAC	57,829,425	36,898	ICF	Cadmus Group
Res. Smart Thermostats	4,191,510	3,978	ICF	Cadmus Group
Res. Low Income	9,409,488	2,185	ICF	ADM
Res. EE Kits	12,042,702	1,997	ICF	Cadmus Group
Res. Home Energy Reports	33,750,000	15,714	ICF	Cadmus Group
Bus. Standard	52,621,209	10,180	Lockheed Martin	ADM
Bus. Custom	108,850,715	24,423	Lockheed Martin	ADM
Bus. Retro Commissioning	12,381,982	2,811	Lockheed Martin	ADM
Bus. New Construction	9,146,309	3,017	Lockheed Martin	ADM
Bus. Small Business Direct Install	14,015,652	2,649	Lockheed Martin	ADM
<b>Total Portfolio</b>	<b>363,865,777</b>	<b>112,478</b>		

Staff reviewed Ameren Missouri's relationship with its implementers to gauge if Ameren Missouri acted prudently in the selection and oversight of its program implementers. Staff also examined the contracts between Ameren Missouri and the implementers in an effort to determine if the terms of the contract were followed during the implementation of the residential and business programs. During this review of the invoices, ICF and Lockheed Martin invoices were crosschecked to the Data Request No.0002.1, and all invoices were reviewed.

Achieved cumulative deemed annual energy and demand savings relative to the planned cumulative annual energy and demand savings for the same period is important to understanding the overall performance of Ameren Missouri's energy efficiency programs. Table 6 provides a comparison of achieved savings and planned saving for Ameren Missouri's residential and business programs for the Review Period. If Ameren Missouri was unable to achieve its planned energy and demand savings levels, that could be an indication the programs were not being prudently administered by the implementers and by

Ameren Missouri. The results in Table 6<sup>31</sup> indicate that Ameren Missouri exceeded its plan for cumulative deemed annual energy savings by 13%<sup>32</sup> during the Review Period. This measurement only represents a portion of Ameren Missouri's 2016-2018 Energy Efficiency Plan and could change during the Plan cycle.

**Table 6**

Cumulative Totals for March 1, 2016 through October 31, 2017						
MEEIA Programs	Achieved Annual Energy Savings (kWh)	Planned Annual Energy Savings (kWh)	Variance	Achieved Annual Demand Savings (kW)	Planned Annual Demand Savings (kW)	Variance
Res. Lighting	55,456,196	42,012,139	13,444,057	8,277	6,259	2,018
Res. Efficient Products	6,339,647	7,614,644	-1,274,997	1,592	2,366	-774
Res. HVAC	93,418,722	57,829,425	35,589,297	62,173	36,898	25,275
Res. Smart Thermostats	7,129,122	4,191,510	2,937,612	6,754	3,978	2,776
Res. Low Income	4,503,889	9,409,488	-4,905,599	1,271	2,185	-914
Res. EE Kits	5,451,098	12,042,702	-6,591,605	1,337	1,997	-660
Res. Home Energy Reports	33,750,000	33,750,000	0	15,730	15,714	16
<b>Total Residential Programs</b>	<b>206,048,674</b>	<b>166,849,909</b>	<b>39,198,765</b>	<b>97,134</b>	<b>69,398</b>	<b>27,736</b>
Bus. Standard	90,219,908	52,621,209	37,598,699	17,047	10,180	6,867
Bus. Custom	81,869,503	108,850,715	-26,981,212	23,104	24,423	-1,319
Bus. Retro Commissioning	1,085,100	12,381,982	-11,296,882	392	2,811	-2,418
Bus. New Construction	24,189,379	9,146,309	15,043,070	4,002	3,017	985
Bus. Small Business Direct Install	5,963,429	14,015,652	-8,052,223	1,133	2,649	-1,516
Bus. EMS	3,078,522	0	3,078,522	0	0	0
<b>Total Business Programs</b>	<b>206,405,841</b>	<b>197,015,867</b>	<b>6,311,452</b>	<b>45,678</b>	<b>43,080</b>	<b>2,598</b>
<b>Total Portfolio</b>	<b>412,454,515</b>	<b>363,865,777</b>	<b>48,588,738</b>	<b>142,812</b>	<b>112,478</b>	<b>30,334</b>

## 2. Summary of Cost Implications

If Ameren Missouri was imprudent in its decisions relating to the selection and supervision of its program implementers, ratepayer harm could result in an increase in the future Energy Efficiency Investment Charge amounts.

## 3. Conclusion

Staff found no indication that Ameren Missouri has acted imprudently regarding the selection and supervision of its program implementers.

<sup>31</sup> Table 6 was created from information provided in an email from Ameren Missouri on April 2, 2018. The Company stated this information came from Ameren's Dashboard. Details can be found in Staff workpapers - Brooke Richter.

<sup>32</sup> This calculation derived from the total variance divided by the total planned energy savings (kWh). Details can be found in Staff workpapers - Brooke Richter.



1                   **4. Documents Reviewed**

- 2                   a. Ameren Missouri’s 2016 – 2018 Energy Efficiency Plan;
- 3                   b. Approved MEEIA Energy Efficiency and Demand Side Management
- 4                   Programs Tariff Sheets;
- 5                   c. Data given through emails from Tom Thompson; and,
- 6                   d. Staff Data Requests: 0001, 0002, 0002.1, and 0015.

7                   *Staff Expert/Witness: Brooke Richter*

8                   **I. Billed Program Costs**

9                   **1. Description**

10                  For the Review Period, Ameren Missouri billed customers through a separate line item

11                  on customers’ bills titled “Energy Efficiency Investment Charge” to recover estimated energy

12                  efficiency programs’ costs and estimated Company’s TD. The “Energy Efficiency Investment

13                  Charge” is based on the customer’s monthly consumption and the applicable energy

14                  efficiency investment rates approved by the Commission in Case Nos. ER-2016-0242 and

15                  ER-2018-0144.<sup>33</sup> During the Review Period of March 1, 2016 through October 31, 2017,

16                  Ameren Missouri billed customers \$66,509,227 to recover its estimated energy efficiency

17                  programs’ costs. For the same period, Ameren Missouri actually spent \$64,743,753 on its

18                  energy efficiency programs. Thus, Ameren Missouri over-collected \$1,765,475 from its

19                  customers during the Review Period. The monthly amounts that are either over- or under-

20                  collected from customers are tracked in a regulatory asset account, along with monthly

21                  interest, until Ameren Missouri files for rate adjustments under its Rider EEIC and new

22                  energy efficiency investment rates are approved by the Commission.<sup>34</sup> The cumulative

23                  interest associated with this over-collected amount was \$48,801 as of October 31, 2017.

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<sup>33</sup> The energy efficiency investment rates on Original Sheet No. 91.11, approved in Case No. EO-2015-0055, are based upon anticipated costs as well as reconciliations of historical costs associated with Ameren Missouri’s approved demand-side programs. Rate changes occurred during the review period in support of revisions to Rider EEIC – Energy Efficiency Investment Charge of Ameren Missouri’s Schedule No. 6 – Schedule of Rates for Electric Service, 2<sup>nd</sup> and 3<sup>rd</sup> Revised Sheet No. 91.11 (respectively), in Case Nos. ER-2017-0149 and ER2018-0144.

<sup>34</sup> On November 21, 2014, Ameren Missouri filed, in Case No. ER-2015-0075 and Tariff Tracking No. YE-2015-0210, testimony, workpapers and its proposed 1st Revised Sheet No. 90.5 to adjust Rider EEIC rates effective with its February 2015 billing month, beginning January 27, 2015, to reflect an increase in annual revenue requirements of \$45.4 million (from \$80.9 million to \$126.3 million).

1                   **2. Summary of Cost Implications**

2                   If Ameren Missouri was imprudent in its tracking, reporting and/or calculating the  
3 Company's estimated billed costs, ratepayer harm could result in an increase in future Energy  
4 Efficiency Investment Charge amounts.

5                   **3. Conclusion**

6                   Staff found no indication that Ameren Missouri has acted imprudently regarding the  
7 calculation of the estimated billed program costs related to the cost recovery of its MEEIA  
8 program costs.

9                   **4. Documents Reviewed**

- 10                   a. Ameren Missouri's 2016 – 2018 Energy Efficiency Plan;  
11                   b. Approved MEEIA Energy Efficiency and Demand Side Management  
12                   Programs Tariff Sheets;  
13                   c. Discussions and meetings with Ameren Missouri; and,  
14                   d. Staff Data Requests: 0001, 0002 0004, 0011 and 0017.

