PRUDENCE REVIEW OF COSTS
RELATED TO THE
MISSOURI ENERGY EFFICIENCY INVESTMENT ACT
FOR THE ELECTRIC OPERATIONS
OF
UNION ELECTRIC COMPANY d/b/a AMEREN MISSOURI

January 2, 2013 through June 30, 2014

MISSOURI PUBLIC SERVICE COMMISSION

STAFF REPORT

FILE NO. EO-2015-0029

Jefferson City, Missouri
December 23, 2014

****<u>Denotes Highly Confidential Information</u>****

Appendix A

NP

Table of Contents

MEEIA Prudence Review of Costs Report

I. Executive Summary

On January 20, 2012, Union Electric Company d/b/a Ameren Missouri ("Ameren Missouri" or "Company") filed, in Case No. EO-2012-0142, its application under the Missouri Energy Efficiency Investment Act[1] ("MEEIA") and the Missouri Public Service Commission's ("Commission") MEEIA rules[2] for approval of its *2013 – 2015 Energy Efficiency Plan*. On July 5, 2012, Ameren Missouri, the Commission's Staff ("Staff"), the Office of the Public Counsel, the Missouri Department of Natural Resources, the Natural Resources Defense Council, Sierra Club, Earth Island Institute d/b/a Renew Missouri, the Missouri Industrial Energy Consumers, and Barnes-Jewish Hospital filed a *Unanimous*[3] *Stipulation and Agreement Resolving Ameren Missouri's MEEIA Filing* ("2012 Stipulation").

Through its August 1, 2012 *Order Approving Unanimous Stipulation And Agreement Resolving Ameren Missouri's MEEIA Filing* in Case Nos. EO-2012-0142 and ER-2012-0166,[4] the Commission authorized Ameren Missouri to implement – beginning January 2, 2013 – the *2013 – 2015 Energy Efficiency Plan* as modified by the 2012 Stipulation including: 1) eleven (11) energy efficiency programs ("MEEIA programs"), 2) a demand-side programs investment mechanism ("DSIM"), and 3) a technical resource manual ("TRM"). Also, through its August 1, 2012 order as amended by its December 19, 2012 order,[5] the Commission approved rates to allow Ameren Missouri to bill its customers through a single line item titled "Energy Efficiency Invest Chg" on customers' bills – beginning January 2, 2013 – for recovery of: 1) estimated annual programs' costs[6] and 2) 90% of estimated Company TD-NSB Share. Company TD-NSB Share means 26.34% of the TD-NSB discounted at 6.95% annually. Throughput disincentive –

---

[1] Section 393.1075, RSMo, Supp. 2013.
[2] 4 CSR 240-3.163, 4 CSR 240-3.164, 4 CSR 240-20.093 and 4 CSR 240-20.094
[3] Laclede Gas Company did not participate in the settlement discussion that led to the comprehensive settlement agreement, but indicated that it does not object and waives its right to object under the Commission's rules. Kansas City Power & Light Company and KCP&L Greater Missouri Operations Company indicated that they do not oppose the Stipulation. Consequently, the Stipulation is treated as unanimous under the Commission's Rule 4 CSR 240-2.115(2)(B) and (C).
[4] Case No. EO-2012-0166 was Ameren Missouri's 2012 general rate case which included as part of its annual revenue requirement $49.11 million for estimated annual MEEIA programs' costs and $30.45 million for 90% of the estimated annual Company TD-NSB Share.
[5] Commission's December 19, 2012 *Order Approving Amendment to Stipulation and Agreement* changed the line item title from "Energy Efficiency Investment Chg" to "Energy Efficiency Invest Chg".
[6] Programs' costs means program expenditures, including such items as program design, administration, delivery, end-use measures and incentive payments, evaluation, measurement and verification, market potential studies and work on the TRM.

net shared benefits ("TD-NSB") means the 2013 present value of the lifetime avoided costs (i.e., avoided energy, capacity, transmission and distribution, and probable environmental compliance costs) for the *2013 – 2015 Energy Efficiency Plan* using the deemed values in the TRM, less the 2013 present value of programs' costs as further described in paragraphs 5.b.i. and 6.b. of the 2012 Stipulation.

Through its August 1, 2012 order, the Commission also approved a tracker mechanism to allow recovery of actual programs' costs and actual Company TD-NSB Share, with interest, through rate adjustments in future Ameren Missouri general rate cases. The DSIM also allows for recovery of performance incentive award amounts through a 2-year amortization should determination of such an award amount result from after-the-fact evaluation, measurement and verification ("EM&V") determination of 3-year annual energy savings and 3-year annual net shared benefits and from application of the performance incentive award mechanism described in Appendix B of the 2012 Stipulation. A performance incentive award amount for the *2013 – 2015 Energy Efficiency Plan* is not the subject of this Staff prudence review because such an amount – if any - will not be determined until 2016.

On January 3, 2014, the Commission approved Ameren Missouri's Rider EEIC in Case No. EO-2014-0075, thereby, changing the Company's DSIM from a tracker to a rider, which provides for periodic rate adjustments between general rate cases.[7] Rider EEIC is included as Addendum A to this Staff prudence review report ("Report").

Commission Rule 4 CSR 240-20.093(10) requires that the Staff conduct prudence reviews of an electric utility's costs for its DSIM no less frequently than every twenty-four (24) months. This Report documents Staff's first review of the prudence of Ameren Missouri's MEEIA programs' costs, Company TD-NSB Share and interest for the period January 2, 2013 through June 30, 2014 ("Review Period"). To complete its review of Company TD-NSB Share, Staff must also review and verify the deemed annual energy (kWh) savings and deemed annual demand (kW) savings, avoided costs resulting from deemed annual energy and demand savings, and the monthly calculations of annual net shared benefits.

Commission Rules 4 CSR 240-20.093(9) and 4 CSR 240-2.163(6) require that Ameren Missouri file quarterly a Surveillance Monitoring Report. Addendum B to this Report is Page 6 of Ameren Missouri's highly confidential Surveillance Monitoring Report including status of the

[7] Paragraph 7 of the 2012 Stipulation includes provision for conversion of the DSIM from a tracker to a rider.

MEEIA programs and DSIM costs for the quarter ended, 12-months ended and cumulative total ended June 30, 2014. Table 1 identifies the line items and amounts from Addendum B which are the subject of Staff's prudence review.

**

THIS TABLE IS HIGHLY CONFIDENTIAL IN ITS ENTIRETY

**

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

Staff reviewed and analyzed a variety of items in examining whether Ameren Missouri prudently incurred programs' costs, Company TD-NSB Share and interest associated with the

NP

2013-2015 Energy Efficiency Plan for the Review Period. Based on its review, Staff identified three concerns that are discussed in detail[8] in this Report. The first deals with Ameren Missouri using an unauthorized sharing percentage value for its Company TD-NSB Share calculations. The use of the unauthorized sharing percentage rendered slightly incorrect monthly Company TD-NSB Share amounts for the Review Period. Second, since the monthly Company TD-NSB Share amounts were incorrect, the interest calculation associated with those amounts would be inaccurate. Third, Ameren Missouri did not reflect the interest rate change from an Allowance for Funds Used During Construction (AFUDC) rate to a short-term borrowing rate associated with the over- or under-collection of the Company TD-NSB Share, as approved in Case No. EO-2015-0075 for its Rider EEIC. Staff has verified that Ameren Missouri corrected its accounting records to reflect the correct sharing percentage, correct Company TD-NSB Share amounts and the correct interest calculations for inclusion in its November 21, 2014, filings, in Case No. ER-2015-0132 and Tariff Tracking No. YE-2015-0210, when requesting approval to adjust its Rider EEIC rates effective January 27, 2015.

Based on its review, Staff found no imprudence on the part of Ameren Missouri's decision makers for the period of January 2, 2013 through June 30, 2013.

II. MEEIA Programs and DSIM

A. MEEIA Programs

Ameren Missouri used various request for proposal ("RFP") processes to contract: 1) implementers for its individual MEEIA programs, 2) EM&V contractors for its residential and business MEEIA programs, 3) demand-side management cost effectiveness software (DSMore® software by Integral Analytics), 4) comprehensive demand-side programs' data management system (Applied Energy Group's VisionDSM® Tracker and Reporting System ("VisionDSM®")), and 5) demand-side market potential study (EnerNOC). Table 2 summarizes for each of the eleven (11) MEEIA programs: Commission-approved cumulative annual energy and demand savings targets, program implementers and program EM&V contractors:

[8] The unauthorized sharing percentage for the Company TD-NSB Share is discussed in detail in Section VII. A. of this Report, and the interest rate and interest amount issue are discussed detail in Section VIII. of this Report.

