

Exhibit No.:  
Issues: Savings Targets  
Performance Incentive  
Witness: John A. Rogers  
Sponsoring Party: MO PSC Staff  
Type of Exhibit: Rebuttal Testimony  
Case No.: EO-2014-0095  
Date Testimony Prepared: March 28, 2014

**MISSOURI PUBLIC SERVICE COMMISSION**

**REGULATORY REVIEW DIVISION**

**REBUTTAL TESTIMONY**

**OF**

**JOHN A. ROGERS**

**KANSAS CITY POWER & LIGHT COMPANY**

**CASE NO. EO-2014-0095**

*Jefferson City, Missouri  
March 2014*

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

**NP**

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

In the Matter of Kansas City Power & )  
Light Company's Filing for Approval of )  
Demand-Side Programs and for Authority )  
to Establish a Demand-Side Programs )  
Investment Mechanism )

Case No. EO-2014-0095

**AFFIDAVIT OF JOHN A. ROGERS**

STATE OF MISSOURI    )  
                                  ) ss  
COUNTY OF COLE    )

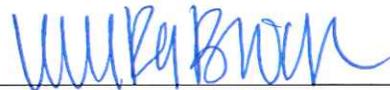
John A. Rogers, of lawful age, on his oath states: that he has participated in the preparation of the following Rebuttal Testimony in question and answer form, consisting of 23 pages of Rebuttal Testimony to be presented in the above case, that the answers in the following Rebuttal Testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true to the best of his knowledge and belief.



\_\_\_\_\_  
John A. Rogers

Subscribed and sworn to before me this 28<sup>th</sup> day of March, 2014.





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

**REBUTTAL TESTIMONY**

**OF**

**JOHN A. ROGERS**

**KANSAS CITY POWER & LIGHT COMPANY**

**CASE NO. EO-2014-0095**

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**REBUTTAL TESTIMONY**

**OF**

**JOHN A. ROGERS**

**KANSAS CITY POWER & LIGHT COMPANY**

**CASE NO. EO-2014-0095**

11 Q. Please state your name and business address.

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

14 Q. What is your position at the Missouri Public Service Commission  
15 (“Commission”)?

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

18 Q. Please state your educational background and experience.

19 A. These are contained in Schedule JAR-1.

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

21 A. In this testimony I provide:

- 22 • An executive summary of the Commission Staff’s (“Staff”) review and  
23 recommendations in this case;
- 24 • A list of Staff witnesses and their areas of responsibility for review and  
25 recommendations related to Commission rules which require actions or  
26 decisions by the Commission in this case;

- 1 • A summary of Kansas City Power & Light Company’s (“KCPL”) past and  
2 present demand-side management (“DSM”) programs and DSM programs in  
3 KCPL’s 20-year adopted preferred resource plan;<sup>1</sup>
- 4 • A summary of KCPL’s proposed 20-month plan for its DSM programs and its  
5 demand-side programs investment mechanism (“DSIM”);
- 6 • A discussion of the most significant issues identified by Staff and the process  
7 necessary before a final order can be issued in this case;
- 8 • Staff’s analyses and recommendations concerning whether KCPL’s demand-  
9 side program plan reflects progress toward an expectation that KCPL’s  
10 demand-side programs can achieve a goal of all cost-effective demand-side  
11 savings;<sup>2</sup> and
- 12 • Identification of the variances – requested and not requested by KCPL - from  
13 the Commission’s Missouri Energy Efficiency Investment Act of 2009  
14 (“MEEIA”) rules<sup>3</sup> required for approval of KCPL’s proposed DSM programs  
15 and proposed DSIM, and Staff’s recommendations concerning each required  
16 variance.

17 **EXECUTIVE SUMMARY**

18 Q. Please summarize Staff’s review and recommendation in this case:

19 A. Seven members of Staff reviewed parts or all of KCPL’s MEEIA application  
20 and supporting documents since the application’s filing on January 15, 2014. Staff members

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<sup>1</sup> On March 20, 2014, KCPL filed its *Integrated Resource Plan 2014 Annual Update* in File No. EO-2014-0256.

<sup>2</sup> § 393.1075.4. states: “The commission shall permit electric corporations to implement commission-approved demand-side programs proposed pursuant to this section with a goal of achieving all cost-effective demand-side savings.”

<sup>3</sup> The Commission’s rules promulgated as a result of the Missouri Energy Efficiency Investment Act of 2009 (“MEEIA”) (Section 393.1075, RSMo, Supp. 2012) include Rules 4 CSR 240-3.163, 4 CSR 240-3.164, 4 CSR 240-20.093 and 4 CSR 240-20.094.

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1 have performed discovery and participated in numerous productive technical conferences and  
2 numerous productive – but unsuccessful - settlement discussions.

3         Should this case not be settled, this will be the first time the Commission will hear and  
4 decide issues related to the MEEIA and its MEEIA rules. While similar to a general rate  
5 proceeding, this MEEIA case is distinctly different as described below.

6         In a general rate case, a comprehensive review of the entire utility is conducted and  
7 the new revenue requirement and new rates – resulting from Commission rulings on  
8 individual issues - are known at the time the Commission issues its report and order. Further,  
9 unless some or all of the report and order is reversed upon appeal, the utility must comply  
10 with the Commission’s report and order.

11         In contrast, for this MEEIA case, a review of only the issues related to the utility’s  
12 MEEIA application is conducted. Whether the Commission rejects or approves KCPL’s  
13 application as filed, the customer rate impact will not be known until some future date. The  
14 Commission’s rulings on what is now a very long list of issues in this case cannot result in a  
15 new revenue requirement and new rates because a “redo” of much of the analysis to support  
16 KCPL’s request for approval of DSM programs and a DSIM will have to be performed –  
17 consistent with the Commission’s rulings on the individual issues. At that time, the parties to  
18 the case should be afforded the opportunity to review and comment on the “redone” analysis.  
19 Staff recommends the Commission allow additional opportunity for consideration of the  
20 analysis and comments by parties before approving the final new revenue requirement and  
21 final new rates.<sup>4</sup> In a MEEIA case, a utility can choose to *accept or to not accept* the final

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<sup>4</sup> KCPL’s proposed Net Shared Benefits component of its DSIM will not result in new rates until June 1, 2015 as described on page 8 lines 1 through 9 of the direct testimony of KCPL witness Tim Rush and in this direct testimony at page 4 line 17 through page 5 through line 6.

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1 new revenue requirement and final new rates, so KCPL will ultimately have the decision on  
2 whether to proceed.<sup>5</sup>

3 Very generally, the requested revenue requirement in KCPL's filed case is the sum of  
4 three components:

- 5 1. **DSM Program Costs** – estimated to be \$29 million over the MEEIA Plan  
6 Period – May 2014 through December 2015 - to recover all actual direct  
7 program costs;
- 8 2. **Net Shared Benefits** – estimated to be \$17 million over the MEEIA Plan  
9 Period. The \$17 million amount was computed as 38.54% of the total net  
10 shared benefits (“deemed” gross annual energy savings and “deemed” annual  
11 demand savings less program costs) associated with KCPL's DSM programs  
12 during the 20-month MEEIA plan period; and
- 13 3. **Performance Incentive** – an amount up to \$5.89 million that KCPL will  
14 recover from customers if certain Commission-approved energy savings  
15 targets and demand savings targets are met through an after-the-fact  
16 evaluation, measurement and verification (“EM&V”).

17 KCPL's requested new rates for this case result from the use of a regulatory asset prior  
18 to June 1, 2015 and to the use of a rider mechanism beginning on June 1, 2015. Under  
19 KCPL's proposal, customers will not be charged for services delivered prior to June 1, 2015,  
20 but will then be charged for these services plus the services delivered from June 1, 2015 to

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<sup>5</sup> 4 CSR 240-20.094(3) ... The commission shall approve, approve with modification *acceptable to the electric utility*, or reject such applications for approval of demand-side program plans within one hundred twenty (120) days of the filing of an application under this section only after providing the opportunity for a hearing. In the case of a utility filing an application for approval of an individual demand-side program, the commission shall approve, approve with modification *acceptable to the electric utility*, or reject applications within sixty (60) days of the filing of an application under this section only after providing the opportunity for a hearing. [Emphasis added]

1 December 31, 2015, over a period of time that will extend at least six years into the future.  
2 KCPL proposes to treat the pre-June 1, 2015 program DSM program costs and net shared  
3 benefits the same way it is allowed to treat capital investments: include past costs in rate base  
4 and earn a return on these costs and recover the past costs over a period of time – in this case,  
5 six years beginning at the time of new rates as a result of KCPL’s next general rate  
6 proceeding.

7 A. Stipulation and Agreement in Case No. EO-2005-0329 (“Regulatory Plan”)  
8 prohibits KCPL from seeking a rider mechanism prior to June 1, 2015.

9 The most significant issues and Staff’s concerns for each issue follows:<sup>6</sup>

- 10 1. **What DSM programs and annual energy savings target and annua I**  
11 **demand savings target should be approved?** Staff has concerns for many of  
12 the DSM program designs causing Staff to recommend that some of the  
13 individual programs be changed and others eliminated. Further, Staff is  
14 concerned that many of the estimates of annual energy savings and demand  
15 savings estimated by KCPL for some programs are overestimated, are  
16 incorrectly “deemed” and are not subject to review and verification after-the-  
17 fact, except during the administration of the proposed Performance Incentive.
- 18 2. **What is an equitable way to determine the amount of the actual revenue**  
19 **requirement and the timing of its recovery?** Staff’s concerns are primarily  
20 focused upon the correct models and models’ inputs to calculate KCPL’s  
21 estimate of the lost revenue margins and the net shared benefits for calculation  
22 of the “%” for the Net Share Benefits. More specifically, Staff is primarily

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<sup>6</sup> Much more detail on all aspects of Staff’s review is contained in the rebuttal testimony of individual Staff witnesses.

1 concerned that KCPL is significantly overestimating the lost margin revenue  
2 by a) not correctly calculating its margin revenue rates and b) not correctly  
3 accounting for benefits it receives from off-system sales made possible through  
4 the reduction in its retail sales as a direct result of its DSM programs. The use  
5 of any incorrectly “deemed” annual energy savings and “deemed” annual  
6 demand savings will impact the amount of net shared benefits used to calculate  
7 the “%” of Net Shared Benefits. Staff has concerns over the additional cost to  
8 customers for the proposed DSIM resulting from the delay in recovery of  
9 programs cost and lost revenue incurred over one year or less (prior to June 1,  
10 2015) and its recovery through rate base treatment and amortization over six  
11 years. Staff identifies use of a lost revenue component of a DSIM as a way to  
12 address its concerns for the proposed Net Shared Benefits.

13 **3. What is the appropriate utility incentive component of a DSIM?** The  
14 proposed Performance Incentive is appropriate so long as the 100% bonus  
15 amount for KCPL is recalculated based upon a Commission-approved energy  
16 savings target for KCPL. However, should a lost revenue component of a  
17 DSIM take the place of the proposed Net Shared Benefits during this case,  
18 Staff would consider an adjustment to the Performance Incentive.

19 **4. When should the rider mechanism be sought and/or implemented?** This  
20 issue is at the very center of this case. Staff is concerned that the Regulatory  
21 Plan prohibits KCPL from seeking a rider mechanism prior to June 1, 2015.  
22 And yet, KCPL has done so and, thereby, is not following the terms of an  
23 agreement it entered into in 2005.

1 Staff includes analysis and recommendations in rebuttal testimony to demonstrate the  
2 extensive adjustments necessary for the Commission to even begin to modify KCPL's  
3 proposed DSM programs and proposed DSIM to be consistent with MEEIA and MEEIA  
4 rules.<sup>7</sup> In Staff's opinion, the Commission's only option is to reject KCPL's MEEIA  
5 application.

6 **SUMMARY OF STAFF'S REVIEW OF KCPL'S PROPOSED 20-MONTH PLAN FOR**  
7 **DSM PROGRAMS AND PROPOSED DSIM**

8 Q. What Staff witnesses have reviewed KCPL's proposed 20-month plan for  
9 DSM programs and proposed DSIM and have made recommendations as a result of their  
10 review?

11 A. The following Staff witnesses have filed rebuttal testimony to include the  
12 review and recommendations of each witness related to Commission rules that require actions  
13 or decisions by the Commission in this case:

- 14 • John Rogers – case coordinator:
  - 15 ✓ Staff overall recommendation concerning the KCPL MEEIA application;
  - 16 ✓ 4 CSR 240-20.094(2) and 4 CSR 240-20.094(3)(A)1 – recommendation
  - 17 concerning expectation that KCPL's DSM programs can achieve a goal of all
  - 18 cost-effective demand-side savings;
  - 19 ✓ 4 CSR 240-20.094(3)(A)3 – recommendation concerning KCPL's preferred
  - 20 resource plan and Chapter 22 integrated resource analysis, annual revenue
  - 21 requirements and net present value of revenue requirements; and
  - 22 ✓ 4 CSR 240-20.093(2)(H) – recommendation concerning approval of a utility
  - 23 incentive component of a DSIM
  - 24
- 25 • Michael Stahlman - energy efficiency programs and structure issues related to and  
26 variances for the DSIM:
  - 27 ✓ 4 CSR 240-3.164(2) – compliance with energy efficiency programs and
  - 28 demand-side program plans filing and submission requirements;
  - 29 ✓ 4 CSR 240-20.094(3) – recommendation concerning approval, modification or
  - 30 rejection of energy efficiency program plan;

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<sup>7</sup> As modified by any approved variances from the MEEIA rules in this case.

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- 1 ✓ 4 CSR 240-20.094(3)(A) – recommendation concerning annual demand and  
2 energy savings targets for energy efficiency programs;  
3 ✓ 4 CSR 240-20.094(3)(A)2 – recommendation concerning evaluation,  
4 measurement and verification plans for energy efficiency programs;  
5 ✓ 4 CSR 240-20.094(3)(B) – recommendation concerning low-income and  
6 general education programs;  
7 ✓ 4 CSR 240-20.093(2)(E) – recommendation concerning KCPL’s ability to  
8 manage all aspects of the approved energy efficiency programs and the ability  
9 to measure and verify the approved energy efficiency programs’ impacts.  
10 ✓ CSR 240-3.163(2)(J) and (K) – compliance with DSIM rate adjustment clause  
11 tariff sheets;  
12 ✓ 4 CSR 240-20.093(2)(C) - recommendations concerning DSM programs’ tariff  
13 sheets;  
14 ✓ 4 CSR 240-20.093(2) – application for a DSIM;  
15 ✓ 4 CSR 240-20.093(5) – implementation of a DSIM; and  
16 ✓ 4 CSR 240-3.163(11), 4 CSR 240-3.164(6), 4 CSR 240-20.093(13) and 4 CSR  
17 240-20.094(9) – variances from the MEEIA Rules concerning energy  
18 efficiency programs and a DSIM  
19  
20 • Randy Gross – demand response programs:  
21 ✓ 4 CSR 240-3.164(2) – compliance with demand response programs and  
22 demand-side program plans filing and submission requirements;  
23 ✓ 4 CSR 240-20.094(3) – recommendation concerning approval, modification or  
24 rejection of demand response program plan;  
25 ✓ 4 CSR 240-20.094(3)(A) – recommendation concerning annual demand and  
26 energy savings targets for demand response programs;  
27 ✓ 4 CSR 240-20.094(3)(A)2 – recommendation concerning evaluation,  
28 measurement and verification plans for demand response programs; and  
29 ✓ 4 CSR 240-20.093(2)(E) – recommendation concerning KCPL’s ability to  
30 manage all aspects of the approved energy efficiency programs and the ability  
31 to measure and verify the approved demand response programs’ impacts.  
32  
33 • Mark Oligschlaeger – structure issues related to the DSIM:  
34 ✓ 4 CSR 240-3.163(2)(C), (D), (F), (H) and (K) - compliance with selected  
35 DSIM filing requirements;  
36 ✓ 4 CSR 240-20.093(2)(C) – recommendation concerning approval of a DSIM;  
37 and  
38 ✓ 4 CSR 240-20.093(2)(E) – recommendation concerning: a) the magnitude of  
39 the utility’s approved demand-side programs on the utility’s costs, revenues  
40 and earnings, and b) interaction among the various components of the DSIM.  
41  
42 • Sarah Kliethermes – Structural issues related to and tariff sheets/customer notice for  
43 the DSIM:  
44 ✓ 4 CSR 240-3.163(2)(A) and (B) – compliance with notice to customers and  
45 example of customer bill;

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- 1 ✓ 4 CSR 240-20.093(2)(C) - recommendations concerning DSIM tariff sheets  
2 ✓ 4 CSR 240-3.093(2)(J) – recommendation concerning rates on tariff sheets;  
3 ✓ 4 CSR 240-20.093(2)(K) – recommendation concerning DSIM revenue  
4 requirement and rates for each customer class;  
5 ✓ 4 CSR 240-20.093(6) – recommendation concerning disclosure on customer  
6 bills; and  
7 ✓ 4 CSR 240-20.093(2)(C) – recommendation concerning DSIM tariff sheets.  
8  
9 • Zephania Marevangeo: - change in utility business risk as a result of DSIM:  
10 ✓ 4 CSR 240-3.163(2)(E) and (G) – compliance with explanation of change in  
11 any business risk resulting from implementation of a DSIM; and  
12 ✓ 4 CSR 240-20.093(2)(D) – recommendation concerning changes in business  
13 risk and the electric utility’s allowed rate of return on equity.  
14  
15 • Natelle Dietrich: single issue ratemaking  
16 ✓ 4 CSR 240-20.093(2)(C) Can the DSIM Rider be implemented on June 1, 2015  
17 or can it only be requested on or after June 1, 2015?