15 *Staff Expert/Witness: Dana E. Eaves*

16                   **J. Throughput Disincentive Costs Billed and Actual**

17                   **1. Description**

18                   Ameren Missouri calculates TD monthly based upon all end use measures installed  
19 during the month and the savings associated with each installed measure. The TD calculation  
20 is prescribed in the Rider EEIC where  $TD = MS \times NMR \times NTGF^{35}$ . Staff reviewed the  
21 various components of the TD calculation for the accuracy and proper timing of measure  
22 counts. TD is also billed to customers through the "Energy Efficiency Investment Charge"  
23 line item on the customers' bill by combining net program cost with net throughput  
24 disincentive (\$/kWh) rates as prescribed in Ameren Missouri's Rider EEIC.<sup>36</sup> During the  
25 Review Period, Ameren Missouri billed customers \$23,082,520 for the Cycle 2 estimated  
26 Company TD and for the Cycle 1 TD under-recovery of \$13,541,922. The actual Company

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<sup>35</sup> Throughput Disincentive = Monthly Savings x Net Margin Revenue x Net to Gross Factor.

<sup>36</sup> ER-2016-0242; Union Electric Company Rider EEIC MO.P.S.C Schedule No. 6, 1st Revised No. 91.11, Tracking No. YE-2016-0244 and ER-2017-0149; Union Electric Company Rider EEIC MO.P.S.C Schedule No. 6, 2nd Revised No. 91.11, Tracking No. YE-2017-0079.

1 TD for Cycle 2 during the Review Period was \$12,586,081. Thus, Ameren Missouri under-  
2 collected \$3,045,483 from its customers during the Review Period.

## 3 **2. Summary of Cost Implications**

4 If Ameren Missouri was imprudent in its tracking, reporting and/or calculating the  
5 Company's estimated billed TD or actual TD cost, ratepayer harm could result in an increase  
6 in future Energy Efficiency Investment Charge amounts.

## 7 **3. Conclusion**

8 Staff found no indication that Ameren Missouri has acted imprudently regarding the  
9 calculation of the TD billed or the actual TD calculated related to the cost recovery of its  
10 MEEIA TD costs or recovery of those costs.

## 11 **4. Documents Reviewed**

- 12 a. Ameren Missouri's 2016 – 2018 Energy Efficiency Plan;
- 13 b. Approved MEEIA Energy Efficiency and Demand Side Management
- 14 Programs Tariff Sheets;
- 15 c. Discussions and meetings with Ameren Missouri; and,
- 16 d. Staff Data Requests: 0001, 0002 0004, 0011 and 0017.

17 *Staff Expert/Witness: Dana E. Eaves*

## 18 **IV. GROSS ANNUAL ENERGY AND DEMAND SAVINGS (KWH AND KW)**

### 19 **1. Description**

20 The purpose of Ameren Missouri's energy efficiency programs is for customers to use  
21 less energy and therefore everything else equal reduces the need for more generation. In the  
22 2016, Stipulation Ameren Missouri planned for cumulative annual energy savings of  
23 571,980,000 kWh and demand savings of 166,642 kW. For the review period, Ameren  
24 Missouri reported actual gross energy and demand savings based upon installed measures of  
25 410,957,000 kWh<sup>37</sup> and 141,403 kW, respectively. Ameren Missouri monetizes the actual  
26 energy savings through its TD calculation as discussed earlier.

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<sup>37</sup> The gross energy savings of 410,957,000 kWh does not include some retrospective adjustments to reach the achieved energy savings of 412,454,515 kWh in Table 6. The retrospective adjustments of 1,497,515 kWh should be included in the TD in the next Rider EEIC rate adjustment filing.

1 The annual EM&V process also affects Ameren Missouri's savings by verifying the  
2 savings. After each EM&V have been performed by its EM&V contractor Ameren Missouri  
3 must rebase its gross energy and demand savings based upon the findings in the EM&V  
4 report. Staff has reviewed Ameren Missouri rebasing processes and procedures.  
5 Rebasing adjustment will be used in determining load forecast in Ameren Missouri next  
6 general rate case.

## 7 **2. Summary of Cost Implications**

8 If Ameren Missouri was imprudent in its tracking, reporting and/or calculating the  
9 Company's estimated energy and demand savings and its rebasing, ratepayer harm could  
10 result in an increase in future Energy Efficiency Investment Charge amounts.

## 11 **3. Conclusion**

12 Staff found no indication that Ameren Missouri has acted imprudently regarding the  
13 calculation of the energy savings.

## 14 **4. Documents Reviewed**

- 15 a. Ameren Missouri's 2016 – 2018 Energy Efficiency Plan;
- 16 b. Approved MEEIA Energy Efficiency and Demand Side Management  
17 Programs Tariff Sheets;
- 18 c. Ameren Missouri's TD Calculator - Excel version; and,
- 19 d. Staff Data Requests: 0001, 0002 0004, 0011 and 0017.

20 *Staff Expert/Witness: Dana E. Eaves*

## 21 **V. INTEREST**

### 22 **1. Description**

23 Staff reviewed the interest calculations for program costs and throughput disincentive,  
24 broken out by rate class as provided in Ameren Missouri's response to Data Request No. 0004  
25 for the review period of March 1, 2016 through October 31, 2017. Staff verified the  
26 company's monthly short-term borrowing rate was applied correctly to the over- or under-  
27 recovered balances for program costs and TD. Ameren Missouri has changed the method of  
28 calculating interest associated with TD from Cycle 1. Starting with Cycle 2 it is calculating

1 interest associated with TD by business rate class. Staff agrees with this approach as it better  
2 reflects actual interest costs for business rate classes instead of taking the average over- or  
3 under- TD balances and spreading it over all rate classes. This is important because the  
4 business rates classes have specific EEIRs. Staff would recommend that Ameren Missouri  
5 employ this same methodology for business program expense if possible.

## 6 **2. Summary of Cost Implications**

7 If Ameren Missouri was imprudent in its reporting and/or calculating of the interest  
8 associated with the over- or under-recovery of energy efficiency programs' costs and/or the  
9 TD, ratepayer harm could result in an increase in future Energy Efficiency Investment  
10 Charge amounts.

## 11 **3. Conclusion**

12 Staff recommends Ameren Missouri provide the interest calculation for business  
13 program costs by rate class, if possible, as the company currently provides for the TD interest  
14 calculation.

## 15 **4. Documents Reviewed**

- 16 a. Ameren Missouri's 2016 – 2018 Energy Efficiency Plan;
- 17 b. Approved MEEIA Energy Efficiency and Demand Side Management
- 18 Programs Tariff Sheets; and,
- 19 c. Staff Data Requests: 0001, 0002 and 0004.

20 *Staff Expert/Witness: Kory J. Boustead*

## 21 **VI. EVALUATION MEASUREMENT AND VERIFICATION (EM&V)**

### 22 **1. Description**

23 In the 2016 Stipulation, Ameren Missouri agreed<sup>38</sup> to have its independent EM&V  
24 evaluator(s) perform annual EM&V and file annual EM&V reports with the Commission  
25 following each program year. During this review period, Ameren Missouri's evaluators filed  
26 their 2016 Program Year EM&V Reports (PY 2016 EM&V). Final changes to the Cadmus  
27 PY 2016 EM&V Report resulted from the Commission's September 27, 2017

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<sup>38</sup> 2016 Stipulation, Paragraph 11 and Appendix C – EMV Plan and Timeline.

1 *Order Approving Non-Unanimous Stipulation and Agreement* in Case No. EO-2015-0055.  
2 The cost of EM&V work performed by Ameren Missouri's independent contractors for the  
3 review period is \$3,212,446.

4 Ameren Missouri contracted with The Cadmus Group, Inc. ("Cadmus") and ADM  
5 Associates, Inc. (ADM) to be the independent EM&V evaluators. Ameren Missouri holds  
6 back or retains 10%<sup>39</sup> of the total amount of each invoice submitted by the EM&V evaluators.  
7 The 10% held back is not paid until a project has been completed to the satisfaction of  
8 Ameren Missouri. Therefore, only 90% of the invoices submitted are paid and reflected in the  
9 transactions provided in Data Request No. 0002.1 and Data Request No. 0014. This 10% is an  
10 accumulating balance and only paid on projects completed at which time the accumulating  
11 balance is reduced. EM&V Invoices submitted by Ameren did provide an itemized list of the  
12 dollar amount for each 10% held back. Staff was able to verify the recording of invoices at  
13 90% of the total invoiced amount and the subsequent payments for the 10% held back in the  
14 response provided to Data Request No. 0002.1 and Data Request No. 0014.