Table 2

2013 - 2015 Energy Efficiency Plan

MEEIA Programs	Cumulative Annual Energy Savings Targets (kWh) (1)	Cumulative Annual Demand Savings Targets (kW)	Program Implementers	Program EM&V Contractors
Res. Lighting	280,465,773	8,433	APT	Cadmus Group
Res. Efficient Products	48,367,466	7,663	APT	Cadmus Group
Res. HVAC	117,247,150	73,409	ICF	Cadmus Group
Res. Refrigerator Recycling	37,577,196	5,234	ARCA	Cadmus Group
Res. Home Energy Performance	3,210,597	1,053	Honeywell	Cadmus Group
Res. Energy Star New Homes	4,934,505	993	ICF	Cadmus Group
Res. Low Income	13,666,410	2,359	Honeywell	Cadmus Group
Bus. Standard	100,268,887	18,918	Lockheed Martin	ADM
Bus. Custom	167,619,239	46,935	Lockheed Martin	ADM
Bus. Retro Commissioning	7,559,721	1,655	Lockheed Martin	ADM
Bus. New Construction	12,185,332	3,780	Lockheed Martin	ADM
Total	793,102,276	170,432		

(1) The cumulative 793,100 MWh net (net-to-gross ratios are equal to 1.0) energy savings is based upon the 1,434,353 MWh annual energy sales for the opt-out customers specified in Table 2.11 of the *2013 - 2015 Energy Efficiency Plan*. Paragraph 5.b.ii. of the 2012 Stipulation specifies that the targeted net energy savings shall be adjusted annuallly for full program year impacts on targeted net energy savings caused by actual opt-out.

The individual program implementers record individual items of programs' costs and individual energy efficiency measures in real time (daily) into the VisionDSM® system as they incur programs' costs and deliver programs' services to customers and retail partners. Monthly, Ameren Missouri downloads files from VisionDSM® model for input to the DSMore® model in order to calculate programs' benefits and then to calculate programs' net benefits[9] in compliance with Rider EEIC and for Ameren Missouri's Annual Report required by 4 CSR 240-20.093(8) and 4 CSR 240-3.163(5)(A). Table 3 is a summary of each MEEIA program's deemed annual energy savings, deemed annual demand savings, benefits, costs and net benefits for the Review Period. Also, included in Table 3 are portfolio EM&V costs and portfolio overhead costs including general, education, marketing, potential study, data tracking, and communication.

[9] Net benefits means the present value of the lifetime avoided costs (i.e., avoided energy, capacity, transmission and distribution, and probable environmental compliance costs) for the *2013 – 2015 Energy Efficiency Plan* using the deemed values in the TRM, less the 2013 present value of programs' costs as further described in paragraphs 5.b.i. and 6.b. of the 2012 Stipulation.

Table 3

January 2, 2013 through June 30, 2014

MEEIA Programs	Cumulative Annual Energy Savings (kWh)	Cumulative Annual Demand Savings (kW)	Programs' Benefits (2013 $)	Programs' Costs (Nominal $)	Programs' Costs (2013 $)	Programs' Net Benefits (2013 $)
Res. Lighting	282,007,532	11,223	$ 105,233,831	$ 11,471,115	$ 11,185,583	$ 94,048,248
Res. Efficient Products	25,737,292	2,359	$ 10,920,987	$ 2,293,238	$ 2,234,738	$ 8,686,249
Res. HVAC	44,551,531	15,378	$ 41,323,076	$ 7,837,984	$ 7,651,222	$ 33,671,854
Res. Refrigerator Recycling	9,673,989	1,754	$ 5,112,047	$ 1,616,177	$ 1,579,955	$ 3,532,092
Res. Home Energy Performance	712,772	68	$ 379,057	$ 332,080	$ 322,319	$ 56,738
Res. Energy Star New Homes	623,217	122	$ 599,195	$ 590,289	$ 578,472	$ 20,722
Res. Low Income	10,391,906	1,195	$ 6,775,428	$ 5,681,018	$ 5,560,010	$ 1,215,418
Bus. Standard	37,853,693	6,018	$ 25,847,556	$ 3,750,363	$ 3,657,662	$ 22,189,894
Bus. Custom	89,032,309	14,621	$ 71,017,579	$ 10,879,787	$ 10,600,458	$ 60,417,121
Bus. Retro Commissioning	1,343,041	220	$ 738,786	$ 720,894	$ 694,884	$ 43,902
Bus. New Construction	5,193,632	798	$ 3,663,300	$ 944,745	$ 907,070	$ 2,756,229
EM&V Costs	0	0	$ -	$ 3,389,242	$ 3,334,669	$ (3,334,669)
Portfolio Overhead Costs	0	0	$ -	$ 5,306,611	$ 5,182,059	$ (5,182,059)
Total	507,120,914	53,755	$ 271,610,840	$ 54,813,543	$ 53,489,102	$ 218,121,738

B. DSIM

Ameren Missouri's DSIM was initially approved by the Commission in its August 1, 2012 *Order Approving Unanimous Stipulation And Agreement Resolving Ameren Missouri's MEEIA Filing* in Case Nos. EO-2012-0142 and ER-2012-0166. Ameren Missouri's initial DSIM was a tracker mechanism as described in paragraph 5. DSIM and paragraph 6. Final Recovery /True-up of the 2012 Stipulation. The DSIM tracker allowed Ameren Missouri to begin recovering - on January 2, 2013 - the following costs through its "Energy Efficiency Invest Chg": 1) $49.11 million for estimated annual MEEIA programs' costs, and 2) $30.45 million for 90% of the estimated annual Company TD-NSB Share. The DSIM tracker allows recovery of actual approved program costs and actual Company TD-NSB Share, with interest, through rate adjustments in Ameren Missouri's subsequent general rate cases. The DSIM tracker also allows recovery of a performance incentive award amount through a 2-year amortization should determination of such an award amount result from EM&V determination of 3-year annual energy savings and 3-year annual net shared benefits and from application of the performance award mechanism described in Appendix B of the 2012 Stipulation. A performance incentive award amount for the *2013 – 2015 Energy Efficiency Plan* and Rider EEIC is not the subject of this Staff prudence review, because such an amount – if any - will not be determined until 2016.

On January 3, 2014, the Commission approved Ameren Missouri's Rider EEIC in Case No. EO-2014-0075, thereby, changing the Company's DSIM from a tracker to a rider, which provides for periodic rate adjustments between general rate cases. Rider EEIC is included as Addendum A.

On November 21, 2014, Ameren Missouri filed, in Case No. ER-2015-0132 and Tariff Tracking No. YE-2015-0210, testimony, work papers and its proposed 1st Revised Sheet No. 90.5 to adjust Rider EEIC rates effective with its February 2015 billing month, beginning January 27, 2015, to reflect an increase in annual revenue requirements of $45.4 million (from $80.9 million to $126.3 million). On the date of Staff's filing of this Report, the Commission had not issued its order in Case No. ER-2015-0132 regarding 1st Revised Sheet No. 90.5.

If the Commission were to order any disallowance of Rider EEIC costs as a result of prudence reviews and/or corrections under the Rider EEIC, such a disallowance would be included as a Net Ordered Adjustment ("NOA") in a future rate adjustment filling for the Rider EEIC.

III. Prudence Review Process

On July 28, 2014, Staff initiated this first prudence review of costs of Ameren Missouri's DSIM in compliance with 4 CSR 240-20.093(10) as authorized under Sections 393.1075. 3. and 393.1075.1, RSMo, Supp. 2013. This prudence review was performed by members of the Energy Resource Analysis Section of the Staff. Staff obtained and analyzed a variety of documents, records, reports and work papers and used face-to-face meetings, emails and phone calls with Ameren Missouri personnel and/or programs' implementers to complete its prudence review of costs for the Rider EEIC for the Review Period of January 2, 2013 through June 30, 2014. In compliance with 4 CSR 240-20.093(10), this prudence review was completed within one-hundred-fifty (150) days of its initiation.

IV. Prudence Review Standard

In *State ex rel. Associated Natural Gas Co. v. Public Service Com'n of State of Mo*., the Western District Court of Appeals stated the Commission defined its prudence standard as follows:

> [A] utility's costs are presumed to be prudently incurred.... However, the presumption does not survive "a showing of inefficiency or improvidence... [W]here some other participant in the proceeding creates a serious doubt as to the

> prudence of expenditure, then the applicant has the burden of dispelling these doubts and proving the questioned expenditure to have been prudent.
>
> In the same case, the PSC noted that this test of prudence should not be based upon hindsight, but upon a reasonableness standard: [T]he company's conduct should be judged by asking whether the conduct was reasonable at the time, under all the circumstances, considering that the company had to solve its problem prospectively rather than in reliance on hindsight. In effect, our responsibility is to determine how reasonable people would have performed the tasks that confronted the company.
>
> 954 S.W.2d 520, 528-29 (Mo. App. W.D., 1997) (citations omitted).

In reversing the Commission in that case, the Court did not criticize the Commission's definition of prudence, but held, in part, that to disallow a utility's recovery of costs from its ratepayers based on imprudence; the Commission must determine the detrimental impact of that imprudence on the utility's ratepayers. *Id*. at 529-30. This is the prudence standard Staff has followed in this review. Staff reviewed for prudence the areas identified and discussed below for Ameren Missouri's DSIM.

