

MISSOURI PUBLIC SERVICE COMMISSION

STAFF REPORT

**SECOND PRUDENCE REVIEW FOR CYCLE 3 OF COSTS
RELATED TO THE DEMAND-SIDE PROGRAMS
INVESTMENT MECHANISM AND CYCLE 2 LONG-LEAD
PROJECTS**

FOR THE ELECTRIC OPERATIONS

OF

UNION ELECTRIC COMPANY,

d/b/a Ameren Missouri

FILE NO. EO-2023-0180

October 1, 2020 through September 30, 2022

Jefferson City, Missouri

April 28, 2023

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2 **RELATED TO THE DEMAND-SIDE PROGRAMS**
3 **INVESTMENT MECHANISM AND CYCLE 2 LONG-LEAD PROJECTS**
4 **FOR THE ELECTRIC OPERATIONS**
5 **OF**
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7 **October 1, 2020 through September 30, 2022**
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9 **I. EXECUTIVE SUMMARY**

10 On June 4, 2018, Union Electric Company, d/b/a Ameren Missouri (“Ameren Missouri”
11 or “Company”) filed, in Case No. EO-2018-0211, its application under the Missouri Energy
12 Efficiency Investment Act¹ (“MEEIA”) and the Missouri Public Service Commission’s
13 (“Commission”) MEEIA rules² for approval of its *2019 – 2024 Energy Efficiency Plan*. On
14 October 25, 2018, Ameren Missouri filed a *Revised MEEIA 2019-2021 Energy Efficiency Plan*
15 (“MEEIA 2019-2021 Plan”) or (“Cycle 3”). Concurrently, on October 25, 2018, Ameren
16 Missouri, Staff of the Missouri Public Service Commission (“Staff”), the Office of the
17 Public Counsel (“OPC”), Missouri Division of Energy (“DE”), Consumers Council of
18 Missouri, Renew Missouri Advocates d/b/a Renew Missouri, National Housing Trust (“NHT”),
19 and Tower Grove Neighborhood Community Development Corporation (“Tower Grove”),
20 (collectively referred to as “Signatories”), submitted a *Stipulation and Agreement*
21 (*“2019 Stipulation”*) for Commission approval of Ameren Missouri’s MEEIA 2019-2021
22 Plan.³

23 Through its December 5, 2018 *Order Approving Stipulation and Agreement and*
24 *Granting Waivers* in Case No. EO-2018-0211, the Commission authorized Ameren Missouri
25 to implement, beginning March 1, 2019, the *2019 – 2021 Energy Efficiency Plan* including:
26 1) nineteen (19) energy efficiency programs (“MEEIA programs”),⁴ and 2) a demand-side

¹ Section 393.1075, RSMo, Supp. 2017.

² 20 CSR 4240-20.093 and 20 CSR 4240-20.094.

³ As part of the 2019 Stipulation, the Signatories agreed that Ameren Missouri’s MEEIA low-income programs would be in effect from 2019 – 2024.

⁴ This includes a residential demand response program and a business demand response program.

1 programs investment mechanism (“DSIM”). The MEEIA 2019-2021 Plan⁵, which was
2 approved on December 5, 2018, included a total program cost budget of \$227,310,000⁶ for all
3 19 MEEIA programs, a throughput disincentive (“TD”), an Earnings Opportunity (“EO”)⁷ of
4 \$30 million at 100% performance, a technical reference manual (“TRM”) and a plan to perform
5 evaluation measurement and verification (“EM&V”) of program cost effectiveness.

6 Through its August 5, 2020 *Order Approving Stipulation and Agreements* in Case
7 No. EO-2018-0211, the Commission authorized Ameren Missouri to extend the existing
8 MEEIA 2019-2021 Plan through Plan Year 2022 (“PY22”) with certain program modifications
9 in PY22 and the addition of a new Pay As You Save® (“PAYS®”) program beginning in PY21
10 to be in effect through PY22. The Signatories also agreed on the total budget cap for PY22 to
11 be \$70 million.

12 Through its October 27, 2021 *Order Approving Stipulation and Agreement Regarding*
13 *MEEIA Plan Year 2023, Approving Tariff Sheet, and Granting Variances* in Case No.
14 EO-2018-0211, the Commission authorized Ameren Missouri to extend the existing MEEIA
15 2019-2021 Plan through Plan Year 2023 (“PY23”) with certain modifications to certain
16 programs to be in effect through PY23. The Signatories also agreed on the total budget cap for
17 PY23 to be \$74.65 million.

18 On May 25, 2022, the Commission authorized through its *Order Approving Stipulation*
19 *and Agreement Regarding Standard and Custom Incentive Programs*, an additional
20 \$6.7 million budget for Standard and Custom incentive programs. On July 27, 2022, the
21 Commission authorized through its *Order Approving Stipulation and Agreement Regarding*
22 *Funding for Residential Heating and Cooling Program*, an additional \$2.5 million budget for
23 the residential HVAC program.

24 Prior to the MEEIA 2019-2021 Plan, on July 20, 2017 in Case No. EO-2015-0055, the
25 Commission issued an *Order Approving Stipulation and Agreement*. This order approved an
26 agreement among the signatories for a transition plan, which allowed Ameren Missouri to

⁵ Subsequent to December 5, 2018, the Plan was modified by Commission orders in Case No. EO-2018-0211 on the following effective dates: January 8, 2019; February 27, 2019; December 11, 2019; June 24, 2020; July 8, 2020; August 5, 2020; November 12, 2020; December 1, 2020, June 16, 2021, September 23, 2021, September 29, 2021, October 27, 2021, December 6, 2021, March 30, 2022, May 25, 2022, July 27, 2022, August 3, 2022, and October 12, 2022.

⁶ This total program cost budget of \$227,310,000 does not include the increased budget of \$70 million and \$74.65 million that were approved to be revised as explained further in lines 5 through 22.

⁷ Appendix N from the *Stipulation and Agreement* filed on October 25, 2018.

1 accommodate the needs of customers who may have long-lead projects requiring up to two
2 years beyond the end of MEEIA Cycle 2 for the issuance of a final rebate check as a result of
3 completed long-lead projects. The total amount of all program costs for all long-lead projects
4 was capped at \$4 million. The transition plan also provided additional time beyond the two-year
5 extension to complete impact measurement and verification and DSIM treatment for the
6 long-lead projects.

7 The program costs and TD, including interest associated with both, along with the EO,
8 are the costs subject to this prudence review, which is Staff's sixth prudence review⁸ of Ameren
9 Missouri's Rider Energy Efficiency Investment Charge ("EEIC") costs.⁹ Ameren Missouri's
10 MEEIA Cycle 2 Rider EEIC is included as Attachment A and Cycle 3 Rider EEIC is included
11 as Attachment B to this Staff prudence review report ("Report"). The most recent periodic rate
12 adjustment for the Cycle 3 Rider EEIC during this Review Period is in File No. ER-2022-0146.

13 Commission Rule 20 CSR 4240-20.093(10) requires that Ameren Missouri file
14 quarterly, a Surveillance Monitoring Report ("SMR"). Confidential Attachment C to this
15 Report is Page 6a (Cycle 2) of Ameren Missouri's confidential SMR including status of the
16 MEEIA programs and EEIC costs for the quarter ended, and cumulative total ended
17 September 30, 2022. Confidential Attachment D to this Report is Page 6b (Cycle 3) of Ameren
18 Missouri's confidential SMR including status of the MEEIA programs and EEIC costs for the
19 quarter ended, and cumulative total ended September 30, 2022. Table 1A and 1B¹⁰ below
20 identify the line items and Review Period amounts from Attachment C and Attachment D,
21 which are the subject of Staff's prudence review.¹¹

⁸ Prior Staff prudence reviews of Ameren Missouri's Rider EEIC costs are in File Nos. EO-2015-0029, EO-2017-0023, EO-2018-0155, EO-2019-0376, and EO-2021-0157. This report, EO-2023-0180, is the Second Prudence Review of Cycle 3 of Costs Related to the Demand-Side Programs Investment Mechanism, in addition to reviewing the Cycle 2 Long-Lead Projects.

⁹ On January 3, 2014, the Commission approved Ameren Missouri's Cycle 1 Rider EEIC in File No. EO-2014-0075, thereby, changing the Company's Cycle 1 DSIM from a tracker to a rider which provides for periodic rate adjustments between general rate proceedings. (20 CSR 4240-20.093(2)(A)9.)

¹⁰ The Company explained that the quarterly SMRs are based on a snapshot in time when the reports were created and are fluid documents due to savings and program costs adjustments that can be made to previous months. When looking at the SMRs, the cumulative totals and 12 month ended totals would reflect the most up to date revisions if any adjustments were made after the quarterly SMRs were filed.

¹¹ Staff's prudence review is for the period of October 1, 2020 through September 30, 2022.

1

Table 1A

MEEIA 2 Cumulative Totals for October 1, 2020 through September 30, 2022		
Category	Descriptor	Period Total
Total Program Costs (\$)	Billed	\$ 1,711,112
Total Program Costs (\$)	Actual	\$ (13,513)
Total Program Costs (\$)	Variance	\$ 1,724,625
Total Program Costs (\$)	Interest	\$ (39)
Gross Energy Savings (kWh)	Target	-
Gross Energy Savings (kWh)	Deemed Actual	3,429,447
Gross Energy Savings (kWh)	Variance	(3,429,447)
Gross Demand Savings (kW)	Target	-
Gross Demand Savings (kW)	Deemed Actual	910
Gross Demand Savings (kW)	Variance	(910)
Throughput Disincentive Costs (\$)	Billed	\$ (4,067,988)
Throughput Disincentive Costs (\$)	Actual	\$ 564,441
Throughput Disincentive Costs (\$)	Variance	\$ (4,632,430)
Throughput Disincentive Costs (\$)	Interest	\$ 13,460

2

3

Table 1B

MEEIA 3 Cumulative Totals for October 1, 2020 through September 30, 2022		
Category	Descriptor	Period Total
Total Program Costs (\$)	Billed	\$ 158,132,632
Total Program Costs (\$)	Actual	\$ 146,945,593
Total Program Costs (\$)	Variance	\$ 11,187,039
Total Program Costs (\$)	Interest	\$ 194,252
Gross Energy Savings (kWh)	Target	583,875,454
Gross Energy Savings (kWh)	Deemed Actual	601,314,356
Gross Energy Savings (kWh)	Variance	(17,438,902)
Gross Demand Savings (kW)	Target	257,520
Gross Demand Savings (kW)	Deemed Actual	203,954
Gross Demand Savings (kW)	Variance	53,566
Throughput Disincentive Costs (\$)	Billed	\$ 47,524,271
Throughput Disincentive Costs (\$)	Actual	\$ 50,498,261
Throughput Disincentive Costs (\$)	Variance	\$ (2,973,990)
Throughput Disincentive Costs (\$)	Interest	\$ (32,604)

4

1 Staff reviewed and analyzed a variety of items while examining whether Ameren Missouri
2 prudently incurred program costs, TD, EO, and interest costs associated with the MEEIA
3 2016-2018 Plan and the MEEIA 2019-2021 Plan for the Review Period. Based on its review,
4 Staff identified no incidence or evidence of imprudence by Ameren Missouri for the period of
5 October 1, 2020 through September 30, 2022.

6 *Staff Expert: Brooke Mastrogiannis*

7 **II. INTRODUCTION**

8 **A. Prudence Standard**

9 Commission Rule 20 CSR 4240-20.093(11) requires that the Commission’s Staff
10 conduct prudence reviews of an electric utility’s costs for its EEIC no less frequently than every
11 twenty-four (24) months. This Report documents Staff’s second review of the prudence of
12 Ameren Missouri’s MEEIA Cycle 3 program costs, Cycle 2 long-lead project costs, Cycle 2
13 non-long lead program costs, Company TD, Company EO, and interest for the period
14 October 1, 2020 through September 30, 2022 (“Review Period”).

15 In evaluating prudence, Staff reviews whether a reasonable person making the same
16 decision would find both the information the decision-maker relied on and the process the
17 decision-maker employed to be reasonable based on the circumstances at the time the decision
18 was made, *i.e.*, without the benefit of hindsight. If either the information relied upon or the
19 decision-making process employed was imprudent, then Staff examines whether the imprudent
20 decision caused any harm to ratepayers. Only if an imprudent decision resulted in harm to
21 ratepayers, will Staff recommend a disallowance. However, if an imprudent decision did not
22 result in harm to Ameren Missouri’s customers, then Staff may further evaluate the
23 decision-making process, and may recommend changes to the company’s business practice
24 going forward.

25 **B. Staff Review and Reconciliation of FERC Accounts**

26 As a public utility, Ameren Missouri is required to maintain its books and records
27 in accordance with the Federal Energy Regulatory Commission’s (“FERC”) Uniform
28 System of Accounts (“USoA”). For the purpose of this MEEIA prudence review, Staff has
29 focused its review on FERC Account 908 - Customer Assistance Expenses. Ameren Missouri
30 provides its monthly General Ledger to the Commission as ongoing surveillance data, which is

1 a summary of all accounting transactions on a monthly basis. For the MEEIA Cycle 2 expenses,
2 Staff filtered the General Ledger based on FERC Major Account 908 - Customer Assistance,
3 Minor EED - Electric Energy Efficiency and Demand, and Minor 228 – Industry Association
4 Memberships and Related Expense. Both accounts have an Activity Code of M2PC¹².
5 The filtering process of the General Ledger provided, by month, the total amount of transactions
6 by Activity Code and Resource Type that occurred during the month in FERC Account 908.
7 For MEEIA Cycle 3 expenses, Staff filtered the General Ledger based on FERC Major Account
8 908 – Customer Assistance, Minor EED – Electric Energy Efficiency and Demand. The MEEIA
9 Cycle 3 expenses all have an Activity Code of M3PC¹³.

10 Staff reconciled FERC Account 908 program costs provided by Ameren Missouri in
11 response to Staff’s Data Request No. 0003 to the SMRs page 6a and 6b¹⁴ and the most recent
12 Rider EEIC filing, Case No. ER-2023-0178¹⁵. Subsequently, Staff used the detail in Data
13 Request No. 0003 and sorted it by month, project number, activity code, and resource type then
14 reconciled these individual line item transactions to follow-up receipts and invoices requested
15 by Staff. Staff analyzed these transactions and reconciled the monthly totals by project number
16 and resource type.

17 *Staff Expert: Brooke Mastrogiannis*

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

19 **A. Overview of Program Costs**

20 **1. Description**

21 During this Review Period, there were breakdowns of expenses by Cycle 2 Long-Lead
22 projects, Cycle 2 Non-Long Lead projects along with Cycle 3 expenses. Within those
23 categories, Ameren Missouri’s program costs include incentive payments and administrative
24 costs. Administrative costs include the following: program administration, general, education,
25 marketing and communication, market potential study, data tracking, and EM&V costs.

¹² M2PC acronym for Missouri Energy Efficiency Energy Act Program Costs – Cycle 2.

¹³ M3PC acronym for Missouri Energy Efficiency Energy Act Program Costs – Cycle 3.

¹⁴ Attached as Confidential Attachment C and D.

¹⁵ Case No. ER-2023-0178 was filed and approved by the Commission after this Review Period of October 1, 2020 through September 30, 2022.

1 Staff reviewed all actual program costs, provided in response to Data Requests No. 0002
2 and No. 0003, which Ameren Missouri is seeking to recover through its “Energy Efficiency
3 Investment Charge” to insure only prudently incurred costs are recovered through the Rider
4 EEIC. Staff reviewed and analyzed for prudence Ameren Missouri’s adherence to contractual
5 obligations, resolution of problems, adequacy of controls, and compliance with approved tariff
6 sheets. Upon Staff’s request, Ameren Missouri did provide documentation to support program
7 costs incurred during the Review Period. Staff categorized these costs by program and
8 segregated them between incentive payments and program administrative costs. Staff also
9 reconciled program costs to the General Ledger FERC Accounts 908 by month, project number,
10 and resource type. (See the Staff Review and Reconciliation of FERC Accounts section for
11 further explanation of process and review.)

12 The results of Staff categorizing program costs are in Table 2¹⁶, which is the total of
13 ALL MEEIA program costs for this Review Period and also the breakdown by categories
14 followed by Tables 2A (Cycle 2 Non-Long Lead program costs¹⁷), 2B (Cycle 2 Long-Lead
15 program costs) and 2C (Cycle 3 program costs):

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27 *continued on next page*

¹⁶ Table 2 was created from the information Ameren Missouri provided in Data Request No. 0003.

¹⁷ Ameren Missouri’s *2016-2018 Energy Efficiency Plan* officially ended on February 28, 2019. However, with any program of this nature a period of time is needed to finalize all energy efficiency projects that may have been scheduled or started but not completed by the official end of Ameren Missouri’s Plan. Staff reviewed the carry-over costs as reported by the Company in response to Staff’s Data Request No. 0003 for prudence and have summarized the results in Table 2A, 4, and 5.