15 Staff requested from Ameren Missouri copies of the EM&V evaluators' invoices.  
16 A total of 24 Cadmus invoices were received and reviewed by Staff. Of those 24 invoices,  
17 19 were duplicated with an accumulated total invoiced amount of \$1,163,286.02.<sup>40</sup>  
18 These invoices had the exact number of incurred billable hours by the same employees and  
19 the difference between them was the assigned project number and the assigned project name  
20 of either "Evaluation" or "Planning and Budget". These duplicate invoices were not defaced,  
21 voided, marked with anything that indicated they were duplicates and not valid unpaid  
22 invoices. Staff researched the responses to Data Request No. 0002.1 and Data Request  
23 No. 0014, which contained program costs provided by Ameren Missouri, and verified that the  
24 duplicate invoices were not paid.

25 Staff requested copies of purchase orders issued for Cadmus and received two that  
26 were related to these EM&V costs. One purchase order (PO# 742156) was in the amount of  
27 \$306,300.00 and issued October 4, 2016 and the other purchase order (PO# 771905) was in  
28 the amount of \$2,631,561.00 issued December 6, 2016. The total of these two purchase orders

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<sup>39</sup> Spreadsheet of 10% retainage on Cadmus invoices located in Staff workpapers – Catherine F. Lucia.

<sup>40</sup> Spreadsheet of duplicate invoices are located in Staff workpapers – Catherine F. Lucia.

1 is \$2,937,861.00. Staff notes the total invoices received from Cadmus associated with these  
2 purchase orders, including the duplicate invoices, was \$2,689,413.94.

3 In a teleconference conversation held on April 11<sup>th</sup>, Ameren Missouri Staff stated  
4 purchase orders are issued in the amount of the contract and when entered into its accounts  
5 payable system an internal flag prevents payment(s) from exceeding the agreed contract  
6 amount. In this particular situation, had all invoices been entered for payment, the internal  
7 flag would not have been effective, because the total amount of the submitted invoices is less  
8 than the total amount of the issued purchase orders. In response to Data Request No. 0023  
9 received on April 25<sup>th</sup>, Ameren Missouri stated “Ameren’s accounts payable system will only  
10 allow the payment of invoices to exceed \$10,000 above the purchase order amount”; this  
11 would not have prevented payment of the duplicate invoices. In Ameren Missouri’s contract  
12 with Cadmus it states under the section for Statistical Sampling Audits, “A computer  
13 generated random sample of approximately one hundred invoices shall be selected from the  
14 population of invoices covering the audit period, (generally four years).”; this would not be  
15 applicable to the 24 invoices received from Cadmus during the 20-month review period.

16 Due to the high number of duplicate invoices received during this 20-month review  
17 period and the increased risk of overpayment of program costs, Staff recommends as a Best  
18 Business Practice that Ameren Missouri implement procedures that could increase internal  
19 controls through early detection of duplicate invoicing and notification to the vendor for  
20 immediate cessation of this practice.

## 21 **2. Summary of Cost Implications**

22 If Ameren Missouri was imprudent in administration of its EM&V contracts, ratepayer  
23 harm could result in an increase in future Energy Efficiency Investment Charge amounts.

## 24 **3. Conclusion**

25 Staff found no indication that Ameren Missouri acted imprudently regarding the  
26 administration of EM&V contracts concerning its PY 2016 EM&V.

27 Staff found Ameren did act imprudently regarding the treatment of duplicate  
28 invoices received from Cadmus. Staff notes ratepayer harm did not occur; therefore no  
29 disallowance of costs.

1                   **4. Documents Reviewed**

- 2                   a. Ameren Missouri's 2016 – 2018 Energy Efficiency Plan;
- 3                   b. Ameren Missouri's 2016 EM&V and associated Stipulation and
- 4                   Agreement;
- 5                   c. Approved MEEIA Energy Efficiency and Demand Side Management
- 6                   Programs Tariff Sheets;
- 7                   d. Cadmus invoices;
- 8                   e. ADM invoices;
- 9                   f. Telecommunication with Tom Thompson; and,
- 10                  g. Staff Data Requests: 0001, 0002, 0002.1, 0004, and 0014.

11                  *Staff Expert/Witness: Dana E. Eaves and Catherine F. Lucia (Invoicing)*

12                  *See attached Addendums A - E*



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

In the Matter of the First Prudence Review of    )  
the Missouri Energy Efficiency Investment        )  
Act (MEEIA) Cycle 2 Energy Efficiency           )  
Programs of Union Electric Company             )  
d/b/a Ameren Missouri                                )

File No. EO-2018-0155

**AFFIDAVIT OF KORY J. BOUSTEAD**

STATE OF MISSOURI        )  
                                  )  
COUNTY OF COLE         )       ss.

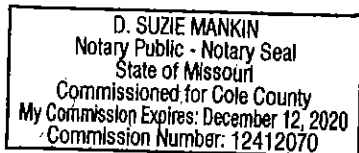
**COMES NOW KORY J. BOUSTEAD** and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing **FIRST PRUDENCE REVIEW Report**; and that the same is true and correct according to her best knowledge and belief.

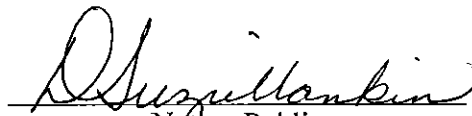
Further the Affiant sayeth not.

  
**KORY J. BOUSTEAD**

**JURAT**

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 30<sup>th</sup> day of April 2018.



  
Notary Public

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

In the Matter of the First Prudence Review of     )  
the Missouri Energy Efficiency Investment     )     File No. EO-2018-0155  
Act (MEEIA) Cycle 2 Energy Efficiency     )  
Programs of Union Electric Company     )  
d/b/a Ameren Missouri     )

**AFFIDAVIT OF DANA E. EAVES**

STATE OF MISSOURI     )  
                                      )     ss.  
COUNTY OF COLE     )

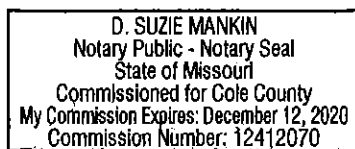
**COMES NOW DANA E. EAVES** and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing **FIRST PRUDENCE REVIEW Report**; and that the same is true and correct according to his best knowledge and belief.

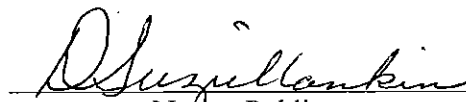
Further the Affiant sayeth not.

  
**DANA E. EAVES**

**JURAT**

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 30<sup>th</sup> day of April 2018.



  
Notary Public

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

In the Matter of the First Prudence Review of     )  
the Missouri Energy Efficiency Investment     )     File No. EO-2018-0155  
Act (MEEIA) Cycle 2 Energy Efficiency     )  
Programs of Union Electric Company     )  
d/b/a Ameren Missouri     )

**AFFIDAVIT OF CATHERINE F. LUCIA**

STATE OF MISSOURI     )  
                                      )     ss.  
COUNTY OF COLE     )

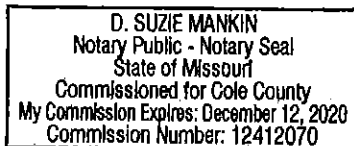
**COMES NOW CATHERINE F. LUCIA** and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing **FIRST PRUDENCE REVIEW Report**; and that the same is true and correct according to her best knowledge and belief.

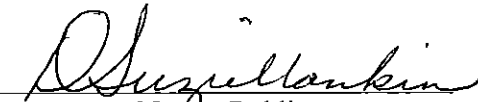
Further the Affiant sayeth not.

  
\_\_\_\_\_  
**CATHERINE F. LUCIA**

**JURAT**

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 30<sup>th</sup> day of April 2018.



  
\_\_\_\_\_  
Notary Public

**BEFORE THE PUBLIC SERVICE COMMISSION**

**OF THE STATE OF MISSOURI**

In the Matter of the First Prudence Review of )  
the Missouri Energy Efficiency Investment )  
Act (MEEIA) Cycle 2 Energy Efficiency )  
Programs of Union Electric Company )  
d/b/a Ameren Missouri )

File No. EO-2018-0155

**AFFIDAVIT OF BROOKE RICHTER**

STATE OF MISSOURI )  
 ) ss.  
COUNTY OF COLE )

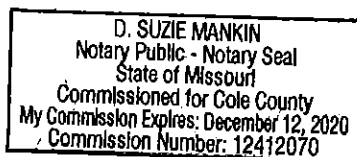
**COMES NOW BROOKE RICHTER** and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing **FIRST PRUDENCE REVIEW Report**; and that the same is true and correct according to her best knowledge and belief.