V. Billed Revenue

A. Recovery of Program Costs and 90% of Company TD-NSB Share

1. Description

For the Review Period, Ameren Missouri billed customers through a separate line item on customers' bills titled "Energy Efficiency Invest Chg" to recover estimated energy efficiency programs' costs and 90% of estimated Company TD-NSB Share. The "Energy Efficiency Invest Chg" is based on the customer's monthly consumption and the applicable energy efficiency investment rates approved by the Commission in Case Nos. ER-2012-0166 and EO-2014-0075.[10] During the Review Period of January 2, 2013 through June 30, 2014, Ameren Missouri billed customers ** __________ ** to recover its estimated energy efficiency programs' costs. For the same period Ameren Missouri actually spent ** __________ ** on its energy efficiency programs. Thus, Ameren Missouri over-collected ** __________ ** from its customers for programs' costs during the Review Period. During the same period, Ameren Missouri billed customers ** __________ ** for 90% of estimated Company TD-NSB Share. The actual

[10] The energy efficiency investment rates on Original Sheet No. 90.5, approved in Case No. EO-2014-0075, are based upon anticipated costs as well as reconciliations of historical costs associated with Ameren Missouri's approved demand-side programs.

Company TD-NSB Share for the period was ** __________ **. Thus, Ameren Missouri under-collected ** __________ ** from its customers for Company TD-NSB Share during the Review Period. The monthly amounts that are either over- or under-collected from customers are tracked in a regulatory asset account, along with monthly interest, until Ameren Missouri files for rate adjustments under its Rider EEIC and new energy efficiency investment rates are approved by the Commission.[11]

Staff obtained through its Data Request No. 0028 sample billing data from each customer class[12] for the "Energy Efficiency Invest Chg" bill line item to determine the correctness of these charges.

2. Summary of Cost Implications

If Ameren Missouri was imprudent in its decisions relating to the determination of the "Energy Efficiency Invest Chg" for customers' bills, ratepayer harm could result in an increase in billed revenue.

3. Conclusion

Staff found no indication that Ameren Missouri has acted imprudently regarding the determination of the "Energy Efficiency Invest Chg" for customers' bills.

4. Documents Reviewed

a. Ameren Missouri's *2013 - 2015 Energy Efficiency Plan*;
b. Approved MEEIA Energy Efficiency and Demand Side Management Programs Tariff Sheets;
c. Rider EEIC;
d. Staff Data Requests; 0001, 0002, 0004, 0015, 0018 and 0028; and
e. May 14 and 15, 2014 in-person meetings and interviews with Ameren Missouri.

Staff Expert: Dana Eaves

VI. Software Systems Costs

A. Applied Energy Group VisionDSM® Software

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

[12] Rider EEIC is applicable to all kilowatt-hours (kWh) of energy supplied to customers served by Ameren Missouri under Service Classification Nos. 1(M), 2(M), 3(M), 11(M) and 12(M), excluding kWh of energy supplied to customers approved to "opt-out" of participation in the MEEIA programs under 4 CSR 240-20.094(6).

NP

1. Description

Staff reviewed the controls Ameren Missouri has developed to help assure demand-side program incentive payments are handled properly. Staff also, reviewed the incentive amounts paid to customers to make sure they complied with incentive levels for individual measures approved for each energy efficiency program. Data management and recordkeeping is critical for the proper administration of Rider EEIC. Ameren Missouri contracted with Applied Energy Group ("AEG") to provide an integrated software tracking system called VisionDSM® that allows Ameren Missouri to store, manage and process data for its entire DSM portfolio over each programs' life-cycles. VisionDSM® specifically allows Ameren to develop operating rules for its approved energy efficiency programs, process customers' applications, support processing and payment of incentives and provide regulatory compliance and management reporting.

Ameren Missouri granted Staff remote on-line access to the VisionDSM® system for Staff's use in conducting Staff's MEEIA prudence review. Staff independently sampled customer data, incentive levels, customer applications and annual energy and demand savings for all of Ameren Missouri's approved energy efficiency programs. As more fully discussed in section VIII. B. of this Report, Staff found the VisionDSM® system to be suitable and that VisionDSM® provides Staff with an auditable trail of costs from time of application to time of payment of incentives. Through VisionDSM®, Staff is able to verify deemed annual energy and demand savings at a measure level.

Staff did identify a variance of ** ______ ** contract cost to actual spend level for AEG's one-time configuration of the VisionDSM®. Staff is aware that Ameren Missouri worked with AEG to rectify this overspend and came to an agreement whereby AEG would discount its future annual hosting fees to Ameren Missouri. Although a legitimate cost over-run is not necessarily imprudent it is a fact that should be considered in Staff's overall determination of prudence. Staff will continue to monitor the discount in annual hosting fees in future prudence reviews and other cases to insure the terms of the original AEG contract are fulfilled prudently.

The costs incurred by Ameren Missouri associated with the VisionDSM® software are being treated differently for the purpose of the *2013 – 2015 Energy Efficiency Plan* than similar software would be treated under traditional ratemaking cost recovery. Under traditional rate making principles, costs associated with long-lived assets (assets that provide Ameren Missouri with a future economic benefits beyond the current year) would be included on its balance sheet and the cost of the asset would be recovered over time through depreciation expense. The characteristics of the VisionDSM® software would certainly qualify as a long-lived asset. However, Ameren Missouri chose to expense the entire VisionDSM® software cost to customers when the expense was incurred. Guidance for cost recovery of demand-side program assets is provided under 4 CSR 240-20.093(1)(M):

> (M); Demand-side programs investment mechanism, or DSIM, means a mechanism approved by the commission in a utility's filing for demand-side program approval to encourage investments in demand-side programs. The DSIM may include, in combination and without limitation:
>
> 1. **Cost recovery of demand-side program costs through capitalization of investments in demand-side programs;**
> 2. **Cost recovery of demand-side program costs through a demand-side program cost tracker;**
> 3. **Accelerated depreciation on demand-side investments;**
> 4. Recovery of lost revenues; and
> 5. Utility incentive based on the achieved performance level of approved demand-side programs **[Emphasis added.]**

However, under the terms and conditions of the 2012 Stipulation, no provision or agreement was made to treat VisionDSM® costs differently than any other item of program costs, i.e., expense. Staff will consider the issue of capitalization of long-lived assets associated with program costs during its review of Ameren Missouri's next MEEIA application.

2. Summary of Cost Implications

If Ameren Missouri was imprudent in its decisions relating to the administration and implementation of the AEG VisionDSM®, ratepayer harm could result in an increase in future energy efficiency investment rates ("EEIRs").

3. Conclusion

Staff found no indication that Ameren Missouri has acted imprudently regarding the implementation and administration of the AEG VisionDSM® software.

4. Documents Reviewed

a. Ameren Missouri's *2013 – 2015 Energy Efficiency Plan*,

b. Approved MEEIA Energy Efficiency and Demand Side Management Programs Tariff Sheets;

c. Staff Data Requests; 0001, 0002, 0015 and 0018; and

d. May 14 and 15, 2014 in-person meetings and interviews with Ameren Missouri.

Staff Expert: Dana Eaves

B. DSMore® Software

1. Description

Ameren Missouri used DSMore® software to screen all measures and programs for cost-effectiveness and to calculate Ameren Missouri's monthly Company TD-NSB Share for its MEEIA application and throughout the Review Period.

The costs related to DSMore® program are not MEEIA program costs because they are being treated under traditional ratemaking cost recovery as explained in the above section.

2. Summary of Cost Implications

If Ameren Missouri was imprudent in its decisions relating to the implementation and administration of DSMore® program, ratepayer harm could result in an increase in future EEIRs or an increase in revenue requirements under traditional ratemaking cost recovery.

3. Conclusion

Staff found no indication that Ameren Missouri has acted imprudently regarding the implementation and administration of the DSMore® software.

4. Documents Reviewed

a. Ameren Missouri's *2013 – 2015 Energy Efficiency Plan*,

b. Approved MEEIA Energy Efficiency and Demand Side Management Programs Tariff Sheets;

c. Staff Data Requests; 0010, 0011, 0011.1, 0011.2 and 0011.3; and

d. May 14 and 15, 2014 in-person meetings and interviews with Ameren Missouri.

Staff Expert: Hojong Kang, Ph.D.

VII. Actual Program Costs

A. Total Program Costs

1. Description

Ameren Missouri's programs' costs include incentive payments, program administration, general, education, marketing and communication, market potential study, data tracking, and EM&V programs' costs.

Staff reviewed all actual program costs Ameren Missouri is seeking to recover through its "Energy Efficiency Invest Chg" to insure only prudently incurred costs are being recovered through the Rider EEIC. Staff reviewed and analyzed for prudency Ameren Missouri's adherence to contractual obligations, resolutions of problems, adequacy of controls, and compliance with approved tariff sheets. Ameren Missouri provided Staff accounting records for all programs' costs it incurred during the Review Period. Staff categorized these costs by program and segregated them between incentives payments and program administrative costs. The results of Staff's categorizing of programs' costs are provided in Table 4.