1

Table 2			
Programs' Costs October 1, 2020 through September 30, 2022			
MEEIA SUMMARY ON ALL PROJECTS			
Program Description	Total for the Review Period Ending September 30, 2022	Administrative Costs	Incentives Paid
Low Income Programs			
IE Multifamily J0HVM	\$ 10,906,430	\$ 4,092,384	\$ 6,814,046
IE Single Family J0HVN	\$ 6,905,410	\$ 3,297,381	\$ 3,608,029
IE Efficiency Housing Grant J0HX9	\$ 1,872,007	\$ 311,289	\$ 1,560,718
IE Social Service for Business J0HVP	\$ 860,190	\$ 60,986	\$ 799,204
MEEIA Co-Delivery Res Kits J0Q82	\$ (478,691)	\$ (175,268)	\$ (303,423)
MEEIA Co-Delivery LI Multifamily J0Q83	\$ (249,541)	\$ (208,314)	\$ (41,227)
MEEIA Co-Delivery LI Single Family J0Q84	\$ (511,812)	\$ (234,652)	\$ (277,160)
Targeted Community Lighting J0RMT	\$ 1,025,756	\$ 628,997	\$ 396,759
Subtotal Low Income Programs	\$ 20,329,749	\$ 7,772,803	\$ 12,556,946
Residential Programs			
Res Lighting J06DF	\$ -	\$ -	\$ -
Res Energy Efficient Products J06DG	\$ -	\$ -	\$ -
Res HVAC J06DH	\$ -	\$ -	\$ -
Res Low Income J06DK	\$ -	\$ -	\$ -
Res Kits J06DL	\$ -	\$ -	\$ -
Res Smart Thermostat J0C9S	\$ -	\$ -	\$ -
Home Energy Reports J0005	\$ -	\$ -	\$ -
PY21 HVAC Extension J0VT6	\$ 2,092,602	\$ 1,132,852	\$ 959,750
Res Lighting J0HVC	\$ 10,893,540	\$ 4,432,327	\$ 6,461,213
Res Products J0HVD	\$ 5,241,951	\$ 2,380,073	\$ 2,861,878
Res HVAC J0HVF	\$ 24,027,848	\$ 6,723,548	\$ 17,304,300
Res Kits J0HVG	\$ 1,557,386	\$ 712,851	\$ 844,535
Res Home Energy Report J0HVVH	\$ 2,175,959	\$ 2,175,959	\$ -
Res Appliance Recycling J0HVJ	\$ 306,223	\$ 183,223	\$ 123,000
Res Demand Response J0HVK	\$ 8,525,019	\$ 5,707,544	\$ 2,817,475
Res MF Market Rate J0HX8	\$ 1,662,199	\$ 775,974	\$ 886,225
Res General Expenses J0HVL	\$ 248,440	\$ 248,440	\$ -
Res STEM Education J0HXC	\$ 401,250	\$ 401,250	\$ -
Res Code Compliance J0HXD	\$ 365,240	\$ 365,240	\$ -
Res Smart Home Energy Management J0HXG	\$ 165,041	\$ 164,081	\$ 960
Res Real Estate Audits J0HXH	\$ 188,609	\$ 165,309	\$ 23,300
Res Employee Education J0HXJ	\$ 73,447	\$ 73,447	\$ -
MEEIA Pay As You Save (PAYS) J0QW4	\$ 1,516,286	\$ 1,213,454	\$ 302,832
Subtotal Residential Programs	\$ 59,441,040	\$ 26,855,572	\$ 32,585,468

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Table 2 (continued)

Programs' Costs October 1, 2020 through September 30, 2022			
MEEIA SUMMARY ON ALL PROJECTS			
Program Description	Total for the Review Period Ending September 30, 2022	Administrative Costs	Incentives Paid
Business Programs			
Biz Standard J06D8	\$ (120,410)	\$ (118,022)	\$ (2,388)
Biz Custom J06D9	\$ (8,612)	\$ 5,278	\$ (13,890)
Biz Retro-Commissioning J06DB	\$ -	\$ (245,586)	\$ 245,586
Biz New Construction J06DC	\$ 101,622	\$ (33,880)	\$ 135,502
Biz Program Gen Expense J06DD	\$ -	\$ -	\$ -
Small Business Direct J0006	\$ (5,651)	\$ (5,651)	\$ -
Biz Standard J0HV3	\$ 20,955,621	\$ 5,006,993	\$ 15,948,628
Biz Custom J0HV4	\$ 13,683,409	\$ 4,552,952	\$ 9,130,457
Biz Retro-Commissioning J0HV5	\$ 3,048,212	\$ 1,390,493	\$ 1,657,719
Biz New Construction J0HV6	\$ 9,261,837	\$ 2,037,429	\$ 7,224,408
Small Business Direct Ins (SBDI) J0HV7	\$ 2,100,354	\$ 305,347	\$ 1,795,007
Biz Demand Response J0HV9	\$ 7,545,750	\$ 7,545,750	\$ -
Biz General Expense J0HVB	\$ 2,759,276	\$ 2,759,276	\$ -
Biz Building Operator Cert (BOC) J0H XK	\$ 48,243	\$ 48,243	\$ -
Subtotal Business Programs	\$ 59,369,651	\$ 23,248,622	\$ 36,121,029
Overhead			
Education J06D3	\$ -	\$ -	\$ -
Data Tracking J06D6	\$ -	\$ -	\$ -
Potential Study J0HV1	\$ 122,012	\$ 122,012	\$ -
Incremental Labor J0HWD	\$ -	\$ -	\$ -
Portfolio General Expense J0HDX	\$ 711,642	\$ 711,642	\$ -
Communications J0HV0	\$ 2,799,783	\$ 2,799,783	\$ -
EMV Income Eligible Programs J0HVQ	\$ 410,435	\$ 410,435	\$ -
EMV Res Programs J06DN	\$ -	\$ -	\$ -
EMV Res Programs J0HVR	\$ 1,570,469	\$ 1,570,469	\$ -
EMV Biz Programs J06DP	\$ 19,538	\$ 19,538	\$ -
EMV Biz Programs J0HVS	\$ 1,151,479	\$ 1,151,479	\$ -
EMV Res Demand Response J0HVV	\$ 636,264	\$ 636,264	\$ -
EMV Biz Demand Response J0HVW	\$ 324,627	\$ 324,627	\$ -
EMV Gen Expense J06DQ	\$ -	\$ -	\$ -
EMV Gen Expense J0HXB	\$ 45,390	\$ 45,390	\$ -
Subtotal Overhead Costs	\$ 7,791,639	\$ 7,791,639	\$ -
Total Program Costs	\$ 146,932,079	\$ 65,668,636	\$ 81,263,443

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Table 2A

Programs' Costs October 1, 2020 through September 30, 2022			
MEEIA CYCLE 2 NON-LONG LEAD PROJECTS			
Program Description	Total for the Review Period Ending September 30, 2022	Administrative Costs	Incentives Paid
Residential Programs			
Res Lighting J06DF	\$ -	\$ -	\$ -
Res Energy Efficient Products J06DG	\$ -	\$ -	\$ -
Res HVAC J06DH	\$ -	\$ -	\$ -
Res Low Income J06DK	\$ -	\$ -	\$ -
Res Kits J06DL	\$ -	\$ -	\$ -
Res Program Gen Expense J06DM	\$ -	\$ -	\$ -
Res Smart Thermostat J0C9S	\$ -	\$ -	\$ -
Home Energy Reports J0005	\$ -	\$ -	\$ -
Subtotal Residential Programs	\$ -	\$ -	\$ -
Business Programs			
Biz Standard J06D8	\$ (250,981)	\$ (139,431)	\$ (111,550)
Biz Custom J06D9	\$ (27,942)	\$ 3,375	\$ (31,317)
Biz Retro-Commissioning J06DB	\$ -	\$ -	\$ -
Biz New Construction J06DC	\$ 85,116	\$ 85,116	\$ -
Biz Program Gen Expense J06DD	\$ -	\$ -	\$ -
Small Business Direct J0006	\$ (5,651)	\$ (5,651)	\$ -
Subtotal Business Programs	\$ (199,458)	\$ (56,591)	\$ (142,867)
Overhead			
Education J06D3	\$ -	\$ -	\$ -
Data Tracking J06D6	\$ -	\$ -	\$ -
EMV Gen Expense J06DQ	\$ -	\$ -	\$ -
EMV Res Programs J06DN	\$ -	\$ -	\$ -
EMV Biz Programs J06DP	\$ 19,538	\$ 19,538	\$ -
Subtotal Overhead Costs	\$ 19,538	\$ 19,538	\$ -
Total Program Costs	\$ (179,920)	\$ (37,053)	\$ (142,867)

2

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Table 2B

Programs' Costs October 1, 2020 through September 30, 2022			
MEEIA CYCLE 2 LONG-LEAD PROJECTS			
Program Description	Total for the Review Period Ending September 30, 2022	Administrative Costs	Incentives Paid
Residential Programs			
Res Lighting J06DF	\$ 1	\$ 1	\$ -
Res Energy Efficient Products J06DG	\$ (259)	\$ (259)	\$ -
Res HVAC J06DH	\$ 133	\$ 133	\$ -
Res Low Income J06DK	\$ 101	\$ 101	\$ -
Res Kits J06DL	\$ 19	\$ 19	\$ -
Res Program Gen Expense J06DM	\$ -	\$ -	\$ -
Res Smart Thermostat J0C9S	\$ -	\$ -	\$ -
Home Energy Reports J0005	\$ 5	\$ 5	\$ -
Subtotal Residential Programs	\$ -	\$ -	\$ -
Business Programs			
Biz Standard J06D8	\$ 130,571	\$ 21,409	\$ 109,162
Biz Custom J06D9	\$ 19,330	\$ 1,903	\$ 17,427
Biz Retro-Commissioning J06DB	\$ -	\$ (122,793)	\$ 122,793
Biz New Construction J06DC	\$ 16,506	\$ (118,996)	\$ 135,502
Subtotal Business Programs	\$ 166,407	\$ (218,477)	\$ 384,884
Overhead			
Education J06D3	\$ -	\$ -	\$ -
Data Tracking J06D6	\$ -	\$ -	\$ -
EMV Gen Expense J06DQ	\$ -	\$ -	\$ -
EMV Res Programs J06DN	\$ -	\$ -	\$ -
EMV Biz Programs J06DP	\$ -	\$ -	\$ -
Subtotal Overhead Costs	\$ -	\$ -	\$ -
Total Program Costs	\$ 166,407	\$ (218,477)	\$ 384,884

2

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Table 2C

Programs' Costs October 1, 2020 through September 30, 2022			
MEEIA CYCLE 3 PROJECTS			
Program Description	Total for the Review Period Ending September 30, 2022	Administrative Costs	Incentives Paid
Low Income Programs			
IE Multifamily JOHVM	\$ 10,906,430	\$ 4,092,384	\$ 6,814,046
IE Single Family JOHVN	\$ 6,905,410	\$ 3,297,381	\$ 3,608,029
IE Efficiency Housing Grant JOHX9	\$ 1,872,007	\$ 311,289	\$ 1,560,718
IE Social Service for Business JOHVP	\$ 860,190	\$ 60,986	\$ 799,204
MEEIA Co-Delivery Res Kits JOQ82	\$ (478,691)	\$ (175,268)	\$ (303,423)
MEEIA Co-Delivery LI Multifamily JOQ83	\$ (249,541)	\$ (208,314)	\$ (41,227)
MEEIA Co-Delivery LI Single Family JOQ84	\$ (511,812)	\$ (234,652)	\$ (277,160)
Targeted Community Lighting JORMT	\$ 1,025,756	\$ 628,997	\$ 396,759
Subtotal Low Income Programs	\$ 20,329,749	\$ 7,772,803	\$ 12,556,946
Residential Program			
PY21 HVAC Extension JOVT6	\$ 2,092,602	\$ 1,132,852	\$ 959,750
Res Lighting JOHVC	\$ 10,893,540	\$ 4,432,327	\$ 6,461,213
Res Products JOHVD	\$ 5,241,951	\$ 2,380,073	\$ 2,861,878
Res HVAC JOHVF	\$ 24,027,848	\$ 6,723,548	\$ 17,304,300
Res Kits JOHVG	\$ 1,557,386	\$ 712,851	\$ 844,535
Res Home Energy Report JOHVH	\$ 2,175,959	\$ 2,175,959	\$ -
Res Appliance Recycling JOHVJ	\$ 306,223	\$ 183,223	\$ 123,000
Res Demand Response JOHVK	\$ 8,525,019	\$ 5,707,544	\$ 2,817,475
Res MF Market Rate JOHX8	\$ 1,662,199	\$ 775,974	\$ 886,225
Res General Expenses JOHVL	\$ 248,440	\$ 248,440	\$ -
Res STEM Education JOHXC	\$ 401,250	\$ 401,250	\$ -
Res Code Compliance JOHXD	\$ 365,240	\$ 365,240	\$ -
Res Smart Home Energy Management JOHXG	\$ 165,041	\$ 164,081	\$ 960
Res Real Estate Audits JOHXH	\$ 188,609	\$ 165,309	\$ 23,300
Res Employee Education JOHXJ	\$ 73,447	\$ 73,447	\$ -
MEEIA Pay As You Save (PAYS) JOQW4	\$ 1,516,286	\$ 1,213,454	\$ 302,832
Subtotal Residential Programs	\$ 59,441,040	\$ 26,855,572	\$ 32,585,468
Business Program			
Biz Standard JOHV3	\$ 20,955,621	\$ 5,006,993	\$ 15,948,628
Biz Custom JOHV4	\$ 13,683,409	\$ 4,552,952	\$ 9,130,457
Biz Retro-Commissioning JOHV5	\$ 3,048,212	\$ 1,390,493	\$ 1,657,719
Biz New Construction JOHV6	\$ 9,261,837	\$ 2,037,429	\$ 7,224,408
Small Business Direct Ins (SBDI) JOHV7	\$ 2,100,354	\$ 305,347	\$ 1,795,007
Biz Demand Response JOHV9	\$ 7,545,750	\$ 7,545,750	\$ -
Biz General Expense JOHVB	\$ 2,759,276	\$ 2,759,276	\$ -
Biz Building Operator Cert (BOC) JOH XK	\$ 48,243	\$ 48,243	\$ -
Subtotal Business Programs	\$ 59,402,702	\$ 23,646,483	\$ 35,756,219
Overhead			
Potential Study JOHV1	\$ 122,012	\$ 122,012	\$ -
Incremental Labor JOHWD	\$ -	\$ -	\$ -
Portfolio General Expense JOHDX	\$ 711,642	\$ 711,642	\$ -
Communications JOHV0	\$ 2,799,783	\$ 2,799,783	\$ -
EMV Income Eligible Programs JOHVQ	\$ 410,435	\$ 410,435	\$ -
EMV Res Programs JOHVR	\$ 1,570,469	\$ 1,570,469	\$ -
EMV Biz Programs JOHVS	\$ 1,151,479	\$ 1,151,479	\$ -
EMV Res Demand Response JOHVV	\$ 636,264	\$ 636,264	\$ -
EMV Biz Demand Response JOHVW	\$ 324,627	\$ 324,627	\$ -
EMV Gen Expense JOHXB	\$ 45,390	\$ 45,390	\$ -
Subtotal Overhead Costs	\$ 7,772,101	\$ 7,772,101	\$ -
Total Program Costs	\$ 146,945,592	\$ 66,046,959	\$ 80,898,633

2

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.¹⁸ 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 Cycle 2 Plan is budgeted for administrative and incentive program costs.¹⁹
 7 Table 3A²⁰ provides a comparison for the 3-year Cycle 2 2016-2018 Plan in total, for
 8 administrative and incentive program costs. Ameren Missouri’s Cycle 2 2016-2018 Plan in
 9 Table 3A anticipated 52%²¹ of the total program costs to be used toward incentives, and the
 10 other 48%²² toward administrative costs. The results in Table 4 indicate that Ameren Missouri
 11 improved this ratio, as it shows actual incentives were 62%²³ of the total Cycle 2 costs and the
 12 other 38% toward administrative costs. The results of the Cycle 2 2016-2018 Plan of
 13 categorizing program costs, administrative and incentives, are provided in Table 3A below.

14 Table 3B²⁴ provides a comparison for the 3-year Cycle 3 2019-2021 Plan in total, for
 15 administrative and incentive program costs. Ameren Missouri’s Cycle 3 2019-2021 Plan in
 16 Table 3B anticipated 51% of the total program costs to be used toward incentives, and the other
 17 49% toward administrative costs. The results in table 2C show actual incentives were 55%²⁵
 18 during the Review Period compared to the 51% in Ameren Missouri’s Cycle 3 2019-2021 Plan.
 19 Even though this ratio has been exceeded, based on the Cycle 3 2019-2021 Plan, Staff will
 20 continue to monitor the actual results compared to the Cycle 3 Plan throughout the life of
 21 Cycle 3. The results of the Cycle 3 2019-2021 Plan of categorizing program costs,
 22 administrative and incentives, are provided in Table 3B below, as well.

¹⁸ 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.

¹⁹ Revised Appendix B and Appendix H of the February 5, 2016 Non-Unanimous Stipulation and Agreement.

²⁰ Table 3A was created from Revised Appendix B from the March 16, 2017 Non-Unanimous Stipulation and Agreement approved by the Commission on April 13, 2017 in Case No. EO-2015-0055.

²¹ This percentage is calculated from total incentives over total portfolio in Table 3A.

²² This percentage is calculated from total administrative costs over total portfolio in Table 3A.

²³ This percentage is calculated from total incentives over total portfolio in Table 4.

²⁴ Table 3B was created from updated Appendix A from the October 13, 2021 Non-Unanimous Stipulation and Agreement approved by the Commission on October 27, 2021 in Case No. EO-2018-0211.

²⁵ This percentage is calculated from total incentives over total program costs in Table 2C.

Table 3A

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
Total Residential Programs	\$ 33.31	\$ 34.40	\$ 67.71
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
Total Business Programs**	\$ 44.26	\$ 51.22	\$ 95.48
Total Portfolio	\$ 77.57	\$ 85.62	\$ 163.19
*Learning Thermostats were incorporated into the Efficient Products and HVAC programs instead of being implemented as a separate program.			
**This total includes the \$4 million budget cap for the Cycle 2 Long-Lead Projects that was approved on July 20, 2017.			

continued on next page

Table 3B

Ameren Missouri 2019-2021 Plan for Administrative and Incentive Program Costs (in millions) *			
MEEIA Programs	Administrative	Incentives	Total
Multifamily Low-Income	\$ 10.08	\$ 16.60	\$ 26.68
Single Family Low-Income	\$ 10.72	\$ 10.85	\$ 21.57
Business Social Services	\$ 1.43	\$ 5.24	\$ 6.67
Targeted Community LED Lighting	\$ 2.48	\$ 1.61	\$ 4.09
Total Low Income Programs	\$ 24.71	\$ 34.30	\$ 59.01
Residential Demand Response	\$ 28.95	\$ -	\$ 28.95
Business Demand Response	\$ 18.10	\$ -	\$ 18.10
Total Demand Response	\$ 47.05	\$ -	\$ 47.05
Residential Appliance Recycling	\$ 1.12	\$ 0.59	\$ 1.71
Efficient Products	\$ 4.62	\$ 6.00	\$ 10.62
Energy Efficient Kits	\$ 1.43	\$ 2.41	\$ 3.84
Home Energy Report	\$ 1.51	\$ 4.34	\$ 5.85
HVAC***	\$ 27.81	\$ 36.47	\$ 64.28
Lighting	\$ 2.73	\$ 2.99	\$ 5.72
Multifamily Market Rate	\$ 4.35	\$ 2.89	\$ 7.24
PAYS	\$ 1.94	\$ 4.35	\$ 6.29
Residential Education	\$ 2.85	\$ -	\$ 2.85
Total Residential Programs	\$ 48.36	\$ 60.04	\$ 108.40
Custom	\$ 24.45	\$ 39.60	\$ 64.05
New Construction	\$ 2.13	\$ 2.98	\$ 5.11
Retro-Commissioning	\$ 2.68	\$ 4.67	\$ 7.35
Small Business Direct Install	\$ 4.47	\$ 8.61	\$ 13.08
Standard	\$ 17.18	\$ 30.10	\$ 47.28
Strategic Energy Management	\$ -	\$ -	\$ -
Business Education	\$ 0.24	\$ -	\$ 0.24
Total Business Programs**	\$ 51.15	\$ 85.96	\$ 137.11
Total Portfolio	\$ 171.27	\$ 180.30	\$ 351.57
* EM&V and Other Portfolio Costs are included			
** This does not include an additional \$6.7 million for Standard and Custom programs that was approved on 5/25/22			
*** This does not include an additional \$2.5 million that was approved for the HVAC program that was approved on 7/27/22			

Ameren Missouri provides incentive payments to its customers as part of its Cycle 3 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 compared to the cost of less efficient measures. Incentive payments can also complement other

1 efficiency policies such as appliance standards and energy codes to help overcome market
2 barriers for cost-effective technologies. All of the business programs are tracked in TRC's
3 database (TRC²⁶ Solutions is the contractor for the business programs) and residential programs
4 are tracked in Franklin Energy's database (Franklin Energy is the contractor for the residential
5 programs). Enel X is the contractor for the Demand Response Business Program.