18 **KCPL’S PAST AND PRESENT DSM PROGRAMS**

19 Q. Please give a brief history of KCPL’s implementation of DSM programs.

20 A. KCPL first began implementing DSM programs as part of its Regulatory Plan,  
21 which established a Customer Programs Advisory Group (“CPAG”) to include Staff, the  
22 Office of the Public Counsel, Missouri Department of Natural Resources and other interested  
23 parties to serve as a stakeholder advisory group to KCPL in the development, implementation,  
24 monitoring and evaluation of KCPL’s demand response, energy efficiency and affordability  
25 programs. Schedule JAR-2 contains information concerning KCPL’s Regulatory Plan DSM  
26 programs<sup>8</sup> and indicates that all of KCPL’s current DSM programs were first implemented  
27 between October 2005 and April 2008. As evidenced by KCPL’s quarterly Strategic  
28 Infrastructure Investment Status Reports for its Regulatory Plan, KCPL’s eight energy  
29 efficiency programs, two demand response programs and one affordability program have been

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<sup>8</sup> Staff’s most recent Status Report file on May 9, 2013 in File No. AO-2011-0035

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1 successful in meeting the overall goals for participation, energy savings and spending levels  
2 established in the Regulatory Plan.

3 As a result of the Commission's *Report and Order* in KCPL's 2010 general rate case  
4 (File No. ER-2010-0355), the Regulatory Plan ended on May 14, 2011 with respect to  
5 KCPL's commitment to implement DSM programs;<sup>9</sup> however, KCPL continues to offer the  
6 same eleven DSM programs to its customers, and the DSM stakeholder advisory group – now  
7 called the KCPL DSM Advisory Group (“DSMAG”) - continues to meet quarterly with  
8 KCPL to provide guidance and support for DSM program development, implementation,  
9 monitoring and evaluation.

10 Q. Following completion of the Regulatory Plan, has KCPL continued to invest in  
11 its DSM programs at a level equal to or greater than it did during the Regulatory Plan?

12 A. Yes. Schedule KHW-1 of the direct testimony of KCPL witness Kim Winslow  
13 contains a summary of KCPL's budget and actual levels for DSM program expenditures,  
14 energy savings and demand savings from the beginning of the Regulatory Plan through  
15 September 30, 2013.

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<sup>9</sup> May 14, 2011 is the effective date of the Commission's May 4, 2011 *Report and Order* in File No. ER-2010-0355.

Table 1 summarized the data in Schedule KHW-1:

<b>Table 1</b>					
<b>Regulatory Plan through September 30, 2013</b>					
<b>Programs</b>	<b>Cost</b>	<b>Annual kWh Savings</b>	<b>\$/kWh</b>	<b>Annual kW Savings</b>	<b>\$/kW</b>
<b>Affordability</b>	\$2,684,420	2,193,970	\$1.22	491	\$5,472
<b>Energy Efficiency</b>	\$31,470,377	154,075,397	\$0.20	34,063	\$924
<b>Demand Response</b>	\$25,055,050	6,321,561	\$3.96	55,127	\$454
<b>Total</b>	\$60,296,404	162,590,928	\$0.37	89,681	\$672

Schedule JAR-3 was prepared by Staff and illustrates that KCPL has continued to invest in its DSM programs at a level equal to or greater than it did during the Regulatory Plan and that expenditures in 2012 and 2013 were approximately \$10 million and \$13 million,<sup>10</sup> respectively, and that approximately 34 GWh of annual energy savings were achieved in 2012 and in 2013.

**KCPL’S CURRENT COST RECOVERY MECHANISM FOR DSM PROGRAMS**

Q. What is the current cost recovery mechanism for KCPL’s DSM programs?

A. All DSM programs’ costs are placed in a regulatory asset account and receive interest at the allowance for funds used during construction (“AFUDC”) rate. In subsequent general electric rate proceedings, prudent DSM programs’ costs incurred prior to December 31, 2010 will be amortized over a ten-year period. Prudent DSM programs’ costs incurred on or after December 31, 2010 will be amortized over a six-year period and the unamortized balances will be included in rate base for determining permanent rates.

<sup>10</sup> Estimated based upon 9 months of 2013 being actual and 3 months being estimated.

1 **KCPL'S 20-YEAR ADOPTED PREFERRED RESOURCE PLAN**

2 Q. Please describe KCPL's 20-year adopted preferred resource plan.

3 A. On March 20, 2014, KCPL filed its *Integrated Resource Plan 2014 Annual*  
4 *Update* in File No. EO-2014-0256. KCPL's 2014 Annual Update revised the adopted  
5 preferred resource plan to include 17 MW of solar additions and 550 MW of wind additions  
6 over the twenty-year planning period. A combustion turbine ("CT") resource addition is  
7 included in 2031. Demand-side resources consist of a suite of six residential energy efficiency  
8 programs, two commercial and industrial energy efficiency programs, one residential demand  
9 response program, one commercial and industrial demand response program, one residential  
10 and two commercial and industrial educational programs. The potential retirements of  
11 Montrose Unit 1 in 2016 and Montrose Units 2 and 3 in 2021 are partially attributed to current  
12 or proposed environmental regulations.

13 Q. Why is the adopted preferred resource plan relevant to this application?

14 A. Each electric utility is required to have consistency between its business plan  
15 and its long range adopted resource plan.<sup>11</sup>

16 Q. Please describe the level of demand-side resources in KCPL's adopted  
17 preferred resource plan.

18 A. The 20-year adopted preferred resource plan includes a modified realistic  
19 achievable potential ("RAP") level of DSM for 2014 and 2015, followed by the Potential  
20 Study<sup>12</sup> RAP level of DSM starting in 2016 and beyond. The modification was based on the  
21 demand-side measures list from the potential study, but at a level comparable to the KCP&L

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<sup>11</sup> Rule 4 CSR 240-22.080 (12).

<sup>12</sup> The potential study was performed by Navigant and was used to inform the demand-side portfolio levels for the alternative resource plans in KCPL's 2013 annual update in File No. EO-2013-0537 and 2014 annual update in File No. EO-2014-0256.

1 Greater Missouri Operations Company (“GMO”) approved MEEIA DSM plan<sup>13</sup> for years  
2 2014 and 2015. The modified DSM plan is named MEEIA/RAP. This plan assumes DSM  
3 programs would include demand-side measures recommended in the Potential Study RAP  
4 level. The DSM savings levels for this scenario are based on the cost per kWh from the RAP  
5 level of DSM in the Potential Study results, but the amount of capacity and energy savings  
6 would be reduced proportionately to reflect the reduced amount of savings that could be  
7 achieved with a level of spending comparable to the GMO approved MEEIA plan for years  
8 2014 and 2015. This plan also assumes the potential study RAP level for program years 2016  
9 and beyond.

10 **KCPL’S PROPOSED DSM PROGRAMS AND PROPOSED DSIM**

11 Q. What is the budget and the expected annual energy savings and annual demand  
12 savings for KCPL’s MEEIA DSM programs proposed in this filing?

13 A. Schedule KHW-2 of the direct testimony of KCPL witness Kim Winslow  
14 contains information for KCPL’s budget and expected annual energy savings and annual  
15 demand savings for each of KCPL’s proposed DSM programs over the next twenty months,  
16 summarized at the program type level in Table 2:  
17

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<sup>13</sup> On November 15, 2012 the Commission issued its *Order Approving Non-unanimous Stipulation and Agreement Resolving KCP&L Greater Missouri Operations Company's MEEIA Filing* in File No. EO-2012-0009.

<b>Table 2</b>					
<b>KCPL MEEIA 20-Month Plan</b>					
<b>Programs</b>	<b>Cost</b>	<b>Annual kWh Savings</b>	<b>\$/kWh</b>	<b>Annual kW Savings</b>	<b>\$/kW</b>
<b>Affordability</b>	\$1,079,898	935,375	\$1.15	179	\$6,033
<b>Energy Efficiency</b>	\$19,965,681	154,662,379	\$0.13	17,916	\$1,114
<b>Demand Response</b>	\$7,541,296	n/a	n/a	58,996	\$128
<b>Total</b>	\$28,586,875	155,597,754	\$0.18	77,091	\$371

1  
2 Q. Does KCPL describe how its proposed DSIM is constructed and how it will  
3 operate?

4 A. Yes. KCPL witness Tim Rush describes how the DSIM is constructed and  
5 how it is proposed to operate on pages 17 through 21 of his direct testimony.

6 Q. Please identify the three components of KCPL's proposed DSIM and the  
7 amounts KCPL estimates will be recovered from customers for each component.

8 A. The components and estimated amounts are:

- 9 • DSM Program Costs – estimated to be \$29 million over the MEEIA Plan  
10 Period to recover all actual direct program costs;
- 11 • Net Shared Benefits – estimated to be \$17 million over the MEEIA Plan  
12 Period. The \$17 million amount was computed as 38.54% of the total net  
13 shared benefits<sup>14</sup> (“deemed” gross annual energy savings<sup>15</sup> and “deemed”

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<sup>14</sup> The actual total net shared benefits will be equal to the programs' avoided costs (based on actual measures installed and the “deemed” gross energy and demand savings for each measure) less the actual costs for the programs.

1 annual demand savings less program costs) associated with KCPL's DSM  
2 programs during the 20-month MEEIA plan period. The Net Shared Benefits  
3 would allow KCPL to collect from customers 38.54% of the estimated lost  
4 margin revenue calculated through the use of "deemed" gross annual energy  
5 savings and "deemed" annual demand savings during the 20-month plan  
6 period as a direct result of an estimated reduction in retail sales due to the  
7 MEEIA programs; and

- 8 • Performance Incentive – an amount up to \$5.89 million that KCPL will recover  
9 from customers if certain Commission-approved energy savings targets and  
10 demand savings targets are met through an after-the-fact EM&V.

11 Should the Commission approve the application as filed, including all the deficiencies  
12 as identified by Staff, all three components of the DSIM will result in a \$49 million impact to  
13 customers assuming the programs perform as planned.

14 Q. How will the proposed DSIM track and recover the dollars associated with the  
15 components of the DSIM?

16 A. Very generally, as a regulatory asset prior to June 1, 2015, and as a rider  
17 mechanism beginning on June 1, 2015.

18 **DISCUSSION OF THE MOST SIGNIFICANT ISSUES IDENTIFIED BY STAFF AND**  
19 **THE PROCESS NECESSARY BEFORE A FINAL ORDER CAN BE ISSUED IN THIS**  
20 **CASE**

21 Q. What is the purpose of this section of your testimony?

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<sup>15</sup> An approach to estimating energy and demand savings which involves multiplying the number of installed measures by an estimated (or deemed) savings per measure, which is derived from historical evaluations.

Rebuttal Testimony of  
John A. Rogers

1           A.     I will discuss the complexity and magnitude of the most significant issues  
2 raised by Staff and the process necessary before the Commission can even begin to modify  
3 KCPL's DSM programs and DSIM to be consistent with MEEIA.

4           Q.     Why are you providing this discussion?

5           A.     This will be the first MEEIA case in which the Commission will be receiving  
6 testimony and other evidence. Should the Commission reject KCPL's application, KCPL will  
7 have to "redo" much of its analysis to support the DSM programs and a DSIM, which are  
8 consistent with the Commission MEEIA rules. This will also necessitate that the Commission  
9 afford the interested parties the opportunity to comment on the results of the "redo" for the  
10 Commission's consideration. The very short duration of KCPL's MEEIA plan after the  
11 additional time necessary for the "redo" will result in a very short MEEIA plan period of  
12 about one year.

13          Q.     Have you performed any independent analysis of KCPL's proposed 20-month  
14 plan for DSM programs in addition to that of other Staff witnesses?

15          A.     Yes. Schedule JAR-4 contains a high level summary of the costs, annual  
16 energy savings (kWh), and annual demand savings (kW) for the affordability programs,  
17 energy efficiency programs and demand response programs for the Regulatory Plan programs  
18 through September 30, 2013, and for the proposed 20-month MEEIA plan. Schedule JAR-4  
19 also contains the calculated \$/kWh, kWh/\$, \$/kW and kW/\$ for KCPL's proposed MEEIA  
20 DSM programs compared to the same metrics for the KCPL Regulatory Plan programs  
21 through September 30, 2013.

22          Q.     Please comment on the meaning of the 158% figure and the 121% figure on  
23 the energy efficiency ("EE") line in Table 4 of Schedule JAR-4.

Rebuttal Testimony of  
John A. Rogers

1           A.     The energy efficiency programs in the MEEIA Plan – as proposed – are  
2 estimated to produce 58% more annual energy savings per dollar of program expenditures and  
3 to produce 21% more annual demand savings per dollar of expenditures than the annual  
4 energy savings per dollar of program expenditures and the annual demand savings per dollar  
5 of program expenditures for the KCPL energy efficiency programs in the Regulatory Plan  
6 through September 30, 2013.

7           Q.     What is the significance of your last answer?

8           A.     From the rate payers’ perspective, 58% more annual energy savings per dollar  
9 of program expenditures and 21% more annual demand savings are good and desirable – all  
10 else equal - as long as the annual energy savings are realistic and achievable and/or can be  
11 measured and verified. This simple comparison would suggest that KCPL’s MEEIA proposal  
12 can be expected to result in progress towards achieving the goal of all cost effective demand-  
13 side savings.<sup>16</sup>

14          Q.     Does Staff believe the estimated annual energy savings and estimated annual  
15 demand savings in the KCPL MEEIA plan are realistic and achievable?

16          A.     No. Staff witnesses Michael Stahlman and Randy Gross provide rebuttal  
17 testimony demonstrating many of KCPL’s proposed DSM program are not very well designed  
18 and that the “deemed” annual energy savings and the annual demand savings in KCPL’s  
19 proposed MEEIA programs are significantly overestimated.

20          Q.     Why are proposed DSM programs’ designs and a significant overestimation of  
21 annual energy savings and annual demand savings through the use of “deemed” savings a  
22 concern in this case?

---

<sup>16</sup> §393.1075.4 and 4 CSR 240-20.094(2)(A) and (B)

Rebuttal Testimony of  
John A. Rogers

1           A.     Because the estimations of “deemed” annual energy savings and “deemed”  
2 annual demand savings have a direct bearing on all three components of the proposed DSIM,  
3 specifically: DSM Programs Cost (estimated to be \$29 million), Net Shared Benefits  
4 (estimated to be \$17 million), and Performance Incentive (estimated to be as much as \$5.89  
5 million).

6           Q.     Can the annual energy savings from the KCPL MEEIA programs be measured  
7 and verified through EM&V?

8           A.     Yes. EM&V can and will be performed by KCPL’s independent EM&V  
9 contractor<sup>17</sup> and the results audited by the Commission’s EM&V auditor<sup>18</sup> after the  
10 completion of a program period to verify the actual annual energy savings from the KCPL  
11 MEEIA programs.

12          Q.     Does KCPL propose to perform EM&V for its Net Shared Benefits component  
13 and its Performance Incentive component of its DSIM?

14          A.     While KCPL proposes to perform EM&V for its Performance Incentive  
15 component of its DSIM in compliance with Rule 4 CSR 240-20.093(2)(H), KCPL does not  
16 propose to perform any EM&V for its Net Shared Benefits component of its DSIM as  
17 required by Rule 4 CSR 240-20.093(2)(H) and has requested a variance from this rule for its  
18 Net Shared Benefits.

19          Q.     Please describe in more detail how KCPL’s Net Shared Benefits proposal will  
20 operate.

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<sup>17</sup> Direct testimony of KCPL witness Kim Winslow at page 27 lines 2 through 11.

