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**BEFORE THE STATE CORPORATION COMMISSION
OF THE STATE OF KANSAS**

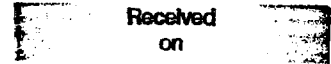
DIRECT TESTIMONY OF

JASON D. JONES

**ON BEHALF OF
KANSAS CITY POWER & LIGHT COMPANY**

**IN THE MATTER OF THE APPLICATION OF
KANSAS CITY POWER & LIGHT COMPANY
FOR APPROVAL TO TRANSITION TO PERMANENT STATUS
CERTAIN DEMAND SIDE MANAGEMENT PROGRAMS**

DOCKET NO. 11-KCPE-780-TAR



MAY 27 2011

by
State Corporation Commission
of Kansas

- 1 **Q: Please state your name and business address.**
- 2 A: My name is Jason D. Jones. My business address is 1200 Main Street, Kansas City,
3 Missouri 64105.
- 4 **Q: By whom and in what capacity are you employed?**
- 5 A: I am employed by Kansas City Power & Light Company ("KCP&L" or the "Company")
6 as Manager, Products and Services.
- 7 **Q: What are your responsibilities as Manager, Products and Services?**
- 8 A: My responsibilities include oversight of KCP&L's Energy Efficiency, Demand
9 Response, Sustainability and Non-Regulated Products Teams. My duties include
10 initiating and bringing to market new products, as well as improvements and innovations

1 to existing affordability, energy efficiency, and demand response products and services.

2 **Q: Please describe your education, experience and employment history.**

3 A: I graduated from The University of Missouri – Columbia with a Bachelor of Journalism
4 degree in 1993. My utility career includes several marketing and product management
5 positions with NiSource and Aquila Energy’s merchant group. I have worked for two
6 companies outside of the utility industry, Fike Corporation in Blue Springs, Missouri, and
7 Diamant Boart in Olathe, Kansas, in the areas of product management and marketing.

8 In 2006, I began my employment at KCP&L as Demand Response Product
9 Manager. One year later I assumed the position of Manager, Demand Response
10 Programs, and in April of 2011, I assumed the position of Manager, Products and
11 Services.

12 **Q: Have you previously testified in a proceeding at the Kansas Corporation
13 Commission (“Commission” or “KCC”) or before any other utility regulatory
14 agency?**

15 A: No, I have not.

16 **Q: What is the purpose of your testimony?**

17 A: KCP&L currently has a portfolio of pilot demand side management (“DSM”) programs
18 that were put in place between 2005 and 2008. KCP&L is requesting to continue certain
19 of these pilot programs and remove their pilot status. The purpose of my testimony is to:

- 20 (1) outline KCP&L’s proposed portfolio of continuing DSM programs;
21 (2) identify proposed tariff changes for these continuing programs;
22 (3) provide the required information for each program consistent with Appendix A of
23 the Commission’s Final Order in Docket No. 08-GIMX-441-GIV (“441 Order”);

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and

(4) provide the results of the most recent Evaluation, Measurement, and Verification (“EM&V”) reports completed for each of the programs.

Q: Do you sponsor any schedules with your direct testimony?

A: Yes, I sponsor the following schedules:

- Schedules JDJ-1 through JDJ-5 contain information for each of the proposed DSM programs in compliance with Appendix A of the 441 Order; and
- Schedules JDJ-6 through JDJ-9 contain the most recent EM&V reports for four of the DSM programs for which KCP&L is requesting continuation. EM&V evaluation was not performed on two of the educational programs.

KCP&L’S PROPOSED DSM PROGRAM PORTFOLIO

Q: Please describe KCP&L’s proposed DSM program portfolio.

A: The following table outlines the programs for which continuation is being requested:

KANSAS CITY POWER & LIGHT COMPANY PROPOSED DEMAND SIDE MANAGEMENT PROGRAM PORTFOLIO	
CLASS OF CUSTOMER SERVED	
Residential	Commercial & Industrial
Energy Optimizer	Energy Optimizer
	MPower
Home Energy Analyzer	Business Energy Analyzer
Low Income Weatherization	Building Operator Certification

1 **Energy Optimizer:** The Energy Optimizer program is an air conditioning cycling
2 program by which KCP&L can reduce residential and small commercial air conditioning
3 load during peak summer days. This load reduction is achieved by sending a paging
4 signal to a control device in a thermostat attached to the customer's air conditioner. The
5 control device then turns the air conditioner off and on, or ramps up the temperature over
6 a period of time, depending on the load reduction strategy established by KCP&L.
7 KCP&L installs, owns and maintains the programmable thermostats used for this
8 program. Participating customers have the opportunity to reduce energy usage through
9 effective use of the programmable thermostat.

10 **MPower:** MPower is a contracted load curtailment program for large commercial and
11 industrial customers that provides a capacity and energy payment to participating
12 customers for curtailing their usage during summer months when high electric demand
13 occurs. Customers are eligible for participation in the program by providing a minimum
14 load reduction of 25 kW during KCP&L's high usage/high cost periods.