6 TRC enters incentives and energy savings submitted by the customer into the TRC
7 database for each energy efficiency program project. Upon completion, the energy efficiency
8 project is flagged to be invoiced. Then, on the last Friday of each month TRC's accounting
9 group submits the month's invoice that includes incentives, and the month-end energy savings
10 reports are provided to Ameren Missouri. After Ameren Missouri performs month-end invoice
11 and savings validation procedures, the invoice is approved to be paid. Once the invoice is
12 approved, the payment date is generated, and the activity posts to the general ledger on the same
13 day that the payment is executed.²⁷ Starting in PY22, the incentive invoices are sent directly
14 from TRC to the Ameren Missouri Principal Accounting Clerk by email. Those emails are then
15 received in the Oracle processing system for payment. The incentive invoices are preapproved
16 and do not require any additional approvals upon receipt. As a result, payment of the invoices
17 generate automatically and invoices are paid within 1-2 business days after the invoice has been
18 received into Oracle. The activity posts to the general ledger on the same day that the payment
19 is executed.²⁸

20 Franklin Energy's vendors input incentives and energy savings into Franklin Energy's
21 efficiency manager database. The kWh and incentive amounts are recorded in the end of month
22 reports as well as the monthly invoices sent to Ameren. After Ameren Missouri performs
23 month-end invoice and savings validation procedures the invoice is approved to be paid. The
24 Franklin Energy incentives invoices are sent directly from Franklin Energy Services to the
25 Ameren Missouri Principal Accounting Clerk by email. Those emails are then received in the
26 Oracle processing system for payment. The incentive invoices are preapproved and do not
27 require any additional approvals upon receipt. As a result, payment of the invoices generate
28 automatically and invoices are paid within 1-2 business days after the invoice has been received

²⁶ Per the response to Data Request No. 0007 in EO-2021-0157, Lockheed Martin Corporation sold its distributed energy solutions business to TRC on November 18, 2019.

²⁷ Data Request No. 0009.3 in EO-2021-0157.

²⁸ Data Request No. 0009.3 in EO-2021-0157.

1 into Oracle. The activity posts to the general ledger on the same day that the payment is
2 executed.²⁹

3 Ameren Missouri has explained to Staff that these systems can be difficult to navigate
4 and pull live data that matches historical invoices and reporting since those historical invoices
5 represent snapshots of the data at those times. Ameren Missouri has provided Staff with reports
6 that contain project level data from TRC and Franklin Energy. For each project, the incentive
7 cost and corresponding invoice are provided as well as the kWh savings. As requested by Staff,
8 Ameren Missouri provided a reconciliation of the TRC and Franklin Energy summary of
9 incentives by invoice from the TRC and Franklin Energy tracking system reports, compared to
10 the general ledger and compared to the actual invoices provided in Data Request No. 0014.
11 Ameren Missouri provided additional reconciliations for incentives and supporting workpapers
12 for those differences. Most of the differences were due to the prudence review lag inherent in
13 the process. Other differences were due to: 1) errors in the original mapping, but once Franklin
14 manually corrected the invoice numbers the project level detail aligned, and 2) for Residential
15 Demand Response, in which Franklin reported incentive costs for customers that received a bill
16 credit. Lastly, Ameren Missouri identified several transactions that were either charged to the
17 wrong account, invoice variances, bill credits over-invoiced or erroneously not posted. Staff
18 found Ameren Missouri's additional follow-up reconciliations and work papers very helpful
19 during this review process. As a result of these reconciliations provided by Ameren Missouri,
20 along with the additional invoices and/or invoice corrections that were reflected outside of the
21 Review Period, and adjusting entries recorded in February, March, and April 2023, Staff was
22 able to reconcile the general ledger total to the invoices provided by project.

23 Please refer to Table 4³⁰ for all costs for MEEIA Cycle 2. Please refer to Table 5³¹ for a
24 comparison of the total actual costs and proposed (budgeted) costs for MEEIA Cycle 2. Ameren
25 Missouri's MEEIA Cycle 2 actual costs were approximately \$6 million under the proposed
26 budget and provided more incentives in the program with less administrative costs.

²⁹ Data Request No. 0009.3 in EO-2021-0157.

³⁰ Table 4 was created from a total of this prudence review Periods total Program Cost (from Data Request No. 0003) and the last three prudence Review Periods total Program Costs. The Long-Lead projects are also included since they were part of the Cycle 2 expenses.

³¹ Table 5 was created from total Program Costs (from Data Request No. 0003) and the total Program Cost budget (Revised Appendix B from the March 16, 2017 Non-Unanimous Stipulation and Agreement).

1

Table 4

Programs' Costs March 1, 2016 through January 31, 2022			
CYCLE 2 PROGRAM COSTS			
(in millions)			
Program Description	Total for the Review Periods Ending January 31, 2022	Administrative Costs	Incentives Paid
Residential Programs			
Res Lighting J06DF	\$ 7.67	\$ 3.62	\$ 4.05
Res Energy Efficient Products J06DG	\$ 3.59	\$ 1.26	\$ 2.33
Res HVAC J06DH	\$ 33.58	\$ 9.97	\$ 23.60
Res Low Income J06DK	\$ 8.33	\$ 3.51	\$ 4.82
Res Kits J06DL	\$ 2.44	\$ 0.85	\$ 1.58
Res Program Gen Expense J06DM	\$ 0.21	\$ 0.21	\$ -
Res Smart Thermostat J0C9S	\$ 2.91	\$ 0.76	\$ 2.15
Home Energy Reports J0005	\$ 2.40	\$ 2.40	\$ -
Subtotal Residential Programs	\$ 61.12	\$ 22.58	\$ 38.54
Business Programs			
Biz Standard J06D8	\$ 39.41	\$ 9.44	\$ 29.97
Biz Custom J06D9	\$ 29.67	\$ 11.00	\$ 18.66
Biz Retro-Commissioning J06DB	\$ 2.05	\$ 0.61	\$ 1.44
Biz New Construction J06DC	\$ 6.89	\$ 1.76	\$ 5.12
Biz Program Gen Expense J06DD	\$ 2.17	\$ 2.17	\$ -
Biz Benchmarking J0DH0	\$ 0.13	\$ 0.13	\$ -
Small Business Direct J0006	\$ 4.91	\$ 0.58	\$ 4.33
Subtotal Business Programs	\$ 85.22	\$ 25.69	\$ 59.52
Overhead			
Education J06D3	\$ 0.08	\$ 0.08	\$ -
Marketing J06D4	\$ 0.01	\$ 0.01	\$ -
Potential Study J06D5	\$ 0.47	\$ 0.47	\$ -
Data Tracking J06D6	\$ 0.33	\$ 0.33	\$ -
General Expense J06D7	\$ 0.40	\$ 0.40	\$ -
Communications J06DR	\$ 2.45	\$ 2.45	\$ -
Research and Development J000P	\$ 0.22	\$ 0.22	\$ -
EMV Gen Expense J06DQ	\$ 0.05	\$ 0.05	\$ -
EMV Res Programs J06DN	\$ 2.99	\$ 2.99	\$ -
EMV Biz Programs J06DP	\$ 3.62	\$ 3.62	\$ -
Subtotal Overhead Costs	\$ 10.62	\$ 10.62	\$ -
Total Program Costs	\$ 156.95	\$ 58.89	\$ 98.06

2

Table 5

Actual vs Proposed Costs March 1, 2016 through September 30, 2020 (in millions)

Cycle 2 Program Costs

Actual vs Proposed Costs March 1, 2016 through September 30, 2020									
Cycle 2 Program Costs									
(in millions)									
Program Description	Actual Total Costs	Proposed Total Costs	Var	Actual Admin Costs	Proposed Admin Costs	Var	Actual Incentives Paid	Proposed Incentives Paid	Var
Residential Program									
Res Lighting J06DF	\$ 7.67	\$ 14.29	\$ (6.62)	\$ 3.62	\$ 6.65	\$ (3.03)	\$ 4.05	\$ 7.64	\$ (3.59)
Res Energy Efficient Products J06DG	\$ 3.59	\$ 5.06	\$ (1.47)	\$ 1.26	\$ 2.53	\$ (1.27)	\$ 2.33	\$ 2.53	\$ (0.20)
Res HVAC J06DH	\$ 33.58	\$ 25.29	\$ 8.29	\$ 9.97	\$ 12.28	\$ (2.31)	\$ 23.60	\$ 13.01	\$ 10.59
Learning Thermostats*	\$ -	\$ 3.88	\$ (3.88)	\$ -	\$ 1.07	\$ (1.07)	\$ -	\$ 2.81	\$ (2.81)
Res Low Income J06DK	\$ 8.33	\$ 10.75	\$ (2.42)	\$ 3.51	\$ 3.94	\$ (0.43)	\$ 4.82	\$ 6.81	\$ (1.99)
Res Kits J06DL	\$ 2.44	\$ 4.14	\$ (1.70)	\$ 0.85	\$ 2.54	\$ (1.69)	\$ 1.58	\$ 1.60	\$ (0.02)
Res Program Gen Expense J06DM	\$ 0.21	\$ -	\$ 0.21	\$ 0.21	\$ -	\$ 0.21	\$ -	\$ -	\$ -
Res Smart Thermostat J0C9S	\$ 2.91	\$ -	\$ 2.91	\$ 0.76	\$ -	\$ 0.76	\$ 2.15	\$ -	\$ 2.15
Home Energy Reports J0005	\$ 2.40	\$ 4.30	\$ (1.90)	\$ 2.40	\$ 4.30	\$ (1.90)	\$ -	\$ -	\$ -
Subtotal Residential Programs	\$ 61.12	\$ 67.71	\$ (6.59)	\$ 22.58	\$ 33.31	\$ (10.73)	\$ 38.54	\$ 34.40	\$ 4.14
Business Program									
Biz Standard J06D8	\$ 39.41	\$ 22.03	\$ 17.38	\$ 9.44	\$ 10.50	\$ (1.06)	\$ 29.97	\$ 11.53	\$ 18.44
Biz Custom J06D9	\$ 29.67	\$ 51.98	\$ (22.31)	\$ 11.00	\$ 24.71	\$ (13.71)	\$ 18.66	\$ 27.27	\$ (8.61)
Biz Retro-Commissioning J06DB	\$ 2.05	\$ 6.92	\$ (4.87)	\$ 0.61	\$ 2.94	\$ (2.33)	\$ 1.44	\$ 3.98	\$ (2.54)
Biz New Construction J06DC	\$ 6.89	\$ 4.82	\$ 2.07	\$ 1.76	\$ 2.08	\$ (0.32)	\$ 5.12	\$ 2.74	\$ 2.38
Biz Program Gen Expense J06DD	\$ 2.17	\$ -	\$ 2.17	\$ 2.17	\$ -	\$ 2.17	\$ -	\$ -	\$ -
Biz Benchmarking J0DH0	\$ 0.13	\$ -	\$ 0.13	\$ 0.13	\$ -	\$ 0.13	\$ -	\$ -	\$ -
Small Business Direct J0006	\$ 4.91	\$ 9.73	\$ (4.82)	\$ 0.58	\$ 4.03	\$ (3.45)	\$ 4.33	\$ 5.70	\$ (1.37)
Subtotal Business Programs	\$ 85.22	\$ 95.48	\$ (10.26)	\$ 25.69	\$ 44.26	\$ (18.57)	\$ 59.52	\$ 51.22	\$ 8.30
Overhead Costs									
Education J06D3	\$ 0.08	\$ -	\$ 0.08	\$ 0.08	\$ -	\$ 0.08	\$ -	\$ -	\$ -
Marketing J06D4	\$ 0.01	\$ -	\$ 0.01	\$ 0.01	\$ -	\$ 0.01	\$ -	\$ -	\$ -
Potential Study J06D5	\$ 0.47	\$ -	\$ 0.47	\$ 0.47	\$ -	\$ 0.47	\$ -	\$ -	\$ -
Data Tracking J06D6	\$ 0.33	\$ -	\$ 0.33	\$ 0.33	\$ -	\$ 0.33	\$ -	\$ -	\$ -
General Expense J06D7	\$ 0.40	\$ -	\$ 0.40	\$ 0.40	\$ -	\$ 0.40	\$ -	\$ -	\$ -
Communications J06DR	\$ 2.45	\$ -	\$ 2.45	\$ 2.45	\$ -	\$ 2.45	\$ -	\$ -	\$ -
Research and Development J000P	\$ 0.22	\$ -	\$ 0.22	\$ 0.22	\$ -	\$ 0.22	\$ -	\$ -	\$ -
EMV Gen Expense J06DQ	\$ 0.05	\$ -	\$ 0.05	\$ 0.05	\$ -	\$ 0.05	\$ -	\$ -	\$ -
EMV Res Programs J06DN	\$ 2.99	\$ -	\$ 2.99	\$ 2.99	\$ -	\$ 2.99	\$ -	\$ -	\$ -
EMV Biz Programs J06DP	\$ 3.62	\$ -	\$ 3.62	\$ 3.62	\$ -	\$ 3.62	\$ -	\$ -	\$ -
Subtotal Overhead Costs	\$ 10.62	\$ -	\$ 10.62	\$ 10.62	\$ -	\$ 10.62	\$ -	\$ -	\$ -
Total Program Costs	\$ 156.96	\$ 163.19	\$ (6.23)	\$ 58.89	\$ 77.57	\$ (18.68)	\$ 98.06	\$ 85.62	\$ 12.44

Staff also reviewed a list of customer purchases from Ameren Missouri’s online store (specific to thermostats, smart sensors, and LED bulbs) that includes the number of specific products sold per purchase, dollar amount for each product, the rebate associated with each transaction, the online store limit of products per transaction, and the total amount for each transaction. During the course of Staff’s review, Ameren Missouri stated in Data Request No. 0031 that there were instances where customers were able to purchase more than the online

1 store limit. In program years 2020-2021 the limits were three thermostats per residential
2 electric account, and in program year 2022 the limit was one thermostat per residential electric
3 account. There were 23 customers in 2020-2021 who purchased over the limit of three
4 thermostats and there were two customers who purchased over one thermostat in 2022. Staff
5 then sent a follow-up Data Request No. 0031.1 to determine if any adjustments have been made
6 for these instances. Ameren Missouri stated:

7 There were no adjustments made in the aforementioned general electric
8 rate reviews for instances where customers were able to purchase over
9 the limit for on-line purchases, as we were not aware that customers were
10 able to purchase above the limit at the time customers made the purchase.
11 However, an adjustment of \$1,650 will be recorded in February 2023
12 monthly close to remove this expense from the MEEIA program and
13 move to a “below the line” 426005 account.

14 Staff has reviewed the February 2023 monthly close adjustment and the supporting calculations
15 and can confirm the correcting adjustment was made.

16 **2. Summary of Cost Implications**

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

20 **3. Conclusion**

21 Staff found no indication that Ameren Missouri has acted imprudently regarding any of
22 the program costs associated with its Energy Efficiency Programs.

23 **4. Documents Reviewed**

- 24 a. Ameren Missouri’s *2016-2018 Energy Efficiency Plan*;
- 25 b. Ameren Missouri’s *2019-2021 Energy Efficiency Plan*;
- 26 c. Approved MEEIA Energy Efficiency and Demand Side Management
27 Programs Tariff Sheets;
- 28 d. Staff Data Requests: 0001, 0002, 0003, 0003.1, 0003.2, 0003.3, 0003.4,
29 0003.5, 0010, 0014, 0015, 0021, 0023, and 0024; and
- 30 e. General Ledger FERC Accounts 908.

31 *Staff Experts: Teresa Denney (Program Cost); Brooke Mastrogiannis (Tracking System)*

B. Implementation Contractors

1. Description

Ameren Missouri hired business partners for design, implementation and delivery of its portfolio of residential and business energy efficiency programs. Contracting with competent, experienced, and reliable program implementers is extremely important to the success of Ameren Missouri’s energy efficiency programs and for affording Ameren Missouri’s customers the greatest benefits.

Ameren Missouri selected and contracted with the organizations identified in Table 6 to implement individual MEEIA programs. All of the implementers identified in Table 6 are nationally recognized contractors that have solid histories of energy efficiency programs’ design and implementation.

continued on next page

Table 6

Review Period October 1, 2020 through September 30, 2022				
MEEIA Programs	Planned Annual Energy Savings (kWh)	Planned Annual Demand Savings (kW)	Program Implementers	Program EM&V Contractors
Appliance Recycling	5,426,405	781	Franklin Energy	Opinion Dynamics
Efficient Products	24,312,803	6,935	Franklin Energy	Opinion Dynamics
Energy Efficient Kits	6,485,258	1,220	Franklin Energy	Opinion Dynamics
Home Energy Report	-	-	Franklin Energy	
HVAC	91,447,244	49,937	Franklin Energy	Opinion Dynamics
Lighting	22,523,482	3,362	Franklin Energy	Opinion Dynamics
Multifamily Income Eligible	10,407,638	3,840	Franklin Energy	Opinion Dynamics
Multifamily Market Rate	8,662,880	2,832	Franklin Energy	Opinion Dynamics
Res Demand Response	3,774,614	32,258	Franklin Energy	Opinion Dynamics
Single Family Income Eligible	7,736,087	2,469	Franklin Energy	Opinion Dynamics
Single Family Income Grants	6,905,518	1,031	Franklin Energy	Opinion Dynamics
Pay As You Save	10,918,161	5,089	EEtility	Opinion Dynamics
HVAC Extension	-	-	Franklin Energy	Opinion Dynamics
Targeted Community Lighting	423,535	63	Franklin Energy	Opinion Dynamics
Business Social Services	6,723,739	1,550	TRC	Opinion Dynamics
Custom	183,732,772	53,702	TRC	Opinion Dynamics
New Construction	15,150,396	4,021	TRC	Opinion Dynamics
Retro-Commissioning	20,849,591	7,647	TRC	Opinion Dynamics
Small Business Direct Install	23,586,764	4,146	TRC	Opinion Dynamics
Standard	133,808,568	26,640	TRC	Opinion Dynamics
Strategic Energy Management	-	-	TRC	
Biz Demand Response	1,000,000	50,000	Enel X	Opinion Dynamics
Total Portfolio	583,875,454	257,520		

Staff 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 the review of invoices, Franklin Energy, TRC, EEtility, and Enel X invoices were cross-checked to the general ledger³² and all invoices were reviewed.