<sup>18</sup> The Commission has a contract with the Johnson Consulting Group to comply with Rule 4 CSR 240-20.093(7): Evaluation, Measurement, and Verification (EM&V) of the Process and Impact of Demand-Side Programs. Each electric utility shall hire an independent contractor to perform and report EM&V of each commission-approved demand-side program in accordance with 4 CSR 240-20.094 Demand-Side Programs. The commission shall hire an independent contractor to audit and report on the work of each utility’s independent EM&V contractor.

Rebuttal Testimony of  
John A. Rogers

1 A. Through its analysis, KCPL has determined that if it receives 38.54% of the  
2 “estimated” \*\* \_\_\_\_\_ \*\* net shared benefits (DSM program benefits minus DSM  
3 program costs) from the MEEIA programs, KCPL expects to be “made whole” for its  
4 “estimated” \*\* \_\_\_\_\_ \*\* lost margin revenue amount (anticipated lost energy sales due  
5 to the MEEIA programs times the lost margin revenue rate at the time of the lost sales) for the  
6 20-month MEEIA plan period.

7  $38.54\% = \text{estimated lost margin revenue} / \text{estimated net shared benefits}$

8  $38.54\% = ** \text{_____} ** / ** \text{_____} **$

9 The high level detail behind the \*\* \_\_\_\_\_ \*\* and \*\* \_\_\_\_\_ \*\* amounts  
10 are contained in Schedule JAR-5 which is from the KCPL LoadShapes\_33 excel file included  
11 with the KCPL workpapers for this case.

12 Q. Does Staff agree with KCPL’s \*\* \_\_\_\_\_ \*\* “estimate” of lost margin  
13 revenue used to calculate the 38.54% for the Net Shared Benefits?

14 A. No. Staff witnesses Sarah Kliethermes and Michael Stahlman testify that the  
15 lost margin revenue amounts used to estimate the 38.54% figure are significantly overstated  
16 for a number of reasons including the improper accounting for revenues from off-systems  
17 made by KCPL as a direct result of the reduction in retail sales due to the DSM programs.

18 Q. Does Staff agree with KCPL’s \*\* \_\_\_\_\_ \*\* “estimate” of net shared  
19 benefits used to calculate the 38.54% for the Net Shared Benefits?

20 A. No. Staff witnesses Michael Stahlman and Randy Gross testify that many of  
21 the proposed DSM programs (home and business analyzer, residential reports, residential  
22 lighting and demand response incentive programs) should be redesigned and others  
23 eliminated. Additionally, they testify that some of the estimated proposed “deemed” annual

Rebuttal Testimony of  
John A. Rogers

1 energy savings and “deemed” annual demand savings for some programs are significantly  
2 overestimated for today’s market place; this is particularly true for the relatively large  
3 residential lighting program.

4 Q. Does Staff recommend approval of KCPL’s proposed Net Shared Benefits?

5 A. No.

6 Q. Why not?

7 A. The current 38.54% Net Shared Benefits proposed by KCPL will likely result  
8 in KCPL customers paying KCPL millions of dollars for “phantom” lost margin revenue  
9 amounts. The “phantom” lost margin revenue amounts are due to KCPL’s poor program  
10 designs with “overstated” deemed annual energy and demand savings and “overstated” lost  
11 margin rates in KCPL’s analysis of the 38.54% Net Shared Benefits.

12 Q. Is there a way to correct for poor program designs and the “%” used for the  
13 Net Shared Benefits through hearings and the current procedural schedule so that KCPL can  
14 move forward with implementing its first set of MEEIA programs?

15 A. No.

16 Q. Why not?

17 A. Staff witnesses identify numerous, complex and significant issues and  
18 concerns with many areas of KCPL’s proposed MEEIA plan. All of the issues and concerns  
19 raised by Staff in this case would have to be heard and ruled on by the Commission prior to a  
20 “redo” of all of the analysis necessary to comply with the filing requirements,<sup>19</sup> including the  
21 “redo” of the “%” for the Net Shared Benefits. The “redo” would require some unknown  
22 amount of time to accomplish. The parties should have an opportunity to review and comment

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<sup>19</sup> See 4 CSR 240-3.163(2) for the filing requirements for a DSIM and 4 CSR 240-3.164(2) for the filing requirements for demand-side programs.

Rebuttal Testimony of  
John A. Rogers

1 on any “redo” before the Commission rules on it. This outcome would mean KCPL’s  
2 proposed 20-month MEEIA plan would become about a one-year MEEIA plan.

3 Q. Can Staff recommend an alternative to KCPL’s proposed Net Shared Benefits?

4 A. Yes. As discussed in the testimony of Staff Witness Michael Stahlman, Staff  
5 can recommend use of a utility lost revenue component of a DSIM to comply with 4 CSR  
6 240-20.093(2)(G). However, this approach would not solve all issues related to the DSM  
7 programs or eliminate the need for a “redo” of the analysis.

8 Q. What information does the Commission need before it can make a decision  
9 related to the DSM programs?

10 A. The Commission needs accurate information related to the individual DSM  
11 program designs, budgets, annual energy savings targets and annual demand savings targets  
12 prior to reviewing and approving DSM programs and a DSIM.

13 Q. If the Commission rejects this application, are the efforts KCPL and the parties  
14 to this case wasted?

15 A. Not at all. This case (including the many technical conferences over the past  
16 two months) has resulted in a significant and very valuable learning experience for KCPL and  
17 the parties.

18 Q. If the Commission rejects this application, could KCPL use its learning  
19 experience in this case to soon refile a new MEEIA application?

20 A. Yes. In fact, consistent with its adopted preferred resource plan, KCPL already  
21 plans to make a MEEIA filing sometime in 2015 for implementation of its RAP DSM  
22 programs beginning January 1, 2016. GMO’s adopted preferred resource plan includes

1 implementation of the GMO RAP DSM programs on that same date. Also, KCPL and GMO  
2 could simultaneously file their RAP MEEIA applications earlier than now planned.

3 **PERFORMANCE INCENTIVE COMPONENT OF THE DSIM (ESTIMATED TO BE**  
4 **UP TO \$5.89 MILLION)**

5 Q. Please provide the results of Staff’s review and recommendation concerning  
6 KCPL’s proposed Performance Incentive component of the DSIM.

7 A. The Performance Incentive component proposed by KCPL is scaled and  
8 modeled after the “stipulated” performance incentive award mechanisms approved by the  
9 Commission for Ameren Missouri in File No. EO-2012-0142 and for GMO in File No. EO-  
10 2012-0009. The following data illustrates this point:

	<b>Energy Target MWh</b>	<b>100% Bonus</b>	<b>Bonus per MWh</b>
<b>Ameren</b>	793,000	\$ 18,750,000	\$ 23.64
<b>GMO</b>	150,347	\$ 3,550,000	\$ 23.61
<b>KCPL</b>	155,598	\$ 3,680,000	\$ 23.65

11  
12 Staff can support this approach so long as the 100% bonus amount for KCPL is  
13 recalculated based upon the Commission-approved energy savings target for KCPL. For  
14 example, if the Commission-approved energy savings target for KCPL is 110,000 MWh, and not  
15 155,598 MWh, the 100% bonus level will be \$2,601,500 (110,000 MWh multiplied by \$23.65 per  
16 MWh).

17 **PROGRESS TOWARD AN EXPECTATION THAT KCPL’S PROPOSED DSM**  
18 **PROGRAMS CAN ACHIEVE A GOAL OF ALL CO ST-EFFECTIVE DEMAND-SIDE**  
19 **SAVINGS**

20 Q. Are KCPL’s proposed DSM programs expected to result in progress toward  
21 achieving a goal of all cost-effective demand-side saving as defined in Rule 4 CSR 240-  
22 20.094(2)(A) and (B)?

Rebuttal Testimony of  
John A. Rogers

1           A.     Based upon KCPL's estimated "deemed" annual energy savings and annual  
2 demand savings for its proposed DSM programs (156 GWh of annual energy savings and 77 MW  
3 of annual demand savings over the 20-month plan period), the answer is yes; however, Staff has  
4 identified many issues concerning KCPL's proposed programs' designs and estimations of annual  
5 energy savings and annual demand savings.

6     **VARIANCES FROM THE COMMISSION'S MEEIA RULES REQUIRED FOR**  
7     **APPROVAL OF KCPL'S PROPOSED DSM PROGRAMS AND KCPL'S PROPOSED**  
8     **DSM, AND STAFF'S RECOMMENDATION CONCERNING EACH**

9           Q.     What variances from the Commission's MEEIA rules has KCPL requested in its  
10 MEEIA application?

11          A.     This is contained in the rebuttal testimony of Michael Stahlman.

12          Q.     What is the purpose of your Schedule JAR-6?

13          A.     Schedule JAR-6 contains KCPL's responses to Staff's and other parties' informal  
14 data request provided during the technical conferences. Staff used these responses to assist in the  
15 development of its rebuttal testimony.

16          Q.     Does this conclude your testimony?

17          A.     Yes, it does.

## **Educational Background and Work Experience of John A. Rogers**

I have a Master of Business Administration degree from the University of San Diego and a Bachelor of Science degree in Engineering Science from the University of Notre Dame. My work experience includes 34 years in energy utility engineering, system operations, strategic planning, regulatory affairs, general management and management consulting. From 1974 to 1985, I was employed by San Diego Gas & Electric with responsibilities in gas engineering, gas system planning and gas operations. From 1985 to 2000, I was employed by Citizens Utilities primarily in leadership roles for gas operations in Arizona, Colorado and Louisiana. From 2000 to 2003, I was an executive consultant for Convergent Group (a division of Schlumberger) providing management consulting services to energy utilities. From 2004 to 2008, I was employed by Arkansas Western Gas and was responsible for strategic planning and resource planning. I have provided expert testimony before the California Public Utilities Commission, Arizona Corporation Commission, Arkansas Public Service Commission and Missouri Public Service Commission in general rate cases, applications for special projects, gas resource plan filings, electric resource plan filings, demand-side management programs and demand-side programs investment mechanism cases. I have been employed by the Missouri Public Service Commission since December 2008 and am responsible for Commission Staff's input to the regulatory process concerning electric utility resource planning, demand-side management programs, demand-side programs investment mechanisms, and fuel adjustment clauses.

**John A. Rogers**  
**Testimony, Reports and Rulemakings**

**BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION**

<u>File Number</u>	<u>Company</u>	<u>Issues</u>
ER-2010-0036	Ameren Missouri	Fuel Adjustment Clause Demand-Side Programs (DSM) DSM Cost Recovery
EX-2010-0368 EW-2010-0254	Missouri Public Service Commission	Missouri Energy Efficiency Investment Act Rulemaking
EX-2010-0254 EW-2009-0412	Missouri Public Service Commission	Electric Utility Resource Planning Rulemaking
EO-2009-0237	KCP&L Greater Missouri Operations Company	Electric Utility Resource Planning Compliance Filing
ER-2009-0090	KCP&L Greater Missouri Operations Company	Fuel Adjustment Clause
ER-2010-0355	Kansas City Power and Light	DSM Cost Recovery Fuel Switching
ER-2010-0356	KCP&L Greater Missouri Operations Company	Fuel Adjustment Clause DSM Cost Recovery Fuel Switching
AO-2011-0035	All Electric Utilities	DSM Status Report
EO-2011-0066	Empire District Electric Company	Electric Utility Resource Planning Compliance Filing
ER-2011-0028	Ameren Missouri	DSM Cost Recovery
EO-2011-0271	Ameren Missouri	Electric Utility Resource Planning Compliance Filing
EO-2012-0009	KCP&L Greater Missouri Operations Company	Demand-side Programs Investment Mechanism
EO-2012-0142	Ameren Missouri	Demand-side Programs Investment Mechanism

**John A. Rogers**  
**Testimony, Reports and Rulemakings**

**BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION (cont.)**

<u>File Number</u>	<u>Company</u>	<u>Issues</u>
ER-2012-0166	Ameren Missouri	DSM Cost Recovery Demand-side Programs Investment Mechanism
ER-2012-0174	Kansas City Power & Light	DSM Cost Recovery
ER-2012-0175	KCP&L Greater Missouri Operations Company	DSM Cost Recovery Demand-side Programs Investment Mechanism
ER-2012-0345	Empire District Electric Co.	DSM Cost Recovery
EO-2012-0323	Kansas City Power & Light	Electric Utility Resource Planning Compliance Filing
EO-2012-0324	KCP&L Greater Missouri Operations Company	Electric Utility Resource Planning Compliance Filing
EO-2013-0537	Kansas City Power & Light	Electric Utility Resource Planning Annual Update
EO-2013-0538	KCP&L Greater Missouri Operations Company	Electric Utility Resource Planning Annual Update
EO-2013-0547	Empire District Electric Co.	Electric Utility Resource Planning Compliance Filing
EX-2014-0205	Dogwood Energy, LLC	Rulemaking Petition

**John A. Rogers**  
**Testimony, Reports and Rulemakings**

**BEFORE THE ARKANSAS PUBLIC SERVICE COMMISSION**

<u>Docket Number</u>	<u>Company</u>	<u>Issues</u>
07-079-TF	Arkansas Western Gas	Arkansas Weatherization Program
07-078-TF	Arkansas Western Gas	Initial Energy Efficiency Programs
07-041-P	Arkansas Western Gas	Special Contract
06-028-R	Arkansas Western Gas	Resource Planning Guidelines for Electric Utilities
05-111-P	Arkansas Western Gas	Gas Conservation Home Weatherization Program

## Kansas City Power & Light Company

**Prepared by:** John Rogers and Hojong Kang

**Collaborative Name and Description:** KCPL Customer Programs Advisory Group (CPAG) was ordered and approved in stipulation and agreement for KCPL Experimental Regulatory Plan in File No. EO-2005-0329. With the Commission's Report and Order in File No. ER-2010-0355, the KCPL Experimental Regulatory Plan's CPAG requirement ended, and KCPL decided the CPAG name would no longer be used. It is now referred to as the DSM Advisory Group.

**Meetings:** KCPL and KCP&L Greater Missouri Operations Company (GMO) DSM Advisory Groups normally conduct quarterly joint meetings via teleconference with occasional in-person meetings in Jefferson City.

**Participants:**

- Regular: KCPL, Staff, OPC, MDNR, NRDC, Sierra Club, Earth Island Institute d/b/a Renew Missouri, MIEC, Wal-Mart Stores East, L.P., and Sam's East.<sup>3</sup>
- Occasional: Praxair, Inc., City of Kansas City, the Empire District Electric Company
- Consultants: Navigant
- Commission EMV Auditor: Johnson Consulting Group

**Program Summaries:** See Attachment B.

**Effectiveness of Participants:** KCPL encourages participation and critical feedback. All participants freely express their points of view and provide advice. The KCPL DSM Advisory Group meetings are efficient and effective overall.

**Success Stories:**

- Customer interest in KCPL's DSM programs has increased since 2005, and KCPL achieved the demand-side management goals established in its Experimental Regulatory Plan in File No. EO-2005-0329.
- KCPL/GMO contracted with Navigant to perform a DSM Market Potential Study. Stakeholder input was received during the planning, review and editing phases of the study, which is expected to be final in May 2013. The results of the DSM Market Potential Study will be used to analyze demand-side resources in KCPL's next Chapter 22 annual update filing, File No. EE-2013-0388, scheduled to be filed on July 1, 2013.

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<sup>3</sup> Signatories to the Commission-approved *Non-Unanimous Stipulation and Agreement Resolving KCP&L Greater Missouri Operations Company's MEEIA Filing*, File No. EO-2012-0009.

Schedule JAR-1-2

Is Deemed

Highly Confidential

In Its Entirety

**Summary of KCPL DSM Programs' Expenditures and Annual Energy Savings for 2006 - 2013**

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	<b>2012</b>	<b>Cumulative 2006 -2012</b>	<b>Estimated *</b> <b>2013</b>	<b>Estimated Cumulative 2006 - 2013</b>	<b>Estimated ** Average Annual Amount</b>
	<b>(a)</b>	<b>(b)</b>	<b>(c)</b>	<b>(d) = (b) + (c)</b>	<b>(e) = (d) / 7</b>
<b>Expenditures (\$ Thousands)</b>	\$ 10,113	\$ 53,579	\$ 13,368	\$ 66,946	\$ 9,564
<b>Annual Energy Savings (MWh)</b>	33,942	151,256	33,631	184,887	26,412
<b>Source</b>	4/30/2013 DSMAG	4/30/2013 DSMAG	11/7/2013 DSMAG		

\* Estimated 2013 is based upon actuals for January through September 2013 divided by 0.75.

\*\* Estimated annual average is based on 7 years, since the six programs with measured energy savings were first implemented over the period of July 2006 to April 2008.