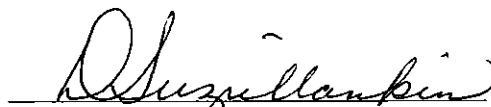
Further the Affiant sayeth not.

  
\_\_\_\_\_  
**BROOKE RICHTER**

**JURAT**

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 30<sup>th</sup> day of April 2018.



  
\_\_\_\_\_  
Notary Public

## UNION ELECTRIC COMPANY

## ELECTRIC SERVICE

MO.P.S.C. SCHEDULE NO. 6

1st Revised

SHEET NO. 91CANCELLING MO.P.S.C. SCHEDULE NO. 6

Original

SHEET NO. 91APPLYING TO MISSOURI SERVICE AREARIDER EEICENERGY EFFICIENCY INVESTMENT CHARGEFor MEEIA Cycle 2 PlanAPPLICABILITY

This Rider EEIC - Energy Efficiency Investment Charge (Rider EEIC ) is applicable to all kilowatt-hours (kWh) of energy supplied to customers served under Company's Service Classification Nos. 1(M), 2(M), 3(M), 4(M), 11(M), and 12(M), excluding kWh of energy supplied to "opt-out" or "low-income" customers.

An Ameren Missouri low-income customer who has received assistance from Missouri Energy Assistance (a.k.a. Low Income Home Energy Assistance Program or LIHEAP), Winter Energy Crisis Intervention Program, or Summer Energy Crisis Intervention Program and (i) whose account has not automatically been exempted from Rider EEIC, or (ii) who has been charged Rider EEIC charges and whose account has not been credited for said charges, may provide the Company, via facsimile to **866.297.8054**, via email to [myhomeamerenmissouri@ameren.com](mailto:myhomeamerenmissouri@ameren.com), or via regular mail to **Ameren Missouri, P.O. Box 790352, St. Louis, MO 63179-0352**

- a. documentation of the assistance received in the form of:
  - i. a copy of the Division of Social Services Family Support Division ("DSSFS") form EA-7 energy assistance payment notice received by the low-income customer, or
  - ii. a copy of the DSSFS LIHEAP Energy Assistance direct payment check received by the low-income customer, or
  - iii. a copy of the Contract Agency energy crisis intervention program ("ECIP") payment notification letter received by the low-income customer, or
  - iv. a printout of the low-income customer's DSSFS LIHEAP EA ElRG System Registration screen identifying the supplier, benefit amount and payment processing date.
- b. Upon receipt of the documentation, the Company will credit the low-income customer's account for:
  - i. energy efficiency investment charges, and
  - ii. any municipal charges attributable to said EEIC charges, that were previously charged to the low-income customer within twelve billing months following the documented receipt of energy assistance; provided that the low-income customer shall not be entitled to any credit, nor shall Company credit the low-income customer, for energy efficiency investment charges and associated municipal charges incurred and billed prior to the June 2015 commencement of the low-income exemption.
- c. Upon receipt of the documentation, for the remainder of the twelve months following the documented receipt of energy assistance, the Company will exempt such low-income customer from any Rider EEIC charges thereafter imposed. The exemption will be evidenced on the low-income customer's bill as an EEIC charge, followed by a credit.

Charges passed through this Rider EEIC reflect the charges approved to be billed from the implementation of the Missouri Energy Efficiency Investment Act (MEEIA) 2016-18 Plan and any remaining unrecovered balances from the MEEIA 2013-15 plan. Those charges include:

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Service Commission  
EO-2015-0055; YE-2016-0198

DATE OF ISSUE February 5, 2016DATE EFFECTIVE March 6, 2016ISSUED BY Michael Moehn  
NAME OF OFFICERPresident  
TITLESt. Louis, Missouri  
ADDRESS**ADDENDUM A****Page 1 of 12**

MO.P.S.C. SCHEDULE NO. 61st RevisedSHEET NO. 91.1CANCELLING MO.P.S.C. SCHEDULE NO. 6OriginalSHEET NO. 91.1APPLYING TO MISSOURI SERVICE AREARIDER EEICENERGY EFFICIENCY INVESTMENT CHARGE (Cont'd.)For MEEIA Cycle 2 PlanAPPLICABILITY (Cont'd.)

- 1) Program Costs, Company's Throughput Disincentive ((TD) and Earnings Opportunity (EO) Award (if any) for each Effective Period (EP)
- \* 2) Reconciliations, with interest, to true-up for differences between the revenues billed under this Rider EEIC and total actual monthly amounts for:
  - i) Program Costs incurred in the MEEIA 2016-18 Plan, including those related to Long-Lead Projects, and/or remaining unrecovered Program balances for MEEIA 2013-15,
  - ii) Company's TD incurred in the MEEIA 2016-18 Plan, including those related to Long-Lead Projects, and/or remaining TD-NSB Share balances for MEEIA 2013-15,
  - iii) Amortization of Earnings Opportunity ordered by the Missouri Public Service Commission (Commission), including those related to Long-Lead Projects, and/or remaining balances for the MEEIA 2013-15 Performance Incentive.
- 3) Any Ordered Adjustments.

Charges under this Rider EEIC shall continue after the anticipated February 28, 2019 end of MEEIA 2016-18 Plan until such time as the charges described in items 1), 2), and 3) above have been billed.

Charges arising from the MEEIA 2016-18 Plan that are the subject of this Rider EEIC shall be reflected in one "Energy Efficiency Invest Chg" on customers' bills in combination with any charges arising from a rider that is applicable to the MEEIA 2013-15 Plan demand-side management programs.

DEFINITIONS

As used in this Rider EEIC, the following definitions shall apply:

"AFUDC" means the Allowance for Funds Used During Construction rate computed in accordance with the formula prescribed in the Code of Federal Regulations Title 18 Part 101.

"Company's Throughput Disincentive" (TD) means to represent the utility's lost margins associated with the successful implementation of MEEIA programs. The detailed method for calculating the TD is described in Tariff Sheets 91.6 - 91.8.

"Earnings Opportunity" (EO) means the amount ordered by the Commission based on actual performance verified through Evaluation Measurement & Verification (EM&V) against planned targets. The details of determining EO are described herein.

"Effective Period" (EP) means the twelve (12) billing months beginning with the February billing month and ending with the January billing month. Where an additional Rider EEIC filing is made to change the EEIR components during a calendar year, the EP for such a filing shall begin with the June or October billing month and end with the subsequent January billing month.

- \* "End Use Category" means the unique summary category of end-use load shapes. The list of End Use Categories is included in Appendix E to the Stipulation.

\*Indicates Change.

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Service Commission  
EO-2015-0055; YE-2017-0275

DATE OF ISSUE June 29, 2017DATE EFFECTIVE July 29, 2017ISSUED BY Michael Moehn  
NAME OF OFFICERPresident  
TITLESt. Louis, Missouri  
ADDRESS**ADDENDUM A****Page 2 of 12**



MO.P.S.C. SCHEDULE NO. 6

2nd Revised

SHEET NO. 91.2CANCELLING MO.P.S.C. SCHEDULE NO. 6

1st Revised

SHEET NO. 91.2APPLYING TO MISSOURI SERVICE AREARIDER EEICENERGY EFFICIENCY INVESTMENT CHARGE (Cont'd.)For MEEIA Cycle 2 PlanDEFINITIONS (Cont'd.)

\* "Evaluation Measurement & Verification" (EM&V) means the performance of studies and activities intended to evaluate the process of the Company's program delivery and oversight and to estimate and/or verify the estimated actual energy and demand savings, cost effectiveness, and other effects from demand-side programs.

"Impact Measurement & Verification" (IM&V) means the determination of ex-post net energy and demand savings for Long-Lead Projects through application of a net-to-gross ratio, but does not include a cost-effectiveness analysis.

"Incentive" means any consideration provided by the Company, including, but not limited to, buy downs, markdowns, rebates, bill credits, payments to third parties, direct installation, giveaways, and education, which encourages the adoption of program measures.

\*\* "Long-Lead Program Costs" means incentive payments made to customers, contract payments made to program administrators, and costs for IM&V. There will be no portfolio-level costs allocated to long-lead projects.

\*\* "Long-Lead Project" means a project committed by a Customer, accepted by the Company, and submitted a signed commitment offer to the program administrator by January 31, 2019, according to the terms and implementation of the MEEIA 2016-2018 Energy Efficiency Plan that will require until a date after February 28, 2019, but no later than January 31, 2021, to certify completion.