**

THIS TABLE IS HIGHLY CONFIDENTIAL IN ITS ENTIRETY

**

NP

Ameren Missouri incurs administrative costs that are directly related to the implementation of its approved energy efficiency programs. Staff uses the term administrative to mean all costs other than incentives.[13] Staff reviewed each administrative category of cost to determine the reasonableness of each individual item of cost and if the costs being sought for recovery were directly related to energy efficiency programs and recoverable from customers through the "Energy Efficiency Invest Chg".

Ameren Missouri provides incentive payments to its customers as part of its approved energy efficiency programs. 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 standard measures. Incentive payments can also complement other efficiency policies such as appliance standards and energy codes to help overcome market barriers for cost-effective technologies.

Ameren Missouri has also developed internal controls that allow for review and approval at various stages of the accounting of costs for its energy efficiency programs. During the in-person meetings held May 14 and 15, 2014, between Staff and Ameren Missouri personnel at Ameren's St. Louis office, a presentation was given to Staff detailing accounting controls developed specifically for its energy efficiency programs. Ameren Missouri made available each of its program managers for Staff questions and each program manager provided detailed actions they take to confirm the accuracy of the information provided by each of its implementers and business partners. Ameren Missouri has developed a document titled; "Invoice Review Checklist" that provides program managers and other reviewers a detailed and approved method for review of all invoices. Also, each program manager provided Staff samples and a walk through of how they complete the "Invoice Review Checklist". Ameren Missouri provided samples in response to Staff's Data Request 0018.

2. Summary of Cost Implications

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

[13] 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.

3. Conclusion

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

4. Documents Reviewed

a. Ameren Missouri's *2013 – 2015 Energy Efficiency Plan*,

b. Approved MEEIA Energy Efficiency and Demand Side Management Programs Tariff Sheets;

c. Staff Data Requests; 0001, 0002, 0015 and 0018;

d. Workpapers and Testimony in Ameren Missouri Case No. ER-2012-0166; and

e. May 14 and 15, 2014 in-person meetings and interviews with Ameren Missouri.

Staff Expert: Dana Eaves

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 to customers. 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.

In 2012, Ameren Missouri issued RFPs for program implementers to directly administer one or more of Ameren Missouri's energy efficiency programs. Ameren Missouri selected and contracted with the organization identified in Table 2 to implement individual MEEIA programs. All of the implementers identified on Table 2 are national recognized contractors that have solid histories of energy efficiency programs' design and implementation.

Staff reviewed Ameren's relationship with its implementers to gauge if Ameren Missouri acted prudently in the selection and oversight of its program implementers. Staff and Ameren Missouri held in-person meetings on May 14 and 15, 2014 at which a wide array of topics were discussed. During these discussions a very open dialogue occurred related to Ameren Missouri's overall working relationship with its program implementers, problems that arose during the course of the deployment of specific programs and program implementer responsiveness and ability to solve problems and address issues as they arose. Staff is satisfied with Ameren Missouri's ability to form a good working partnership with the implementers.

Staff also examined the contracts between Ameren Missouri and the implementers in an effort to determine if the terms of the contract where followed during the implementation of the residential and business programs.

Achieved cumulative deemed annual energy and demand savings relative to the planned cumulative annual energy and demand savings for the same period is important to understanding the overall performance of Ameren Missouri's energy efficiency programs. Table 5 provides a comparison of achieved savings and planned saving for Ameren Missouri's residential and business programs for the Review Period. If Ameren Missouri was unable to achieve its planned energy and demand savings levels, that could be an indication the programs were not being prudently administered by the implementers and by Ameren Missouri. The results in Table 5 indicate that Ameren Missouri exceeded its plan for cumulative deemed annual energy savings by 36% during the Review Period. This fact alone is a strong indicator of the ability of Ameren Missouri and its program implementers to design and deliver effective demand-side programs.

Table 5

January 2, 2013 through June 30, 2014

MEEIA Programs	Achieved Annual Energy Savings (kWh)	Planned Annual Energy Savings (kWh)	Variance	Achieved Annual Demand Savings (kW)	Planned Annual Demand Savings (kW)	Variance
Res. Lighting	282,007,532	171,171,791	110,835,741	11,223	5,148	6,075
Res. Efficient Products	25,737,292	15,985,659	9,751,633	2,359	2,645	(286)
Res. HVAC	44,551,531	36,844,638	7,706,893	15,378	25,379	(10,001)
Res. Refrigerator Recycling	9,673,989	17,723,313	(8,049,324)	1,754	2,469	(715)
Res. Home Energy Performance	712,772	1,605,596	(892,824)	68	527	(460)
Res. Energy Star New Homes	623,217	1,359,464	(736,247)	122	211	(89)
Res. Low Income	10,391,906	8,079,162	2,312,744	1,195	1,198	(3)
Total Residential Programs	**373,698,239**	**252,769,623**	**120,928,616**	**32,098**	**37,576**	**(5,478)**
Bus. Standard	37,853,693	37,555,331	298,362	6,018	6,852	(834)
Bus. Custom	89,032,309	75,143,051	13,889,258	14,621	18,516	(3,895)
Bus. Retro Commissioning	1,343,041	3,576,073	(2,233,032)	220	741	(521)
Bus. New Construction	5,193,632	4,324,061	869,571	798	1,246	(449)
Total Business Programs	**133,422,675**	**120,598,516**	**12,824,159**	**21,658**	**27,356**	**(5,699)**
Total Portfolio	**507,120,914**	**373,368,139**	**133,752,775**	**53,755**	**64,932**	**(11,177)**

2. Summary of Cost Implications

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

3. Conclusion

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

4. Documents Reviewed

a. Ameren Missouri's *2013 – 2015 Energy Efficiency Plan*,

b. Approved MEEIA Energy Efficiency and Demand Side Management Programs Tariff Sheets;

c. Staff Data Requests; 0001, 0002, 0015 and 0018; and

d. May 14 and 15, 2014 in-person meetings and interviews with Ameren Missouri.

Staff Expert: Dana Eaves

C. Education and Communication

1. Description

Ameren Missouri provided Staff with its general ledger of all MEEIA related program costs for January 2013 – June 2014, and Staff reviewed these costs for prudency. Staff was able to sort costs by program. From this sort, Staff viewed and checked all of Ameren Missouri's education and communication related expenses from January 2013 through June 2014. During the Review Period, Ameren spent a total of ** __________ ** on education and communications related to its MEEIA programs. The Company used various media sources and third party vendors to promote its MEEIA programs. Ameren's advertising vendors included St. Louis Cardinals, Shelton Group, Weber Shandwick, KC Creative Service, ID Media, and FISERV. For the determination of prudence in this case the Staff utilized the KCPL advertising standard that was adopted by the Commission in Case No. EO-85-185 et al. The commission has recognized the following five categories to determine the treatment of allowing or disallowing advertising expenses:

1. General: informational advertising that is useful in the provision of adequate service;

NP

2. Safety: advertising which coveys the ways of safely use electricity and to avoid accidents;
3. Promotional: advertising used to encourage or promote the use of electricity;
4. Institutional: advertising used to improve the company's public image; and
5. Political: advertising associated with political issues.

The Commission utilized these categories of advertisements to explain that a utility's revenue requirement should always include the reasonable and necessary cost of general and safety advertisements; never include the cost of institutional or political advertisements; and include the cost of promotional advertisements only to the extent the utility can provide cost-justification for the advertisements.

In Ameren Missouri Case No. ER-2008-0318, the Commission decided that the standards for advertising announced in the KCPL case should be imposed on a "campaign" basis rather than an "ad-by-ad" basis.

> In the future, Staff would do well to examine advertisements on a campaign basis rather than becoming ensnared in the effort to evaluate individual ads within a larger campaign. If on a balance, a campaign is acceptable then the cost should be recoverable in rates. If the campaign is unacceptable under the Commission's standards, then the cost of all advertisements within the larger campaign should be disallowed.

Based on Staff's application of the Commission's past treatment of advertising in previous general rate cases, Ameren's MEEIA advertisements would be allowable and prudent, since they would be classified as general and promotional with the related costs being reasonable. Ameren Missouri's MEEIA advertising campaign, as a whole, would also be acceptable under the Commission's ruling in Case No. ER-2008-0318.

2. Summary of Cost Implications

If Ameren Missouri was imprudent in its decisions relating to management of its education and communications for the MEEIA programs, ratepayer harm could result in an increase in future EEIRs.

3. Conclusion

Staff found no indication that Ameren Missouri has acted imprudently regarding their education and communication for the MEEIA programs.

4. Documents Reviewed

a. Case No. EO-85-185, Case No. ER-2008-0318 and Case No, and ER-2014-0258 Cost of Service Report pages 113-115,
b. MEEIA Program Costs January 2013 – June 2014
c. Various Ameren Missouri MEEIA Advertisements and Related Invoices
d. Staff Data Requests 0002 and 0020; and
e. November 14, 2014 conference call with Ameren Missouri and St. Louis PSC Auditors.