2. Summary of Cost Implications

If Ameren Missouri was imprudent in its decisions relating to the supervision of its program implementers, ratepayer harm could result in an increase in the future EEIC amounts.

³² General Ledger for the period under review was provided in response to Data Request No. 0003.

1 **3. Conclusion**

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

4 **4. Documents Reviewed**

- 5 a. Ameren Missouri’s *2019-2021 Energy Efficiency Plan*;
6 b. Approved MEEIA Energy Efficiency and Demand Side Management
7 Programs Tariff Sheets;
8 c. Staff Data Requests: 0002, 0003, 0007, 0008, 0014 and 0020.

9 *Staff Expert: Brooke Mastrogiannis*

10 **C. Billed Program Costs**

11 **1. Description**

12 For the Review Period, Ameren Missouri billed customers through a separate line item
13 on customers’ bills titled “Energy Efficiency Investment Charge” to recover estimated energy
14 efficiency programs’ costs and estimated Company’s TD. The “Energy Efficiency Investment
15 Charge” is based on the customer’s monthly consumption and the applicable energy efficiency
16 investment rates approved by the Commission in Case No. ER-2023-0178.³³ During the
17 Review Period of October 1, 2020 through September 30, 2022, Ameren Missouri billed
18 customers \$1,711,112 to recover its estimated energy efficiency programs’ costs for MEEIA
19 Cycle 2. For the same period, Ameren Missouri actually spent \$(13,513) on its energy
20 efficiency programs. Thus, Ameren Missouri over-collected \$1,724,625 from its customers
21 during the Review Period for MEEIA Cycle 2 Program Costs. During this same Review Period,
22 Ameren Missouri billed customers \$158,132,632 to recover its estimated energy efficiency
23 programs’ costs for MEEIA Cycle 3. For the same period, Ameren Missouri actually spent
24 \$146,945,593 on its energy efficiency programs. Thus, Ameren Missouri over-collected
25 \$11,187,039 from its customers during the Review Period for MEEIA Cycle 3 program costs.
26 The monthly amounts that are either over- or under-collected from customers are tracked in a
27 regulatory asset account, along with monthly interest, until Ameren Missouri files for rate

³³ 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, 1st Revised Sheet No. 91.23 in Case No ER-2021-0158, 2nd Revised Sheet No. 91.23 in Case No. ER-2022-0146, and 3rd Revised Sheet No. 91.23.

1 adjustments under its Rider EEIC and new energy efficiency investment rates are approved by
2 the Commission. The interest associated with these over- or under-collected amounts are
3 provided in Section V of this Report.

4 **2. Summary of Cost Implications**

5 If Ameren Missouri was imprudent in its tracking, reporting and/or calculating its
6 estimated billed costs, ratepayer harm could result in an increase in future Energy Efficiency
7 Investment Charge amounts.

8 **3. Conclusion**

9 Staff found no indication that Ameren Missouri has acted imprudently regarding the
10 calculation of the estimated billed program costs related to the cost recovery of its MEEIA
11 program costs. The monthly amounts that were over- or under-collected from customers are
12 tracked in a regulatory asset account, along with monthly interest, and will be reflected in a
13 future Ameren Missouri rate adjustment filing under its Rider EEIC.

14 **4. Documents Reviewed**

- 15 a. Ameren Missouri's *2016-2018 Energy Efficiency Plan*;
- 16 b. Ameren Missouri's *2019-2021 Energy Efficiency Plan*;
- 17 c. Approved MEEIA Energy Efficiency and Demand Side Management
18 Programs Tariff Sheets;
- 19 d. EEIC Rider Case No. ER-2023-0178; and
- 20 e. Staff Data Requests: 0001, 0002, 0003, and 0005.

21 *Staff Expert: Brooke Mastrogiannis and Teresa Denney*

22 **D. Throughput Disincentive Costs Billed and Actual**

23 **1. Description**

24 According to Ameren's current tariff, Throughput Disincentive (TD) means to represent
25 the utility's lost margins associated with the successful implementation of MEEIA programs.³⁴
26 For a utility that operates under a traditional regulated utility model, a "throughput incentive"
27 is created when a utility's increase in revenues is linked directly to its increase in sales. This

³⁴ Tariff MO P.S.C. Schedule No. 6, 2nd revised, Sheet No. 91.1.

1 relationship between revenues and sales creates a TD, when the utility engages in any activity
2 that would decrease sales, such as utility sponsored energy efficiency programs. The TD allows
3 the utility to recover its lost margin revenues associated with the successful implementation of
4 the MEEIA programs.

5 Ameren Missouri calculates TD monthly based upon all end use measures installed
6 during the month and the savings associated with each installed measure. For Cycle 2, the
7 TD calculation is prescribed in the Rider EEIC where $TD = MS \times NMR \times NTGF^{35}$.
8 Staff reviewed the various components of the TD calculation for the accuracy and proper
9 timing of measure counts. TD is also billed to customers through the “Energy Efficiency
10 Investment Charge” line item on the customers’ bill by combining net program cost with
11 net throughput disincentive (\$/kWh) rates as prescribed in Ameren Missouri’s Rider EEIC.
12 For Cycle 2, TD is taken from each cumulative TD calculation file, so that any difference to
13 previous months’ TD is captured in the current month’s over/under accounting if there was a
14 correction made to a prior month. During the Review Period, Ameren Missouri billed
15 customers \$(4,067,988) for the Cycle 2 estimated Company TD. The actual Company TD for
16 Cycle 2 during the Review Period was \$564,441. Of this actual Company TD, \$564,441
17 was from the Long Lead TD, and \$0.00 was from the Non-Long Lead TD. The total cumulative
18 TD for the entire Cycle 2 period to date is \$90,235,713³⁶. Thus, Ameren Missouri
19 under-collected \$(4,632,430) from its customers during the Review Period for Cycle 2 TD.

20 For Cycle 3, the TD calculation is prescribed in the Rider EEIC where $TD = MS \times NMR$
21 $\times NTGF^{37}$. Cycle 3 TD is taken from each cumulative TD calculation file as described above.
22 In addition, TD is summarized separately for plan years 2019, 2020, 2021 and 2022, and those
23 four calculations are then combined. During the Review Period, Ameren Missouri billed
24 customers \$47,524,271 for the Cycle 3 estimated Company TD. The actual company TD for
25 Cycle 3 during the Review Period and the total cumulative TD for the entire Cycle 3 period was
26 \$50,498,261. Thus, Ameren Missouri under-collected \$2,973,990 from its customers during the
27 Review Period for Cycle 3 TD.

³⁵ Throughput Disincentive = Monthly Savings x Net Margin Revenue x Net to Gross Factor. Union Electric Company Rider EEIC MO P.S.C. Schedule No. 6, Original Sheet No. 91.6.

³⁶ This total cumulative TD includes Cycle 2 Non-Long Lead TD and Long Lead TD.

³⁷ Throughput Disincentive = Monthly Savings x Net Margin Revenue x Net-to-Gross Factor. Union Electric Company Rider EEIC MO P.S.C. Schedule No. 6, Original Sheet No. 91.17.

1 As described in the TD calculation process above, at various times there are revisions
2 made to past months' TD. These revisions could reflect corrections to errors, updates to TD
3 calculation methodology, updates to program year savings, etc. As requested, Ameren Missouri
4 provided a monthly TD comparison file³⁸ to explain historical changes in detail for each TD
5 cycle, including a description for each occurrence of revisions to the monthly TD from the
6 previous month. With this TD calculation comparison file, Staff was able to reconcile the
7 revisions made to past months' TD to the total cumulative TD for Cycle 2 and Cycle 3.

8 **2. Summary of Cost Implications**

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

12 **3. Conclusion**

13 Staff found no indication that Ameren Missouri has acted imprudently regarding the
14 calculation of the TD billed or the actual TD calculation related to the cost recovery of its
15 MEEIA TD costs or recovery of those costs.

16 **4. Documents Reviewed**

- 17 a. Ameren Missouri's *2016-2018 Energy Efficiency Plan*;
- 18 b. Ameren Missouri's *2019-2021 Energy Efficiency Plan*;
- 19 c. Ameren Missouri's MEEIA EEIC Rider, ER-2023-0178;
- 20 d. Approved MEEIA Energy Efficiency and Demand Side Management
21 Programs Tariff Sheets;
- 22 e. Ameren Missouri's Surveillance Monitoring Reports;
- 23 f. Direct Testimony of Antonio M. Lozano, Case No ER-2023-0178;
- 24 g. Rate Case No. ER-2021-0240; and,
- 25 h. Staff Data Requests: 0003, 0005, 0011, 0016, 0017, and 0018.

26 *Staff Expert: Cynthia M. Tandy*

³⁸ Data Request No. 0018.

E. Demand Response

1. Description

The Business and Residential Demand Response Programs were new demand response programs starting in Ameren Missouri's MEEIA 2019 – 2021 Plan. The purpose of the Business and Residential Demand Response Programs is to proactively impact customer energy use in such a way as to reduce demand and/or energy.³⁹ The program season for which demand response events may be called is May through September.

The Business Demand Response Program is operated by a demand response aggregator to obtain energy and demand reductions from existing facilities by incentivizing customers to reduce energy usage through direct load control, manual response, and/or the use of behind the meter assets such as energy management systems or other properly permitted dispatchable assets. Customers can receive a demand reduction incentive based on their average demand reduction during the events of the program season. Customers can also receive an energy reduction incentive based on the energy reduction for each event. During the Review Period the maximum number of events per program season was ten and the minimum number of events per program season was two.

The Residential Demand Response Program obtains energy and demand reductions from residences that have installed program-eligible devices by incentivizing them to allow the Program Administrator to control their device's operation during peak events for demand reduction and non-peak periods for energy reduction. Participants receive incentives for participating in the program, which may include upfront enrollment incentives, an annual incentive, and an installation incentive. During the Review Period the maximum number of events per program season was ten and the minimum number of events per program season was three with at least one event per program season dispatching all participants.

In response to Staff Data Request No. 0027, Ameren Missouri stated that for the Residential Demand Response Program, the program can call either a peak shaving event or a "test" event. Peak shaving events are triggered by Ameren Missouri when the forecasted day ahead peak demand exceeds 99% of the forecasted annual peak load. Test events are ideally called when the day-ahead temperature at the St. Louis Lambert International Airport is

³⁹ MO P.S.C. Schedule No. 6 1st Revised Sheet No. 247.

1 forecasted to equal or exceed 95 degrees Fahrenheit. The Business Demand Response Program
2 is contractually bound to five emergency demand response events triggered per MISO MaxGen
3 Event Stage 2 criteria and five peak shaving events when the day-ahead forecasted daily peak
4 demand exceeds 99% of forecasted annual summer peak demand limited to two events across
5 two consecutive days. Two “test” events are allowed in absence of emergency or peak events
6 after August 15th and before September 30th.

7 In response to Staff Data Request No. 0028, Ameren Missouri stated:

8 The business DR program called seven (7) events during the review
9 period - four (4) in 2021 and three (3) in 2022. The residential demand
10 response program called a total of fourteen events during the review
11 period – five in the 2021 event season and nine in 2022. The number of
12 events called during this period is that permitted by the terms of the tariff
13 and Stipulation and Agreement, and in accordance with implementer
14 contracts and program design. While the residential program allowed for
15 up to ten events per event season and business allowed for up to ten in
16 2021 and 15 in 2022, the number of events which are actually called is
17 governed by 1) business demand response need to reserve five events for
18 2021 and 10 for 2022 for the ability to respond to potential MISO
19 emergency events, to ensure the program meets the minimum
20 qualifications under the MISO tariff to permit an offset against the
21 Company's planning reserve requirement; 2) event triggering criteria that
22 the day ahead forecast be at least 99% of the forecasted annual peak
23 demand; 3) Business demand response contractual maximum of two test
24 events per event season; 4) a minimum of two business events required
25 by tariff; 5) and two residential event filing elements – in 2021 a
26 minimum of three residential events required by tariff and in 2022 the
27 maximum number of qualifying residential demand response events (8)
28 for the purpose of earnings opportunity. An additional two residential
29 test events were called in 2021 and one additional in 2022 for operational
30 purposes. As the residential program had already been dispatched the
31 minimum three events per event season and additional triggering events
32 did not occur, no justification for calling additional events existed.

33 Staff would additionally note that for PY23 Ameren Missouri will conduct a max of 15
34 residential demand response events. No more than ten events will qualify for the earnings
35 opportunity performance bonus and no more than five test events will be included for the
36 earnings opportunity performance bonus unless additional test events above the first five test
37 events are specifically called for locational demand purposes or off-peak capability such as
38 during a winter peaking period.

1 **2. Summary of Cost Implications**

2 If Ameren Missouri was imprudent in its decisions to call demand response events,
3 ratepayer harm could result in an increase in future Energy Efficiency Investment Charge
4 amounts and Fuel and Adjustment Clause amounts.

5 **3. Conclusion**

6 Staff found no indication that Ameren Missouri acted imprudently in its decisions to
7 call, or not to call, demand response events for this Review Period. Ameren Missouri’s demand
8 response programs are new to its MEEIA 2019 – 2021 Plan. Ameren Missouri has specific
9 protocols in place for if, and when, it will call demand response events.

10 **4. Documents Reviewed**

- 11 a. Ameren Missouri’s *2019-2021 Energy Efficiency Plan*;
- 12 b. Approved MEEIA Energy Efficiency and Demand Side Management
13 Programs Tariff Sheets;
- 14 c. Staff Data Requests: 0026, 0027, and 0028.

15 *Staff Expert/Witness: Jordan T. Hull*

16 **IV. GROSS ANNUAL ENERGY AND DEMAND SAVINGS (kWh and kW)**

17 **1. Description**

18 The purpose of Ameren Missouri’s energy efficiency programs is for customers to use
19 less energy and therefore everything else being equal reduces the need for more generation. In
20 the 2019 Stipulation, Ameren Missouri planned for cumulative annual energy savings of
21 1,275,507,000 kWh and demand savings of 572,080 kW⁴⁰ for MEEIA Cycle 3. On August 5,
22 2020, the Commission issued its *Order Approving Stipulation and Agreements* approving
23 additional modifications for Cycle 3 regarding the implementation of certain MEEIA programs
24 through PY22, which added a new Pay As You Save program starting in PY21 and continuing
25 through PY22. On October 27, 2021, the Commission issued its *Order Approving Stipulation*
26 *and Agreement Regarding MEEIA Plan Year 2023, Approving Tariff Sheet, and Granting*
27 *Variances* extending MEEIA Cycle 3 through 2023.

⁴⁰ These savings were updated on October 27, 2021. The 2019 Stipulation planned energy savings was 793,970,000 kWh and demand savings of 360,800 kW.

1 In the 2016 Stipulation, Ameren Missouri planned for cumulative annual energy savings
2 of 570,980,000 kWh and demand savings of 166,642 kW for MEEIA Cycle 2. However, for
3 the Review Period, Ameren Missouri planned for no annual energy or demand savings for
4 MEEIA Cycle 2, and it planned for cumulative annual energy savings of 583,875,454 kWh and
5 demand savings of 257,520 kW for MEEIA Cycle 3⁴¹. For the Review Period for MEEIA
6 Cycle 3, Ameren Missouri reported actual gross energy and demand savings based upon
7 installed measures of 601,314,357 kWh and 203,954 kW, respectively. During the same Review
8 Period for MEEIA Cycle 2, Ameren Missouri reported actual gross energy and demand savings
9 based upon installed measures of 3,429,447 kWh and 910 kW, respectively. Ameren Missouri
10 monetizes the actual energy savings through its TD calculation as discussed earlier.

11 Achieved cumulative deemed annual energy and demand savings relative to the planned
12 cumulative annual energy and demand savings for the same period is important to
13 understanding the overall performance of Ameren Missouri's energy efficiency programs.
14 Table 7A provides a comparison of achieved savings and planned savings for Ameren
15 Missouri's residential and business programs specifically for MEEIA Cycle 3 for the Review
16 Period. If Ameren Missouri was unable to achieve its planned energy and demand savings
17 levels, that could be an indication the programs were not being prudently administered by the
18 implementers and by Ameren Missouri.

19 The results in Table 7A⁴² below indicate that Ameren Missouri exceeded its plan for
20 cumulative deemed annual energy savings by 3%⁴³ during the Review Period of Ameren
21 Missouri's MEEIA 2019-2021 Plan. Table 7B provides a comparison of achieved savings and
22 planned savings for Ameren Missouri's residential and business programs specifically for
23 MEEIA Cycle 2 for the Review Period. There were only achieved annual energy savings for
24 Cycle 2 Long-Lead projects, so Cycle 2 Non Long-Lead projects are not show in the
25 following tables:

⁴¹ Data Request No. 0020.

⁴² Tables 7A and 7B were created from Data Request No. 0020.

⁴³ This calculation derived from the total variance divided by the total planned energy savings (kWh).