"Low-Income" customers means those Service Classification 1(M)-Residential customers eligible for the low income exemption provisions contained in Section 393.1075.6, RSMo. As approved in File No. ER-2014-0258, customers eligible under this definition will be exempt from Rider EEIC charges for 12 billing months following assistance received from either Missouri Energy Assistance (a.k.a. Low Income Home Energy Assistance Program or LIHEAP), Winter Energy Crisis Intervention Program, Summer Energy Crisis Intervention Program, the Company's Keeping Current Low Income Pilot Program, and/or the Company's Keeping Cool Low Income Pilot Program.

"Measure" means energy efficiency measures described for each program attached as Appendix B to the Stipulation.

"MEEIA 2013-15 Plan" means Company's "2013-15 Energy Efficiency Plan" submitted in File No. EO-2012-0142 and its corresponding tariff sheets.

"MEEIA 2016-18 Plan" means Company's "2016-18 Energy Efficiency Plan" submitted in File No. EO-2015-0055 and modified by the Stipulation.

"Programs" means MEEIA 2016-18 programs listed in tariff sheet no. 174.

"Program Costs" means any prudently incurred program expenditures, including such items as program planning, program design, administration, delivery, end-use measures and incentive payments, advertising expense, evaluation, measurement and verification, market potential studies and work on a utility and/or statewide Technical Resource Manual (TRM).

"TRM" means the Company's Technical Resource Manual (attached as Appendix F to the Stipulation) and updated based on EM&V ex-post gross adjustments determined for Year 1 no later than twenty-four (24) months after commencement of MEEIA 2016-18.

"Stipulation" means the Stipulation and Agreement approved by the Commission in File No. EO-2015-0055, as it may be amended further by subsequent Commission orders.

\*Indicates Reissue. \*\*Indicates Addition.

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Missouri Public  
Service Commission  
EO-2015-0055; YE-2017-0275

DATE OF ISSUE June 29, 2017DATE EFFECTIVE July 29, 2017ISSUED BY Michael Moehn  
NAME OF OFFICERPresident  
TITLESt. Louis, Missouri  
ADDRESS**ADDENDUM A****Page 3 of 12**

## UNION ELECTRIC COMPANY

## ELECTRIC SERVICE

MO.P.S.C. SCHEDULE NO. 6Original SHEET NO. 91.3

CANCELLING MO.P.S.C. SCHEDULE NO. \_\_\_\_\_

SHEET NO. \_\_\_\_\_

APPLYING TO MISSOURI SERVICE AREARIDER EEICENERGY EFFICIENCY INVESTMENT CHARGE (Cont'd.)For MEEIA Cycle 2 PlanENERGY EFFICIENCY INVESTMENT RATE (EEIR) DETERMINATION

The EEIR during each applicable EP is a dollar per kWh rate for each applicable Service Classification calculated as follows:

$$EEIR = [NPC + NTD + NEO + NOA] / PE$$

Where:

NPC = Net Program Costs for the applicable EP as defined below,

$$NPC = PPC + PCR$$

PPC = Projected Program Costs is an amount equal to Program Costs projected by the Company to be incurred during the applicable EP.

PCR = Program Costs Reconciliation is equal to the cumulative difference, if any, between the PPC revenues billed resulting from the application of the NPC component of the EEIR and the actual Program Costs incurred through the end of the previous EP (which will reflect projections through the end of the previous EP due to timing of adjustments). Such amounts shall include monthly interest charged at the Company's monthly short-term borrowing rate. Any remaining PCR balance from MEEIA Cycle 1 shall be rolled into the PCR calculation starting February 2017.

NTD = Net Throughput Disincentive for the applicable EP as defined below,

$$NTD = PTD + TDR$$

PTD = Projected Throughput Disincentive is the Company's TD projected by the Company to be incurred during the applicable EP. For the detailed method for calculating the TD, see Sheet 91.6.

TDR = Throughput Disincentive Reconciliation is equal to the cumulative difference, if any, between the PTD revenues billed during the previous EP resulting from the application of the NTD component of the EEIR and the Company's TD through the end of the previous EP (which will reflect projections through the end of the previous EP due to timing of adjustments). Such amounts shall include monthly interest charged at the Company's monthly short-term borrowing rate. Any remaining TDR balance from MEEIA Cycle 1 shall be rolled into the TDR calculation starting February 2017.

NEO = Net Earnings Opportunity for the applicable EP as defined below,

$$NEO = EO + EOR$$

EO = Earnings Opportunity is equal to the Earnings Opportunity Award monthly amortization multiplied by the number of billing months in the applicable EP.

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Missouri Public  
Service Commission  
EO-2015-0055; YE-2016-0198

DATE OF ISSUE February 5, 2016DATE EFFECTIVE March 6, 2016ISSUED BY Michael Moehn  
NAME OF OFFICERPresident  
TITLESt. Louis, Missouri  
ADDRESS**ADDENDUM A****Page 4 of 12**



MO.P.S.C. SCHEDULE NO. 6Original SHEET NO. 91.4

CANCELLING MO.P.S.C. SCHEDULE NO. \_\_\_\_\_

SHEET NO. \_\_\_\_\_

APPLYING TO MISSOURI SERVICE AREARIDER EEICENERGY EFFICIENCY INVESTMENT CHARGE (Cont'd.)For MEEIA Cycle 2 PlanEEIR DETERMINATION (Cont'd.)

The monthly amortization shall be determined by dividing the Earnings Opportunity Award by the number of available billing months between the first billing month of the first EEIR filing after the determination of the Earnings Opportunity Award and 24 calendar months following the end of the annual period in which the Earnings Opportunity Award is determined.

The number of applicable billing months in the EP shall be the number of applicable billing months less the number of months including Earnings Opportunity Award amortization from previous EPs.

EOR = Earnings Opportunity Reconciliation is equal to the cumulative difference, if any, between the EO revenues billed resulting from the application of the NEO+NPI component of the EEIR and the monthly amortization of the Performance Incentive Award through the end of the previous EP (which will reflect projections through the end of the previous EP due to timing of adjustments). Such amounts shall include monthly interest charged at the Company's monthly short-term borrowing rate. Any remaining PIR balance from MEEIA Cycle 1 shall be rolled into the EOR calculation starting February 2019.

NOA = Net Ordered Adjustment for the applicable EP as defined below,

$$NOA = OA + OAR$$

OA = Ordered Adjustment is the amount of any adjustment to the Rider EEIC ordered by the Commission as a result of prudence reviews and/or corrections under this Rider EEIC. Such amounts shall include monthly interest at the Company's monthly short-term borrowing rate.

OAR = Ordered Adjustment Reconciliation is equal to the cumulative difference, if any, between the OA revenues billed resulting from the application of the EEIR and the actual OA ordered by the Commission through the end of the previous EP (which will reflect projections through the end of the previous EP due to timing of adjustments). Such amounts shall include monthly interest charged at the Company's monthly short-term borrowing rate.

PE = Projected Energy, in kWh, forecasted to be delivered to the customers to which the Rider EEIC applies during the applicable EP.

FILED  
Missouri Public  
Service Commission  
EO-2015-0055; YE-2016-0198

DATE OF ISSUE February 5, 2016DATE EFFECTIVE March 6, 2016ISSUED BY Michael Moehn  
NAME OF OFFICERPresident  
TITLESt. Louis, Missouri  
ADDRESS**ADDENDUM A****Page 5 of 12**

## UNION ELECTRIC COMPANY

## ELECTRIC SERVICE

MO.P.S.C. SCHEDULE NO. 6Original SHEET NO. 91.5

CANCELLING MO.P.S.C. SCHEDULE NO. \_\_\_\_\_

SHEET NO. \_\_\_\_\_

APPLYING TO MISSOURI SERVICE AREARIDER EEICENERGY EFFICIENCY INVESTMENT CHARGE (Cont'd.)For MEEIA Cycle 2 PlanEEIR DETERMINATION (Cont'd.)

The EEIR components and Total EEIR applicable to the individual Service Classifications shall be rounded to the nearest \$0.000001.

Allocations of charges for each applicable Service Classification for the MEEIA 2016-18 Plan will be made in accordance with the Stipulation and Agreement in File No. EO-2015-0055, Company's MEEIA 2016-18 Plan.

This Rider EEIC shall not be applicable to customers that have satisfied the opt-out provisions contained in Section 393.1075.7, RSMo or the low-income exemption provisions described herein.