Staff Expert: Jason Huffman

D. Evaluation, Measurement and Verification Contractors

1. Description

Ameren Missouri is required to hire independent contractor(s) to perform and report EM&V of each commission-approved demand-side programs. Commission rules allow Ameren Missouri spend up to 5% of its total budget for EM&V for all approved demand-side program costs.[14] Ameren Missouri contracted with two EM&V contractors to provide the EM&V services for its demand-side programs. The Cadmus Group, Inc. ("Cadmus") conducted and reported EM&V for the residential programs, and ADM Associates ("ADM") conducted and reported EM&V for the business programs. Cadmus and ADM provided EM&V final reports for their respective programs for the 2013 program year to Ameren Missouri and stakeholders on June 12, 2014.

During the Review Period Ameren Missouri expended **__________ ** for EM&V which represents 6.2% of the **____________ ** total programs' costs. Thus, the costs associated with the EM&V exceed the 5% maximum. It is Staff understanding that this variance is not unexpected during the startup of a multi-year EM&V plan and that the total EM&V expenditures for the entire *2013 – 2015 Energy Efficiency Plan* are expected to be within the 5% maximum.

[14] 4 CSR 240-20.094(7)(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. 2012 Stipulation includes in its paragraph11. EM&V a. Approximately five percent of the three-year MEEIA Programs' costs budget will be spent for EM&V. Ameren Missouri will consider input from the stakeholder group, as described in paragraph 14, in its determination of how best to allocate and utilize the EM&V budget.

2. Summary of Cost Implications

If Ameren Missouri was imprudent in its decisions relating to the selection and supervision of its EM&V contractor's ratepayer harm could result in an increase in future EEIRs.

3. Conclusion

Staff found no indication that Ameren Missouri has acted imprudently regarding the selection and supervision of its EM&V contractors.

4. Documents Reviewed

a. Ameren Missouri's *2013 – 2015 Energy Efficiency Plan*,

b. Approved MEEIA Energy Efficiency and Demand Side Management Programs Tariff Sheets;

c. Staff Data Requests; 0001, 0002, 0015 and 0018; and

d. May 14 and 15, 2014 in-person meetings and interviews with Ameren Missouri.

Staff Expert: Dana Eaves

E. Potential Study Contractors

1. Description

Ameren Missouri contracted with EnerNOC to perform a demand-side management market potential study ("Potential Study") to aid Ameren Missouri in assessing the various categories of energy efficiency, demand response and distributed generation/combined heat and power potentials in the residential, commercial and industrial sectors for the Ameren Missouri service area. During the review period Ameren Missouri's incurred costs of ** __________ ** for the completion of its Potential Study. How Ameren Missouri benefited from a potential study is described in the Potential Study:[15]

> Ameren Missouri will use the results of this study in its integrated resource planning process to analyze various levels of energy efficiency related savings and peak demand reductions attributable to both EE and DR initiatives at various levels of cost. This study also provides estimated levels of combined heat and power (CHP) and distributed generation (DG) installations over the specified time horizon. Furthermore, Ameren Missouri has adhered to both the Missouri Public Service Commission ("Commission") rules, 4 CSR 240-3.164 regarding potential study requirements for purposes of complying with the Missouri Energy Efficiency Investment Act (MEEIA) and 4 CSR 240-22 regarding potential study requirements for Ameren Missouri's next Integrated Resource

[15] Enernoc Demand-Side Management Market Potential Study, Volume 3: Energy Efficiency Analysis, page 1-1

> Plan (IRP) to be filed in April 2014. Both rules contain new provisions that were not part of Ameren Missouri's previous DSM Potential Study published in 2010.

As explained above, the potential study was designed to be used to fulfill two Commission rules, MEEIA and IRP[16]. However, costs recovery for the potential study was agreed to be recovered through MEEIA based upon the 2012 Stipulation, Paragraph 13, which states:

> 13. Market Potential Study. Ameren Missouri will perform a new market potential study meeting the requirements of 4 CSR 240-3.164(2)(A), and will use the same to inform the preparation of its April 2014 IRP filing. This study will include a comprehensive analysis of demand response programs.

Staff realizes that a portion of the benefits derived from the Potential Study may flow over to other analyses or purposes (such as the IRP) that are related to MEEIA. Ultimately, 4 CSR 240-20.093(2)(F) provides clear guidance that all of the costs of the Potential Study can be recovered through the cost recovery component of the Rider EEIC.

> (F) Any cost recovery component of a DSIM shall be based on costs of demand-side programs approved by the commission in accordance with 4 CSR 240-20.094 Demand-Side Programs. Indirect costs associated with demand-side programs, including but not limited to costs of utility market potential study and/or utility's portion of statewide technical resource manual, shall be allocated to demand-side programs and thus shall be eligible for recovery through an approved DSIM. The commission shall approve any cost recovery component of a DSIM simultaneously with the programs approved in accordance with 4 CSR 240-20.094 Demand-Side Programs.

2. Summary of Cost Implications

If Ameren Missouri was imprudent in its selection and supervision of Enernoc and the costs related to performance of the Potential Study, ratepayer harm could result in an increase in future EEIRs.

3. Conclusion

The Potential Study expenditures appear reasonable and prudent and can be recovered through the Rider EEIC.

4. Documents Reviewed

a. Ameren Missouri's *2013 – 2015 Energy Efficiency Plan*,

b. Approved MEEIA Energy Efficiency and Demand Side Management Programs Tariff

[16] 4 CSR 240-22 Electric Utility Resource Planning.

Sheets;

c. Staff Data Requests; 0001, 0002, 0015 and 0018; and

d. 2012 Stipulation.

Staff Expert: Dana Eaves

VII. Throughput Disincentive – Net Shared Benefits (TD-NSB)

A. TD-NSB

1. Description

For a utility that operates under a traditional regulated utility model a "throughput incentive" is created when a utility's increase in revenues is linked directly to its increase in sales. This relationship between revenues and sales creates a financial disincentive for the utility to engage in any activity that would decrease sales, such as utility sponsored energy efficiency programs.

Annual net shared benefits are a determination of benefits that result from energy efficiency programs through net present value ("NPV") of benefits (avoidance of costs of energy, capacity, transmission and distribution and probable environmental costs) less the NPV of costs for approved energy efficiency programs.

The sharing of annual net shared benefits between the customers and the utility is needed to offset the throughput disincentive Ameren Missouri is expected to incur as a result of its *2013 – 2015 Energy Efficiency Plan*. A sharing percentage of 26.34% was agreed to in the 2012 Stipulation. During the course of this prudence review, Staff found Ameren Missouri used a different sharing percent than what was agreed upon. Staff found Ameren Missouri used 26.3442204116859000% and not the Commission approved sharing percentage of 26.34%. Staff provides the following corrected table showing the $9,205 difference in Ameren Missouri's Surveillance Monitoring Report (SMR), Page 6 for period ending June 30, 2014 and Staff's corrected Company TD-NSB Share totals.

**

THIS TABLE IS HIGHLY CONFIDENTIAL IN ITS ENTIRETY

**

Staff has verified that Ameren Missouri corrected its accounting records for this error prior to making its November 21, 2014, filings, in Case No. ER-2015-0132 and Tariff Tracking No. YE-2015-0210, to adjust its Rider EEIC rates effective January 27, 2015.

2. Summary of Cost Implications

If Ameren Missouri was imprudent in its reporting and/or calculating the Company TD-NSB Share, ratepayer harm could result in an increase in future EEIRs.

3. Conclusion

Staff found that Ameren Missouri used an unauthorized sharing percentage in the calculation of the Company TD-NSB Share component. This error increased the calculated Company TD-NSB share by $9,205. The Staff recommended to Ameren Missouri that this error be corrected in its accounting records and future Surveillance Monitoring Report filing prior to making its first adjustment to its EEIRs. Ameren Missouri has timely made the recommended corrections.

4. Documents Reviewed

a. Ameren Missouri's 2013 – 2015 Energy Efficiency Plan,
b. Approved MEEIA Energy Efficiency and Demand Side Management Programs Tariff Sheets; and
c. Staff Data Requests; 0001, 0002, 0015 and 0018.

Staff Expert: Dana Eaves

NP

B. Gross Deemed Annual Energy and Demand Savings

1. Description

Staff reviewed the monthly calculation of NPV of the benefits from Ameren Missouri's MEEIA programs calculated with DSMore® software[17]. Ameren Missouri provided Staff its DSMore® software program files to show how the NPV of the programs' benefit were calculated during the Review Period. Staff was able to follow Ameren Missouri's calculation procedures for several sample months to verify that Ameren Missouri used the same values for avoided costs, deemed energy and demand savings for measures, incentive payments for measures, discount rate, and version of DSMore® software required by paragraph 6.b. of the 2012 Stipulation:

> … For purposes of determining the Ameren Missouri's TD-NSB Share, the only changes that will be made to the inputs[18] into the DSMore model[19] that was utilized for the MEEIA Report when the DSMore model is re-run (at any point in time) to calculate actual NSB are (i) the actual number of energy efficiency measures (by type) installed in each month up to that point, (ii) the actual program costs in each month incurred up to that point; and (iii) for Commercial and Industrial Custom measures for which the TRM does not provide a deemed value, savings determined according to the protocol provided for at pages 85 to 98 of the TRM. …

To begin its review of Ameren Missouri's calculations of its monthly Company TD-NSB Share for the Review Period, Staff reviewed the version of DSMore® software that Ameren Missouri used to calculate the monthly NPV of benefits from its programs during the Review Period to verify that it is the same version of DSMore® specified in 2012 Stipulation. However, the version of DSMore® was incorrectly stated in 2012 Stipulation. The correct version of DSMore® is XLS Version 5.0.14, GCG Version 5.0.23. Ameren Missouri did use the same version of Batch files which have the same measure information as agreed in 2012 Stipulation.