15 **Home Energy Analyzer:** The Home Energy Analyzer provides information to
16 customers on how they use energy based on their specific usage data. It also provides
17 information on ways customers can save energy and what their payback might be based
18 upon the improvements made.

19 **Business Energy Analyzer:** The Business Energy Analyzer provides information to
20 business customers on how they use energy based on their specific usage data. It
21 provides information on ways they can save energy and what their payback might be
22 based on the improvements made. It also allows businesses to benchmark themselves
23 against like businesses.

1 Cool Homes program, the ENERGY STAR[®] New Homes program, and the C&I Rebate
2 suite of three programs.

3 **Q: Is KCP&L proposing any modifications to the DSM programs it wants to continue?**

4 A: Yes. KCP&L is proposing minor modifications to its Energy Optimizer program,
5 MPower program, Building Operator Certification program and Low Income
6 Weatherization program. KCP&L also is providing updated five-year budget projections
7 for each of the continuing DSM programs.

8 **Q: What specific changes to the programs are being requested?**

9 A: In addition to the updated program budget projections included in the Appendix A
10 information provided for each program, KCP&L is requesting specific tariff language
11 changes to the three programs noted above. The following summary provides the
12 proposed tariff language modifications to these program tariffs.

13 **▪ Energy Optimizer**

- 14 ○ Change the name of the tariff schedule to Schedule EO (Energy
15 Optimizer) from Schedule ACC (Air Conditioner Cycling).
- 16 ○ Remove language tying the program to Docket No. 04-KCPE-1025-GIE
17 (the “1025 Docket”).
- 18 ○ Add sections outlining the Program Funding and Evaluation.

19 **▪ MPower Program**

- 20 ○ Remove language tying the program to the 1025 Docket.
- 21 ○ Delete the Energy Purchase Option. This option has not been used by
22 customers.
- 23 ○ Delete the section allowing the Company to waive one non-compliance

1 penalty per season per customer. This option is no longer needed or used.
2 Customers can limit performance risk by choosing the maximum number
3 of events in which they are willing to participate.

4 ○ Delete Curtailment Excess of Customer Load section. Payments made
5 under this provision are negligible. The deletion of this provision is
6 expected to reduce customer confusion and increase efficiency in program
7 administration.

8 ○ Delete Voluntary Load Reduction. This option has not been used by the
9 Company as it is too restrictive.

10 ○ Add language to allow KCP&L to limit the term of each contract.

11 ○ Add language allowing the Company to determine the payment for
12 Additional Voluntary Events in advance of each additional Voluntary
13 Event. Such payment could be more or less than \$0.35 per kW of
14 curtailable load.

15 ○ Add a section defining the Curtailment Hours. This section was
16 inadvertently omitted from the current tariff.

17 ○ Add sections outlining the Program Funding and Evaluation.

18 ■ **Low Income Weatherization**

19 ○ Remove language tying the program to the 1025 Docket.

20 ○ Remove the Program Reporting section. Reporting for all programs will
21 be in accordance with the guidelines set forth in the 442 Order.

22 ○ Update the Program Funding section and add a section outlining the
23 Evaluation.

1 ▪ **Building Operator Certification**

- 2 ○ Remove language tying the program to the 1025 Docket.
- 3 ○ Classify as an education program pursuant to guidelines set forth in the
- 4 Order issued April 13, 2009 in Docket No. 08-GIMX-442-GIV
- 5 (“442 Order”).
- 6 ○ Add sections outlining the Program Funding and Evaluation.

7 **Q: Why is it necessary for KCP&L to request that its existing programs be moved from**

8 **pilot status to permanent status?**

9 A: Ms. Turner addresses this issue and the rationale for the request in her Direct Testimony.

10 **Q: Is KCP&L proposing to add any new programs to its DSM portfolio?**

11 A: No. Not at this time.

12 **Q: Is KCP&L proposing any new customer research programs?**

13 A: No.

14 **Q: Has KCP&L included information in this filing for each continuing program tariff**

15 **as required by the Commission in the 441 Order?**

16 A: Yes. KCP&L has included a proposed tariff, clean and redline versions, where

17 appropriate, and Appendix A supporting information for each program in compliance

18 with the 441 Order. The tariffs for approval are attached to the Application. Clean and

19 redline tariffs also are attached to Ms. Turner’s Direct Testimony as Schedules MBT-1

20 through MBT-8. As noted above, the Appendix A supporting information for each

21 proposed program is attached to my testimony as Schedules JDJ-1 through JDJ-5.