1

Table 7A

MEEIA 3						
Cycle 3 Totals (kWh & kW) October 1, 2020 through September 30, 2022						
MEEIA Programs	Achieved Annual Energy Savings (kWh)	Planned Annual Energy Savings (kWh)	Variance	Achieved Annual Demand Savings (kW)	Planned Annual Demand Savings (kW)	Variance
Appliance Recycling	1,970,894	5,426,405	(3,455,511)	293	781	(488)
Efficient Products	18,715,392	24,312,803	(5,597,411)	7,396	6,935	462
Energy Efficient Kits	10,254,313	6,485,258	3,769,055	1,883	1,220	663
Home Energy Report	(9,945,500)	-	(9,945,500)	(4,635)	-	(4,635)
HVAC	78,378,316	91,447,244	(13,068,928)	53,395	49,937	3,458
Lighting	150,434,202	22,523,482	127,910,720	23,085	3,362	19,724
Multifamily Income Eligible	12,894,456	10,407,638	2,486,818	3,807	3,840	(32)
Multifamily Market Rate	6,363,690	8,662,880	(2,299,190)	1,554	2,832	(1,278)
Res Demand Response	2,193,169	3,774,614	(1,581,445)	17,109	32,258	(15,149)
Single Family Income Eligible	2,677,128	7,736,087	(5,058,959)	1,253	2,469	(1,215)
Single Family Income Eligible- Grants	5,096,266	6,905,518	(1,809,252)	1,043	1,031	13
Pay As You Save	1,429,748	10,918,161	(9,488,413)	768	5,089	(4,320)
HVAC Extension	4,809,550	-	4,809,550	3,039	-	3,039
Targeted Community Lighting	1,370,757	423,535	947,222	213	63	149
Total Residential Programs	286,642,381	199,023,624	87,618,757	110,204	109,815	389
Business Social Services	2,113,530	6,723,739	(4,610,209)	398	1,550	(1,152)
Custom	77,224,586	183,732,772	(106,508,186)	31,269	53,702	(22,432)
New Construction	65,349,698	15,150,396	50,199,302	20,869	4,021	16,849
Retro-Commissioning	12,872,749	20,849,591	(7,976,842)	5,367	7,647	(2,280)
Small Business Direct Install	11,005,509	23,586,764	(12,581,255)	2,085	4,146	(2,060)
Standard	146,661,428	133,808,568	12,852,860	36,128	26,640	9,489
Strategic Energy Management	-	-	-	-	-	-
Biz Demand Response	(555,525)	1,000,000	(1,555,525)	(2,367)	50,000	(52,367)
Total Business Programs	314,671,975	384,851,830	(70,179,855)	93,750	147,705	(53,955)
Total Portfolio	601,314,356	583,875,454	17,438,902	203,954	257,520	(53,566)

2

Table 7B

MEEIA 2						
Cycle 2 Long Lead Totals (kWh & kW) October 1, 2020 through September 30, 2022						
MEEIA Programs	Achieved Annual Energy Savings (kWh)	Planned Annual Energy Savings (kWh)	Variance	Achieved Annual Demand Savings (kW)	Planned Annual Demand Savings (kW)	Variance
Lighting	-	-	-	-	-	-
Efficient Products	-	-	-	-	-	-
HVAC	-	-	-	-	-	-
Smart Thermostats	-	-	-	-	-	-
Low Income	-	-	-	-	-	-
EE Kits	-	-	-	-	-	-
Home Energy Reports	-	-	-	-	-	-
Total Residential Programs	-	-	-	-	-	-
Standard	1,636,352	-	1,636,352	311	-	311
Custom	167,365	-	167,365	101	-	101
Retro-Commissioning	-	-	-	-	-	-
New Construction	1,625,730	-	1,625,730	498	-	498
SBDI	-	-	-	-	-	-
Cust Ext Lighting	-	-	-	-	-	-
Total Business Programs	3,429,447	-	3,429,447	910	-	910
Total Portfolio	3,429,447	-	3,429,447	910	-	910

In previous MEEIA prudence reviews of Ameren Missouri's MEEIA Cycle 2 Plan, Staff noted an issue with the reporting kWh values. The following notation was made between Staff and OPC with Ameren Missouri that a reconciliation explanation and detail would be provided:

Ameren Missouri shall modify its process to eliminate timing differences between its sources for reporting information. The Company will implement processes so that retroactive adjustments are not made to the previous month's results. If differences occur among the sources of reporting information, Ameren Missouri shall provide reconciliations to explain the nature of the differences among the sources of information.

Staff requested in Data Request No. 0020 that Ameren Missouri perform a detailed reconciliation in an effort to determine the most accurate determination of energy savings associated with the MEEIA Plan for the Review Period. Staff notes that the Company provided the following sources of information for the total energy savings (kWh): a reconciliation provided in Data Request No. 0020, the tracking system reports (included with Data Request

1 No. 0010)⁴⁴, the TD calculation spreadsheets (included with Data Requests Nos. 0016 and
2 0018), and the SMRs. The sources provided in Data Request No. 0020, the tracking system
3 reports, and the TD calculation spreadsheets provided in Data Request No. 0016 reconcile with
4 each other. The Company explained that the SMRs are based on a snapshot in time when the
5 reports were created and are fluid documents due to savings adjustments that can be made to
6 previous months. Staff and Ameren Missouri had discussions in regard to submitting any
7 changes to the SMRs at the time of any adjustment, so Staff would be aware of any changes
8 prior to the next prudence review. Ameren Missouri has agreed that going forward they will
9 provide a more granular savings tracking report for deemed savings.

10 When comparing the kWh values provided in Data Request No. 0020 and the SMRs,
11 there was a discrepancy in the 3rd quarter of 2021, in the 12 month ended total, solely for Home
12 Energy Reports (“HER”). HER values were initially communicated as reflecting the correct
13 counting method of paper reports mailed in a current month, but was discovered that the report
14 counts reflected an incorrect method of growing number of customers who received a paper
15 report in the plan year. This was updated once it was discovered, and was reflected correctly in
16 the SMRs after the 3rd quarter of 2021.

17 Once the HER adjustment as explained above was reflected correctly in the SMR
18 after the 3rd quarter of 2021, all sources reflect a cumulative total of 601,314,357 kWh and
19 203,954 kW for MEEIA Cycle 3 and 3,429,447 kWh and 910 kW for MEEIA Cycle 2 during
20 the Review Period. As stated above, the cumulative totals from the SMRs reflect the most up
21 to date revisions. Staff was able to verify these amounts in the reconciliation provided in
22 Data Request No. 0020, the tracking system reports (included with Data Request No. 0010),
23 and the TD calculation spreadsheets (included with Data Request No. 0016) for MEEIA 2 and
24 MEEIA 3 kWh.

25 **2. Summary of Cost Implications**

26 If Ameren Missouri was imprudent in its tracking, reporting and/or calculating the
27 Company’s estimated energy and demand savings ratepayer harm could result in an increase in
28 future Energy Efficiency Investment Charge amounts.

⁴⁴ Staff chose a sample of program measures and compared the kWh savings as reported in the Company details to the measure savings as reported in the TRM and subsequent updates to the TRM.

1 **3. Conclusion**

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

4 **4. Documents Reviewed**

- 5 a. Ameren Missouri’s *2016-2018 Energy Efficiency Plan* and Technical
6 Resource Manual;
- 7 b. Ameren Missouri’s *2019-2023 MEEIA Energy Efficiency Plan* and
8 Technical Resource Manual;
- 9 c. Stipulations and Agreements in Cases Nos. EO-2015-0055 and
10 EO-2018-0211;
- 11 d. Approved MEEIA Energy Efficiency and Demand Side Management
12 Programs Tariff Sheets;
- 13 e. Ameren Missouri’s Surveillance Monitoring Reports;
- 14 f. Phone conversation with Ameren on reconciliation report;
- 15 g. Staff Data Requests: 0001, 0013, and 0020; and,
- 16 h. Reports pulled from TRC and Franklin Energy’s database tracking system.

17 *Staff Expert: Cynthia M. Tandy*

18 **V. INTEREST**

19 **1. Description**

20 Staff reviewed the interest calculations for program costs and throughput disincentive,
21 broken out by rate class, as provided in Ameren Missouri’s response to Data Request No. 0005
22 for the Review Period of October 1, 2020 through September 30, 2022. Ameren Missouri’s
23 tariff sheets provide that for program costs and TD: “Such amounts shall include monthly
24 interest charged at the Company’s monthly short-term borrowing rate.” Staff verified the
25 Company’s average monthly short-term borrowing rates were applied correctly (except what is
26 explained in the paragraph below) to the over- or under-recovered balances for program costs
27 and TD. Ameren Missouri calculates interest associated with TD by each rate class.

28 During Staff’s review of the Company’s average monthly short-term borrowing rates,
29 Staff discovered the rate used for December 2020 was incorrect. Staff sent Data Request

No. 0005.1 to get more information on the interest rate used. Ameren Missouri responded: “The incorrect rate for this month was used in the over/under calculation (i.e. the AMC rate instead of the UEC rate). Accordingly, we have a proposed combined MEEIA 2 and MEEIA 3 adjustment of (\$507.36), which will be recorded as part of January 2023 GL.” Staff reviewed the supporting work papers for the interest adjustment provided in this response, and verified the adjustment was made with the correct December 2020 interest rate.

During the Review Period Ameren Missouri’s total for the interest amount accrued for the Company’s program costs were as follows:

Table 8

INTEREST				
	For Review Period October 1, 2020 through September 30, 2022	(Over)/ Under Billed	Cumulative Interest	(Over)/ Under Billed
MEEIA Cycle 2	\$ 40	Under	\$ 259,388	Over
MEEIA Cycle 3	\$ 194,252	Over	\$ 185,275	Over
TD Cycle 2	\$ 13,460	Over	\$ 36,480	Over
TD Cycle 3	\$ 32,604	Under	\$ 21,506	Under

2. Summary of Cost Implications

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

3. Conclusion

Staff found no indication that Ameren Missouri’s interest calculations were incorrect after they made an adjustment for December 2020 with the correct interest rate, and found them reasonable; therefore, Staff found no indication that Ameren Missouri acted imprudently regarding the calculation of the interest.

1 **4. Documents Reviewed**

- 2 a. Ameren Missouri’s Quarterly Surveillance Monitoring Reports for Review
3 Period;
4 b. Approved MEEIA Energy Efficiency and Demand Side Management
5 Programs Tariff Sheets; and,
6 c. Staff Data Requests: 0003, 0005 and 0011.

7 *Staff Expert: Amy L. Eichholz*

8 **VI. EARNINGS OPPORTUNITY (EO)**

9 **1. Description**

10 Ameren Missouri’s EO is designed to provide a substitute for earnings lost on physical
11 plant that was not built by Ameren Missouri because of the energy and demand savings
12 achieved by Ameren Missouri’s MEEIA programs. The MEEIA 2019-2021 Plan includes
13 annual targets, with EO payout amounts calculated for each Program Year. Ameren Missouri’s
14 tariff sheet defines Earnings Opportunity Award Determination as:

15 An Earnings Opportunity Award shall be calculated for each Program
16 Year using the EO Calculator submitted with the MEEIA 2019-21 Plan
17 as Appendix N. The Earnings Opportunity Award will not go below zero
18 dollars (\$0). If Commission-approved new programs are added to the
19 Program, the Company may seek Commission approval to have the
20 targets and the cap of the Earnings Opportunity Award adjusted. For
21 each Program Year the Earnings Opportunity Award shall be adjusted
22 for the difference, with carrying cost at the Company’s monthly
23 short-term interest rate, between TD revenues billed resulting from the
24 application of the EEIR and what those revenues would have been if:
25 1) the ME used in the calculation were the normalized savings for each
26 Measure at customer meter per Measure determined through EM&V ex-
27 post gross analysis for each Program Year, and 2) the NTGF used in the
28 calculation was the net-to-gross values determined through EM&V.⁴⁵

29 Staff reviewed the Cycle 2 and Cycle 3 EO from the calculations provided in response to Data
30 Request No. 0017 and the calculations in the EEIC Riders in dockets ER-2020-0147,

⁴⁵ 3rd Revised Sheet No. 91.21. Ameren Missouri’s previous tariff sheets that defines EO are attached to this report in Attachment A and B.

1 ER-2021-0158, and EO-2022-0146 for the months in this Review Period⁴⁶. During this review,
2 Staff was able to verify that Ameren Missouri did not recover more than its approved EO for
3 Cycle 2 and Cycle 3. During this Review Period, the Cycle 2 total EO recovered was
4 \$29,438,135, and the Cycle 3 EO recovered was \$13,550,462.

5 **2. Summary of Cost Implications**

6 If Ameren Missouri was imprudent in its reporting and/or calculation of the EO,
7 ratepayer harm could result in an increase in future EEIC Charge amounts.

8 **3. Conclusion**

9 Staff has verified that Ameren Missouri has not recovered earnings opportunity in
10 excess of the amounts awarded.

11 **4. Documents Reviewed**

- 12 a. Ameren Missouri's *2016-2018 Energy Efficiency Plan*;
- 13 b. Ameren Missouri's *2019-2021 Energy Efficiency Plan*;
- 14 c. Ameren Missouri Tariff Sheet 91.16 and 91.21;
- 15 d. Ameren Missouri Cycle 3 Stipulation and Agreement;
- 16 e. EEIC Rider filings EO-2020-0147, EO-2021-0158, and EO-2022-0146; and,
- 17 f. Staff Data Requests: 0003, 0011, and 0017.

18 *Staff Expert: Brooke Mastrogiannis*

19 **VII. EVALUATION MEASUREMENT AND VERIFICATION (EM&V)**

20 **1. Description**

21 In the MEEIA 2019-2021 Plan, Ameren Missouri agreed⁴⁷ to have its independent
22 EM&V evaluator(s) perform annual EM&V and file annual EM&V reports with the
23 Commission following each program year. During this Review Period, Ameren

⁴⁶ In Case No. ER-2020-0147 the effective dates were February 2020 through January 2021, which is 4 months of this Review Period (October 2020 through January 2021). In Case No. ER-2021-0158 the effective dates were February 2021 through January 2022, which is 12 months of this Review Period. In Case No. ER-2022-0146 the effective dates were February 2022 through January 2023, which is 8 months of this Review Period (February 2022 through September 2022).

⁴⁷ Stipulation and Agreement approved by the Commission on June 25, 2021, Paragraph 2 reference to the Revised Ameren Missouri's 2019-21 Energy Efficiency Plan.

1 Missouri's evaluators filed eight evaluation reports: four for PY2020 and four for PY2021.⁴⁸
2 Ameren Missouri submitted the "PY 2020 EM&V" report on June 11, 2021. On September 23,
3 2021, the Commission issued its *Order Approving Stipulation and Agreement*, which approved
4 the resolutions to the issues raised in the PY 2020 EM&V report. Ameren Missouri submitted
5 the "PY 2021 EM&V" report on June 22, 2022 and June 28, 2022. On August 3, 2022, the
6 Commission issued its *Order Accepting EM&V Program Year 2021 Report*, which accepted
7 the EM&V and audit reports for PY 2021. The cost of EM&V work performed by
8 Ameren Missouri's independent evaluator for the Review Period for Cycle 3 is \$4,440,541.

9 Ameren Missouri contracted with Opinion Dynamics Corporation (Opinion) to be the
10 evaluator for the Cycle 3 programs. Ameren Missouri holds back or retains 5% of the total
11 amount of each invoice submitted by Opinion. The 5% retainage will be payable after Opinion
12 submits an acceptable and timely final annual report, unless issues are identified that result in
13 forfeiture of the retainage amount. Therefore, only 95% of the invoices submitted are paid and
14 reflected in the transactions that Staff reviewed. Staff requested from Ameren Missouri, copies
15 of the EM&V evaluators' invoices. EM&V invoices submitted by Ameren Missouri reflected
16 the entire 100% invoice total, including the 5% retainage portion. Staff was able to verify the
17 recording of invoices at 95% of the total invoiced amount in the responses provided to Data
18 Request Nos. 0003 and 0009.

19 Ameren Missouri contracted with ADM to perform impact measurement and
20 verification ("IM&V") of the MEEIA Cycle 2 Long Lead Projects and to provide the results in
21 two annual reports. The first annual report was submitted in May 2020, for the period of March
22 2019 through February 2020. The second annual report was submitted in June 2021, for the
23 period of October 2020 through September 2021. The cost of impact measurement and
24 verification work performed by ADM for the Review Period for Cycle 2 Long Lead Projects is
25 \$19,538.

26 Commission rules allow Ameren Missouri to spend up to 5% of its total program costs
27 budget for EM&V.⁴⁹ During the Review Period, Ameren Missouri expended \$19,538 for
28 Cycle 2 EM&V. This amount, combined with the \$6,635,863 EM&V Cycle 2 cumulative costs

⁴⁸ The ten evaluation reports are provided in response to Data Request No. 0006 and Case No EO-2018-0211 Item Nos. 155, 204, and 206.

⁴⁹ 20 CSR 4240-20.093(8)(A) Each utility's EM&V budget shall not exceed five percent (5%) of the utility's total budget for all approved demand-side program costs.

1 reported previously, amounts to \$6,655,401 or 4.08% of the \$163,190,000 total Cycle 2 budget
2 for program costs. Thus, the costs associated with the Cycle 2 EM&V costs did not exceed the
3 5% maximum cap. During the Review Period, Ameren Missouri expended \$4,440,541⁵⁰ for
4 Cycle 3 EM&V, which represents 2.82% of the \$351.57 million total Cycle 3 budget for
5 programs' costs. Thus, the costs associated with the Cycle 3 EM&V costs did not exceed the
6 5% maximum cap. Staff will continue to monitor EM&V costs throughout the life of Cycle 3,
7 to ensure Ameren Missouri does not exceed the 5% maximum cap of the total Cycle 3 budget.

8 **2. Summary of Cost Implications**

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

11 **3. Conclusion**

12 Staff found no indication that Ameren Missouri acted imprudently regarding the
13 administration of EM&V contracts concerning its Cycle 3 EM&V for the review period.

14 **4. Documents Reviewed**

- 15 a. Ameren Missouri's *2016-2018 Energy Efficiency Plan*;
- 16 b. Ameren Missouri's *2019-2021 Energy Efficiency Plan*;
- 17 c. Ameren Missouri Cycle 3 Stipulation and Agreement, EO-2018-0211;
- 18 d. Approved MEEIA Energy Efficiency and Demand Side Management
19 Programs Tariff Sheets;
- 20 e. Staff Report, Case No. EO-2019-0376, Second Prudence Review of Cycle 2
21 of Costs Related to the Demand-Side Programs Investment Mechanism;
- 22 f. Staff Report, Case No. EO-2021-0157, First Prudence Review of Cycle 3 of
23 Costs Related to the Demand-Side Programs Investment Mechanism;
- 24 g. Opinion Dynamics invoices;
- 25 h. ADM invoices; and,

⁵⁰ This number does not match the EM&V total from Table 2 because there are entries coded in the general ledger under vendor name as "N/A". As stated in Data Request No. 0009.3, "These are for accruals made during each monthly close cycle to estimate the expense incurred during the period, and they automatically reverse the following month to coincide with the receipt of actual invoiced amounts." Staff has verified the amounts listed here do match the invoices provided in Data Request No. 0009.

1 i. Staff Data Requests: 0002, 0003, 0006, 0007, 0008, 0009, 0009.1, 0009.2,
2 0009.3 and 0011.

3 *Staff Expert: Amanda C. Conner*

4 *See attached Attachment A and B and Confidential Attachment C and D*

APPLYING TO MISSOURI SERVICE AREA

RIDER EEIC
ENERGY EFFICIENCY INVESTMENT CHARGE
For MEEIA Cycle 2 Plan

APPLICABILITY

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, or via regular mail to **Ameren Missouri, P.O. Box 790098, St. Louis, MO 63179-0098**

- a. documentation of the assistance received in the form of:
 - i. a copy of the Division of Social Services Family Support Division ("DSSFSD") form EA-7 energy assistance payment notice received by the low-income customer, or
 - ii. a copy of the DSSFSD 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 DSSFSD LIHEAP EA EIRG 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

FILED
 Missouri Public
 Service Commission
 JE-2020-0023

DATE OF ISSUE August 2, 2019 DATE EFFECTIVE September 1, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
 NAME OF OFFICER TITLE ADDRESS

MO.P.S.C. SCHEDULE NO. 6 2nd Revised SHEET NO. 91.1

CANCELLING MO.P.S.C. SCHEDULE NO. 6 1st Revised SHEET NO. 91.1

APPLYING TO MISSOURI SERVICE AREA

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

APPLICABILITY (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) months beginning with February and ending with January. 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 month of June or October and end the subsequent January.