**Table 1: Data from Schedule KHW-2 page 2 of 86 (20- month MEEIA Plan)**

	Cost	kWh	\$/kWh	kWh/\$	kW	\$/kW	kW/\$
<b>Affordability</b>	\$ 1,079,898	935,375	\$ 1.15	0.87	179	\$ 6,033	0.00017
<b>EE</b>	\$ 19,965,681	154,662,379	\$ 0.13	7.75	17,916	\$ 1,114	0.00090
<b>DR</b>	\$ 7,541,296	0	n/a	0.00	58,996	\$ 128	0.00782
<b>Total</b>	\$ 28,586,875	155,597,754	\$ 0.18	5.44	77,091	\$ 371	0.00270

**Table 2: Data from Schedule KHW-1 (Regulatory Plan through September 30, 2013)**

	Cost	kWh	\$/kWh	kWh/\$	kW	\$/kW	kW/\$
<b>Affordability</b>	\$ 2,684,420	2,193,970	\$ 1.22	0.82	491	\$ 5,467	0.00018
<b>EE</b>	\$ 31,470,377	154,075,397	\$ 0.20	4.90	34,063	\$ 924	0.00108
<b>DR</b>	\$ 25,055,050	6,321,561	\$ 3.96	0.25	55,127	\$ 454	0.00220
<b>Total</b>	\$ 60,296,404	162,590,928	\$ 0.37	2.70	89,681	\$ 672	0.00149

**Table 3: MEEIA Plan less Regulatory Plan (absolute values)**

	Cost	kWh	\$/kWh	kWh/\$	kW	\$/kW	kW/\$
<b>Affordability</b>	\$ (1,604,522)	-1,258,595	\$ (0.07)	0.05	-312	\$ 566	-0.00002
<b>EE</b>	\$ (11,504,696)	586,982	\$ (0.08)	2.85	-16,147	\$ 191	-0.00019
<b>DR</b>	\$ (17,513,754)	-6,321,561	n/a	-0.25	3,869	\$ (327)	0.00562
<b>Total</b>	\$ (31,709,529)	-6,993,174	\$ (0.19)	2.75	-12,590	\$ (302)	0.00121

**Table 4: MEEIA Plan less Regulatory Plan [Percentage Change]**

	Cost	kWh	\$/kWh	kWh/\$	kW	\$/kW	kW/\$
<b>Affordability</b>	40%	43%	94%	106%	36%	110%	91%
<b>EE</b>	63%	100%	63%	158%	53%	121%	83%
<b>DR</b>	30%	0%	n/a	0%	107%	28%	356%
<b>Total</b>	47%	96%	50%	202%	86%	55%	181%

**Schedule JAR-5**

**Is Deemed**

**Highly Confidential**

**In Its Entirety**

**Staff: KCP&L-MO MEEIA Technical Conference #1 Questions**  
**File No. EO-2014-0095**  
**Responses to 1/24/14 Request**

**NOTE: QUESTIONS 18 AND 39 CONTAIN HIGHLY CONFIDENTIAL INFORMATION AND SHOULD BE TREATED AS SUCH**

**Historical Relevance:**

1. Kim Winslow's testimony gave a breakdown of Kansas/Missouri expenditures to date on DSM related activities. Staff is requesting a further breakdown of activity between the two Missouri service territories to give stakeholders a better understanding of potential saturation and existing opportunities in relation to the proposed KCPL MEEIA portfolio. We are requesting the following information:
  - a. Please breakdown the GMO, KCPL-MO portions of each activity in the following programs:
    - 22,000 installed thermostats in Missouri under the Energy Optimizer program
    - 58 Missouri participants in the MPower program
    - 40,900 Missouri customers using the Home Energy Analyzer program
    - 1,381 Missouri customers using the Business Energy Analyzer program
    - 9,494 Missouri customers participating in the Cool Homes program
    - 2,653 Missouri customers participating in the Home Performance w/Energy Star
    - 1,629 Missouri homes build in the Energy Star New Homes program
    - Provided 1,425 rebates to Missouri customers under the Energy Audit, Energy Savings Measure—Retrofit and Energy Savings Measure—New Construction (C&I Rebate) program
    - 826 Low Income Weatherization Homes in Missouri
    - Any historical numbers to date on the Building Operator Certification program as well as their level 1 and level 2 completion.

**Response:**

All of the above-referenced figures relate only to KCP&L-MO historical participation as of 9/30/2013.

2. There has been no activity within the Affordable New Homes Program (since 2009). What is the previous record of this program per year, per territory (if any)? What organizations have KCPL-MO/GMO partnered with in the past to deliver this program?

**Response:**

There were 9 participants in KCP&L-MO in 2009 and 4 participants in MPS (GMO) in 2009. The year 2009 was the only year of participation in the Affordable New Homes program. The agencies that we partner with in Missouri include City of Kansas City, Missouri, Blue Hills Community Services, Ivanhoe Neighborhood Council, Missouri Valley Community Action Agency, Central Missouri Community Action, West Central Missouri Community Action Agency, Westside Housing Organization, Green Hills Community Action Agency, and Community Services, Inc.

**NP**

The Kansas agencies include East Central Kansas Economic Opportunity Corporation, Southeast Kansas Community Action Program, and Johnson County Human Services & Aging.

3. KCPL has invested over \$60m as of 9/30/13. Please provide:
  - a. A breakdown of monetary investment per service area (e.g., GMO, KCPL-MO, KCPL-KS)?

**Response:**

The expenditures of \$60M include DSM investment in KCP&L-MO only through 9/30/13. DSM investment for the other service territories at 9/30/13 are:

GMO	\$41.7 MM
KCP&L-KS	\$36.2 MM

4. What year did DSM expenditures begin per service territory and program?

**Response:**

Programs related to our Comprehensive Energy Plan were approved in 2005 with a majority being approved in 2006 and 2007.

**Methodology & Delivery:**

5. Opt-Out Customers:
  - a. Do the current MEEIA energy & demand savings projections factor in C&I opt-out customers since the potential study?

**Response:**

No, the current MEEIA projections do not factor in C&I opt-out customers.

- b. Does KCPL-MO anticipate additional opt-out customers?

**Response:**

KCP&L-MO currently has 10 opt-out customers in 2014 and based on historical experience, we would expect additional opt-out customers in 2015.

- c. Do projected rate impacts on customers reflect the absence of these opt-out customers?

**Response:**

Yes, based on 2013 opt-out customers and estimates for 2014.

**Adjustable Incentive Levels:**

6. Does KCPL-MO anticipate adjusting incentives during a shortened MEEIA cycle? Would GMO incentives be adjusted in-sync with KCPL-MO for applicable measures?

**Response:**

The possibility of KCP&L-MO adjusting customer incentive levels during the shortened cycle (ending 12/31/15) is relatively low; however, we want to introduce the concept to adjust and

have the flexibility, if needed. We would like the incentives to be largely in sync with GMO where possible, but the current GMO tariffs do not allow incentive levels to be adjusted without a tariff change through 2015.

**EM&V:**

7. What are the projected dates for the next EM&V evaluation results for both GMO and KCPL-MO?

**Response:**

The EM&V schedule for GMO was provided in the NON-UNANIMOUS STIPULATION AND AGREEMENT RESOLVING KCP&L GREATER MISSOURI OPERATIONS COMPANY'S MEEIA FILING COME as Appendix D. Program year 2014 is included below; however, it is assumed that remaining program years will be similar.

**Appendix D**

<b>EM&amp;V SCHEDULE 12/31/2013</b>	<b>Program Year Ends</b>	
<b># Days</b>	<b>1/1/2014</b>	<b>EM&amp;V Analysis Starts</b>
120	4/30/2014	EM&V Draft Completed
60	6/29/2014	Stakeholder comments due
TBD		Stakeholder meeting
30	7/29/2014	Final Draft Report Due
20	8/18/2014	Stakeholder comments to Final Draft Report are due to GMO, all participating stakeholders, EM&V Auditor and EM&V contractor
10	8/28/2014	EM&V contractor initiated conference call with stakeholder group and EM&V auditor regarding stakeholder comments
15	9/12/2014	Final EM&V Report due
21	10/3/2014	Grace period to file with Commission to request impact change
5 after change request	10/8/2014	Conference Call if needed
21 after change request	10/24/2014	Stakeholder responses to impact change requests to Commission are due
60 after change request	12/2/2014	Evidentiary hearings complete
30	1/1/2015	Commission order resolving change requests
<b>365</b>	<b>1/1/2015</b>	<b>EM&amp;V Results Final</b>

Subsequently, Navigant, Inc. was retained as the GMO EM&V contractor. Navigant is conducting GMO's EM&V analysis. Navigant presented suggested changes to the GMO EM&V schedule at the EM&V planning meeting with stakeholders on August 29, 2013. Navigant is on-track to deliver the draft EM&V report on April 30, 2014.

8. Would they be in-sync? Can they be in-sync if ex-ante estimates need to accurately be established?

**Response:**

We anticipate KCP&L-MO EM&V schedule will be similar to GMO with the exception that KCP&L-MO will only have one evaluation of the programs at the end of the plan period.

9. Please address the current estimate of free riders or spillover with KCPL-GMO to date and the potential impact (if any) on programs being enacted within KCPL-MO's territory.

**Response:**

Estimates of free riders or spillover for the GMO territory will be presented in the final EM&V report covering all three program years.

10. Will Navigant (and the Blackstone Group) perform the EM&V for KCPL-MO?

**Response:**

It is not definitively known at this time who will be the evaluator for KCP&L-MO.

11. What are the proposed confidence and precision level "targets"?

**Response:**

This will be determined after an EM&V contractor has been engaged and will be part of the EM&V planning process.

12. Please provide a breakdown by energy and demand savings rank (and estimated percentage) for each program for the KCPL-MO MEEIA Portfolio

**Response:**

We have sorted the energy and demand Savings by Program Year (at the meter) in increasing order.

KCP&L-MO Energy Savings, kWh	Year	
	2014 kWh Savings	2015 kWh Savings
Home Energy Report	21,928,861	27,411,076
Business Energy Efficiency Rebate-Standard	16,995,544	16,668,880
Business Energy Efficiency Rebate-Custom	16,286,471	16,271,118
Home Lighting Rebate	14,816,440	15,999,922
Air Conditioning Upgrade Rebate	2,044,674	1,992,012
Building Operator Certification	759,251	1,518,500
Home Appliance Recycling Rebate	409,839	743,606
Income Eligible Weatherization	354,744	580,631
Home Energy Improvements	290,222	525,963
Home Energy Analyzer	0	0
Business Energy Analyzer	0	0
Demand Response	0	0
Programmable Thermostat	0	0
<b>Total kWh Savings</b>	<b>73,886,046</b>	<b>81,711,708</b>

KCP&L-MO Demand Savings, kW	Year	
	2014 kW Savings	2015 kW Savings
Demand Response	39,065	39,065
Programmable Thermostat	20,019	19,931
Home Energy Report	5,482	6,853
Business Energy Efficiency Rebate-Custom	4,391	4,397
Business Energy Efficiency Rebate-Standard	3,421	3,356
Home Lighting Rebate	1,579	1,739
Air Conditioning Upgrade Rebate	1,186	1,153
Income Eligible Weatherization	129	173
Building Operator Certification	87	173
Home Energy Improvements	73	132
Home Appliance Recycling Rebate	65	119
Home Energy Analyzer	0	0
Business Energy Analyzer	0	0
<b>Total kW Savings</b>	<b>75,498</b>	<b>77,093</b>

**Portfolio-Wide Changes:**

13. KCPL has adjusted its KCPL-MO MEEIA portfolio from the GMO portfolio due largely to data and cost-effective tests that were obtained from the market potential study and from experience in the field. Will corresponding GMO changes be submitted in-sync with KCPL-MO proposed changes. (e.g., KCPL-MO and GMO will both eliminate the Energy Star New Homes program in May 2014....)?

**Response:**

We will address any changes to GMO programs during the GMO DSM Advisory Group meetings.

**Program Specific:**

**Appliance Recycling:**

14. This program has a NTG of 0.52 (as encouraged previously by stakeholders). Does KCPL-MO anticipate adjusting incentives for this program? TRC calculations will adversely be impacted if incentive levels are adjusted for programs that don't assume a NTG of 1.0.

**Response:**

We assumed Net to Gross (NTG) of 1.0 for all programs in the KCP&L-MO MEEIA filing except for Appliance Recycling which has a NTG of 0.52, which was factored in economic screening by Navigant.

We have suggested a range of incentives for this program based on Navigant Potential Study information shown in Schedule KHW-4.

**Low-Income Specific Questions (new homes & weatherization):**

15. Has KCPL-MO considered incentives to be extended to multifamily units (see page 13 of Kim Winslow's testimony)?

**Response:**

Yes, the potential study evaluated every residential measure for single family and multi-family.

16. How does KCPL-MO's low-income program(s) differ from the programs being offered in GMO's service territory?

**Response:**

Program structure is the same, but program budget is different between the territories.

17. Have any "new" program designs and/or pilots been considered that target low income populations and/or subsets within that population (e.g., elderly, disabled, renters...)? If not, should dialogue take place regarding this population for future programs in light of the low income new homes program being eliminated from the portfolio (amongst other stated reasons submitted in the first technical conference)?

**Response:**

We have not designed any new programs at this time.

**Home Energy Analyzer & Business Energy Analyzer:**

18. \* \_\_\_\_\_ \* Please explain the administrative/incentive/M&V allocation of these programs in greater detail. It is our understanding that the website is already up and running on KCPL's homepage (since 2006?). Would a new website be developed? Haven't these costs already been realized?

**Response:**

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**Home Energy Report Pilot (OPower):**

19. Will the program encompass all residential homes within the territory? If not, who will be included and why?

**Response:**

The Home Energy Report Pilot will encompass 120,000 households, which is approximately 50% of our residential customer base. This allows for proper statistical treatment in evaluating performance of participant and non-participants. OPower uses algorithms to determine the best candidates to receive the reports in order to affect the changed behavior to energy usage reduction.

20. How will the Home Energy Report Pilot website differ from the Home Energy Analyzer Website?

**Response:**

The Home Energy Report Pilot website is different than Home Energy Analyzer, but we are evaluating the need for both as we move forward with the programs to provide potential cost savings.

21. Will EM&V results of the OPower program include segmented demographic data to better understand KCPL-MO's population and future program designs?

**Response:**

Currently, we have not requested this data.

**Residential Audit and Program Delivery:**

22. Please explain in greater detail the audit process that will be enacted in place of the \$400.00+ Building Performance Audit connected with the Energy Star Program. Who would conduct the audit?

**Response:**

Please note that the proposed program is inclusive of both an audit and rebates for home energy improvements. The Home Energy Improvements program will include a home energy assessment and rebates for qualifying measures. The audit is conducted by a qualified energy auditor who will assess the homeowners' usage and provide a report that outlines steps they can take for more comprehensive upgrades to maximize savings.

The Home Energy Improvements program provides a two pronged approach of educating consumers on basic low costs or no cost solutions that provide high impact savings as well as more comprehensive steps they may take in their home.

23. What would a “walk-through” audit consist of?

**Response:**

The audit assessment would consist of a site inspection of the customer’s home by a certified auditor and detailed report outlining prescriptive measures installed and recommendations for more comprehensive projects.

24. Who would conduct it?

**Response:**

It is anticipated that the audits will be conducted by certified home energy auditors from the existing Home Performance with Energy Star auditor network.

25. What would a “walk-through” audit cost (if anything)?

**Response:**

The walkthrough audit would cost around \$50-\$100 to cover auditor’s time and expense for the site inspection.

26. Does KCPL-MO anticipate any joint delivery of this program (e.g., MGE w/GMO) and/or has there been any discussion with applicable gas utilities on accomplishing this?

**Response:**

To the extent that it is cost effective, KCP&L-MO anticipates utilizing a joint delivery model with MGE to increase savings synergies and lower program delivery costs where possible. The Home Energy Improvements program will reduce the existing programs barrier of first costs. By conducting an initial assessment the programs intent is to increase awareness among customers of basic energy efficiency solutions while driving customers to more comprehensive improvements to their home. KCP&L-MO has discussed our proposed changes with MGE.

**Demand Response Incentive:**

27. What is the current number of participants in the KCPL-MO service territory?

**Response:**

There are 58 customer participants (97 accounts) in the KCP&L-MO service territory as of 1/27/14.

28. Will additional participants be targeted (97 are listed for 2014 & 2015)?

**Response:**

Participants needed will be determined by the incremental MW targets for 2014 and 2015. Additional participants may be targeted to meet DR capacity levels as needed for 2014 and 2015.

29. What strategy will be utilized to acquire these new participants and how were these target participation goals determined?