---

[17] DSMore® software is a financial analysis tool designed to evaluate the costs, benefits, and risks of demand side management (DSM) programs and services. This tool, built by Integral Analytics, is the industry-leading DSM cost-effectiveness model and is used in more than 27 states for DSM program planning. The power of DSMore lies in its ability to process millions of calculations resulting in thousands of cost effectiveness results that vary with weather and/or market prices.

[18] Net-to-gross ratio equal 1.0 (except for the Refrigerator Recycling Program, which has a net-to-gross ratio of 0.64), avoided costs, and discount rate.

[19] DSMore Model – SLX Version 5.0.14, CSG Version 5.0.23.

Then, Ameren Missouri used the newer version of DSMore®, DSMore® 2012 to run "*BatchTool*" files and "*BatchAggregation*" files with the automated procedural function.[20]

To review the usage of the same values for avoided costs and discount rate, Staff compared the "Utility Input" tabs in DSMore® program's Batch files located in the CD provided for the 2012 Stipulation to those in DSMore® program's Batch files for this prudence review. Staff did not find any different values for avoided costs and discount rate used to calculate the NPV of benefits from the programs.[21]

To verify that Ameren Missouri used the same net-to-gross ratios and the same deemed annual energy and demand savings as those specified by the 2012 Stipulation, Staff compared these values in the "*BatchTool*" files[22] in the CD provided for the 2012 Stipulation to the values in the "*BatchTool*" files[23] provide for this prudence review. Staff did not find any different values in either set of files that were used to calculate the NPV of benefits from the programs.

Then, Staff reviewed Ameren Missouri's monthly programs' benefits calculations using DSMore® software. Near the end of each month, Ameren Missouri's internal MEEIA implementation team provided Ameren Services DSM planning team the programs' input files[24] that contain monthly costs, measures delivered information, and new measures delivered information with descriptions to start the calculation procedure.

---

[20] Staff made the data request, DR.0011.3, on October 16, 2014 and had a phone conference with Ameren Missouri (Robert Willen) on December 16, 2014.

[21] Staff compared Column G and H for avoided costs and Column N through R for discount rate from the file in the 2012 stipulation to those Columns from the prudence review file.

[22] Net-to-gross ratio are in Column CO and deemed savings in Column AK and AL in "BatchTool_01LightingRAP_MEEIA-1MRES-RES_2011-12-21-Elec.xlsx", "BatchTool_02EffProdRAP_MEEIA-1MRES-RES_2011-12-21-Elec.xlsx", "BatchTool_03HVACRAP_MEEIA-1MRES-RES_2011-12-21-Elec.xlsx", "BatchTool_04AppRecycleRAP_MEEIA-1MRES-RES_2011-12-21-Elec_50incent.xlsx", "BatchTool_05HEPRAP_MEEIA-1MRES-RES_2011-12-21-Elec.xlsx", "BatchTool_06NewHomeRAP_MEEIA-1MRES-RES_2011-12-21-Elec.xlsx", "BatchTool_07LowIncomeRAP_MEEIA-1MRES-RES_2011-12-21-Elec.xlsx", "BatchTool_10BIZSTD_MEEIA-3MLGS-GEN_2011-12-21-Elec.xlsx", "BatchTool_11Custom_MEEIA-3MLGS-GEN_2011-12-21-Elec.xlsx", "BatchTool_12RCx_MEEIA-3MLGS-GEN_2011-12-21-elec.xlsx", and "BatchTool_13NewConstruction_MEEIA-3MLGS-GEN_2011-12-21-elec.xlsx"

[23] Net-to-gross ratio are in Column DK and deemed savings in Column K and L in "BatchTool_01ResLgt_NSBCalc.xlsx", "BatchTool_02ResEPd_NSBCalc.xlsx", "BatchTool_03ResHVC_NSBCalc.xlsx", "BatchTool_04ResApR_NSBCalc.xlsx", "BatchTool_05ResHEP_NSBCalc.xlsx", "BatchTool_06ResNuH_NSBCalc.xlsx", "BatchTool_07ResLoI_NSBCalc.xlsx", "BatchTool_10BusStd_NSBCalc.xlsx", "BatchTool_11BusCst_NSBCalc.xlsx", "BatchTool_12BusRCx_NSBCalc.xlsx", and "BatchTool_13BusNuC_NSBCalc.xlsx"

[24] In 2013, "NSB_Residential_Reporting_Template - Negative.xlsx", and "NSB_Business_Reporting_Template.xlsx". From 2014, "NSB_Residential_Reporting_Template - Negative.xlsx", "NSB_Residential_Reporting_Template - Positive.xlsx", and "NSB_Business_Reporting_Template.xlsx"

From the monthly calculation of NPV of benefits for January 2014, Ameren Missouri used two residential input files[25] to correct an overstated number of measures installed. Since a calculation of NPV of benefits from DSMore® is required internally to be completed before the actual month has ended, measure counts are sometimes overstated. The accrual true-ups are re-established each month to give an accurate depiction of the prior month.

Staff reviewed the input files for numbers of measures implemented (Columns S, T and U in each program tab) and incentive payments (Column D in Costs tabs) for each month. With these input files, the DSM planning team performed several steps[26] to calculate the NPV of benefits from the programs. Also, Staff reviewed all the steps performed by the DSM planning team and found the NPV of benefits from the programs to be $** __________ **.

To calculate an aggregated deemed energy and demand savings from the programs, Ameren Missouri performed more procedures as shown in Addendum C. With these procedures, Staff is able to verify the reported ** _______ ** MWh of energy savings and ** _____ ** MW of demand savings from the programs for the Review Period.

2. Summary of Cost Implications

If Ameren Missouri was imprudent in its decisions relating to calculating the NPV of the program benefits, ratepayer harm could result in an increase in future EEIRs.

3. Conclusion

Staff found no indication that Ameren Missouri has acted imprudently regarding the calculation of the NPV of the program benefits by using the DSMore® software.

4. Documents Reviewed

a. Ameren Missouri's *2013 – 2015 Energy Efficiency Plan,*

b. Approved MEEIA Energy Efficiency and Demand Side Management Programs Tariff Sheets;

c. Staff Data Requests; 0010, 0011, 0011.1, 0011.2 and 0011.3; and

d. May 14 and 15, 2014 in-person meetings and interviews with Ameren Missouri.

Staff Expert: Hojong Kang, Ph.D.

[25] "NSB_Residential_Reporting_Template - Negative.xlsx" and "NSB_Residential_Reporting_Template - Positive.xlsx"

[26] These steps are described in Staff's data requests, DR 0011 and DR 0011.2

VIII. Interest Costs

1. Description

The 2012 Stipulation provides that; "Interest shall be applied monthly at Ameren Missouri's short-term borrowing rate to the cumulative differences between the billed amount of monthly MEEIA Programs' costs and the monthly MEEIA Programs' costs actual incurred". During the Review Period the interest amount accrued for the over-recovery of program costs was ** ______ **. Because Ameren Missouri over-recovered from customers, the interest amount as of June 30, 2014 would be returned to customers as part of a future adjustment to the EEIRs under the Rider EEIC.

During the Review Period Ameren Missouri billed customers an estimated amount for its Company TD-NSB Share compared to the amount of Company TD-NSB Share actually incurred, based on the actual programs' costs and measures installed, on a monthly basis. It was agreed to in the 2012 Stipulation that;

> "Interest shall be accrued at Ameren Missouri's Allowance for Funds Used During Construction ("AFUDC") rate applied (separately for the residential and on-residential customer classes) to the monthly cumulative differences between the billed amount for Ameren Missouri's TD-NSB Share (which is based upon 90% of Ameren Missouri's estimated TD-NSB Share) and the portion of the Ameren Missouri TD-NSB Share based on actual number of measure (by type) installed in each month."

However, as a result of Case No. EO-2014-0075 in which Ameren Missouri sought to change from its MEEIA tracker mechanism to a Rider EEIC, the applicable interest rate applied to the over- or under-recovery to the TD-NSB changed from the AFUDC rate to the Company's short-term borrowing rate. As stated in Ameren Missouri's Rider EEIC Tariff:

> Throughput Disincentive Reconciliation is equal to the cumulative difference, if any, between the PTD revenues billed resulting from the application of the EEIR and 100% of Ameren Missouri's TD-NSB Share through the end of the previous EP as adjusted for the inputs described in paragraph 6.b. of the Stipulation, (which will reflect projections through the end of the previous EP due to timing of adjustments). **Prior to the beginning of the February 2014 billing month, such amounts shall include monthly interest charged at the Company's monthly Allowance for Funds Used During Construction (AFUDC) rate. Beginning with the start of the February 2014 billing month, any cumulative difference and all subsequent amounts shall include monthly interest charged at the Company's monthly short-term borrowing rate. (Emphasis added)** =

During the Review Period Ameren Missouri reported the interest amount accrued for the Company TD-NSB Share costs was ** **. However, this amount is not correct because its calculation did not recognize the change from an AFUDC rate to a short term borrowing rate as directed by its new tariff. Because Ameren Missouri under-recovered its TD-NSB from customers, any interest amount as of June 30, 2014 would be returned to Ameren Missouri.