"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.

FILED
 Missouri Public
 Service Commission
 ER-2020-0147; YE-2020-0090

DATE OF ISSUE November 22, 2019 DATE EFFECTIVE ~~January 21, 2020~~ February 1, 2020

ISSUED BY Michael Moehn President St. Louis, Missouri
 NAME OF OFFICER TITLE ADDRESS

APPLYING TO MISSOURI SERVICE AREA

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

DEFINITIONS (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.

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

DATE OF ISSUE June 29, 2017 DATE EFFECTIVE July 29, 2017

ISSUED BY Michael Moehn President St. Louis, Missouri
NAME OF OFFICER TITLE ADDRESS

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

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

ENERGY 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.

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

DATE OF ISSUE February 5, 2016 DATE EFFECTIVE March 6, 2016

ISSUED BY Michael Moehn President St. Louis, Missouri
 NAME OF OFFICER TITLE ADDRESS

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

EEIR 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

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

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

EEIR 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, 2016

ISSUED BY Michael Moehn President St. Louis, Missouri
NAME OF OFFICER TITLE ADDRESS

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

TD 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_{CM} = 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).

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

DATE OF ISSUE February 5, 2016 DATE EFFECTIVE March 6, 2016

ISSUED BY Michael Moehn President St. Louis, Missouri
 NAME OF OFFICER TITLE ADDRESS

APPLYING TO MISSOURI SERVICE AREA

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

TD DETERMINATION (Cont'd.)

a. 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	0.041430	0.045700	0.034588	0.035639	0.028725
February	0.042148	0.045551	0.035551	0.036287	0.031331
March	0.044040	0.048054	0.036561	0.036895	0.030147
April	0.045920	0.050473	0.037263	0.036579	0.030010
May	0.048148	0.052224	0.038191	0.038374	0.031032
June	0.103081	0.089681	0.077969	0.078589	0.056455
July	0.103081	0.089681	0.076643	0.077954	0.058907
August	0.103081	0.089681	0.076994	0.078763	0.057650
September	0.103081	0.089681	0.077319	0.078028	0.058389
October	0.045144	0.050437	0.037248	0.037245	0.031531
November	0.048189	0.051888	0.037606	0.037399	0.031034
December	0.043856	0.048895	0.035990	0.036578	0.029560

FILED
 Missouri Public
 Service Commission
 ER-2018-0362; YE-2019-0004

* Indicates Change.

DATE OF ISSUE July 16, 2018 DATE EFFECTIVE August 1, 2018
 ISSUED BY Michael Moehn President St. Louis, Missouri
 NAME OF OFFICER TITLE ADDRESS

MO.P.S.C. SCHEDULE NO. 6 1st Revised SHEET NO. 91.8

CANCELLING MO.P.S.C. SCHEDULE NO. 6 Original SHEET NO. 91.8

APPLYING TO MISSOURI SERVICE AREA

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

TD 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.

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

DATE OF ISSUE June 29, 2017 DATE EFFECTIVE July 29, 2017

ISSUED BY Michael Moehn President St. Louis, Missouri
NAME OF OFFICER TITLE ADDRESS

APPLYING TO MISSOURI SERVICE AREA

RIDER EEIC
ENERGY 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

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

DATE OF ISSUE April 18, 2017 DATE EFFECTIVE May 18, 2017

ISSUED BY Michael Moehn President St. Louis, Missouri
 NAME OF OFFICER TITLE ADDRESS

MO.P.S.C. SCHEDULE NO. 6 1st Revised SHEET NO. 91.10

CANCELLING MO.P.S.C. SCHEDULE NO. 6 Original SHEET NO. 91.10

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 application to the usage on and after the first day of the subsequent February. 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 the first day of June or October. 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 20 CSR 4240-20.093(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.

*Indicates Change.

FILED
Missouri Public
Service Commission
ER-2020-0147; YE-2020-0090

DATE OF ISSUE November 22, 2019 DATE EFFECTIVE ~~January 21, 2020~~ February 1, 2020

ISSUED BY Michael Moehn President St. Louis, Missouri
NAME OF OFFICER TITLE ADDRESS

MO.P.S.C. SCHEDULE NO. 6 1st Revised SHEET NO. 91.12CANCELLING MO.P.S.C. SCHEDULE NO. 6 Original SHEET NO. 91.12APPLYING TO MISSOURI SERVICE AREA

RIDER EEIC
ENERGY EFFICIENCY INVESTMENT CHARGE
For MEEIA 2019-21 Plan

APPLICABILITY

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 exempt 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, or via regular mail to **Ameren Missouri, P.O. Box 790098, St. Louis, MO 63179-0098**

- a. documentation of the assistance received in the form of:
 - i. a copy of the Division of Social Services Family Support Division ("DSSFSD") form EA-7 energy assistance payment notice received by the Low-income customer, or
 - ii. a copy of the DSSFSD 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 DSSFSD LIHEAP EA EIRG 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 within 12 billing months following the documented receipt of energy assistance 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;
- c. Upon receipt of the documentation, for the remainder of the 12 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) 2019-21 Plan and any remaining unrecovered balances from the MEEIA 2016-18 Plan. Those charges include:

FILED
Missouri Public
Service Commission
JE-2020-0023

DATE OF ISSUE August 2, 2019 DATE EFFECTIVE September 1, 2019ISSUED BY Michael Moehn President St. Louis, Missouri
NAME OF OFFICER TITLE ADDRESS

APPLYING TO MISSOURI SERVICE AREA

RIDER EEIC
ENERGY EFFICIENCY INVESTMENT CHARGE (Cont'd.)
For MEEIA 2019-21 Plan

APPLICABILITY (Cont'd.)

- 1) Program Costs, Company's Throughput Disincentive (TD) and Earnings Opportunity 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 2019-21 Plan and/or remaining unrecovered Program Cost balances for MEEIA 2016-18;
 - ii) Company's TD incurred in the MEEIA 2019-21 Plan and/or remaining unrecovered TD balances for MEEIA 2016-18;
 - iii) Amortization of Earnings Opportunity Award ordered by the Missouri Public Service Commission (Commission) for the MEEIA 2019-21 Plan and/or remaining unrecovered EO balances for MEEIA 2016-18.
- 3) Any Ordered Adjustments.

Charges under this Rider EEIC shall continue after the anticipated December 31, 2021 end of the non-low-income portions of the MEEIA 2019-21 Plan and after December 31, 2024 for the low-income portion of the MEEIA 2019-21 Plan until such time as the charges described in items 1), 2), and 3) above have been billed. Any programs and/or balance associated with the low-income portions of the MEEIA 2019-21 Plan may be rolled into the recovery mechanism for an approved MEEIA program that commences in 2022.

Charges arising from the MEEIA 2019-21 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 previous MEEIA plans.

DEFINITIONS

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

"Deemed Savings Table" means a list of Measures derived from the Company's TRM that characterizes associated gross energy and demand savings with Company-specific Measure parameters where available, as outlined in Appendix F to the MEEIA 2019-21 Plan and updated as provided for herein based on EM&V ex-post gross adjustments.

"Earnings Opportunity Award" (EO) means the dollar amount calculated for each Program Year by the EO Calculator as described in the Earnings Opportunity Award Determination section below.

* "Effective Period" (EP) means the months for which an approved EEIR is to be effective, i. e., the twelve (12) months beginning with February and ending with January unless there is an additional Rider EEIC filing made to change the Energy Efficiency Investment Rate components during a calendar year, the EP for such a filing shall begin with the either June or October and end with the subsequent January.

"End Use Category" means the unique summary category of end-use load shapes. The **FILED** list of End Use Categories is included in Appendix G to the MEEIA 2019-21 Plan **Missouri Public Service Commission**

ER-2020-0147; YE-2020-0090

*Indicates Change.

DATE OF ISSUE November 22, 2019 DATE EFFECTIVE ~~January 21, 2020~~ February 1, 2020

ISSUED BY Michael Moehn President St. Louis, Missouri
NAME OF OFFICER TITLE ADDRESS

MO.P.S.C. SCHEDULE NO. 6 Original SHEET NO. 91.14

CANCELLING MO.P.S.C. SCHEDULE NO. _____ SHEET NO. _____

APPLYING TO MISSOURI SERVICE AREA

RIDER EEIC
ENERGY EFFICIENCY INVESTMENT CHARGE (Cont'd.)
For MEEIA 2019-21 Plan

DEFINITIONS (Cont'd.)

"Incremental Internal Labor Cost and Associated Benefits" (IIL) means the labor costs and associated benefits of personnel 1) hired by Ameren Missouri after Commission approval of the MEEIA 2019-21 Plan that were (a) not hired to replace an Ameren Missouri or Ameren Services Company employee whose labor and benefit costs were accounted for in Ameren Missouri's prior general rate proceeding, (b) hired by Ameren Missouri and assigned exclusively to support Ameren Missouri's MEEIA Programs; and 2) were not an Ameren Missouri or Ameren Services Company employee whose labor and benefit costs were accounted for in Ameren Missouri's prior general rate proceeding.

"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.

"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.

"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 the same as defined in 4 CSR 240-20.092(1)FF.

"MEEIA 2016-18 Plan" means Company's "2016-18 Energy Efficiency Plan" approved in File No. EO-2015-0055.

"MEEIA 2019-21 Plan" means Company's "2019-21 MEEIA Energy Efficiency Plan" approved in File No. EO-2018-0211 as may be amended.

"Programs" means MEEIA 2019-21 programs listed in tariff sheet nos. 174 and 174.1.

"Program Costs" means any prudently incurred Program expenditures, including such items as Program planning, education Programs, Program design, administration, delivery, end-use Measures and Incentive payments, advertising expense, EM&V, market potential studies, work on a Company and/or statewide Technical Resource Manual, and IIL.

"Program Year" means the period of Programs that ends on December 31 of each year of the MEEIA 2019-21 Plan. The first Program Year will be 10 months long and each subsequent Program Year will be 12 months long.

"TRM" means the Company's Technical Resource Manual (attached as Appendices G-I to the MEEIA 2019-21 Plan) and updated based on EM&V ex-post gross adjustments.

FILED
 Missouri Public
 Service Commission
 EO-2018-0211; YE-2019-0133

DATE OF ISSUE December 21, 2018 DATE EFFECTIVE January 20, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
 NAME OF OFFICER TITLE ADDRESS

MO.P.S.C. SCHEDULE NO. 6 Original SHEET NO. 91.15

CANCELLING MO.P.S.C. SCHEDULE NO. _____ SHEET NO. _____

APPLYING TO MISSOURI SERVICE AREA

RIDER EEIC
ENERGY EFFICIENCY INVESTMENT CHARGE (Cont'd.)
For MEEIA 2019-21 Plan

ENERGY 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 2016-18 shall be rolled into the PCR calculation starting February 2022.

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 91.17.

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 2016-18 shall be rolled into the TDR calculation starting February 2024.

FILED
Missouri Public
Service Commission
EO-2018-0211; YE-2019-0133

DATE OF ISSUE December 21, 2018 DATE EFFECTIVE January 20, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
NAME OF OFFICER TITLE ADDRESS

MO.P.S.C. SCHEDULE NO. 6 Original SHEET NO. 91.16

CANCELLING MO.P.S.C. SCHEDULE NO. _____ SHEET NO. _____

APPLYING TO MISSOURI SERVICE AREA

RIDER EEIC
ENERGY EFFICIENCY INVESTMENT CHARGE (Cont'd.)
For MEEIA 2019-21 Plan

EEIR DETERMINATION (Cont'd.)

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

$$NEO = EO + EOR$$

EO = Earnings Opportunity is equal to the sum of the monthly amortizations of each Program Year's Earnings Opportunity Award multiplied by the number of billing months in the applicable EP.

A monthly amortization shall be determined by dividing each Program Year's Earnings Opportunity Award by 12. The monthly amortization of each Program Year's Earnings Opportunity Award will continue through each subsequent EEIR determination until such time that the total Earnings Opportunity Award for that Program Year has been fully amortized.

EOR = Earnings Opportunity Reconciliation is equal to the cumulative difference, if any, between the EO revenues billed resulting from the application of the EEIR and the monthly amortization of the EO 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 EO balance from MEEIA 2016-18 shall be rolled into the EOR calculation starting February 2022.

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 EEIR 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-2018-0211; YE-2019-0133

DATE OF ISSUE December 21, 2018 DATE EFFECTIVE January 20, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
 NAME OF OFFICER TITLE ADDRESS

MO.P.S.C. SCHEDULE NO. 6 Original SHEET NO. 91.17

CANCELLING MO.P.S.C. SCHEDULE NO. _____ SHEET NO. _____

APPLYING TO MISSOURI SERVICE AREA

RIDER EEIC
ENERGY EFFICIENCY INVESTMENT CHARGE (Cont'd.)
For MEEIA 2019-21 Plan

EEIR 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 will be made in accordance with the MEEIA 2019-21 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.

TD DETERMINATION

Monthly TD is the sum of the TD calculation for all End Use Categories and Demand Response Event Net Energy (DRENE).

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:

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

Where:

MAS_{CM} = 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.

FILED
Missouri Public
Service Commission
EO-2018-0211; YE-2019-0133

DATE OF ISSUE December 21, 2018 DATE EFFECTIVE January 20, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
NAME OF OFFICER TITLE ADDRESS

RIDER EEIC
ENERGY EFFICIENCY INVESTMENT CHARGE (Cont'd.)
For MEEIA 2019-21 Plan

TD DETERMINATION (Cont'd.)

- ME = Measure Energy. ME will be determined as follows, for each Measure:
 - a. For Measures in the Deemed Savings Table (including Residential Demand Response energy savings not included in $DRENE_{CM}$), the ME is the annual total of normalized savings for each Measure at customer meter per Measure defined in the Company's current Deemed Savings Table.
 - b. For Measures not in the Deemed Savings Table, the ME will be the annual value attributable to the installations reported monthly by the Program administrator.
- CM = Current calendar month.
- CAS = Cumulative sum of MAS of all prior calendar months for each End Use Category for the MEEIA 2019-21 Plan.
- 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 2019-21 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 2019-21 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 (included in the MEEIA 2019-21 Plan).
- $DRENE_{CM}$ = Demand Response Event Net Energy for the Current Month. $DRENE_{CM}$ is the net energy savings resulting from demand response events during the month as reported by the program administrator consistent with TRM guidance. $DRENE_{CM}$ incurred during the time period used for establishing billing determinants in general rate proceedings will be added back to those billing determinants and will not be included in the Rebasing Adjustment.

FILED
Missouri Public
Service Commission
EO-2018-0211; YE-2019-0133

DATE OF ISSUE December 21, 2018 DATE EFFECTIVE January 20, 2019

ISSUED BY Michael Moehn President St. Louis, Missouri
NAME OF OFFICER TITLE ADDRESS

UNION ELECTRIC COMPANY

ELECTRIC SERVICE

MO.P.S.C. SCHEDULE NO. 6 2nd Revised SHEET NO. 91

CANCELLING MO.P.S.C. SCHEDULE NO. 6 1st Revised SHEET NO. 91

APPLYING TO MISSOURI SERVICE AREA

RIDER EEIC
ENERGY EFFICIENCY INVESTMENT CHARGE (Cont'd.)
For MEEIA 2019-21 Plan

*** TD DETERMINATION (Cont'd.)**

NMR = Net Margin Revenue. NMR values for each applicable Service Classification and by End Use Category where applicable are as follows:

Month	Service Classifications	
	1 (M) Res \$/kWh	2 (M) SGS \$/kWh
January	0.051041	0.055283
February	0.051569	0.055595
March	0.052598	0.057380
April	0.054791	0.063914
May	0.056398	0.068912
June	0.115657	0.099557
July	0.115657	0.099557
August	0.115657	0.099557
September	0.115657	0.099557
October	0.055871	0.063349
November	0.055909	0.063200
December	0.052723	0.059422

Month	MISC./AIR COMP./ PROCESS/MOTORS			COOLING			EXT LIGHTING		
	3M	4M	11M	3M	4M	11M	3M	4M	11M
January	0.037309	0.037862	0.029121	0.037989	0.038909	0.020648	0.029585	0.027383	0.022197
February	0.037735	0.038270	0.028996	0.038844	0.039213	0.020648	0.029943	0.026421	0.022083
March	0.038400	0.038303	0.030049	0.039697	0.039617	0.020648	0.030326	0.026467	0.020893
April	0.039986	0.039909	0.029556	0.047394	0.049125	0.030579	0.031985	0.027631	0.021997
May	0.041888	0.041752	0.031981	0.053057	0.059047	0.046979	0.032126	0.027195	0.020916
June	0.078059	0.075856	0.053500	0.096769	0.100907	0.078361	0.052953	0.042217	0.023053
July	0.073399	0.072593	0.053107	0.088381	0.090298	0.062687	0.049581	0.041651	0.022516
August	0.075392	0.073981	0.054892	0.092608	0.095770	0.073023	0.050102	0.041998	0.023172
September	0.074381	0.072086	0.055126	0.096898	0.101619	0.086083	0.051369	0.041888	0.023124
October	0.040178	0.040322	0.035233	0.048348	0.052329	0.034047	0.031073	0.026916	0.020895
November	0.040493	0.040530	0.033248	0.047795	0.045545	0.020648	0.031452	0.026819	0.020675
December	0.038907	0.037974	0.031798	0.040001	0.041320	0.020648	0.030643	0.026338	0.020853

*Indicates Change.