**Response:**

To be answered at a future conference call.

30. Are current participants contractual signed through 2014 and 2015? If not, what is the breakdown (if contracts are more than one-year in length)?

**Response:**

To be answered at a future conference call.

31. What were the KW savings for the years 2012 & 2013 within KCPL-MO?

**Response:**

To be answered at a future conference call.

32. Explain the methodology used to project the MPower KW savings for 2014 & 2015 and any amount of KW savings used as input to determine the throughput disincentive.

**Response:**

To be answered at a future conference call.

33. Additionally, explain the rationale that will be utilized to determine whether an event is called versus buying energy from SPP to cover any anticipated peaks.

**Response:**

To be answered at a future conference call.

34. Please provide any potential plans to utilize this program to bid demand response into the SPP marketplace or to utilize this program to facilitate off-system sales.

**Response:**

To be answered at a future conference call.

35. Please provide the projected breakdown of the MPower cost per participant for all program expenditures.

**Response:**

To be answered at a future conference call.

**Programmable Thermostat:**

36. What is the current number of registered participants for this program?

**Response:**

As of 1/29/2014 using Vision reporting, there are 21,695 participants for the Programmable Thermostat program.

37. Will additional promotion take place and/or will specific customer segments be targeted?

**Response:**

Yes, additional promotion will take place and will target specific customers in conjunction with our implementer, Honeywell.

38. Are there planned “test events” (if no events are called due to excess capacity) during this MEEIA cycle for purposes of data collection?

**Response:**

A formal test plan has not been developed at this time, but it would be our intent to call test events for data collection.

39. \* \_\_\_\_\_  
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**Response:**

To be answered at a future conference call.

**C&I Prescriptive & Custom Programs:**

40. Have “high impact” projects for the C&I Custom Program been identified?

**Response:**

At this time, no “high impact” projects have been identified for KCP&L-MO. KCP&L-MO will utilize its key account managers to work with Tier 1 customers to identify any large projects.

41. And what sort of impact has the existing opt-out customers had on potential savings estimates?

**Response:**

The Company is not aware of the impact, but intends to adjust KCP&L-MO potential savings estimates to reflect the impact of opt-out customers during the MEEIA plan period.

42. As of July 2013, 99.9% of the Prescriptive Program savings from the GMO territory was due to lighting (Navigant EM&V review).

**Response:**

As of December 2013, 90% of the projects are lighting and/or lighting controls measures, with the remaining 10% composed of HVAC and VFD (variable frequency drive) measures.

43. Has this percentage changed?

**Response:**

Yes. There has been a gradual shift to non-lighting measures as program awareness and participation has grown.

44. Has Navigant or KCPL identified what barriers were inhibiting non-lighting rebates from being accepted?

**Response:**

Awareness and identification of qualifying projects were initial barriers for non-lighting rebates. As the commercial HVAC community gains a better understanding of this program we anticipate more participation from the non-lighting sector.

45. Has Navigant or KCPL identified opportunities to support deeper retrofits?

**Response:**

Navigant and KCP&L identified both barriers to participation for potential deeper retrofits as a key evaluation issue in its evaluation plan (C&I Issues 1&4). Navigant is currently recruiting for a C&I Trade Ally panel to research these potential barriers, but there are no findings to share currently.

46. Is KCPL-MO anticipating a similar outcome?

**Response:**

At this point neither KCP&L nor Navigant can validate whether we anticipate the same outcome, although lighting measures tend to be the most cost effective and easily identifiable measure for many C&I programs.

**DSIM and Customer Notice:**

47. What is meant by “KWH and Average usage will be held constant during the 5 years being evaluated?” (See “Assumptions” on TRM-2)

**Response:**

The assumption included in Schedule TMR-2 was intended to explain that the kWh usage and average usage shown did not incorporate a forecast for growth or future change in usage. For illustrative purposes only, these inputs were held constant and utilized KCP&L-MO’s last rate case average usage/kWh.

48. Will the determinants used from the 0174 case in Rush’s Schedule 1 be updated for the next rate case or in any other manner? (See “Assumptions” on TRM-2)

**Response:**

Yes, the determinants will be updated with knowledge at the time of filing a rate case or when we get to the point when we can file for recovery.

49. What is meant by “proactively support environmental initiatives” language in the Customer Notice?

**Response:**

Consistent with our Guiding Principles, KCP&L strives to proactively support environmental initiatives. As such, our belief is that by offering a robust DSM portfolio that includes a full suite of energy efficient customer options, we are doing our part to support MEEIA environmental objectives and goals.

50. Confirm that there is no intent to consider seasonality in determining or designing the charge under the rider.

**Response:**

Correct, there is no intent to consider seasonality.

51. Confirm that there is no charge applicable to the lighting class under the rider, or to be accrued under the tracker approach.

**Response:**

Correct, there is no charge applicable to the lighting class under the rider, or to be accrued under the tracker approach.

Kansas City Power & Light Company

Case No. EO-2014-0095

The response to the attached information for the first set of Technical Conference Questions is true and accurate to the best of my knowledge and belief.

Signed: Tom Rusz

Date: 2/6/14

**Staff: KCP&L-MO MEEIA Technical Conference #2 Technical Resource Follow Up Questions**

**File No. EO-2014-0095**

**Responses to 1/31/14 (and additional questions submitted)**

**NOTE: QUESTIONS 35, 39, 1, 2, AND 6 CONTAIN HIGHLY CONFIDENTIAL INFORMATION AND SHOULD BE TREATED AS SUCH.**

27. What is the current number of MPower participants in the KCPL-MO service territory?

**Response:**

There are 58 customer participants 97 accounts in the KCPL-MO service territory as of month end January 2014.

28. Will additional MPower participants be targeted (97 are listed for 2014 & 2015)?

**Response:**

Participants needed shall be determined by the incremental MW capacity targets for program years 2014 and 2015. Whether 97 participants will be needed or not will be determined by the capacity levels provided of the customers enrolled.

29. What strategy will be utilized to acquire these new participants and how were these target participation goals determined?

**Response:**

KCP&L has maintained a demand response waiting list for the MPower program while the program was in moratorium. KCP&L will utilize this list along with a targeted recruitment strategy of former customers along with new potential customers that meet the program requirements of the ability to curtail a minimum of 25 kW.

30. Are current participants signed through 2014 and 2015? If not what is the breakdown (if contracts are more than one year in length)?

**Response:**

<b>Load under Contract</b>	<b>Contract through date</b>
3.5 MW	Expired 12/31/2013 (re-signing now)
20.5 MW	Expire by 5/31/2014 (contacting now)
6.7 MW	Expire by 12/31/2014
8.3 MW	Signed through 2014-2015
<b>39 MW</b>	<b>Total</b>

31. What were the kW savings for MPower for the years 2012 and 2013 within KCPL-MO?

**Response:**

2012: 41.8 MW

2013: 39 MW

32. Explain the methodology used to project the MPower kW savings for 2014 and 2015 and any amount of kW savings used as input to determine the throughput disincentive.

**Response:**

Joe O'Donnell will further review at a future teleconference.

33. Additionally, explain the rationale that will be utilized to determine whether an event is called versus buying energy from SPP to cover any anticipated peaks.

**Response:**

Our Power Sales group determines whether an event is called or energy is purchased from Southwest Power Pool ("SPP") to cover anticipated peaks. Variables include availability of generating units and market price.

34. Please provide any potential plans to utilize this program to bid demand response into the SPP marketplace or to utilize this program to facilitate off system sales.

**Response:**

KCP&L has decided to continue to operate the MPower program as is for operational demand response needs, but will continue to monitor the SPP integrated market. Based on the SPP demand response requirements (metering, notification timing) needed to bid load into SPP, the MPower program would need modification from the current design or tariff guidelines (i.e. customer 4 hour notification, max 10 events).

35. Please provide the projected breakdown of the MPower cost per participant for all program expenditures.

**Response:**

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39. \*\* \_\_\_\_\_ \*\*

**Response:**

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**Staff: KCP&L-MO MEEIA Technical Conference #3 Questions**  
**File No. EO-2014-0095**  
**Responses to 2/7/14 Request**

1. Please provide greater detail of how and what kind of participants are being selected for the Home Energy Report Pilot and what control group will be utilized to compare them against. Please provide a breakdown of projected marketing costs.

**Response:**

Participants are determined by the utility and program implementer by identifying the target population with the greatest opportunity for energy savings that ties to the filed annual savings target. From the population that meet the programs requirements in the target population the program implementer randomly assigns customers to statistically equivalent groups; one recipient group and one control group. The only difference in the group is that one receives the report and the other does not. As such we are able to accurately measure the programs energy savings by comparing the recipient group's usage to the control group.

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2. Home & Business Energy Analyzer Program
  - a. Please provide a breakdown of hosting and/or other applicable fees for the website(s):
    - i. Per service territory

**Response:**

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**Response:**

KCP&L is utilizing a branded house approach to naming and branding our customer programs. The branded house is a unified, self-explanatory approach to product naming. It emphasizes the benefits customers will receive and leverages the established KCP&L brand customers recognize. This approach was selected because it is more cost effective to market a unified, cohesive portfolio of products than marketing a collection of disparate product names that don't readily identify what the programs are and what benefit they provide to customers (for example: Optimizer, Cool Homes). The demand response program was named KCP&L Programmable Thermostat because it clearly explains to customers one of the benefits they receive with the program.

Our marketing materials for KCP&L Programmable Thermostat explain that customers are receiving a free programmable thermostat that is installed in their home. Also, the call to action is to call us to make an appointment. This differs from the call to action with a rebate program – which is to buy a thermostat and then submit your rebate form.

5. Does Lighting Program include lighting that was supposed to be included in the Navigant's Home Energy Improvements program?

**Response:**

Yes, all lighting measures recommended from potential study were moved into the Home Lighting program including different delivery structures (direct install, self install).

6. Provide additional detail on the programmable thermostat EPRI pilot.

**Response:**

Below is the scope of work for the EPRI pilot.

**Programmable Thermostat Pilot Program**

**Current State**

KCP&L primarily uses one-way programmable thermostats. The infrastructure enabling the demand response with the current thermostats is proprietary and flexibility to “plug and play” with vendors and or technology has been very limited in a cost-effective manner.

Historically, programmable thermostat programs at KCP&L have been used for the sole purpose of DRLC without consideration for any EE benefits. Although for some time ENERGY STAR ratings were available for programmable thermostats claiming up to 20% savings, the rating was removed because those savings did not materialize. Currently, achievable savings are unknown in the industry.

KCP&L issued a sole source agreement in the beginning of 2013 with Honeywell to begin implementation of their new wi-fi smart thermostat due to time sensitivity with GMO MEEIA implementation, the regulatory structure, a very small incremental deployment, a long-standing relationship with Honeywell, and the lack of data and awareness of any other proven two way technology on the market.

**Objective**

With new technology emerging and gaining penetration KCP&L would like to evaluate the potential of smart thermostats and a new program framework based on the following criteria:

1. Achievable energy and demand impacts
2. Two-way verifiable data using standardized communication methods
3. More widely available hardware and software (architecture) solutions
4. Additional customer benefits beyond EE such as synergies with other programs resulting in greater portfolio results and increased customer satisfaction

**Research Framework**

EPRI is currently conducting research to evaluate smart thermostats with the following key research questions.

Primary

1. Do smart thermostats result in energy savings with residential customers?
2. Do smart thermostats result in load reduction during demand reduction events with residential customers

Secondary

1. What are the technology specifications of various smart thermostats on the market, such as their different architectures for providing utility demand response?
2. At what rate do residential customers opt to participate in smart thermostat pilots/programs?
3. How do customers use and interact with the thermostats?
4. How are customer participation and energy and demand impacts affected by demographics, season, technology, and other potential variables?

**Benefits of participating in the EPRI study**

1. Access to the technical review and analysis of all available technologies on the market
2. A framework for the design, implementation, and analysis of the pilot.
3. Access to results for all host pilots
4. KCP&L specific impact data

**Number of Customers:** 2,000

**Cost:** \$220,000

**Timing:** 2014-2015

**KCP&L Role:**

KCP&L-MO will participate in the EPRI project as a host utility conducting a trial under the MO MEEIA framework. The KCP&L trial will utilize two technologies comparing the saving potential differences between a consumer behavior model and a technology automation (self-learning algorithm) approach to achieve results.

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Kansas City Power & Light Company

Case No. EO-2014-0095

The response to the attached information for the Technical Conference Questions is true and accurate to the best of my knowledge and belief.

Signed: Tom Rush

Date: 2/13/14

**Responses to KCP&L-MO MEEIA Technical Conference Questions  
2/14/2014, 10:30 AM  
Questions from Stakeholders from 2/7/2014 Technical Conference Call  
File No. EO-2014-0095**

**NOTE: QUESTION 5 CONTAINS HIGHLY CONFIDENTIAL INFORMATION AND SHOULD BE TREATED AS SUCH.**

**Demand Response Incentive**

1. # of MPower customers that have opted out on both the current and waiting list.

**Response:**

As of February 14 2014, there are 3 MPower customers who have opted out. There are no opt-out customers on the MPower waiting list.

2. What was the realization rate for MPower determined in the EM&Vs that have been done?

**Response:**

As stated in EM&Vs that previously filed in EO-2012-0008 and shared with the DSM Advisory group, the realization rate is the best estimate of how much of the contracted curtailable load for the MPower group was seen as a drop in load on the system on the day of the event.

- a. GMO: 2009 season– 91%, 2010 season – 69%
- b. KCP&L-MO: 2008 season - 72%

3. MPower – Was it called for reliability reasons?

**Response:**

KCP&L has utilized MPower to meet operational and reliability needs on system peak days. The company assesses all available options in order to meet system peak demand. KCP&L resources are assessed on a day ahead basis to meet system peak demand. Decisions on wholesale purchases and/or whether to call an event are made to ensure the KCP&L system has generation in accordance with NERC and SPP reliability procedures.

The Manager, System Operations (Power) will consult with the day ahead/real time operations staff and the Director of Supply Resources to make the decision to call for curtailments in order to preserve the integrity of reliable systems operations under a number of possible scenarios as is standard in extreme operating conditions.

4. What is the percent of MPower customers using generator versus load shed?

**Response:**

Approximately 45% of the KCP&L-MO 39 MW of MPower load reduction is accomplished through self-generation.

5. Please provide MPower event history by year and date/hour of events since 2008.

**Response:**

Below is the MPower event history for combined GMO and KCP&L.

		MPower (KCPL + GMO)						
	Date	Start	Stop	Duration	Dispatch Blocks	MPower Capacity Called (MW)		
	7/17/2008	14	20	6	14			
	7/21/2008	14	20	6	14			
	8/4/2008	12	20	8	13			
	6/22/2009	14	19	5	14			
	6/23/2009	14	19	5	14			
	7/14/2010	13	20	7	All	115.7		
	7/19/2010	13	20	7	All	115.7		
	7/22/2010	13	19	6	All	115.7		
	7/23/2010	13	19	6	All	115.7		
	8/2/2010	14	19	5	All	115.7		
	8/3/2010	13	19	6	All	115.7		
	8/9/2010	13	19	6	All	115.7		
	8/10/2010	13	19	6	All	115.7		
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	8/2/2011	13	19	6	All	87.2		
	6/28/2012	13	20	7	All	87.2		
	6/29/2012	13	20	7	All	87.2		
	7/17/2012	13	20	7	All	87.2		

- a. Rules of Day 2 market as they apply to aggregators and why MPower doesn't fit into plans for program period (metering, etc.).

**Response:**

KCP&L has actively reviewed both PJM and MISO markets to gain a better understanding of how IOU's are able to successfully participate in these markets. One primary barrier to demand response participation in SPP currently is pricing. The current prices offered in SPP are typically lower than PJM or MISO. Although the pricing isn't drastically lower it has been enough to limit participation thus far. Currently, there is only one known DR participant enrolled in SPP. The current demand response aggregator workshop proceeding in Missouri (EW-2010-0187) is still dormant, which currently leaves the prohibition in place for aggregators.

**Home Energy Report Pilot**

- 6. Opower – Comment from stakeholders that the Opower Home Energy Reports are disproportionately targeting one segment over another (income usage) rental versus owner.

**Response:**

The residential reports program does not seek to select customers by income level, single versus multi-family, or renters versus owners, but rather, by usage characteristics and customers who represent the greatest potential to reduce consumption. As a basis of comparison, 10 percent of the customers in the GMO residential reports program are multi-family. The percentage of renters in the target population is slightly lower, but overall, all residential customer segments are represented in both the target and control groups of the reports program.

- 7. Please provide Navigant's EM&V of ComED related to Opower.

**Response:**

Please see attached.