FILED  
Missouri Public  
Service Commission  
EO-2015-0055; YE-2016-0198

DATE OF ISSUE February 5, 2016 DATE EFFECTIVE March 6, 2016ISSUED BY Michael Moehn President St. Louis, Missouri  
NAME OF OFFICER TITLE ADDRESS**ADDENDUM A****Page 6 of 12**

MO.P.S.C. SCHEDULE NO. 6

Original

SHEET NO. 91.6

CANCELLING MO.P.S.C. SCHEDULE NO. \_\_\_\_\_

SHEET NO. \_\_\_\_\_

APPLYING TO MISSOURI SERVICE AREARIDER EEICENERGY EFFICIENCY INVESTMENT CHARGE (Cont'd.)For MEEIA Cycle 2 PlanTD DETERMINATION

Monthly TD is the sum of the TD calculation for all End Use Categories applicable to Service Classifications as set out in the Availability section herein.

The TD for each End Use Category shall be determined by the following formula:

$$TD = MS \times NMR \times NTGF$$

Where:

TD = Throughput Disincentive, in dollars, to be collected for a given month, for a given Service Classification.

MS = Monthly Savings, is the sum of all programs' monthly savings, in kWh, for a given month, for a given Service Classification. The MS for each End Use Category shall be determined by the following formula:

$$MS = ((MAS_{CM} / 2) + CAS_{PM} - RB) \times LS$$

Where:

MAS<sub>CM</sub> = The sum of (MC x ME) for all measures in a program in the current calendar month.

MC = Measure Count. MC for a given month, for a given Service Classification, for each measure, is the number of each measure installed in the current calendar month. For the Home Energy Report program, the number of reports mailed during the current calendar month shall be used as the Measure Count.

ME = Measure Energy. ME will be determined as follows, for each Measure:

- a. Prior to finalization of EM&V for MEEIA 2016-18 Plan, Year 1 programs, for Measures not listed under those programs listed in (c) below, the ME is the annual total of normalized savings for each measure at customer meter per measure defined in the Company's Technical Resource Manual (TRM).
- b. After finalization of EM&V for MEEIA 2016-18 Plan, Year 1 programs, for Measures not listed under those programs listed in (c) below, the ME is the annual total of normalized savings for each measure at customer meter per measure defined in the updated TRM (which will be updated based on EM&V ex-post gross adjustments determined for Year 1 no later than 24 months after the commencement of MEEIA 2016-18 Plan).

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Missouri Public  
Service Commission  
EO-2015-0055; YE-2016-0198

DATE OF ISSUE February 5, 2016DATE EFFECTIVE March 6, 2016ISSUED BY Michael Moehn  
NAME OF OFFICERPresident  
TITLESt. Louis, Missouri  
ADDRESS**ADDENDUM A****Page 7 of 12**



## UNION ELECTRIC COMPANY

## ELECTRIC SERVICE

MO.P.S.C. SCHEDULE NO. 61st Revised SHEET NO. 91.7CANCELLING MO.P.S.C. SCHEDULE NO. 6Original SHEET NO. 91.7APPLYING TO MISSOURI SERVICE AREARIDER EEICENERGY EFFICIENCY INVESTMENT CHARGE (Cont'd.)For MEEIA Cycle 2 PlanTD DETERMINATION (Cont'd.)

c. For Measures under the -Business Custom Incentive Program, Business New Construction Incentive Program, and Business Retro-Commissioning Program, the ME will be the annual value attributable to the installations reported monthly by the program implementer.

CM = Current calendar month.

CAS = Cumulative sum of MAS of all prior calendar months for each End Use Category for the MEEIA 2016-18 Plan.

PM = Prior calendar month.

RB = Rebasing Adjustment. The RB shall equal the CAS applicable as of the date used for MEEIA normalization when base rates are adjusted in any general electric rate case or otherwise resulting in new retail electric rates becoming effective during the accrual and collection of TD pursuant to this MEEIA 2016-18 Plan. In the event base rates are adjusted by more than one general electric rate case or otherwise resulting in new rates becoming effective during the accrual and collection of TD pursuant to this MEEIA 2016-18 Plan occurs, the RB adjustment shall include each and every prior RB adjustment calculation.

LS = Load Shape. The LS is the monthly load shape percent (%) for each End-Use Category (attached as Appendix E to the Stipulation).

\*NMR = Net Margin Revenue. NMR values for each applicable Service Classification are as follows:

Month	Service Classifications				
	1 (M) Res \$/kWh	2 (M) SGS \$/kWh	3 (M) LGS \$/kWh	4 (M) SPS \$/kWh	11 (M) LPS \$/kWh
January	0.047640	0.051510	0.039208	0.039679	0.032205
February	0.048358	0.051361	0.040171	0.040327	0.034811
March	0.050250	0.053864	0.041181	0.040935	0.033627
April	0.052130	0.056283	0.041883	0.040619	0.033490
May	0.054358	0.058034	0.042811	0.042414	0.034512
June	0.109291	0.095491	0.082589	0.082629	0.059935
July	0.109291	0.095491	0.081263	0.081994	0.062387
August	0.109291	0.095491	0.081614	0.082803	0.061130
September	0.109291	0.095491	0.081939	0.082068	0.061869
October	0.051354	0.056247	0.041868	0.041285	0.035011
November	0.054399	0.057698	0.042226	0.041439	0.034514
December	0.050066	0.054705	0.040610	0.040618	0.033040

\* Indicates Change.

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Missouri Public  
Service Commission  
ER-2016-0179; YE-2017-0173

Issued pursuant to the Order of the Mo.P.S.C. in Case No. ER-2016-0179.

DATE OF ISSUE March 8, 2017

DATE EFFECTIVE April 1, 2017

ISSUED BY Michael Moehn  
NAME OF OFFICER

President  
TITLE

St. Louis, Missouri  
ADDRESS

**ADDENDUM A**

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## UNION ELECTRIC COMPANY

## ELECTRIC SERVICE

MO.P.S.C. SCHEDULE NO. 61st Revised SHEET NO. 91.8CANCELLING MO.P.S.C. SCHEDULE NO. 6Original SHEET NO. 91.8APPLYING TO MISSOURI SERVICE AREARIDER EEICENERGY EFFICIENCY INVESTMENT CHARGE (Cont'd.)For MEEIA Cycle 2 PlanTD DETERMINATION (Cont'd.)

The Company shall file an update to NMR rates by month by Service Classification contemporaneous with filing any compliance tariff sheets in any general electric rate case reflecting the rates set in that case, and the billing determinants used in setting rates in such case. Updates to the NMR values shall be calculated following the same process described on pages 32-35 of the Company's filed December 22, 2014 2016-18 Energy Efficiency Plan.

NTGF = Net To Gross Factor. The initial NTGF is 0.85. Upon completion of the three year cycle, the final portfolio Net To Gross factor applied for the Earnings Opportunity shall be used as the NTGF prospectively starting with the month in which the Earnings Opportunity is determined.

Annual kWh savings per measure will be updated prospectively in the Company's TRM no later than twenty-four (24) months after the commencement of the plan based on EM&V ex-post gross adjustments determined for Year 1.

\* The Company shall file a general electric rate case at some point before February 28, 2021 to make a Rebasing Adjustment to rebase the TD arising from the MEEIA 2016-18 plan in its entirety, except as described below concerning Long-Lead Projects, and if Company fails to do so, the accrual and collection of the TD terminates beginning March 1, 2021. The filing of a general electric rate case utilizing an update or true-up period that ends between thirty (30) months and sixty (60) months after the effective date of the electric tariff sheets implementing MEEIA 2016-18 satisfies this requirement. For the rate case used to rebase the TD arising from the MEEIA 2016-18 plan in its entirety, the MEEIA normalization shall reach forward as far as the effective date of new rates in that rate case.

\*\* Projects designated as Long-Lead Projects shall continue to incur TD until a rate case rebases all such projects or until February 28, 2023, whichever occurs first.

\*Indicates Change. \*\*Indicates Addition.