FILED
 Missouri Public
 Service Commission
 ER-2021-0240; YE-2022-0222

Issued pursuant to the Order of the Mo.P.S.C. in Case No. ER-2021-0240 **February 28, 2022**
 DATE OF ISSUE February 14, 2022 DATE EFFECTIVE ~~March 16, 2022~~

ISSUED BY Mark C. Birk Chairman & President St. Louis, Missouri
 NAME OF OFFIC _____ TITLE _____ ADDRESS _____

UNION ELECTRIC COMPANY

ELECTRIC SERVICE

MO.P.S.C. SCHEDULE NO. 6 1st Revised SHEET NO. 91.19

CANCELLING MO.P.S.C. SCHEDULE NO. 6 Original SHEET NO. 91.19

APPLYING TO MISSOURI SERVICE AREA

RIDER EEIC
ENERGY EFFICIENCY INVESTMENT CHARGE (Cont'd.)
For MEEIA 2019-21 Plan

* **TD DETERMINATION (Cont'd.)**

NMR = Net Margin Revenue. NMR values for each applicable Service Classification and by End Use Category where applicable are as follows:

Month	Service Classifications	
	1 (M) Res \$/kWh	2 (M) SGS \$/kWh
January	0.044375	0.053661
February	0.045622	0.055252
March	0.047230	0.057794
April	0.047618	0.058522
May	0.049702	0.061238
June	0.104792	0.090992
July	0.104792	0.090992
August	0.104792	0.090992
September	0.104792	0.090992
October	0.046772	0.059083
November	0.049328	0.060646
December	0.046037	0.056723

Month	MISC./AIR COMP./ PROCESS/MOTORS			COOLING			EXT LIGHTING		
	3M	4M	11M	3M	4M	11M	3M	4M	11M
January	0.032900	0.032612	0.026759	0.025861	0.023079	0.018069	0.025881	0.024801	0.019697
February	0.033629	0.033309	0.027253	0.026528	0.023200	0.018069	0.026544	0.023220	0.019747
March	0.034622	0.033845	0.027386	0.027113	0.023356	0.018069	0.027131	0.023622	0.018321
April	0.033775	0.034296	0.027399	0.037753	0.036687	0.028390	0.028126	0.024779	0.019553
May	0.036715	0.036755	0.031260	0.049020	0.055877	0.046776	0.028293	0.023963	0.018366
June	0.068381	0.067156	0.053324	0.085725	0.089526	0.077183	0.045440	0.037585	0.020588
July	0.066040	0.065258	0.050240	0.079928	0.081437	0.059184	0.044249	0.037499	0.020010
August	0.068091	0.066149	0.049954	0.083828	0.086016	0.065846	0.045361	0.037610	0.020626
September	0.066093	0.064668	0.050927	0.086550	0.091348	0.077816	0.045532	0.037858	0.020587
October	0.035712	0.035715	0.032402	0.038227	0.036561	0.031288	0.027123	0.023675	0.018308
November	0.036135	0.035963	0.030643	0.027736	0.023477	0.018069	0.027875	0.023669	0.018096
December	0.033574	0.031724	0.028852	0.026528	0.023245	0.018069	0.026684	0.023265	0.018274

CANCELLED
 February 28, 2022
 Missouri Public
 Service Commission
 ER-2021-0240; YE-2022-0222
 *Indicates Change.

FILED
 Missouri Public
 Service Commission
 ER-2019-0335; YE-2020-0164

Issued pursuant to the Order of the Mo.P.S.C. in Case No. ER-2019-0335.
 DATE OF ISSUE March 18, 2020 DATE EFFECTIVE April 1, 2020
 ISSUED BY Martin J. Lyons Chairman & President St. Louis, Missouri
 NAME OF OFFICER TITLE ADDRESS

APPLYING TO MISSOURI SERVICE AREA

RIDER EEIC
ENERGY EFFICIENCY INVESTMENT CHARGE (Cont'd.)
For MEEIA 2019-21 Plan

* **TD DETERMINATION (Cont'd.)**

Month	HVAC/BUILDING SHELL			LIGHTING			REFRIG.		
	3M	4M	11M	3M	4M	11M	3M	4M	11M
January	0.040160	0.044258	0.034141	0.038845	0.040167	0.030648	0.036127	0.036018	0.027630
February	0.041162	0.043584	0.033355	0.039110	0.040316	0.029906	0.036473	0.036333	0.027564
March	0.042527	0.043881	0.032818	0.039933	0.040568	0.031117	0.037089	0.037147	0.029700
April	0.042640	0.043124	0.030006	0.042049	0.043178	0.032096	0.039087	0.038649	0.029179
May	0.047013	0.049967	0.039079	0.044007	0.044923	0.034242	0.040485	0.039657	0.030497
June	0.095857	0.099685	0.077214	0.082470	0.081758	0.058727	0.074873	0.071591	0.050507
July	0.087962	0.089771	0.062258	0.077553	0.077189	0.056832	0.070266	0.068379	0.047402
August	0.092042	0.095052	0.072377	0.079730	0.079470	0.058724	0.072265	0.070027	0.050280
September	0.093056	0.096576	0.080800	0.076447	0.074792	0.057965	0.071320	0.068070	0.050914
October	0.043665	0.046002	0.034237	0.042173	0.043266	0.038826	0.038855	0.038376	0.033203
November	0.044188	0.044788	0.041385	0.042112	0.043156	0.034846	0.039157	0.038571	0.030951
December	0.041579	0.043465	0.030730	0.040073	0.039748	0.032697	0.037668	0.036103	0.030261

Month	COOK.			DHW			HEAT.		
	3M	4M	11M	3M	4M	11M	3M	4M	11M
January	0.038309	0.038790	0.028787	0.037960	0.037747	0.027586	0.038061	0.041205	0.034141
February	0.038568	0.039440	0.028711	0.038076	0.038658	0.027537	0.038934	0.040433	0.033374
March	0.039270	0.040865	0.032619	0.038562	0.040170	0.031768	0.040449	0.040971	0.033221
April	0.042201	0.043346	0.032873	0.041709	0.042594	0.032106	0.041125	0.040950	0.033129
May	0.043770	0.044565	0.033993	0.043366	0.043942	0.033545	0.041331	0.040859	0.030651
June	0.083546	0.083197	0.060467	0.083459	0.083081	0.062476	0.052466	0.041567	0.022435
July	0.078424	0.078469	0.053040	0.078426	0.077269	0.050458	0.049122	0.041016	0.022435
August	0.080909	0.080961	0.058612	0.080837	0.080870	0.057805	0.049611	0.041378	0.022435
September	0.078895	0.078001	0.061331	0.077884	0.076676	0.059940	0.076653	0.075063	0.058249
October	0.041924	0.042894	0.038235	0.041547	0.042325	0.038202	0.040395	0.040543	0.036738
November	0.041909	0.043184	0.033287	0.041629	0.042594	0.032144	0.041298	0.039838	0.042414
December	0.040132	0.039292	0.033829	0.039898	0.038570	0.033377	0.039199	0.039428	0.030735

Month	OFFICE			VENT		
	3M	4M	11M	3M	4M	11M
January	0.037286	0.038071	0.029552	0.036081	0.036558	0.028162
February	0.037561	0.037999	0.028928	0.036454	0.036269	0.027610
March	0.038187	0.038071	0.029822	0.037074	0.036538	0.028433
April	0.039892	0.039801	0.029494	0.039225	0.038787	0.029095
May	0.041760	0.041566	0.031849	0.040794	0.040117	0.030815
June	0.076344	0.073561	0.051306	0.074454	0.071029	0.049180
July	0.071827	0.070685	0.052198	0.070473	0.068997	0.050253
August	0.073708	0.071853	0.053187	0.072308	0.070082	0.051634
September	0.071698	0.068567	0.051435	0.070775	0.067355	0.050164
October	0.040076	0.040178	0.035084	0.039165	0.038832	0.033621
November	0.040238	0.040078	0.032832	0.038925	0.038057	0.030410
December	0.038433	0.037453	0.030533	0.037820	0.036716	0.030011

* Indicates Change.

FILED
 Missouri Public
 Service Commission
 ER-2021-0240; YE-2022-0222

Issued pursuant to the Order of the Mo.P.S.C. in Case No. ER-2021-0240. **February 28, 2022**
 DATE OF ISSUE February 14, 2022 DATE EFFECTIVE ~~March 16, 2022~~

ISSUED BY Mark C. Birk Chairman & President St. Louis, Missouri
 NAME OF OFF TITLE ADDRESS

UNION ELECTRIC COMPANY

ELECTRIC SERVICE

MO.P.S.C. SCHEDULE NO. 6 1st Revised SHEET NO. 91.20

CANCELLING MO.P.S.C. SCHEDULE NO. 6 Original SHEET NO. 91.20

APPLYING TO MISSOURI SERVICE AREA

RIDER EEIC
ENERGY EFFICIENCY INVESTMENT CHARGE (Cont'd.)
For MEEIA 2019-21 Plan

* **TD DETERMINATION (Cont'd.)**

Month	HVAC/BUILDING SHELL			LIGHTING			REFRIG.		
	3M	4M	11M	3M	4M	11M	3M	4M	11M
January	0.034640	0.038339	0.031730	0.034154	0.034350	0.028287	0.031757	0.031025	0.025268
February	0.036376	0.037276	0.032064	0.034537	0.034615	0.028269	0.032324	0.031559	0.025719
March	0.038793	0.038233	0.030006	0.035791	0.035557	0.028425	0.033226	0.033444	0.027040
April	0.034113	0.033239	0.027835	0.035679	0.037511	0.029861	0.033493	0.033976	0.027033
May	0.042518	0.045739	0.039120	0.038560	0.039603	0.033858	0.035508	0.035005	0.029512
June	0.084877	0.088426	0.076134	0.072455	0.072404	0.058526	0.065449	0.055448	0.050269
July	0.079539	0.080952	0.058800	0.069884	0.069434	0.053755	0.063150	0.061512	0.044695
August	0.083309	0.085358	0.065285	0.072041	0.071117	0.053427	0.065251	0.062669	0.045773
September	0.083042	0.086756	0.073496	0.067956	0.067096	0.053491	0.063332	0.061168	0.047068
October	0.035901	0.035979	0.031467	0.037663	0.038461	0.035627	0.034427	0.033943	0.030495
November	0.038133	0.034794	0.037912	0.037126	0.037867	0.032129	0.034856	0.034333	0.028386
December	0.034440	0.034887	0.027827	0.033944	0.032253	0.029716	0.032491	0.030253	0.027377

Month	COOK.			DHW			HEAT.		
	3M	4M	11M	3M	4M	11M	3M	4M	11M
January	0.033317	0.032232	0.026424	0.033896	0.030868	0.025223	0.034640	0.038340	0.031731
February	0.033644	0.033331	0.026935	0.033889	0.032405	0.025691	0.036391	0.037298	0.032084
March	0.034613	0.036345	0.029822	0.034447	0.035561	0.029033	0.039224	0.038760	0.030380
April	0.036261	0.038190	0.030592	0.036945	0.037340	0.029871	0.036453	0.036565	0.030831
May	0.038356	0.039289	0.033580	0.039467	0.038724	0.033069	0.035633	0.035091	0.029693
June	0.073451	0.073688	0.060207	0.073371	0.073584	0.062138	0.045009	0.037016	0.019928
July	0.070691	0.070597	0.050174	0.070692	0.069507	0.047691	0.043836	0.036937	0.019928
August	0.073116	0.072469	0.053325	0.073050	0.072387	0.052594	0.044944	0.037067	0.019928
September	0.070168	0.069982	0.056531	0.069254	0.068789	0.055276	0.068142	0.067339	0.053748
October	0.037338	0.038002	0.035099	0.038316	0.037496	0.035069	0.037690	0.038499	0.033761
November	0.036955	0.038397	0.030680	0.038210	0.037851	0.029561	0.038654	0.035365	0.038768
December	0.034237	0.031730	0.030777	0.035224	0.030961	0.030358	0.034444	0.034893	0.027832

Month	OFFICE			VENT		
	3M	4M	11M	3M	4M	11M
January	0.032964	0.033103	0.027191	0.031426	0.031522	0.025799
February	0.033396	0.032974	0.027177	0.032013	0.030991	0.025768
March	0.034302	0.033567	0.027161	0.032890	0.031910	0.025782
April	0.033729	0.034260	0.027339	0.033430	0.033711	0.026952
May	0.036608	0.036591	0.031105	0.035766	0.035296	0.029886
June	0.066802	0.065117	0.051097	0.065063	0.062870	0.048893
July	0.064588	0.063533	0.049365	0.063340	0.062005	0.047494
August	0.066562	0.064227	0.048408	0.065290	0.062630	0.047000
September	0.063673	0.061513	0.047550	0.062841	0.060431	0.046374
October	0.035672	0.035658	0.032262	0.034778	0.034402	0.030888
November	0.035710	0.035164	0.030237	0.033876	0.032368	0.027854
December	0.032831	0.030960	0.027638	0.032515	0.030851	0.027136

CANCELLED
 February 28, 2022
 Missouri Public
 Service Commission
 ER-2021-0240; YE-2022-0222

FILED
 Missouri Public
 Service Commission
 ER-2019-0335; YE-2020-0164

Indicates Change.

Issued pursuant to the Order of the Mo.P.S.C. in Case No. ER-2019-0335.

DATE OF ISSUE March 18, 2020 DATE EFFECTIVE April 1, 2020

ISSUED BY Martin J. Lyons Chairman & President St. Louis, Missouri
 NAME OF OFFICER TITLE ADDRESS

APPLYING TO MISSOURI SERVICE AREA

RIDER EEIC

ENERGY EFFICIENCY INVESTMENT CHARGE (Cont'd.)

For MEEIA 2019-21 Plan

TD DETERMINATION (Cont'd.)

The Company shall file an update to NMR rates by month by Service Classification and by end-use category 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 in the Marginal Rate Analysis section of the MEEIA 2019-21 Plan.

- * NTGF = Net-To-Gross Factor. For each Program Year, all TD calculations will assume a NTGF of 0.85 until such time as a NTGF is determined through EM&V for that Program Year. Thereafter, for each given Program Year, the NTGF determined through EM&V will be used prospectively starting with the month in which the Earnings Opportunity Award is determined. The NTGF for the 2022 and 2023 Program Years will be 0.825.

Annual kWh savings per Measure will be updated prospectively in the Company's TRM and Deemed Savings Table.

* EARNINGS OPPORTUNITY AWARD DETERMINATION

An Earnings Opportunity Award shall be calculated for each Program Year using the EO Calculator submitted with the MEEIA 2019-21 Plan as Appendix N except for the 2022 and 2023 Program Years where the Earnings Opportunity Award will be determined as described in Company's Application for MEEIA Extension and the terms set forth in item ten (10) of the Unanimous Stipulation and Agreement Regarding The Implementation Certain MEEIA Programs Through Plan Year 2022 and item (11) of the Non-Unanimous Stipulation And Agreement Regarding The Implementation Certain Meeia Programs Through Plan Year 2023 And Motion For Expedited Treatment in File No. EO-2018-0211. The Earnings Opportunity Award will not go below zero dollars (\$0). If Commission-approved new programs are added to the Program, the Company may seek Commission approval to have the targets and the cap of the Earnings Opportunity Award adjusted. For each Program Year the Earnings Opportunity Award shall be adjusted for the difference, with carrying cost at the Company's monthly short-term interest rate, between TD revenues billed resulting from the application of the EEIR and what those revenues 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 for the 2022 and 2023 Program Years the NTGF will remain 0.825.

FILING

The Company shall make a Rider EEIC filing each calendar year to be effective for application to the usage on and after the first date of the subsequent February. 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 the first day of June or October. Rider EEIC filings shall be made at least 60 days prior to their effective dates.

*Indicates Change.

FILED
Missouri Public
Service Commission
EO-2018-0211; YE-2022-0154

DATE OF ISSUE November 19, 2021 DATE EFFECTIVE December 19, 2021

ISSUED BY Martin J. Lyons Chairman & President St. Louis, Missouri
NAME OF OFFICER TITLE ADDRESS

APPLYING TO MISSOURI SERVICE AREA

RIDER EEIC

ENERGY EFFICIENCY INVESTMENT CHARGE (Cont'd.)

For MEEIA 2019-21 Plan

TD DETERMINATION (Cont'd.)

The Company shall file an update to NMR rates by month by Service Classification and by end-use category 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 in the Marginal Rate Analysis section of the MEEIA 2019-21 Plan.

- * NTGF = Net-To-Gross Factor. For each Program Year, all TD calculations will assume a NTGF of 0.85 until such time as a NTGF is determined through EM&V for that Program Year. Thereafter, for each given Program Year, the NTGF determined through EM&V will be used prospectively starting with the month in which the Earnings Opportunity Award is determined. The NTGF for the 2022 Program Year will be 0.825.

Annual kWh savings per Measure will be updated prospectively in the Company's TRM and Deemed Savings Table.

* EARNINGS OPPORTUNITY AWARD DETERMINATION

An Earnings Opportunity Award shall be calculated for each Program Year using the EO Calculator submitted with the MEEIA 2019-21 Plan as Appendix N except for the 2022 Program Year where the Earnings Opportunity Award will be determined as described in Company's Application for MEEIA Extension and the terms set forth in item ten (10) of the Unanimous Stipulation and Agreement Regarding The Implementation Certain MEEIA Programs Through Plan Year 2022 in File No. EO-2018-0211. The Earnings Opportunity Award will not go below zero dollars (\$0). If Commission-approved new programs are added to the Program, the Company may seek Commission approval to have the targets and the cap of the Earnings Opportunity Award adjusted. For each Program Year the Earnings Opportunity Award shall be adjusted for the difference, with carrying cost at the Company's monthly short-term interest rate, between TD revenues billed resulting from the application of the EEIR and what those revenues 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 for the 2022 Program Year the NTGF will remain 0.825.

FILING

The Company shall make a Rider EEIC filing each calendar year to be effective for application to the usage on and after the first date of the subsequent February. 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 the first day of June or October. Rider EEIC filings shall be made at least 60 days prior to their effective dates.

CANCELLED
December 19, 2021
Missouri Public
Service Commission
EO-2018-0211; YE-2022-0154

FILED
Missouri Public
Service Commission
EO-2018-0211; YE-2021-0119

*Indicates Change.

DATE OF ISSUE November 18, 2020 DATE EFFECTIVE December 18, 2020

ISSUED BY Martin J. Lyons Chairman & President St. Louis, Missouri
NAME OF OFFICER TITLE ADDRESS

APPLYING TO MISSOURI SERVICE AREA

RIDER EEIC

ENERGY EFFICIENCY INVESTMENT CHARGE (Cont'd.)

For MEEIA 2019-21 Plan

TD DETERMINATION (Cont'd.)

The Company shall file an update to NMR rates by month by Service Classification and by end-use category 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 in the Marginal Rate Analysis section of the MEEIA 2019-21 Plan.

NTGF = Net-To-Gross Factor. For each Program Year, all TD calculations will assume a NTGF of 0.85 until such time as a NTGF is determined through EM&V for that Program Year. Thereafter, for each given Program Year, the NTGF determined through EM&V will be used prospectively starting with the month in which the Earnings Opportunity Award is determined.

Annual kWh savings per Measure will be updated prospectively in the Company's TRM and Deemed Savings Table.

EARNINGS OPPORTUNITY AWARD DETERMINATION

An Earnings Opportunity Award shall be calculated for each Program Year using the EO Calculator submitted with the MEEIA 2019-21 Plan as Appendix N. The Earnings Opportunity Award will not go below zero dollars (\$0). If Commission-approved new programs are added to the Program, the Company may seek Commission approval to have the targets and the cap of the Earnings Opportunity Award adjusted. For each Program Year the Earnings Opportunity Award shall be adjusted for the difference, with carrying cost at the Company's monthly short-term interest rate, between TD revenues billed resulting from the application of the EEIR and what those revenues 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.