**Home and Business Analyzer**

- 8. Please provide IP address information on Analyzer to count unique views vs total views.

**Response:**

KCP&L does not capture IP address information on Home or Business Energy Analyzer. Each user record has a unique UserID assigned and there is only one data record provided for each UserID.

**Questions Submitted by Brightergy**

- 1. Could Company please explain the incentives for delamping? From Schedule KWH-2, page 70-72:

_Linear Fluorescent - T12_Linear Fluorescent - Standard T8 with Reflector/Delamping	\$10.00	per lamp	
C&I_Linear Fluorescent - T12_Linear Fluorescent - Standard T8 (4ft 2 lamp)	\$18.00	per fixture	

- a. If a customer went from a T12, 4-lamp fixture to a T8, 2-lamp fixture with reflectors would they be eligible for both the \$18 fixture incentive for changing two lamps to a more efficient fixture and also the \$20 delamping incentive for removing two lamps

(\$10/lamp)?

**Response:**

Yes.

- b. GMO does not have a prescriptive incentive for delamping. Their prescriptive incentives are only for one-to-one replacements. All of their delamping incentives are in the custom program. Why was delamping included in KCPL-MO's prescriptive incentive program?

**Response:**

As stated in the program description (Schedule KHW-2), the proposed Business Energy Efficiency Rebate Custom program provides rebates for energy saving improvements not specifically covered under the KCP&L-MO Standard program. The potential study conducted by Navigant (Schedule KHW-5) targets de-lamping as a standard measure as a function of the opportunity in the marketplace. In addition, the Navigant potential study had not been completed, and therefore not used, to design the GMO programs. Please refer to Kim Winslow's testimony on Page 24, Line 24 through Page 26 for additional detail on why programs have been proposed to be different between GMO and KCP&L-MO.

2. As discussed in our last conference, T8 will soon (2015) be the baseline fixture. The proposed measure in Schedule KHW-2 does not differentiate between standard and premium T8 lamps.

Linear Fluorescent - T8	Linear Fluorescent - Standard T8	\$0.50	per lamp
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This would seem to leave opportunities for free-riders to get incentives for replacing lamps they would already be using. Why not move T8s to the custom program to verify actual kW and kWh savings for incentives?

**Response:**

The intent is to have incentives for the more efficient T8s rather than the baseline and we will document this in our public facing website that lists incentives. Any free ridership will be determined through the EM&V.

3. Many of the standard measures in Schedule KHW-4 have an Initial Incentive of \$0.
  - a. Will these incentives be included in the 2014-2015 program?

**Response:**

As presented in Kim Winslow's testimony and as shown in Schedule KHW-4, in order to maintain flexibility as the marketplace changes, we have provided a range of incentive levels for each measure. The top end of the range presented is based on Navigant's potential study incentive findings or current GMO incentive offerings for similar program measures. The bottom end of the range is based on nominal percent of total cost or initial incentive. The incentive level does not impact the TRC, so the program is still cost effective across the range.

- b. What criteria will be used to determine when incentives levels will change within the proposed range and by how much?

**Response:**

Please see the answer to 3.a.

4. Why are “LED screw ins” included in the prescriptive program and not custom? The price range for screw in LED’s can range from \$10- \$100+ depending on the wattage.

**Response:**

As stated in the program description (Schedule KHW-2), our proposed Business Energy Efficiency Rebate Custom program provides rebates for energy saving improvements not specifically covered under the KCP&L-MO Standard program.

5. What assurances can KCPL-MO provide that programs will not abruptly end or run out of funding, similar to what happened with the solar rebate program?

**Response:**

There are no assurances. Our intent is to follow plan submitted and approved by commission and if changes to plan are desired we will discuss in proper channels and meetings with advisory groups, etc.

6. What happens if the program budget is reached in a specific calendar year? Can you spend the 2015 budget in 2014?

**Response:**

It is our intent is to follow plan submitted and approved by commission and if changes to plan are desired we will discuss in proper channels and meetings with advisory groups, etc.

7. Can the Company provide any additional information on why Combined Heat & Power was not included as a DSM? Is there any additional analysis or commentary Company can share other than the Navigant Demand-Side Resource Potential Study Report? We would like to see CHP included as a DSM in cases where the societal benefit is >1.0 and benefits ratepayers.

**Response:**

Please refer to Kim Winslow’s testimony on Page 23, Line 16 through Page 24, Line 5.

**Questions Submitted by Staff**

8. Is KCPL willing to send a customer notice now as part of this case similar to that sent in the 0009 case containing information responsive to the requirements of 4 CSR 240-3.163 (2)(A)?

**Response:**

The rule requires that when the utility files for a DSIM, that it provide supporting information as part of the filing. Schedule TMR-1 represented the Company’s interpretation of that requirement for both (2)(A)and (B). The notice was not to be provided to customers at the time of filing, but

as a notice to customers on how it would work. The example Staff provided was a news release from the GMO filing submitted at the time of filing over twelve months before the actual MEEIA went into effect. At our technical conference, OPC indicated that a news release was not sufficient to meet the requirements and that a bill message or some other form of notification would be required to satisfy OPC's position.

KCP&L would be willing to include a customer bill message at the time customers would be impacted by MEEIA with a line item charge on their bill. This would be sometime before the June 1, 2015 timeframe. At that time, KCP&L would be in a better position to explain with accurate/complete detail exactly how the rate would be calculated. At this time, any information shared with the customer would be speculative, particularly given Staff and OPC's apparent opposition to such an adjustment mechanism beginning on June 1, 2015.

***Note: The 0009 case was treated differently than KCPL-MO MEEIA because the original proposal for that filing was immediate utilization of a rider mechanism.***

9. Adjustable incentives

- a. It is unclear whether the adjustable incentive ranges (low to high) listed in KHW-4 can be exceeded in either direction (e.g., measure is now free...).

**Response:**

We will stay within the prescribed range in KHW-4.

We do have \$0 incentive for some measures in the C&I Standard rebates that we do not want to offer a prescriptive incentive (e.g. air compressor motor or high efficiency motor) or incentive at all (e.g. 80 Plus Power supply, cold cathodes) but were in Navigant's potential study. These could be offered in Custom if meeting other requirements.

- b. Is KCP&L-MO reserving the right to adjust incentives beyond what is listed in this filing?

**Response:**

No.

10. Program Delivery

- a. Discuss the impact of free riders from KCP&L's other three service territories with the up-stream rebate method in residential lighting or other similarly delivered measures.
  - i. In particular, given the close proximity of all these service territories, please discuss the obvious impact of lighting rebates being offered and funded by one service territory whose benefits will likely be enjoyed by the other service territories.

**Response:**

We are considering a few potential ways to get into the market of residential lighting including up-stream (partnering with manufacturers), midstream (partnering with retail vendors) and direct install measures. The impact of free ridership is there with any utility energy efficiency program and we aim to minimize those impacts while effectively obtaining savings from the lighting

measures. We will provide more detailed plans for program design at future technical conference.

- ii. Also, given this scenario, the impact on KCP&L counting the deemed savings that are derived from these sales towards the incentive goals and the calculation of the throughput disincentive.

**Response:**

The intent is for all programs to approximate a Net to Gross of 1.0 (except home appliance recycling), so those deemed savings would match actual savings and be input into throughput disincentive as filed.

- iii. Please indicate or reference anywhere in your program description that addresses these issues and provisions in your program to mitigate this situation and also explain how your proposed EM&V program can quantify the impact of this situation.

**Response:**

The program descriptions are general overviews of market measures and do not detail specifics of market delivery tactics. We will provide further lighting program design at a future technical conference. Our EM&V plan would include provisions for the vendor to be able to estimate free riders, if any, by utilizing and surveying existing customers.

11. With reference to the lost margin position/ treatment established in the most recent MEEIA cases, which suggest that a company is made whole when they recover program costs and a portion of Net Shared Benefits (NSB) related to the Throughput Disincentive (TD), does KCPL's application and testimony request the Commission allow the recovery of lost margins as a separate item or does KCPL view lost revenues as synonymous with "TD-NSB"?

**Response:**

"Lost Revenues" as defined in the MEEIA rules is specific to a condition where there is a drop in net system retail kWh delivered to jurisdictional customers below the level used to set electricity rates.

Lost Revenues as defined in the MEEIA rules and the TD are not synonymous.

KCP&L's testimony and tariff filing is only requesting a portion of the net shared benefits, not lost revenues.

- i. **If the Company is NOT treating the two (lost revenue and TD-NSB) as synonymous:** Is it KCPL's position that the lost margin discussion is an issue that is separate from "TD-NSB" and should be given special consideration and recovery as such?  
**In other words,** is it KCPL's position that it is not made whole (revenue neutral) if it does not recover lost revenue as an item separate from "TD-NSB"?

**Response:**

KCP&L is not asking in this filing for special consideration of the lost revenues.

- ii. **If the Company is treating the two as synonymous:** Why did the Company list lost revenues/ lost margins as separate items for recovery (*see excerpts below*)?

**Response:**

The two are not synonymous. The only reason for inclusion is that the rules set out lost revenues as a component for recovery. However, nowhere in the rules does it talk about TD-NSB.

**An excerpt from the company's application:**

**H. Rate Impact**

25. There will be no change to a customer's bill until June 1, 2015, at which time KCP&L will begin recovery through the proposed DSIM Charge of **program costs**, a portion of the annual **net benefits**, and a **reward** to the Company for successful implementation of programs and the **recovery of lost revenues**.

**An excerpt from Kevin Bryant's Direct Testimony, page 10 and lines 3-4:**

Additionally, the current commission approved method for recovery does not include any recovery for **net shared benefits**, **lost revenues**, or **performance incentive**.

12. Please state all the DSIM components that are in the KCPL-GMO DSIM charge or that are currently being recovered through KCPL-GMO rates.

**Response:**

Currently, an estimate of program costs and a portion of estimated net shared benefits are being recovered in GMO rates.

13. KCPL claims that its projected business risk profile is negatively impacted. Please explain

**Response:**

Since the passage of the MEEIA legislation in 2009 and the approved rules in 2011, both GMO and Ameren have received Commission orders approving their MEEIA filings. These allow recovery for prospective program costs, a portion of net shared benefits, carrying costs and opportunity for a performance reward. Effective in 2014, Ameren will be allowed to utilize a Rider mechanism which will allow them timelier true-up of program costs, net shared benefits, and performance incentive.

As explained in Kevin Bryant's testimony, utilization of KCPL-MO current recovery mechanism, which is recovery of program costs only during a rate case proceeding, does not adequately address regulatory lag, nor does it align with the objectives and goals of the MEEIA legislation and rules.

As such, when investors/analysts compare KCP&L with other like utilities in Missouri who have full utilization of MEEIA riders and trackers that better manage the issues of regulatory lag, it is viewed negatively by comparison.

14. Please state all the components of a DSIM that KCPL seeks to recover in order to achieve the earnings/ revenue neutral status. If the performance incentive is one of the components, please explain why it is necessary in order to achieve the earnings/revenue neutral status.

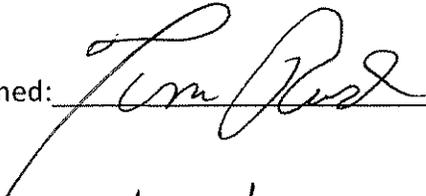
**Response:**

KCPL is seeking recovery program costs and a portion of net shared benefits (TD) to be revenue/earnings neutral. There is still a lag in recovery, which is a cost to the Company. Combined with the performance incentive, the recovery mechanism is designed to put energy efficiency and supply side options on a level playing field.

Kansas City Power & Light Company

Case No. EO-2014-0095

The response to the attached information for the Technical Conference Questions is true and accurate to the best of my knowledge and belief.

Signed:  \_\_\_\_\_  
Date: 2/19/14 \_\_\_\_\_

**Summary of MEEIA topics and Q&A discussed at the 2/21/14 KCP&L-MO MEEIA Technical Conference**  
**File No. EO-2014-0095**

Lighting Standards Presentation:



Lighting  
Measures.pdf

C&I Rebates:

Update C&I rebate eligibility for 2014/2015 for T12 incentives and Premium T8 lighting from Schedule KHW-4.

**Response:**

(Selected changes highlighted below)

<b>Business Energy Efficiency Rebates - Standard (Measures)</b>	<b>Incentive Low Range</b>	<b>2014 Initial Incentive</b>	<b>2015 Incentive</b>	<b>Incentive High Range</b>	<b>Unit</b>
C&I_Linear Fluorescent - T12_Linear Fluorescent - <b>PREMIUM</b> T8 (8ft 1 lamp)	\$12.50	\$25.00	<b>\$0.00</b>	\$31.25	per fixture
C&I_Linear Fluorescent - T12_Linear Fluorescent - <b>PREMIUM</b> T8 (8ft 2 lamp)	\$13.50	\$27.00	<b>\$0.00</b>	\$33.75	per fixture
C&I_Linear Fluorescent - T12_Linear Fluorescent - <b>PREMIUM</b> T8 (4ft 4 lamp)	\$14.25	\$28.50	<b>\$0.00</b>	\$35.63	per fixture
C&I_Linear Fluorescent - T12_Linear Fluorescent - <b>PREMIUM</b> T8 (4ft 3 lamp)	\$13.50	\$27.00	<b>\$0.00</b>	\$33.75	per fixture
C&I_Linear Fluorescent - T12_Linear Fluorescent - <b>PREMIUM</b> T8 (4ft 2 lamp)	\$9.00	\$18.00	<b>\$0.00</b>	\$22.50	per fixture
C&I_Linear Fluorescent - T12_Linear Fluorescent - <b>PREMIUM</b> T8 (4ft 1 lamp)	\$8.25	\$16.50	<b>\$0.00</b>	\$20.63	per fixture
C&I_Linear Fluorescent - T12_Linear Fluorescent - <b>PREMIUM</b> T8 (3 ft 4 lamp)	\$14.25	\$28.50	<b>\$0.00</b>	\$35.63	per fixture
C&I_Linear Fluorescent - T12_Linear Fluorescent - <b>PREMIUM</b> T8 (3 ft 3 lamp)	\$13.50	\$27.00	<b>\$0.00</b>	\$33.75	per fixture
C&I_Linear Fluorescent - T12_Linear Fluorescent - <b>PREMIUM</b> T8 (3 ft 2 lamp)	\$9.00	\$18.00	<b>\$0.00</b>	\$22.50	per fixture
C&I_Linear Fluorescent - T12_Linear Fluorescent - <b>PREMIUM</b> T8 (3 ft 1 lamp)	\$8.25	\$16.50	<b>\$0.00</b>	\$20.63	per fixture
C&I_Linear Fluorescent - T12_Linear Fluorescent - <b>PREMIUM</b> T8 (2ft 4 lamp)	\$14.25	\$28.50	<b>\$0.00</b>	\$35.63	per fixture
C&I_Linear Fluorescent - T12_Linear Fluorescent - <b>PREMIUM</b> T8 (2ft 3 lamp)	\$13.50	\$27.00	<b>\$0.00</b>	\$33.75	per fixture
C&I_Linear Fluorescent - T12_Linear Fluorescent - <b>PREMIUM</b> T8 (2ft 2 lamp)	\$9.00	\$18.00	<b>\$0.00</b>	\$22.50	per fixture
C&I_Linear Fluorescent - T12_Linear Fluorescent	\$8.25	\$16.50	<b>\$0.00</b>	\$20.63	per

- PREMIUM T8 (2ft 1 lamp)					fixture
C&I_Linear Fluorescent - T12_Linear Fluorescent - PREMIUM T8 (HO 8 ft 1 lamp)	\$16.50	\$33.00	\$0.00	\$41.25	per fixture
C&I_Linear Fluorescent - T12_Linear Fluorescent - PREMIUM T8 (HO 8 ft 2 lamp)	\$18.00	\$36.00	\$0.00	\$45.00	per fixture
C&I_Linear Fluorescent - T12_Linear Fluorescent - T5 (1 lamp)	\$15.00	\$30.00	\$0.00	\$37.50	per fixture
C&I_Linear Fluorescent - T12_Linear Fluorescent - T5 (2 lamp)	\$18.50	\$37.00	\$0.00	\$46.25	per fixture
C&I_Linear Fluorescent - T12_Linear Fluorescent - T5 (3 lamp)	\$20.00	\$40.00	\$0.00	\$50.00	per fixture
C&I_Linear Fluorescent - T12_Linear Fluorescent - T5 (4 lamp)	\$22.00	\$44.00	\$0.00	\$55.00	per fixture
C&I_Linear Fluorescent - T12_Linear Fluorescent - T5 (HO 1 lamp)	\$30.00	\$60.00	\$0.00	\$75.00	per fixture
C&I_Linear Fluorescent - T12_Linear Fluorescent - T5 (HO 2 lamp)	\$35.00	\$70.00	\$0.00	\$87.50	per fixture
C&I_Linear Fluorescent - T12_Linear Fluorescent - T5 (HO 3 lamp)	\$44.00	\$88.00	\$0.00	\$110.00	per fixture
C&I_Linear Fluorescent - T12_Linear Fluorescent - T5 (HO 4 lamp)	\$56.00	\$112.00	\$0.00	\$140.00	per fixture

Mpower:

Conditions during Mpower 2012 – specific characteristics (temp, prices, etc.)