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Missouri Public  
Service Commission  
EO-2015-0055; YE-2017-0275

DATE OF ISSUE June 29, 2017DATE EFFECTIVE July 29, 2017ISSUED BY Michael Moehn  
NAME OF OFFICERPresident  
TITLESt. Louis, Missouri  
ADDRESS**ADDENDUM A****Page 9 of 12**



MO.P.S.C. SCHEDULE NO. 61st RevisedSHEET NO. 91.9CANCELLING MO.P.S.C. SCHEDULE NO. 6OriginalSHEET NO. 91.9

APPLYING TO

MISSOURI SERVICE AREARIDER EEICENERGY EFFICIENCY INVESTMENT CHARGE (Cont'd.)For MEEIA Cycle 2 Plan\*EO DETERMINATION

EO shall be calculated using the matrix below. EO will not go below zero dollars (\$0). The EO at 100% is \$27,801,935. Before adjustments reflecting TD EM&V including NTG, the EO cannot go above \$39,212,516. The EO including adjustments reflecting TD EM&V including NTG cannot go above \$54,212,516. The cap is based on current program levels. If Commission approved new programs are added in years 2017 and 2018, the Company may seek Commission approval to have the targets and the cap of the EO matrix scale adjusted. EO shall be adjusted for the difference, with carrying cost at the Company's monthly Allowance for Funds Used During Construction (AFUDC) rate compounded semi-annually, between TD billed and what TD billed would have been if:

- (1) The ME used in the calculation were the normalized savings for each measure at customer meter per measure determined through EM&V ex-post gross analysis for each program year, and
- (2) The NTGF used in the calculation was the net-to-gross values determined through EM&V, except that if the NTGF value determined through EM&V is less than 0.80, the recalculation shall use 0.80 and if the NTG value determined through EM&V is greater than 1.0, the recalculation shall use 1.0.

\*EARNINGS OPPORTUNITY MATRIX

Performance Metric	Ameren Missouri						
	Payout Rate	Payout Unit	% of Target EO	100% payout	Target @ 100%	Cap/100% Multiplier	Cap
Home Energy Report criteria will be effective, prudent spend of budget	n/a		7.19%	\$ 2,000,000			\$ 2,000,000
EE MWh (Excl. Home Energy Report, TStat & LIMF): criteria will be the cumulative of the 1st yr incremental MWh during the 3 year plan	\$ 7.50	\$/MWh	15.11%	\$ 4,201,935	560,258	130%	\$ 5,462,516
EE Coincident MW (Excl. Home Energy Report, TStat & LIMF): criteria will be cumulative of the 2023 MW reduction, coincident with system peak	\$ 141,428.57	\$/MW	71.22%	\$ 19,800,000	140	150%	\$ 29,700,000
Number of Learning Thermostats Installed	\$ 30.62	\$/Unit	1.80%	\$ 500,000	16,331	150%	\$ 750,000
Low Income Multi-Family (LIMF) and Low Income Assistance Program: criteria will be effective, prudent spend of budget	n/a		4.68%	\$ 1,300,000			\$ 1,300,000
				\$ 27,801,935			\$ 39,212,516
Total Cap Including TD Adjustments							\$ 54,212,516

\*Indicates Change

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Missouri Public  
Service Commission  
EO-2015-0055; YE-2017-0202

DATE OF ISSUE April 18, 2017DATE EFFECTIVE May 18, 2017ISSUED BY Michael Moehn  
NAME OF OFFICERPresident  
TITLESt. Louis, Missouri  
ADDRESS**ADDENDUM A****Page 10 of 12**

## UNION ELECTRIC COMPANY

## ELECTRIC SERVICE

MO.P.S.C. SCHEDULE NO. 6

Original

SHEET NO. 91.10

CANCELLING MO.P.S.C. SCHEDULE NO. \_\_\_\_\_

SHEET NO. \_\_\_\_\_

APPLYING TO MISSOURI SERVICE AREA

RIDER EEIC  
ENERGY EFFICIENCY INVESTMENT CHARGE (Cont'd.)  
For MEEIA Cycle 2 Plan

FILING

The Company shall make a Rider EEIC filing each calendar year to be effective for the subsequent calendar year's February billing month. The Company is allowed or may be ordered by the Commission to make one other Rider EEIC filing in each calendar year with such subsequent filing to be effective beginning with either the June or October billing month. Rider EEIC filings shall be made at least sixty (60) days prior to their effective dates.

PRUDENCE REVIEWS

A prudence review shall be conducted no less frequently than at twenty-four (24) month intervals in accordance with 4 CSR 240-20.093(10). Any costs which are determined by the Commission to have been imprudently incurred or incurred in violation of the terms of this Rider EEIC shall be addressed through an adjustment in the next EEIR determination and reflected in factor OA herein.

FILED  
Missouri Public  
Service Commission  
EO-2015-0055; YE-2016-0198

DATE OF ISSUE	<u>February 5, 2016</u>	DATE EFFECTIVE	<u>March 6, 2016</u>
ISSUED BY	<u>Michael Moehn</u>	<u>President</u>	<u>St. Louis, Missouri</u>
	NAME OF OFFICER	TITLE	ADDRESS

**ADDENDUM A****Page 11 of 12**

## UNION ELECTRIC COMPANY

## ELECTRIC SERVICE

MO.P.S.C. SCHEDULE NO. 6

3rd Revised

SHEET NO. 91.11

CANCELLING MO.P.S.C. SCHEDULE NO. 6

2nd Revised

SHEET NO. 91.11

APPLYING TO MISSOURI SERVICE AREA

RIDER EEICENERGY EFFICIENCY INVESTMENT CHARGE (Cont'd.)

(Applicable To Determination of EEIR Beginning February, 2018 through the Billing Month of January 2019)

MEEIA 2013-15 EEIR Components (Applicable to MEEIA Cycle 1 Plan)

Service Class	NPC/PE (\$/kWh)	NTD/PE (\$/kWh)	NPI/PE (\$/kWh)	NOA/PE (\$/kWh)
1(M)-Residential Service	\$0.000000	\$0.000000	\$0.000666	\$0.000000
2(M)-Small General Service	\$0.000000	\$0.000000	\$0.000253	\$0.000000
3(M)-Large General Service	\$0.000000	\$0.000000	\$0.000455	\$0.000000
4(M)-Small Primary Service	\$0.000000	\$0.000000	\$0.000453	\$0.000000
11(M)-Large Primary Service	\$0.000000	\$0.000000	\$0.000644	\$0.000000
12(M)-Large Transmission Service	\$0.000000	\$0.000000	\$0.000000	\$0.000000

MEEIA 2016-18 EEIR Components (Applicable to MEEIA Cycle 2 Plan)

Service Class	NPC/PE (\$/kWh)	NTD/PE (\$/kWh)	NEO/PE (\$/kWh)	NOA/PE (\$/kWh)
1(M)-Residential Service	\$0.002029	\$0.001064	\$0.000000	(\$0.000074)
2(M)-Small General Service	\$0.003122	\$0.001126	\$0.000000	(\$0.000002)
3(M)-Large General Service	\$0.003136	\$0.000897	\$0.000000	(\$0.000002)
4(M)-Small Primary Service	\$0.003166	\$0.001127	\$0.000000	(\$0.000002)
11(M)-Large Primary Service	\$0.003136	\$0.000140	\$0.000000	(\$0.000002)
12(M)-Large Transmission Service	\$0.000000	\$0.000000	\$0.000000	\$0.000000

Summary EEIR Components and Total EEIR

Service Class	NPC (\$/kWh)	NTD (\$/kWh)	(NEO+NPI) (\$/kWh)	NOA (\$/kWh)	Total EEIR (\$/kWh)
1(M)-Residential Service	\$0.002029	\$0.001064	\$0.000666	(\$0.000074)	\$0.003685
2(M)-Small General Service	\$0.003122	\$0.001126	\$0.000253	(\$0.000002)	\$0.004499
3(M)-Large General Service	\$0.003136	\$0.000897	\$0.000455	(\$0.000002)	\$0.004486
4(M)-Small Primary Service	\$0.003166	\$0.001127	\$0.000453	(\$0.000002)	\$0.004744
11(M)-Large Primary Service	\$0.003136	\$0.000140	\$0.000644	(\$0.000002)	\$0.003918
12(M)-Large Transmission Service	\$0.000000	\$0.000000	\$0.000000	\$0.000000	\$0.000000

DATE OF ISSUE November 21, 2017

DATE EFFECTIVE January 25, 2018

ISSUED BY Michael Moehn  
NAME OF OFFICERPresident  
TITLESt. Louis, Missouri  
ADDRESSFILED  
Missouri Public  
Service Commission  
ER-2018-0144, YE-2018-0063

ADDENDUM A

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**ADDENDUM B**

**HAS BEEN DEEMED**

**CONFIDENTIAL**

**IN ITS ENTIRETY**

**Description of General Ledger and Subsidiary Ledger**

**General Ledger** is the source of the accounting information of an organization in which the summaries of all financial transactions (collected from subsidiary ledgers) during an accounting period are recorded. Also referenced to as the book of final entry, it provides the data from individual accounts needed for preparing financial statements for the organization.