2. Summary of Cost Implications

If Ameren Missouri was imprudent in its reporting and/or calculating of the interest associated to over- or under-recovery of energy efficiency programs' costs and/or the Ameren Missouri's 90% of Company TD-NSB Share, ratepayer harm could result in an increase in future EEIRs.

3. Conclusion

In November, 2014, Staff recommended to Ameren Missouri that it correct the interest associated with the Company TD-NSB Share in its accounting records, its Surveillance Monitoring Reports and as ordered by the Commission in a future adjustment to the EEIRs under the Rider EEIC. Staff has verified that Ameren Missouri corrected its accounting records to reflect the correct sharing percentage, correct Company TD-NSB Share amounts and the correct interest calculations for inclusion in its November 21, 2014, filings, in Case No. ER 2015-0132 and Tariff Tracking No. YE-2015-0210, when requesting approval to adjust its Rider EEIC rates effective January 27, 2015.

4. Documents Reviewed

a. Ameren Missouri's *2013 – 2015 Energy Efficiency Plan*,
b. Approved MEEIA Energy Efficiency and Demand Side Management Programs Tariff Sheets; and
c. Staff Data Requests; 0001, 0002, 0004, 0015 and 0018.

Staff Expert: Dana Eaves

RIDER EEIC
ENERGY EFFICIENCY INVESTMENT CHARGE
For MEEIA CYCLE 1 Plan

APPLICABILITY

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

Charges passed through this Rider EEIC reflect the charges approved to be collected from the implementation of the MEEIA Cycle 1 Plan. Those charges include: 1) projected Program Costs, projected Ameren Missouri's TD-NSB Share and Performance Incentive Award (if any) for each Effective Period, 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, ii) Ameren Missouri's TD-NSB Share incurred, and iii)amortization of any Performance Incentive Award ordered by the Missouri Public Service Commission (Commission) and 3)any Ordered Adjustments. Charges under this Rider EEIC shall continue after the anticipated December 31, 2015 end of MEEIA Cycle 1 Plan until such time as the charges described in items 1), 2) and 3) in the immediately preceding sentence have been billed. Charges arising from the MEEIA Cycle 1 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 post-MEEIA Cycle 1 Plan demand-side management programs approved under the Missouri Energy Efficiency Investment Act.

DEFINITIONS

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

"Ameren Missouri's TD-NSB Share" means 26.34% of the TD-NSB multiplied by the Time-Value Adjustment Factor.

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

"Evaluation Measurement & Verification - Net Shared Benefits" (EM&V-NSB) means the 2013 present value of the lifetime avoided costs (i.e., avoided energy, capacity, transmission and distribution, and probable environmental compliance costs) for the MEEIA Cycle 1 Plan using the EM&V results described in paragraph 11 of the Stipulation less the 2013 present value of Program Costs. Paragraphs 5.b.ii and 6. c. of the Stipulation provide further description of the EM&V-NSB.

"MEEIA Cycle 1 Plan" has the same meaning as the defined term "Plan" provided for in paragraph 4 of the Stipulation, as it may be hereafter amended by Commission-approved amendments to the Stipulation.

"MWH Target" has the meaning provided for in paragraph 5.b.ii and Appendix B of the Stipulation.

"Program Costs" means program expenditures, including such items as program design, administration, delivery, end-use measures and incentive payments, evaluation, measurement and verification, market potential studies and work on the Technical Resource Manual (TRM).

RIDER EEIC
ENERGY EFFICIENCY INVESTMENT CHARGE (Cont'd.)
For MEEIA CYCLE 1 Plan

DEFINITIONS (Cont'd.)

"Performance Incentive Award" means the sum of a two-year annuity (using 6.95% as a discount rate and not discounting the first period) of a percentage of EM&V-NSB as described below and further described in paragraph 5.b.ii and Appendix B of the Stipulation:

Percent of MWH Target	Percent of EM&V-NSB*
<70	0.00%
70	4.60%
80	4.78%
90	4.92%
100	5.03%
110	5.49%
120	5.87%
130	6.19%
>130	6.19%

*Includes income taxes (i.e. results in revenue requirement without adding income taxes). The percentages are interpolated linearly between the performance levels.

"Stipulation" means the Stipulation and Agreement approved by the Commission in its order effective August 11, 2012, as amended by order effective December 29, 2012, in File No. EO-2012-0142, as it may be amended further by subsequent Commission orders.

"Throughput Disincentive - Net Shared Benefits" (TD-NSB)means the 2013 present value of the lifetime avoided costs (i.e., avoided energy, capacity, transmission and distribution, and probable environmental compliance costs) for the MEEIA Cycle 1 Plan using the deemed values in the TRM, less the 2013 present value of Program Costs as further described in paragraphs 5.b.i and 6. b. of the Stipulation.

"Time-Value Adjustment Factor" means the factor used each month to convert Ameren Missouri's TD-NSB Share from a present value into a nominal revenue requirement. The factor is [1.0695 ^ (Calendar Year - 2013)].

RIDER EEIC
ENERGY EFFICIENCY INVESTMENT CHARGE (Cont'd.)
For MEEIA CYCLE 1 Plan

ENERGY EFFICIENCY INVESTMENT RATE (EEIR) DETERMINATION

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

EEIR = [NPC + NTD + NPI + 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 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.

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

NTD = PTD + TDR

PTD = Projected Throughput Disincentive is 90% of Ameren Missouri's TD-NSB Share projected by the Company to be incurred during the applicable EP.

TDR = Throughput Disincentive Reconciliation is equal to the cumulative difference, if any, between the PTD revenues billed resulting from the application of the EEIR and 100% of Ameren Missouri's TD-NSB Share through the end of the previous EP as adjusted for the inputs described in paragraph 6.b. of the Stipulation, (which will reflect projections through the end of the previous EP due to timing of adjustments). Prior to the beginning of the February 2014 billing month, such amounts shall include monthly interest charged at the Company's monthly Allowance for Funds Used During Construction (AFUDC) rate. Beginning with the start of the February 2014 billing month, any cumulative difference and all subsequent amounts shall include monthly interest charged at the Company's monthly short-term borrowing rate.

RIDER EEIC
ENERGY EFFICIENCY INVESTMENT CHARGE (Cont'd.)
For MEEIA CYCLE 1 Plan

EEIR DETERMINATION (Cont'd.)

NPI = Net Performance Incentive for the applicable EP as defined below,

NPI = PI + PIR

PI = Performance Incentive is equal to the Performance Incentive Award monthly amortization multiplied by the number of billing months in the applicable EP.

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

PIR = Performance Incentive Reconciliation is equal to the cumulative difference, if any, between the PI revenues billed resulting from the application 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.

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 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.

RIDER EEIC
ENERGY EFFICIENCY INVESTMENT CHARGE (Cont'd.)
For MEEIA CYCLE 1 Plan

EEIR DETERMINATION (Cont'd.)

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

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 Service Classification for the MEEIA Cycle 1 Plan will be made in accordance with the Stipulation.

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

FILING

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

PRUDENCE REVIEWS

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

RIDER EEIC

ENERGY EFFICIENCY INVESTMENT CHARGE (Cont'd.)