**Response:**

	High Temp (F) at KCI	System Capacity Available Expected	System Net Peak Expected	SPP LMP Price (day ahead)	Other Factors
6/28/2012	105 F	3,499 MW	3,780 MW	\$41/MW	Iatan 2 offline
6/29/2012	102 F	3,450 MW	3,524 MW	\$48/MW	Iatan 2 offline
7/17/2012	100 F	3,209 MW	3,455 MW	\$51/MW	Iatan 1 offline

Discussion of Avoided Costs:

**Response:**

Avoided Costs were provided on MEEIA HIGHLY CONFIDENTIAL workpapers, disk #1 of 4 in sub-directory “Avoided Costs”.

Filenames and description of avoided cost workpapers:

**1. Filename: SPP Capacity Prices with MISO CONE.xlsx**

This MS-Excel file has the avoided generation and T&D capacity prices that were used for the KCP&L-MO MEEIA filing. This file also includes a forecast of SPP-North generation reserve and generation capacity margins for the years 2014-2022. (Source: Ventyx database/SPP EIA data)

**2. Filename: SPP\_KCPL Hourly Prices.xlsx**

This MS-Excel file has historical hourly SPP KCP&L node locational imbalance prices. This data was used to set the **market based** avoided energy price data for the KCP&L-MO MEEIA filing.

**3. Filename: MIDAS\_Hourly Prices\_01152013\_DBechman.xlsx**

This is the Jan 15, 2013 forecast of hourly market clearing from the Midas model.

This data was updated for the 2013 KCP&L-MO IRP filing and is used to forecast year-over-year escalation rates of hourly market clearing prices that was used for the KCP&L-MO MEEIA filing.

**4. Filename: WACC.xlsx**

This MS-Excel file shows the weighted average cost of capital that was used for the KCP&L-MO MEEIA filing.

**5. Filename: Emissions cost per kWh.xlsx**

This MS-Excel file shows the emissions cost in \$/kWh that was used for the KCP&L-MO MEEIA filing.

**6. Filename: LineLoss\_2012\_2011\_sales.xlsx**

This MS-Excel file shows the line loss data that was used for the KCP&L-MO MEEIA filing.

**7. Filename: Lost Margins.docx**

This MS-Word document shows the lost margin values that were used for the KCP&L-MO MEEIA filing.

**8. Filename: Native Load Lambda\_PROD\_Jan2010\_Aug2013.xlsx**

This MS-Excel file has the historical marginal cost of production data that was used for the KCP&L-MO MEEIA filing. This data was used to set the cost-based avoided energy prices in DSMore.

Definition of Demand Side Program as it pertains to Demand Response and “Modify net consumption on customer side of meter”:

**Response:**

Company interprets statute and rules of MEEIA as being inclusive of Demand Response, per the definition and therefore would be included (even with self generation).

Opt-Outs:

Example calculation

**Response:**

<b>The following represents the KCP&amp;L-MO MEEIA savings targets as filed and kWh savings adjusted for approved opt outs as of 2/2014.</b>		
<b>The kWh savings do NOT reflect potential opt outs that may be received/approved for 2015.</b>		
<i>NOTE: This example is intended for illustrative purposes only.</i>		
<b>KCP&amp;L-MO MEEIA Savings Targets (As Filed on 1/7/2014)</b>		
<b>2014</b>	<b>73,886,046</b>	
<b>2015</b>	<b>81,711,708</b>	
	<b>155,597,753</b>	<b>Total kWh</b>

<b>Total Opt Outs Received effective for 2014 as of Feb 2014**:</b>	<b>668,614,093</b>	
<b>2013 Kilowatt Hour Sales (actuals)*:</b>	<b>8,490,243,492</b>	
<b>Opt out customers as a percent of annual base sales:</b>	<b>7.88%</b>	
<b>Adjusted KCP&amp;L-MO MEEIA Savings Targets</b>		
<b>2014</b>	<b>73,886,046</b>	
<b>2015</b>	<b>81,711,708</b>	
	<b>155,597,753</b>	<b>Total kWh</b>
	<b>12,253,459</b>	<b>Opt out kWh (7.88 % of originally filed savings targets)</b>
	<b>143,344,294</b>	<b>Adjusted Total kWh savings target</b>
<i>*Pulled from GPE Report 1A filed December 31, 2013, excluding Public Street Lighting.</i>		
<i>**Compiled from Data received from Energy Solutions on 2/14/14. Represents 2013 annual base sales for approved opt out customers.</i>		

**New Questions for 2/21/2014:**

**File No. EO-2014-0095/KCP&L DSIM Questions - Mark Oligschlaeger**

1. As the term is used in Mr. Rush's direct testimony, please define the duration of the initial "MEEIA Program Period."

**Response:**

The MEEIA Program Period is expected to be the period of time 120 days after the filing of the KCP&L MEEIA through December 31, 2015.

2. Please verify that no amount of DSM-related costs incurred by KCP&L prior to MEEIA implementation will be included in the DSIM tracker mechanism or DSIM rider charge.

**Response:**

No DSM-related costs for current or prior programs will be included in the MEEIA tracker mechanism or DSIM Charge. Some costs are being incurred today in order to have ready programs for implementation beginning May 7, 2014.

3. Is it KCPL's intent to book to the DSIM tracker actual incurred program costs, budgeted program costs, or some combination of actual and budgeted amounts?

**Response:**

It is KCP&L's intent to book to the DSIM tracker only actual costs incurred. For purposes of filing the DSIM Charge to become effective June 1, 2015, the Company plans to file a combination of actual

incurred costs plus the remaining budgeted amounts for the program period plus the TD-NSB realized in the proposed DSIM tracker and an estimate of the remaining TD-NSB for the budgeted period.

4. When will KCPL stop deferring program costs and net shared benefits to the DSIM tracker – June 1, 2015; January 1, 2016; KCPL’s next general rate case, or some other date?

**Response:**

KCP&L’s intent is to continue to defer program costs and track TD-NSB through December 31, 2015. A new MEEIA should be filed sometime in 2015 which will become effective January 1, 2016.

5. When does KCPL propose to begin recovering in rates the deferred program costs and net shared benefits booked to the DSIM tracker – June 1, 2015, January 1, 2016, KCPL’s next general rate case, or some other date?

**Response:**

KCP&L proposes to begin recovery of these deferred costs (program costs and TD-NSB) effective June 1, 2015 via the DSIM Charge.

6. Is it KCPL’s intent to include in the DSIM rider charge actual program costs, budgeted program costs, a combination of actual and budgeted program costs, amortizations of deferrals previously booked to the DSIM tracker, or any other category of cost?

**Response:**

Yes, all actual deferred costs recorded to date will be included in the DSIM Charge, as well as, estimated costs through the end of the MEEIA plan period (December 31, 2015) and the TD-NSB for the program period. The program costs will be based on an amortization period of 6 years and the TD-NSB will be based on a recovery over 2 years.

7. For budgeted program cost values included in the DSIM rider charge, when and how often will these amounts be true-up to actual values? How will overages/underages in collections be returned to KCPL or its customers – through the rider mechanism, in a general rate case, or both? Will a carrying charge be applied to overages and underages? If so, what carrying charge rate should be used?

**Response:**

As set out in the tariff, KCP&L may file a true-up semi-annually. The tariff provides flexibility. Assuming an effective date for the Rider of June 1, 2015, we would most likely make the initial filing to true-up numbers sometime after the beginning of 2016, when we have actuals for the entire plan period. However, we would work with staff in planning the filing. Overages and underages will be adjusted through the DSIM Charge. A carrying cost would be applied and the rate, as set out in the tariff would be the Company’s last authorized weighted cost of capital rate.

8. Same questions as in No. 7 above for budgeted net shared benefit amounts included in the DSIM rider. Relating to net shared benefits, what components of the calculation will be true-up and what components will not be?

**Response:**

Please see response to #7. The TD-NSB will only be adjusted to reflect actual energy and demand savings realized based on savings data collected by KCP&L, not through EM&V, consistent with the methodology used for GMO MEEIA. For purposes of the TD-NSB, all avoided cost data would remain the same, as would any NTG assumption assumed at the time of the KCP&L-MO MEEIA filing (1.00, except for one program). The kW and kWh savings would be calculated based on the deemed savings included in the KCP&L-MO MEEIA filing.

9. Does the proposed six-year and two-year amortization periods for program costs and net shared benefits, respectively, apply only to the portion of these items that are deferred prior to implementation of a rider mechanism? Or is it KCPL's position that ongoing amounts of these items incurred after the DSIM rider charge is in place should also be amortized?

**Response:**

The proposed amortization periods apply to all program costs and TD-NSB for the plan period.

10. Please explain how KCPL's proposal to book deferrals of net shared benefits and subsequently recover this item in rates through a two-year amortization meets the applicable financial accounting requirements standards (ASC 980-605-25) referenced by Mr. Rush at pages 10 -12 of his surrebuttal testimony in Case No. EO-2012-0009 (i.e., automatic adjustment of future rates; amount of recovery is objectively determinable and recovery is probable; the revenues must be collected within 24 months of the end of the annual period in which they are recognized)?

**Response:**

The Company would follow the guidance contained in FASB Codification 980-605-25 which provides guidance on the recognition of revenue. There are 3 criteria that must be met in order to recognize revenue on your books applicable to Net Shared Benefit revenue streams. They are:

- a. The program is established by an order from the utility's regulatory commission that allows for automatic adjustment of future rates. Verification of the adjustment to future rates by the regulator would not preclude the adjustment from being considered automatic.
- b. The amount of additional revenues for the period is objectively determinable and is probable of recovery.
- c. The additional revenues will be collected within 24 months following the end of the annual period in which they are recognized.

As such, KCP&L-MO MEEIA revenue streams associated with Net Shared Benefit will be tracked off-book in 2014. In 2015, all 2014 NSB revenue may be booked, as well as, any ongoing NSB revenue that will be collected through the rider mechanism within 24 months of the current annual reporting period.

**Variance Questions:**

1. For each variance request in the Direct Testimony of Tim M. Rush, please provide an explanation of why the company seeks the variance.

**Response:**

Each variance request included in Tim Rush's Direct Testimony includes the company's reasons for needing the variance, which varies by the variance.

### Net Shared Benefits

Variance 1 on Line 10, pg. 23 pertains to the company's need to utilize Net Shared Benefits based on actual performance tracked monthly and not based on EM&V results. Good cause exists for this variance request since KCP&L's financial performance would be negatively impacted by a delay in the recovery of the TD-NSB portion of MEEIA costs through the DSIM charge if it were to wait until EM&V results were available. Timely recovery of the TD-NSB is needed to remain earnings neutral. The company would utilize EM&V results to validate kW/kWh savings achieved and for determining if a performance incentive has been earned.

### Statewide Technical Resource Manual

Variance 2 on Line 3, pg. 24 pertains to the company's (and/or EM&V contractors) inability to use a statewide technical resources manual since one does not exist and is therefore not available to use.

### Annual Report

Variance 3 on Line 8, pg. 24 pertains to the company's inability to provide all of the deliverables required in the annual report within 60 days of the end of the calendar year. With the exception of the EM&V report and any EM&V dependent information (cost effectiveness by program and market transformation data), the company will provide the annual report and all other requirements within 90 days of the end of the calendar year. EM&V reports and EM&V dependent data will be available based on the EM&V calendar that is yet to be established/finalized.

### Tariffs

Variance 4 on Line 13, pg. 24 pertains to the Company's need for flexibility in the tariffs to allow for possible changes in program detail as outlined in the Change Process sections of the applicable Residential and Commercial and Industrial Demand-Side Management General Rules and Regulations Applying to Electric Service. The Change Process excludes changes to the proposed ranges of incentive amounts for each measure. The variance will allow the Company a means to best manage programs according to customers' choices and needs.

2. On page 23, lines 10-12 of the Direct Testimony of Tim M. Rush, "KCP&L requests a variance of section C (net shared benefits) of 20.093..." Is this variance request for 4 CSR 240-20.093(1)(C)?

### **Response:**

Yes.

3. In the Direct Testimony of Tim M. Rush, on page 24 lines 8 through 12, KCPL requests a variance from filing an annual report. Does this variance request mean that KCPL will file an annual report annually on a program year or some other basis, or will not file an annual report at all?

### **Response:**

As outlined in response 1, with the exception of the EM&V report and any/all EM&V dependent information, the annual report will be filed within 90 days of the end of the calendar year.

4. In the Direct Testimony of Tim M. Rush, on page 24 lines 13 through 15, KCPL requests a variance from 4 CSR 240-14.030 pursuant to 4 CSR 240-20.093(13). Did KCPL intend for this to be pursuant to 4 CSR 240-14.010(2)? If so, did KCPL "show proof of service of a copy of the

application on each public utility providing the same or competing utility service in all or any portion of the service area of the filing utility”?

**Response:**

The Company requested the variance due to the offering of rebates to customers and the requested flexibility outlined in the applicable tariffs. The Company did not request the variance pursuant to 4 CSR 240-14.010(2) as it does not believe there is a public utility providing the same or competing utility service in KCP&L’s service area.

5. In the Direct Testimony of Tim M. Rush, on page 23 line 10 through page 24 line 2, KCPL requests a variance from various provisions in 4 CSR 240-20.093, 4 CSR 240-20.094, and 4 CSR 240-3.163 pursuant to 4 CSR 240-20.093(13). What specific rule subsections is the Company requesting a variance from? Also, do the variances requested implicate any other rules? Is so, please list them and explain.

**Response:**

Tim Rush’s Direct Testimony includes all applicable rule subsections known at this time (as further explained above) and as it pertains to Net Shared Benefits and non-utilization of EM&V results to calculate the TD-NSB as filed by the company on January 7, 2014. Should parties agree that specific filing components are to be modified, it is possible that additional variances may be needed.

**Brightergy Questions:**

1. C&I Standard Rebate Program

When incentive levels are changed on the website, what type of notice will you provide customers before levels change? Can you provide 30/60/90 days notice on the website of pending changes so customers can have sufficient time to submit applications for materials they have already purchased for prescriptive incentives?

**Response:**

KCP&L customer contact personnel and trade allies will be informed per the C&I energy efficiency tariff outline of the “Change Process”. The Standard rebates are only available to pre-approved applications, so materials already purchased would not be eligible.

Will rebate amounts be based on the incentive levels that were in effect at the time the customer purchased equipment or the date the customer submits application?

**Response:**

The date of application will dictate since the program is a pre-approval only incentive.

2. C&I Custom Rebate Program

- a. The tariff only references custom measures listed on the company’s website. What energy savings measures are included in the C&I Custom rebate program? What is the process for adding or removing measures from the custom rebate program?

**Response:**

Measures that are more efficient than current ASHRAE standards (used as a baseline) will be evaluated for energy savings and payback in the Custom program.

- b. Business Behavior Based Demand Side Rate, Combined Heat and Power, Small Business Direct Install, Small/Medium Business Curtailable Load, Energy Education were recommended programs from Navigant's study. They were excluded from this filing because "In general, the overall savings that would be realized from some of the programs were so small in comparison relative to our proposed programs that we did not want to incur additional marketing expense, or significantly deviate from programs that we were currently offering in our GMO service territory."

Could those programs be included in the C&I custom rebate program for this filing to obtain EM&V data for those measures without marketing expense of creating new/separate programs?

**Response:**

No.

3. Program Funding

If program funding for a calendar year is depleted, how will applications be paid? Will they be in a queue to be paid at the beginning of the next calendar year using that year's budget funds?

**Response:**

Program funding is based on a program plan, in this particular filing, for 2014-2015 and not by calendar year. KCP&L has requested tariff flexibility which allows for shifting of program funding among programs.

Kansas City Power & Light Company

Case No. EO-2014-0095

The response to the attached information for the Technical Conference Questions is true and accurate to the best of my knowledge and belief.

Signed: Tom R

Date: 2/27/14

**KCP&L-MO**

**MEEIA Lighting Assumptions**

**February 06, 2014**

Schedule JAR-6-42

**energy solutions**



## Navigant Potential Study *EE/DR Potential Modeling Methodology Recommendations*

Dec 13, 2012 Presentation to stakeholders.