**Subsidiary Ledger** is used because the general ledger holds all the historical journal entries, some key general ledger accounts become so complex that a separate ledger is needed to keep track of its transactions. For example, a company's general ledger might include only one accounts receivable account yet the company may have thousands of customers. Therefore, it is necessary to create a subsidiary ledger to hold each customer account and include the grand total of that ledger in the general ledger.

FERC Account 908 - Customer Assistance Expenses									
Include the cost of labor, materials used and expenses incurred in providing instructions or assistance to customers, the object of which is to encourage safe, efficient and economical use of the utility's service.									
Minor		Business Division		FMC Segment Hierarchy		Activity		Resource Type (RT)	
01M	MEEIA Program Costs - Residential	21	MO Or Corp Distribution Or St Louis	020	Missouri Energy Services	MEPC	MO Energy Eff Inv Act - Pgrm Costs	82	Non-Taxable Meals
01M	MEEIA Program Costs - Residential	21	MO Or Corp Distribution Or St Louis	020	Missouri Energy Services	MEPC	MO Energy Eff Inv Act - Pgrm Costs	CI	Customer Incentives and Rebates
01M	MEEIA Program Costs - Residential	21	MO Or Corp Distribution Or St Louis	020	Missouri Energy Services	MEPC	MO Energy Eff Inv Act - Pgrm Costs	EX	Professional Services Other
EED	Electric Energy Efficiency and Demand	20	Corporate - Missouri	020	Missouri Energy Services	EECY	Electric Energy Efficiency and Demand	3L	AMS Pen, Ben, OPEB, Inj and Dmgs, SS Ldg-Non Cap
EED	Electric Energy Efficiency and Demand	20	Corporate - Missouri	020	Missouri Energy Services	MEPC	MO Energy Eff Inv Act - Pgrm Costs	80	Individual Expenses
EED	Electric Energy Efficiency and Demand	20	Corporate - Missouri	020	Missouri Energy Services	MEPC	MO Energy Eff Inv Act - Pgrm Costs	82	Non-Taxable Meals
EED	Electric Energy Efficiency and Demand	20	Corporate - Missouri	020	Missouri Energy Services	MEPC	MO Energy Eff Inv Act - Pgrm Costs	BQ	Purchases Software
EED	Electric Energy Efficiency and Demand	20	Corporate - Missouri	020	Missouri Energy Services	MEPC	MO Energy Eff Inv Act - Pgrm Costs	BX	Purchases Other
EED	Electric Energy Efficiency and Demand	20	Corporate - Missouri	020	Missouri Energy Services	MEPC	MO Energy Eff Inv Act - Pgrm Costs	LE	Incentive Comp Management
EED	Electric Energy Efficiency and Demand	20	Corporate - Missouri	020	Missouri Energy Services	MEPC	MO Energy Eff Inv Act - Pgrm Costs	LM	Labor Management
MPC	Electric Energy Efficiency and Demand	21	MO Or Corp Distribution Or St Louis	020	Missouri Energy Services	MEPC	MO Energy Eff Inv Act - Pgrm Costs	EI	Accounting Entries Other
EED	Electric Energy Efficiency and Demand	21	MO Or Corp Distribution Or St Louis	020	Missouri Energy Services	M2PC	MEEIA 2 - Program Costs	EC	Control Services
EED	Electric Energy Efficiency and Demand	21	MO Or Corp Distribution Or St Louis	020	Missouri Energy Services	M2PC	MEEIA 2 - Program Costs	ES	Software License Agreements
EED	Electric Energy Efficiency and Demand	20	Corporate - Missouri	020	Missouri Energy Services	M2PC	MEEIA 2 - Program Costs	34	Purchasing Rate AP Loading
EED	Electric Energy Efficiency and Demand	20	Corporate - Missouri	020	Missouri Energy Services	M2PC	MEEIA 2 - Program Costs	40	Materials Stock
EED	Electric Energy Efficiency and Demand	20	Corporate - Missouri	020	Missouri Energy Services	M2PC	MEEIA 2 - Program Costs	80	Individual Expenses

FERC Account 908 - Customer Assistance Expenses									
Include the cost of labor, materials used and expenses incurred in providing instructions or assistance to customers, the object of which is to encourage safe, efficient and economical use of the utility's service.									
Minor		Business Division		FMC Segment Hierarchy		Activity		Resource Type (RT)	
EED	Electric Energy Efficiency and Demand	20	Corporate - Missouri	020	Missouri Energy Services	M2PC	MEEIA 2 - Program Costs	82	Non-Taxable Meals
EED	Electric Energy Efficiency and Demand	20	Corporate - Missouri	020	Missouri Energy Services	M2PC	MEEIA 2 - Program Costs	BQ	Purchases Software
EED	Electric Energy Efficiency and Demand	20	Corporate - Missouri	020	Missouri Energy Services	M2PC	MEEIA 2 - Program Costs	BX	Purchases Other
EED	Electric Energy Efficiency and Demand	20	Corporate - Missouri	020	Missouri Energy Services	M2PC	MEEIA 2 - Program Costs	CI	Customer Incentives and Rebates
EED	Electric Energy Efficiency and Demand	21	Corporate - Missouri	020	Missouri Energy Services	M2PC	MEEIA 2 - Program Costs	EC	Control Services
EED	Electric Energy Efficiency and Demand	21	Corporate - Missouri	020	Missouri Energy Services	M2PC	MEEIA 2 - Program Costs	ES	Software License Agreements
EED	Electric Energy Efficiency and Demand	21	MO Or Corp Distribution Or St Louis	020	Missouri Energy Services	M2PC	MEEIA 2 - Program Costs	EX	Professional Services Other
EED	Electric Energy Efficiency and Demand	21	MO Or Corp Distribution Or St Louis	020	Missouri Energy Services	M2PC	MEEIA 2 - Program Costs	C1	Contributions Charitable Trusts
EED	Electric Energy Efficiency and Demand	21	MO Or Corp Distribution Or St Louis	020	Missouri Energy Services	M2PC	MEEIA 2 - Program Costs	VF	Vehicles Fuel
EED	Electric Energy Efficiency and Demand	21	MO Or Corp Distribution Or St Louis	020	Missouri Energy Services	M2PC	MEEIA 2 - Program Costs	VX	Vehicles Other
EED	Electric Energy Efficiency and Demand	21	MO Or Corp Distribution Or St Louis	020	Missouri Energy Services	M2PC	MEEIA 2 - Program Costs	MD	Dues and Membership Other
EED	Electric Energy Efficiency and Demand	21	MO Or Corp Distribution Or St Louis	020	Missouri Energy Services	M2PC	MEEIA 2 - Program Costs	MT	Membership Trade
EED	Electric Energy Efficiency and Demand	21	Corporate - Missouri	022	ALT - AMS - BCS	M2PC	MEEIA 2 - Program Costs	CI	Customer Incentives and Rebates
EED	Electric Energy Efficiency and Demand	21	Corporate - Missouri	022	ALT - AMS - BCS	MEPC	MO Energy Eff Inv Act - Pgrm Costs	CI	Customer Incentives and Rebates

This addendum was provided as an example of transactions reviewed by Staff but may not be all inclusive due to the voluminous number of transactions in this account for the review period of March 1, 2016 through October 31, 2017.

**MEEIA 2016-18 1<sup>st</sup> Prudence Review Workshop****Date** January 22, 2018**Time** 9:30-4:00**Team Members** Bill Davis, Rich Wright, Tom Thompson, Shelly Hendry, Jeff Friedrich, Kenny Blair, Marco Tipton, Jeff Berg, Judy Gillis, Raysene Logan, Casie Geuin, Laureen Welikson**Other Attendees** Dana Eaves, Ron Irving, Brooke Richter, Cathy Lucia, John Rogers**Location** W302**Dial-in No.**

TIME	AGENDA TOPIC	PRESENTER
9:30 – 9:45	1. Welcome, Introductions, and Review of Rule	Tom Thompson
9:45 – 11:15	2. Implementer to Ameren: Measure, Savings, and Cost Process and SOX audit and Accruals	Jeff Berg/ Marco Tipton/Tom Thompson
11:15 – 12:00	3. Ameren TD calculation and review and Day 5 meeting	Jeff Friedrich
12:00 – 1:00	4. Lunch	
1:00 – 1:30	5. EEIC Rider	Raysene Logan/Tom Thompson
1:30 – 2:30	6. EM&V and TRM tracking	Laureen Welikson/Jeff Berg
2:30-3:00	7. Vision Software	Tom Thompson
3:00-3:30	8. 11 step process	Kenny Blair
3:30 – 4:00	9. Wrap up and next steps	Tom Thompson