For MEEIA CYCLE 1 Plan

(Applicable To Determination of EEIR for the Billing Months of February 2014 through January 2015)

EEIR Components and Total EEIR

Service Class	NPC/PE ($/kWh)	NTD/PE ($/kWh)	NPI/PE ($/kWh)	NOA/PE ($/kWh)	Total EEIR ($/kWh)
1(M)-Residential Service	$0.001447	$0.002025	$0.000000	$0.000000	**$0.003472**
2(M)-Small General Service	$0.000920	$0.001035	$0.000000	$0.000000	**$0.001955**
3(M)-Large General Service	$0.000933	$0.001439	$0.000000	$0.000000	**$0.002372**
4(M)-Small Primary Service	$0.000936	$0.001087	$0.000000	$0.000000	**$0.002023**
11(M)-Large Primary Service	$0.000809	$0.000886	$0.000000	$0.000000	**$0.001695**
12(M)-Large Transmission Service	$0.000000	$0.000000	$0.000000	$0.000000	**$0.000000**

HIGHLY CONFIDENTIAL

Ameren Missouri
Quarter Ended, 12 Months Ended and Cumulative Total Ended June 30, 2014
SURVEILLANCE MONITORING REPORT
Missouri Energy Efficiency Investment Act of 2009 (MEEIA)
Status of Demand-Side Programs and Demand-Side Programs Investment Mechanism

DSM Program Name	Start Date	Planned End Date	Actual End Date
Business - Standard	01/02/2013	12/31/2015	
Business - Custom	01/02/2013	12/31/2015	
Business - Retro-commissioning	01/02/2013	12/31/2015	
Business - New Construction	01/02/2013	12/31/2015	
Residential - Lighting	01/02/2013	12/31/2015	
Residential - Energy Efficient Products	01/02/2013	12/31/2015	
Residential - HVAC	01/02/2013	12/31/2015	
Residential - Refrigerator Recycling	01/02/2013	12/31/2015	
Residential - Home Energy Performance	03/01/2013	12/31/2015	
Residential - New Homes	01/02/2013	12/31/2015	
Residential - Low Income	01/02/2013	12/31/2015	

Category	Descriptor	Quarter Ended	12 Months Ended	Cumulative Total Ended
Total Programs' Costs (S)	Planned	$ 12,423,552	$ 41,060,303	$ 59,364,739
Total Programs' Costs (S)	Actual	$ 11,700,349	$ 41,630,147	$ 54,813,543
Total Programs' Costs (S)	Variance	$ 723,203	$ (569,844)	$ 4,551,196
Total Programs' Costs (S)	Billed	$ 7,578,193	$ 44,805,650	$ 66,240,949
Total Programs' Costs (S)	Actual	$ 11,700,349	$ 41,630,147	$ 54,813,543
Total Programs' Costs (S)	Variance	$ (4,122,156)	$ 3,175,503	$ 11,427,406
Total Programs' Costs (S)	Interest	$ (10,089)	$ (49,103)	$ (71,618)
Energy Savings (MWh)	Planned	67,844	284,281	373,368
Energy Savings (MWh)	Actual	93,790	407,782	507,121
Energy Savings (MWh)	Variance	(25,946)	(123,501)	(133,753)
Demand Savings (MW)	Planned	17.26	52.98	64.93
Demand Savings (MW)	Actual	11.53	44.88	53.76
Demand Savings (MW)	Variance	5.73	8.10	11.17
Net Shared Benefits (S)	Planned	$ 44,080,329	$ 128,469,277	$ 183,533,984
Net Shared Benefits (S)	Estimated	$ 44,581,713	$ 183,485,007	$ 218,121,738
Net Shared Benefits (S)	Variance	$ (501,384)	$ (55,015,730)	$ (34,587,754)
Company TD-NSB Share (S)	Planned	$ 11,612,619	$ 33,844,230	$ 48,350,597
Company TD-NSB Share (S)	Disincentive	$ 11,744,705	$ 48,337,695	$ 57,462,471
Company TD-NSB Share (S)	Variance	$ (132,086)	$ (14,493,465)	$ (9,111,874)
90 % Company TD-NSB Share (S)	Billed	$ 10,364,925	$ 37,858,984	$ 50,605,338
Company TD-NSB Share (S)	Disincentive	$ 11,744,705	$ 48,337,695	$ 57,462,471
Company TD-NSB Share (S)	Variance	$ (1,379,780)	$ (10,478,711)	$ (6,857,133)
Company TD-NSB Share (S)	Interest	$ 83,352	$ 211,716	$ 70,634

Notes for Descriptors:

1. Planned = amounts which are consistent with and included in the Company's Commission-approved MEEIA Plan
2. Billed = amounts billed to customers for recovery of Programs' Costs or 90% of Company TD-NSB Share
3. Actual = amounts (prior to evaluation, measurement and verification (EM&V)) used to determine Estimated Net Benefits
4. Estimated = net shared benefits amounts calculated monthly using DSMore model and prior to EM&V
5. Disincentive = Commission-approved percentage of Estimated Net Shared Benefits amounts
6. Variance = Planned less Actual, Billed less Actual, Planned less Estimated, Planned less Calculated, or Billed less Calculated
7. Interest = amounts of interest (at Company's monthly short-term borrowing interest rate) applied monthly to the cumulative Variance for the Category

Addendum C:

** Steps to Calculate an Aggregated Deemed Energy and Demand Savings **

1. Open the *DSMore_Aggregation_2014-06_RESALL* Microsoft Excel Worksheet from the June 2014 Positive Net Shared Benefit (NSB) analysis.
2. Select the "Financial Reports" tab.
3. Note cell Q38 displays 397,001,502.
4. Open the *DSMore_Aggregation_2014-06_RESALL* Microsoft Excel Worksheet from the June 2014 Negative Net Shared Benefit (NSB) analysis.
5. Select the "Financial Reports" tab.
6. Note cell Q38 displays 1,927,724.
7. Open the *DSMore_Aggregation_2014-06_BUSALL* Microsoft Excel Worksheet.
8. Select the "Financial Reports" tab.
9. Note cell Q38 displays 139,880,332.
10. Open a new Microsoft Excel Worksheet.
11. Type "Residential" in cell A2.
12. Type "Business" in cell A3.
13. Type "Total" in cell A4.
14. Type "Positive Analysis" in cell B1.
15. In cell B2, input the 397,001,502 (from cell Q38 for energy savings and cell M28 for demand savings on the "Financial Reports" tab of the *DSMore_Aggregation_2014-06_RESALL* Microsoft Excel Worksheet from the Positive NSB analysis).
16. In cell B3, input the 139,880,332 (from cell Q38 on the "Financial Reports" tab of the *DSMore_Aggregation_2014-06_BUSALL* Microsoft Excel Worksheet).
17. Type the formula "=SUM(B2:B3)" in cell B4.
18. Type "Negative Analysis" in cell C1.
19. In cell C2, input the 1,927,724 (from cell Q38 on the "Financial Reports" tab of the *DSMore_Aggregation_2014-06_RESALL* Microsoft Excel Worksheet from the Negative NSB analysis).
20. Type "Cumulative kWh @ MISO" in cell D1.
21. Type the formula "=B2-C2" in cell D2.
22. Type the formula "=B3-C3" in cell D3.
23. Type the formula "=B4-C4" in cell D4.
24. Type "Line Losses" in cell E1.
25. Type "5.72%" in cell E2.
26. Type "4.84%" in cell E3.
27. Type "Cumulative kWh @ Meter" in cell F1.
28. Type the formula "=D2/(1+E2)" in cell F2.
29. Type the formula "=D3/(1+E3)" in cell F3.
30. Type the formula "=SUM(F2:F3)" in cell F4.
31. Type "Cumulative MWh @ Meter" in cell G1.
32. Type the formula "=F4/1000" in G4.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the First Prudence Review of Union Electric Company d/b/a Ameren Missouri's Implementation of Energy Efficiency Programs in Furtherance of the Missouri Energy Efficiency Investment Act (MEEIA).	)))))))	Case No. EO-2015-0029

AFFIDAVIT OF DANA E. EAVES

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

Dana E. Eaves, of lawful age, on his oath states: that he has participated in the preparation of the foregoing Staff Report in pages 1-11, 12-17, 19-23 and 27-28 ; that he has knowledge of the matters set forth in such Report; and that such matters are true to the best of his knowledge and belief.

Dana E. Eaves
Dana E. Eaves

Subscribed and sworn to before me this 23rd day of December, 2014.

SUSAN L. SUNDERMEYER
Notary Public - Notary Seal
State of Missouri
Commissioned for Callaway County
My Commission Expires: October 28, 2018
Commission Number: 14942086

Susan L. Sundermeyer
Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the First Prudence Review of Union Electric Company d/b/a Ameren Missouri's Implementation of Energy Efficiency Programs in Furtherance of the Missouri Energy Efficiency Investment Act (MEEIA).	)))))))	Case No. EO-2015-0029

AFFIDAVIT OF HOJONG KANG

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

Hojong Kang, of lawful age, on his oath states: that he has participated in the preparation of the foregoing Staff Report in pages 12 and 23-26; that he has knowledge of the matters set forth in such Report; and that such matters are true to the best of his knowledge and belief.

Hojong Kang

Subscribed and sworn to before me this 23rd day of December, 2014.

SUSAN L. SUNDERMEYER
Notary Public - Notary Seal
State of Missouri
Commissioned for Callaway County
My Commission Expires: October 28, 2018
Commission Number: 14942086

Susan L. Sundermeyer
Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the First Prudence Review of Union Electric Company d/b/a Ameren Missouri's Implementation of Energy Efficiency Programs in Furtherance of the Missouri Energy Efficiency Investment Act (MEEIA).	)))))))	Case No. EO-2015-0029

AFFIDAVIT OF JASON HUFFMAN

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

Jason Huffman, of lawful age, on his oath states: that he has participated in the preparation of the foregoing Staff Report in pages 17 - 19; that he has knowledge of the matters set forth in such Report; and that such matters are true to the best of his knowledge and belief.

.

Jason Huffman

Subscribed and sworn to before me this 23rd day of December, 2014.

SUSAN L. SUNDERMEYER
Notary Public - Notary Seal
State of Missouri
Commissioned for Callaway County
My Commission Expires: October 28, 2018
Commission Number: 14942086

Susan L. Sundermeyer
Notary Public