*FILING

The Company shall make a Rider EEIC filing each calendar year to be effective for application to the usage on and after the first date of the subsequent February. 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 the first day of June or October. Rider EEIC filings shall be made at least 60 days prior to their effective dates.

PRUDENCE REVIEWS

A prudence review shall be conducted no less frequently than at 24-month intervals in accordance with 20 CSR 4240-20.093(11). 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.

CANCELLED
December 18, 2020
Missouri Public
Service Commission
EO-2018-0211; YE-2021-0119
*Indicates Change.

FILED
Missouri Public
Service Commission
ER-2020-0147; YE-2020-0090

DATE OF ISSUE November 22, 2019 DATE EFFECTIVE ~~January 21, 2020~~ February 1, 2020

ISSUED BY Michael Moehn President St. Louis, Missouri
NAME OF OFFICER TITLE ADDRESS

MO.P.S.C. SCHEDULE NO. 6 3rd Revised SHEET NO. 91.22

CANCELLING MO.P.S.C. SCHEDULE NO. 6 2nd Revised SHEET NO. 91.22

APPLYING TO MISSOURI SERVICE AREA

RIDER EEIC

ENERGY EFFICIENCY INVESTMENT CHARGE (Cont'd.)

For MEEIA 2019-21 Plan

* PRUDENCE REVIEWS

A prudence review shall be conducted no less frequently than at 24-month intervals in accordance with 20 CSR 4240-20.093(11). 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.

*Indicates Reissue.

FILED
Missouri Public
Service Commission
EO-2018-0211; YE-2021-0119

DATE OF ISSUE November 18, 2020 DATE EFFECTIVE December 18, 2020

ISSUED BY Martin J. Lyons Chairman & President St. Louis, Missouri
NAME OF OFFICER TITLE ADDRESS

UNION ELECTRIC COMPANY

ELECTRIC SERVICE

MO.P.S.C. SCHEDULE NO. 6 2nd Revised SHEET NO. 91.22

CANCELLING MO.P.S.C. SCHEDULE NO. 6 1st Revised SHEET NO. 91.22

APPLYING TO MISSOURI SERVICE AREA

RIDER EEIC

ENERGY EFFICIENCY INVESTMENT CHARGE (Cont'd.)

* (Applicable To Service Provided Beginning June 2019 through January 31, 2020)

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	\$0.000039	\$0.000000
2 (M) -Small General Service	\$0.000000	\$0.000000	\$0.000055	\$0.000000
3 (M) -Large General Service	\$0.000000	\$0.000000	\$0.000112	\$0.000000
4 (M) -Small Primary Service	\$0.000000	\$0.000000	\$0.000094	\$0.000000
11 (M) -Large Primary Service	\$0.000000	\$0.000000	\$0.000185	\$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	(\$0.000614)	\$0.001109	\$0.000000	\$0.000005
2 (M) -Small General Service	\$0.000580	\$0.002301	\$0.000000	(\$0.000002)
3 (M) -Large General Service	\$0.000584	\$0.001802	\$0.000000	(\$0.000002)
4 (M) -Small Primary Service	\$0.000598	\$0.001492	\$0.000000	(\$0.000002)
11 (M) -Large Primary Service	\$0.000687	\$0.000648	\$0.000000	(\$0.000002)
12 (M) -Large Transmission Service	\$0.000000	\$0.000000	\$0.000000	\$0.000000

MEEIA 2019-21 EEIR Components (Applicable to MEEIA Cycle 3 Plan)

Service Class	NPC/PE (\$/kWh)	NTD/PE (\$/kWh)	NEO/PE (\$/kWh)	NOA/PE (\$/kWh)
1 (M) -Residential Service	\$0.003679	\$0.000357	\$0.000000	\$0.000000
2 (M) -Small General Service	\$0.002247	\$0.000239	\$0.000000	\$0.000000
3 (M) -Large General Service	\$0.002247	\$0.000181	\$0.000000	\$0.000000
4 (M) -Small Primary Service	\$0.002247	\$0.000179	\$0.000000	\$0.000000
11 (M) -Large Primary Service	\$0.002247	\$0.000065	\$0.000000	\$0.000000
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	\$0.003065	\$0.001466	\$0.000039	\$0.000005	\$0.004575
2 (M) -Small General Service	\$0.002827	\$0.002540	\$0.000055	(\$0.000002)	\$0.005420
3 (M) -Large General Service	\$0.002831	\$0.001983	\$0.000112	(\$0.000002)	\$0.004924
4 (M) -Small Primary Service	\$0.002845	\$0.001671	\$0.000094	(\$0.000002)	\$0.004608
11 (M) -Large Primary Service	\$0.002934	\$0.000713	\$0.000185	(\$0.000002)	\$0.003830
12 (M) -Large Transmission Service	\$0.000000	\$0.000000	\$0.000000	\$0.000000	\$0.000000

*Indicates Change.

CANCELLED
December 18, 2020
Missouri Public
Service Commission
EO-2018-0211; YE-2021-0119

DATE OF ISSUE November 22, 2019

DATE EFFECTIVE January 27, 2020
~~January 21, 2020~~

ISSUED BY Michael Moehn
NAME OF OFFICER

President
TITLE
Missouri Public
Service Commission
St. Louis, Missouri
ADDRESS

APPLYING TO MISSOURI SERVICE AREA

RIDER EEIC

ENERGY EFFICIENCY INVESTMENT CHARGE (Cont'd.)

(Applicable To Service Provided Beginning February 1, 2022 through January 31, 2023)

* **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	(\$0.000005)	(\$0.000010)	(\$0.000038)	\$0.000001
2 (M) -Small General Service	(\$0.000050)	(\$0.000014)	(\$0.000046)	(\$0.000001)
3 (M) -Large General Service	(\$0.000040)	(\$0.000055)	\$0.000001	\$0.000000
4 (M) -Small Primary Service	(\$0.000032)	(\$0.000041)	\$0.000024	\$0.000000
11 (M) -Large Primary Service	(\$0.000013)	(\$0.000027)	\$0.000138	(\$0.000001)
12 (M) -Large Transmission Service	\$0.000000	\$0.000000	\$0.000000	\$0.000000

* **MEEIA 2019-21 EEIR Components (Applicable to MEEIA Cycle 3 Plan)**

Service Class	NPC/PE (\$/kWh)	NTD/PE (\$/kWh)	NEO/PE (\$/kWh)	NOA/PE (\$/kWh)
1 (M) -Residential Service	\$0.002804	\$0.000632	\$0.000382	(\$0.000009)
2 (M) -Small General Service	\$0.002430	\$0.000775	\$0.000343	(\$0.000007)
3 (M) -Large General Service	\$0.002445	\$0.000562	\$0.000356	(\$0.000007)
4 (M) -Small Primary Service	\$0.002529	\$0.000385	\$0.000369	(\$0.000007)
11 (M) -Large Primary Service	\$0.002438	\$0.000071	\$0.000380	(\$0.000006)
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	\$0.002799	\$0.000622	\$0.000344	(\$0.000008)	\$0.003757
2 (M) -Small General Service	\$0.002380	\$0.000761	\$0.000297	(\$0.000008)	\$0.003430
3 (M) -Large General Service	\$0.002405	\$0.000507	\$0.000357	(\$0.000007)	\$0.003262
4 (M) -Small Primary Service	\$0.002497	\$0.000344	\$0.000393	(\$0.000007)	\$0.003227
11 (M) -Large Primary Service	\$0.002425	\$0.000044	\$0.000518	(\$0.000007)	\$0.002980
12 (M) -Large Transmission Service	\$0.000000	\$0.000000	\$0.000000	\$0.000000	\$0.000000

*Indicates Change.

DATE OF ISSUE December 1, 2021 DATE EFFECTIVE February 1, 2022

ISSUED BY Martin J. Lyons Chairman & President St. Louis, Missouri
 NAME OF OFFICER TITLE ADDRESS

APPLYING TO MISSOURI SERVICE AREA

RIDER EEIC

ENERGY EFFICIENCY INVESTMENT CHARGE (Cont'd.)

(Applicable To Service Provided Beginning February 1, 2021 through January 31, 2022)

* **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	(\$0.000058)	(\$0.000283)	\$0.000702	\$0.000001
2 (M) -Small General Service	\$0.000135	(\$0.000392)	\$0.000899	(\$0.000001)
3 (M) -Large General Service	\$0.000125	(\$0.000221)	\$0.000922	(\$0.000001)
4 (M) -Small Primary Service	\$0.000116	(\$0.000118)	\$0.000937	(\$0.000001)
11 (M) -Large Primary Service	\$0.000115	\$0.000012	\$0.001192	(\$0.000001)
12 (M) -Large Transmission Service	\$0.000000	\$0.000000	\$0.000000	\$0.000000

* **MEEIA 2019-21 EEIR Components (Applicable to MEEIA Cycle 3 Plan)**

Service Class	NPC/PE (\$/kWh)	NTD/PE (\$/kWh)	NEO/PE (\$/kWh)	NOA/PE (\$/kWh)
1 (M) -Residential Service	\$0.003200	\$0.001528	\$0.000228	\$0.000000
2 (M) -Small General Service	\$0.003477	\$0.001447	\$0.000246	\$0.000000
3 (M) -Large General Service	\$0.003471	\$0.001052	\$0.000244	\$0.000000
4 (M) -Small Primary Service	\$0.003458	\$0.000878	\$0.000233	\$0.000000
11 (M) -Large Primary Service	\$0.003560	\$0.000475	\$0.000237	\$0.000000
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	\$0.003142	\$0.001245	\$0.000930	\$0.000001	\$0.005318
2 (M) -Small General Service	\$0.003612	\$0.001055	\$0.001145	(\$0.000001)	\$0.005811
3 (M) -Large General Service	\$0.003596	\$0.000831	\$0.001166	(\$0.000001)	\$0.005592
4 (M) -Small Primary Service	\$0.003574	\$0.000760	\$0.001170	(\$0.000001)	\$0.005503
11 (M) -Large Primary Service	\$0.003675	\$0.000487	\$0.001429	(\$0.000001)	\$0.005590
12 (M) -Large Transmission Service	\$0.000000	\$0.000000	\$0.000000	\$0.000000	\$0.000000

*Indicates Change.

DATE OF ISSUE December 3, 2020 DATE EFFECTIVE February 1, 2021

ISSUED BY Martin J. Lyons Chairman & President St. Louis, Missouri

NAME OF OFFICER TITLE ADDRESS

UNION ELECTRIC COMPANY

ELECTRIC SERVICE

MO.P.S.C. SCHEDULE NO. 6 Original SHEET NO. 91.23

CANCELLING MO.P.S.C. SCHEDULE NO. _____ SHEET NO. _____

APPLYING TO MISSOURI SERVICE AREA

RIDER EEIC

ENERGY EFFICIENCY INVESTMENT CHARGE (Cont'd.)

(Applicable To Service Provided Beginning February 1, 2020 through January 31, 2021)

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	\$0.000126	\$0.000108	\$0.000822	\$0.000000
2 (M) -Small General Service	\$0.000112	\$0.000321	\$0.000806	\$0.000000
3 (M) -Large General Service	\$0.000043	\$0.000556	\$0.000833	\$0.000000
4 (M) -Small Primary Service	(\$0.000006)	\$0.000541	\$0.000862	\$0.000000
11 (M) -Large Primary Service	(\$0.000182)	\$0.000481	\$0.000995	\$0.000000
12 (M) -Large Transmission Service	\$0.000000	\$0.000000	\$0.000000	\$0.000000

MEEIA 2019-21 EEIR Components (Applicable to MEEIA Cycle 3 Plan)

Service Class	NPC/PE (\$/kWh)	NTD/PE (\$/kWh)	NEO/PE (\$/kWh)	NOA/PE (\$/kWh)
1 (M) -Residential Service	\$0.002501	\$0.000389	\$0.000000	\$0.000000
2 (M) -Small General Service	\$0.002225	\$0.000279	\$0.000000	\$0.000000
3 (M) -Large General Service	\$0.002226	\$0.000181	\$0.000000	\$0.000000
4 (M) -Small Primary Service	\$0.002249	\$0.000174	\$0.000000	\$0.000000
11 (M) -Large Primary Service	\$0.002314	\$0.000237	\$0.000000	\$0.000000
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	\$0.002627	\$0.000497	\$0.000822	\$0.000000	\$0.003946
2 (M) -Small General Service	\$0.002337	\$0.000600	\$0.000806	\$0.000000	\$0.003743
3 (M) -Large General Service	\$0.002269	\$0.000737	\$0.000833	\$0.000000	\$0.003839
4 (M) -Small Primary Service	\$0.002243	\$0.000715	\$0.000862	\$0.000000	\$0.003820
11 (M) -Large Primary Service	\$0.002132	\$0.000718	\$0.000995	\$0.000000	\$0.003845
12 (M) -Large Transmission Service	\$0.000000	\$0.000000	\$0.000000	\$0.000000	\$0.000000

CANCELLED
February 1, 2021
Missouri Public
Service Commission
ER-2021-0158; YE-2021-0131

DATE OF ISSUE January 15, 2020

DATE EFFECTIVE February 1, 2020
~~March 15, 2020~~

ISSUED BY Martin J. Lyons
NAME OF OFFICER

Chairman & President
TITLE

FILED
Missouri Public
Service Commission
ADDRESS
St. Louis, Missouri

ATTACHMENT C

and

ATTACHMENT D

HAVE BEEN DEEMED

CONFIDENTIAL

IN ENTIRETY

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Second Prudence)
Review of the Missouri Energy Efficiency)
Investment Act (MEEIA) Cycle 3 Energy) File No. EO-2023-0180
Efficiency Programs and Cycle 2 Long-)
Lead Projects of Union Electric Company)
d/b/a Ameren Missouri)

AFFIDAVIT OF AMANDA C. CONNER

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW AMANDA C. CONNER and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing *Staff Report*; and that the same is true and correct according to her best knowledge and belief.

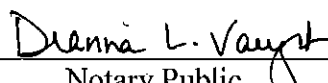
Further the Affiant sayeth not.


AMANDA C. CONNER

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 27th day of April, 2023.

DIANNA L VAUGHT
Notary Public - Notary Seal
STATE OF MISSOURI
Cole County
My Commission Expires: July 18, 2023
Commission #: 15207377



Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Second Prudence)
Review of the Missouri Energy Efficiency)
Investment Act (MEEIA) Cycle 3 Energy) File No. EO-2023-0180
Efficiency Programs and Cycle 2 Long-)
Lead Projects of Union Electric Company)
d/b/a Ameren Missouri)

AFFIDAVIT OF TERESA DENNEY

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW TERESA DENNEY and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing *Staff Report*; and that the same is true and correct according to her best knowledge and belief.

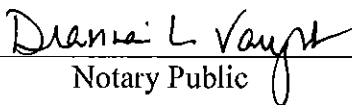
Further the Affiant sayeth not.


TERESA DENNEY

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 26th day of April, 2023.

DIANNA L. VAUGHT
Notary Public - Notary Seal
STATE OF MISSOURI
Cole County
My Commission Expires: July 18, 2023
Commission #: 15207377


Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Second Prudence)
Review of the Missouri Energy Efficiency)
Investment Act (MEEIA) Cycle 3 Energy) File No. EO-2023-0180
Efficiency Programs and Cycle 2 Long-)
Lead Projects of Union Electric Company)
d/b/a Ameren Missouri)

AFFIDAVIT OF AMY L. EICHHOLZ

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

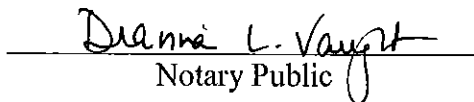
COMES NOW AMY L. EICHHOLZ and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing *Staff Report*; and that the same is true and correct according to her best knowledge and belief.

Further the Affiant sayeth not.


AMY L. EICHHOLZ

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 27th day of April, 2023.


Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Second Prudence)	
Review of the Missouri Energy Efficiency)	
Investment Act (MEEIA) Cycle 3 Energy)	<u>File No. EO-2023-0180</u>
Efficiency Programs and Cycle 2 Long-)	
Lead Projects of Union Electric Company)	
d/b/a Ameren Missouri)	

AFFIDAVIT OF JORDAN T. HULL

STATE OF MISSOURI)
) ss.
 COUNTY OF COLE)

COMES NOW JORDAN T. HULL and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Staff Report*; and that the same is true and correct according to his best knowledge and belief.

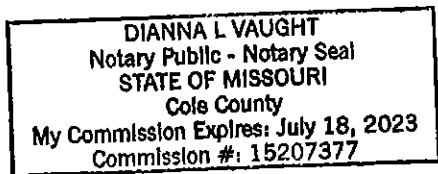
Further the Affiant sayeth not.

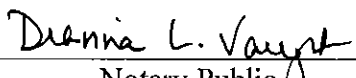


 JORDAN T. HULL

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 27th day of April, 2023.





 Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Second Prudence)
Review of the Missouri Energy Efficiency)
Investment Act (MEEIA) Cycle 3 Energy) File No. EO-2023-0180
Efficiency Programs and Cycle 2 Long-)
Lead Projects of Union Electric Company)
d/b/a Ameren Missouri)

AFFIDAVIT OF BROOKE MASTROGIANNIS

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

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

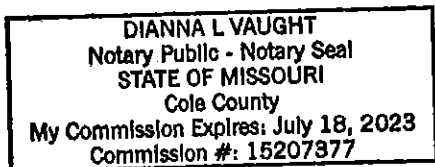
Further the Affiant sayeth not.

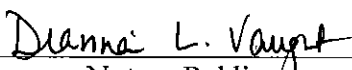


BROOKE MASTROGIANNIS

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 26th day of April, 2023.





Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Second Prudence)
Review of the Missouri Energy Efficiency)
Investment Act (MEEIA) Cycle 3 Energy) File No. EO-2023-0180
Efficiency Programs and Cycle 2 Long-)
Lead Projects of Union Electric Company)
d/b/a Ameren Missouri)

AFFIDAVIT OF CYNTHIA M. TANDY

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW CYNTHIA M. TANDY and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing *Staff Report*; and that the same is true and correct according to her best knowledge and belief

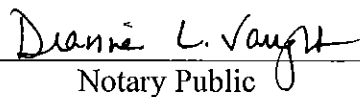
Further the Affiant sayeth not.


CYNTHIA M. TANDY

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 26th day of April, 2023.

DIANNA L VAUGHT
Notary Public - Notary Seal
STATE OF MISSOURI
Cole County
My Commission Expires: July 18, 2023
Commission #: 15207377


Notary Public