- T12 savings: per MO stakeholder discussion and suggestions, we propose the following:
- –Permit T12 to Premium T8 (better than code compliant) savings for 2013/2014
- –T12 in situ would be the baseline for these 2 years to account for pre-existing T12's that have not yet burned out and to account for inventory of T12 lamps not yet installed.
- –Starting in 2015, a code-compliant T8 (800-series) will be the baseline for all existing T12 replacements. EE measure would be a “premium T8.” Cost basis would change from RET to ROB at this point (i.e., assuming T12's would no longer be available for replacement, so incremental cost is appropriate).

Schedule JAR-6-43

- **All lighting measures in the KCP&L-MO MEEIA proposed suite of DSM programs utilize the potential study modeling methodology and assumptions**

For measures with a baseline of "Linear Fluorescent - T12", the potential study analysis assumed a T12 baseline for 2013 and 2014, and a standard T8 baseline (800 series) from 2015 on, consistent with recommendations from KCP&L and Missouri Stakeholders.

The baseline values listed in the potential study Appendix A, Measure Characterization Summary, are consistent with savings for 2013 and 2014. To account for the baseline shift to T8, the model adjusts baseline kWh and kW for these measures to 63% of their 2013 value for 2015 on.

In addition, the Applicability changes from a Early Retirement (RET) measure assuming a full installed cost to an "Replace On Burnout" (ROB) measure with an incremental cost between a standard T8 and a premium T8.

Schedule JA 6-44

Appendix A, Measure Characterization Summary also included a twenty year schedule of annual energy adjustments to both baseline and energy efficient measures.

# KCPL-MO MEEIA filing

## Review of lighting measures and assumptions

February 21, 2014

**energy solutions**



## Lighting

- Review of potential study end-use measure characterization (Appendix A)
- Commercial & Industrial Lighting measures
  - Issues with Linear fluorescent fixtures.
- Residential Lighting measures
  - No linear fluorescent fixtures in programs.
  - Only 2X, CFL and LED lamps in res lighting
- Energy Adjustments
- Cost Adjustments.
- Review of end-use measures passing screening and included in potential study program recommendations.
- Review of residential lighting program measures as filed in KCPL-MO MEEIA application



# C&I end-use Lighting Measure Characterization



Applicability	Base Description	Efficient Description
Early Retirement	Linear Fluorescent - T12	Linear Fluorescent - Premium T8
Early Retirement	Linear Fluorescent - T12	Linear Fluorescent - Premium T8 with Reflector/Delamping
Early Retirement	Linear Fluorescent - T12	Linear Fluorescent - T5
Early Retirement	Linear Fluorescent - T12	Linear Fluorescent - T8
Early Retirement	Linear Fluorescent - T12	Linear Fluorescent - T8 with Reflector/Delamping
Replace-on-burnout / New Construction	Linear Fluorescent - T8	Linear Fluorescent - Premium T8
Early Retirement	Linear Fluorescent - T8	Linear Fluorescent - T5
Early Retirement	Linear Fluorescent - T8	Linear Fluorescent - T8 with Reflector/Delamping
Early Retirement	Controls - No Controls	Controls - Hotel Room Occupancy
Early Retirement	Controls - No Dimming	Controls - Continuous Dimming
Early Retirement	Controls - No Occupancy Sensors	Controls - Occupancy Sensors
Early Retirement	Controls - No Outdoor Controls	Controls - Photocells/Timers
Early Retirement	Controls - Standard	Controls - Tune Up
Early Retirement	Exit Sign - CFL	Exit Sign - LED
Early Retirement	Exit Sign - Incandescent	Exit Sign - LED
Early Retirement	Hardwired - Incandescent	Hardwired - CFLs
Early Retirement	Hardwired - Incandescent	Hardwired - LEDs
Early Retirement	High Intensity Discharge - HPS	Hardwired - Ceramic Metal Halide
Early Retirement	High Intensity Discharge - HPS	High Bay - Premium T8
Early Retirement	High Intensity Discharge - HPS	High Bay - T5
Early Retirement	High Intensity Discharge - HPS	High Bay - T8
Early Retirement	High Intensity Discharge - HPS	Induction Lighting
Early Retirement	High Intensity Discharge - MH	Hardwired - Ceramic Metal Halide
Early Retirement	High Intensity Discharge - MH	High Bay - Premium T8
Early Retirement	High Intensity Discharge - MH	High Bay - T5
Early Retirement	High Intensity Discharge - MH	High Bay - T8
Early Retirement	High Intensity Discharge - MH	Induction Lighting
Early Retirement	High Intensity Discharge - MH	Pulse-Start Metal Halide
New Construction	Lighting Power Density - Standard	Lighting Power Density - Reduced
Early Retirement	Outdoor - Mercury Vapor	Outdoor - Bi-Level LED Lighting
Early Retirement	Outdoor - Mercury Vapor	Outdoor - LED Lighting
Early Retirement	Parking Lot Lighting - Standard	Parking Lot Lighting - LED
Replace-on-burnout / New Construction	Screw In - Incandescent	Screw In - 2x Incandescent Lamps
Replace-on-burnout / New Construction	Screw In - Incandescent	Screw In - CFLs
Replace-on-burnout / New Construction	Screw In - Incandescent	Screw In - Cold Cathodes
Replace-on-burnout / New Construction	Screw In - Incandescent	Screw In - LEDs
Early Retirement	Street Lighting - Standard	Street Lighting - Induction
Early Retirement	Street Lighting - Standard	Street Lighting - LED

## C&I end-use Measure Characterization



- All C&I savings were modeled by market segment
- 18 C&I segments

C & I Segment	
Chemicals	Office - small
College	Other Commercial
Electronics	Other Industrial
Food	Restaurant
Grocery	Retail
Healthcare	Rubber- Plastics
Lodging	School
Motor Freight	Stone – Clay – Glass
Office - Large	Warehouse

# Allocation of C&I Sample to Customer Segments

Commercial segments are consistent with those outlined in MO PSC 4 CSR 240-22-010.

“Motor Freight” segment added as a separate segment, based on SIC code analysis.

Smaller Industrial segments aggregated into “Other Industrial.”

C&I Segment	Population Size (premises)	Coefficient of Variation ( $\sigma/\mu$ )	Sample Size	Strata Relative Precision @ CI	Total Known Segment Annual Consumption (kWh)	Weight	Relative Precision Program Group	
Office - Large	746	0.5	23.0	17.9%	3,515,248,076	20.5%	Commercial	
Retail	9,744	0.5	9.0	31.0%	1,435,791,656	8.4%		
Office - Small	38,155	0.5	9.0	31.0%	1,378,706,801	8.0%		
Healthcare	3,954	0.5	9.0	31.0%	1,122,465,399	6.5%		
School	2,699	0.5	9.0	31.0%	1,118,314,105	6.5%		
Restaurant	4,090	0.5	6.0	41.1%	633,373,194	3.7%		
Warehouse	5,152	0.5	6.0	41.1%	625,457,756	3.6%		
Grocery	1,312	0.5	6.0	41.1%	581,993,525	3.4%		
Lodging	723	0.5	6.0	41.1%	343,193,584	2.0%		
College	438	0.5	6.0	41.1%	268,147,545	1.6%		
Other Commercial	20,760	0.8	9.0	49.6%	1,550,500,476	9.0%		
Food	343	0.5	7.0	36.7%	837,546,691	4.9%		Industrial
Chemicals	308	0.5	7.0	36.7%	745,292,960	4.3%		
Rubber-Plastics	104	0.5	5.0	47.7%	324,297,355	1.9%		
Motor Freight	1,098	0.5	5.0	47.7%	290,714,013	1.7%		
Electronics	360	0.5	5.0	47.7%	321,522,098	1.9%		
Stone-Clay-Glass	197	0.5	5.0	47.7%	299,760,538	1.7%		
Other Industrial	11,960	0.8	8.0	53.6%	1,750,635,125	10.2%		
	14,370		140.0			Overall Relative Precision	8.9%	
Finite Population Correction Factor	No		Total kWh		15,003,111,347			
Confidence Interval Type	Two_Sided		Total Commercial kWh		10,922,960,651			
Confidence Interval	90%		Total Industrial kWh		4,080,150,696			

# Linear Fluorescent Lighting – T12 Assumptions



- Assumptions for T12 lighting
- New Construction:
  - No rebates or potential for T12 to T8 fixtures for new construction.
  - Not included in any program recommendations.
- Retrofit and replace-on-burnout:
- Permit T12 to Premium T8 (better than code compliant) savings for 2013/2014
- T12 in situ would be the baseline for these 2 years to account for pre-existing T12's that have not yet burned out and to account for inventory of T12 lamps not yet installed.
- –Starting in 2015, a code-compliant T8 (800-series) will be the baseline for all existing T12 replacements. EE measure would be a “premium T8.” Cost basis would change from Retrofit to Replace-on-Burnout at this point (i.e., assuming T12's would no longer be available for replacement, so incremental cost is appropriate).
- **HOWEVER, Potential study results and program recommendations DONOT include any T12 to standard T8 measures.**



- Q&A

# Measure Energy Adjustments

## Baseline Energy Adjustments

Measure	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Res_Screw In - Incandescent_Screw In - CFLs	100%	91%	82%	82%	82%	82%	82%	82%	82%	82%
<b>Res_Screw In - Incandescent_Screw In - LEDs</b>	<b>100%</b>	<b>91%</b>	<b>82%</b>							
Res_Screw In - Incandescent_Screw In - 2x Incandescent Lamps	100%	91%	82%	82%	82%	82%	82%	82%	82%	82%
C&I_Screw In - Incandescent_Screw In - CFLs	100%	91%	82%	82%	82%	82%	82%	82%	82%	82%
C&I_Screw In - Incandescent_Screw In - LEDs	100%	91%	82%	82%	82%	82%	82%	82%	82%	82%
C&I_Screw In - Incandescent_Screw In - 2x Incandescent Lamps	100%	91%	82%	82%	82%	82%	82%	82%	82%	82%
C&I_Screw In - Incandescent_Screw In - Cold Cathodes	100%	91%	82%	82%	82%	82%	82%	82%	82%	82%
C&I_Linear Fluorescent - T12_Linear Fluorescent - Premium T8	100%	100%	83%	83%	83%	83%	83%	83%	83%	83%
Linear Fluorescent - Premium T8 with Reflector/Delamping	100%	100%	83%	83%	83%	83%	83%	83%	83%	83%
<b>C&amp;I_Linear Fluorescent - T12_Linear Fluorescent - T8</b>	<b>100%</b>	<b>100%</b>	<b>83%</b>							
Linear Fluorescent - T12_Linear Fluorescent - T8 with Reflector/Delamping	100%	100%	83%	83%	83%	83%	83%	83%	83%	83%
C&I_Linear Fluorescent - T12_Linear Fluorescent - T5	100%	100%	83%	83%	83%	83%	83%	83%	83%	83%

## Efficient Energy Modification

Measure	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Res_Screw In - Incandescent_Screw In - CFLs	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
<b>Res_Screw In - Incandescent_Screw In - LEDs</b>	<b>100%</b>	<b>82%</b>	<b>69%</b>	<b>60%</b>	<b>54%</b>	<b>49%</b>	<b>45%</b>	<b>43%</b>	<b>41%</b>	<b>40%</b>
Res_Screw In - Incandescent_Screw In - 2x Incandescent Lamps	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
C&I_Screw In - Incandescent_Screw In - CFLs	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
C&I_Screw In - Incandescent_Screw In - LEDs	100%	82%	69%	60%	54%	49%	45%	43%	41%	40%
C&I_Screw In - Incandescent_Screw In - 2x Incandescent Lamps	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
C&I_Screw In - Incandescent_Screw In - Cold Cathodes	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
C&I_Linear Fluorescent - T12_Linear Fluorescent - Premium T8	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Linear Fluorescent - T12_Linear Fluorescent - Premium T8 with Reflector/Delamping	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
<b>C&amp;I_Linear Fluorescent - T12_Linear Fluorescent - T8</b>	<b>100%</b>	<b>100%</b>	<b>81%</b>							
Linear Fluorescent - T12_Linear Fluorescent - T8 with Reflector/Delamping	100%	100%	81%	81%	81%	81%	81%	81%	81%	81%
C&I_Linear Fluorescent - T12_Linear Fluorescent - T5	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%



- No Commercial programs include T12 to standard T8 rebates
- Example T12 to Premium T8 Early Retirement
- Chemicals sector
- 2014 (T12) Baseline kWh = 798.12
- 2014 T8 Premium kWh = 401.74
- 2015 (Standard T\*) Baseline kWh =  $798.12 \times 0.62 \text{ EA} = 502.82 \text{ kWh}$
- 2015 T8 Premium kWh =  $401.74 \times 1.0 \text{ EA} = 401.74 \text{ kWh}$

The following represents the KCPL-MO MEEIA savings targets as filed and kWh savings adjusted for approved opt outs as of 2/2014. The kWh savings do NOT reflect potential opt outs that may be received/approved for the program plan year 2015.  
**NOTE: This example is intended for illustrative purposes only.**

<u>KCPL-MO MEEIA Savings Targets (As Filed on 1/7/2014)</u>	
2014	73,886,046
2015	81,711,708
	<u>155,597,753</u> Total kWh
Total Opt Outs Received effective for 2014 as of Feb 2014**:	
	668,614,093
2013 Kilowatt Hour Sales (actuals)*: 8,490,243,492	
Opt out customers as a percent of annual base sales: <b>7.88%</b>	
<u>KCPL-MO Adjusted KCPL-MO MEEIA Savings Targets</u>	
2014	73,886,046
2015	81,711,708
	<u>155,597,753</u> Total kWh
	12,253,459 Opt out kWh (7.88 % of originally filed savings targets)
	<u><u>143,344,294</u></u> Adjusted Total kWh savings target

\*Pulled from GPE Report 1A filed December 31, 2013, excluding Public Street Lighting.  
 \*\*Compiled from Data received from Energy Solutions on 2/14/14. Represents 2013 annual base sales for approved opt out customers.



## KCP&L Requests Approval for Energy Efficiency Programs and Cost-Recovery Mechanism

***Programs will help customers reduce energy use this year and keep bills affordable long-term.***

For years, KCP&L has offered energy efficiency pilot programs to our residential and business customers.

We were the first utility in Missouri to make such a strong commitment to energy efficiency, and we have created significant energy and cost savings as a result.

Now that we know our pilot programs were successful, we want to offer an expanded portfolio of energy efficiency programs for customers. These programs help us move toward a more sustainable energy future in a way that manages costs for the

company and customers. These programs may include instant rebates, low-cost energy audits and in-home products, like our programmable thermostat. All are designed to help you reduce your energy usage and better control your bills.

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***Energy efficiency helps keep electricity affordable for everyone.***

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On January 7, 2014, we filed a request with the Missouri Public Service Commission (MoPSC) to offer these programs. If our request is approved, we will introduce these programs to customers as early as June 2014.

If approved, the request also includes a Demand-Side Investment Mechanism (DSIM) that will be added as a separate line item on monthly KCP&L bills beginning in June 2015. This charge reimburses KCP&L for costs spent on the programs, and establishes an incentive-sharing mechanism where the company and the customer may both benefit from program savings. While a typical customer will see an increase of pennies per day, energy efficiency is a low-cost way to meet electricity needs. Utilizing it will help keep bills affordable long term.

## **Energy efficiency puts the investment in our customers.**

Energy efficiency helps keep electricity affordable for everyone, and helps defer the costs of constructing new power plants and generation units. That would be far more expensive for both KCP&L and our customers. And, when you make energy-efficient improvements to your home or business, you continue to benefit by saving energy each year.

The separate new line item will first appear in June 2015 in the Billing Details section of your bill. It will be calculated by multiplying the kWh of usage by a rate that will be determined prior to June 2015 based on actual programs' costs and net benefits. This rate will be reviewed and adjusted by the Commission semi-annually to account for any changes in the programs' costs and net benefits. KCP&L's request with the Commission has been filed as Case No. EO-2014-0095, and it can be viewed at [www.psc.mo.gov](http://www.psc.mo.gov). You can contact KCP&L at 1-888-471-5275. You may also contact the Consumer Services Unit of the Missouri Public Service Commission for inquiries or to file a comment by calling (800) 392-4211, or by email at [pscinfo@psc.mo.gov](mailto:pscinfo@psc.mo.gov).

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***When you make energy-efficient improvements to your home or business, you continue to benefit by saving energy each year.***

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Schedule JAR-6-56

For more information about our new energy efficiency programs, please visit [www.kcpl.com/energyprograms](http://www.kcpl.com/energyprograms).