22 **Q: Is KCP&L proposing any education programs in this filing?**

23 A: Yes. KCP&L is proposing the following three programs be considered as education

1 programs:

- 2 ▪ Home Energy Analyzer
- 3 ▪ Business Energy Analyzer
- 4 ▪ Building Operator Certification

5 **Q: Do the proposed budgets for these three education programs meet the Commission's**
6 **five percent guideline for total DSM portfolio funding devoted to education**
7 **programs?**

8 A: The total budget for the education programs for year one is approximately 6% of the
9 larger DSM budget; close to the guideline. Due to some underlying assumptions built
10 into the MPower and Energy Optimizer programs' five-year budgets, this percentage
11 increases in years two through five as the MPower budget declines.

12 **Q: What are the underlying assumptions for the MPower program which drive the**
13 **increase in this percentage?**

14 A: Recall that the MPower program allows KCP&L discretion regarding the amount of peak
15 shaving that is required and beneficial each year. At this point in time, KCP&L has
16 restricted extensions to expiring contracts to one year – 2011 – and is not signing new
17 customers. KCP&L expects to revisit the amount of MPower to contract each year. For
18 purposes of the five-year program budget information required in Appendix A, KCP&L
19 assumed that existing multi-year contracts would be allowed to expire over the next
20 several years. Beyond the one year re-sign contracts currently anticipated for 2011,
21 KCP&L did not include any contract extension expectations for the remaining four years.
22 This assumption for years two through five resulted in significantly fewer dollars in the
23 overall DSM program portfolio budget in those years which, in turn, affects the percent

1 of the overall budget represented by education programs.

2 **Q: What are the underlying assumptions for the Energy Optimizer program that drive**
3 **the increase in this percentage?**

4 A: As with the MPower program, the Energy Optimizer program likewise allows KCP&L
5 discretion regarding the amount of peak shaving that is required and beneficial to pursue
6 under the program. For the time being, KCP&L has determined to restrict additional
7 installations of programmable thermostats and continue to utilize the significant base of
8 peak shaving MWs available from customers participating in the program currently. This
9 significantly reduces the annual spend for this program to only the maintenance necessary
10 for currently installed thermostats and, therefore, increases the percent of the overall
11 budget represented by education programs.

12 **Q: Does KCP&L anticipate any future changes to its DSM program portfolio?**

13 A: KCP&L intends to engage Staff and other stakeholders over the coming year to continue
14 discussions regarding a revised cost recovery model, incentives and potential new DSM
15 programs. At the conclusion of these discussions, KCP&L will approach the
16 Commission with any requested changes to its portfolio and its cost recovery mechanism.

17 **EVALUATION, MEASUREMENT & VERIFICATION**

18 **Q: The programs in KCP&L's proposed portfolio have been in place for several years.**
19 **Has KCP&L been following an EM&V process for these programs?**

20 A: Yes. KCP&L had an evaluation process in place for its programs from the start of its
21 DSM initiative in 2005; prior to the initiation of Docket No. 10-GIMX-013-GIV (the
22 "013 Docket"). KCP&L currently contracts with a third party evaluator to perform both
23 process and impact evaluations for its existing DSM programs with the exception of its

1 educational programs. The third party evaluator is used to avoid conflicts of interest and
2 to ensure creditability of evaluation results. Evaluations are completed two years and six
3 months following program tariff approval dates. Evaluation plans are developed by
4 KCP&L's evaluation contractor(s) and describe all necessary data collection, process
5 evaluation tasks, and impact evaluation tasks by program.

6 The evaluation plans include study methodology by program, data collection
7 strategies, data requests by program, and a detailed work plan and schedule. KCP&L
8 supports the International Performance Measurement and Verification Protocol
9 ("IPMVP") for all programs where this standard is applicable.

10 **Q: What EM&V evaluations have been completed on the programs KCP&L is**
11 **requesting to continue?**

12 **A:** To date, process and impact evaluations have been completed on the following DSM
13 programs KCP&L is requesting to continue:

- 14 ▪ Energy Optimizer;
- 15 ▪ MPower;
- 16 ▪ Building Operator Certification; and
- 17 ▪ Low Income Weatherization.

18 As noted above these EM&V evaluations were conducted by third party EM&V
19 vendors contracted by KCP&L prior to the initiation of the 013 Docket. I have included
20 the most recent EM&V reports for each of these programs as Schedules JDJ-6 through
21 JDJ-9.

22 With regard to the Home and Business Energy Analyzer programs, KCP&L
23 conducted some internal trend analysis but did not contract for EM&V evaluations of

1 these programs.

2 Going forward, KCP&L plans to follow the guidance provided by the
3 Commission in the 013 Docket wherein educational programs are required to undergo
4 process evaluations and the EM&V process for other programs is conducted using a third
5 party evaluator contracted through the KCC Staff.

6 **Q: What were the results of the EM&V evaluations performed?**

7 A: In general, the results have been favorable. KCP&L has used the results of the process
8 portion of the evaluation to help improve program design and implementation processes.
9 KCP&L considered the recommendations by the third-party evaluator and made
10 adjustments to program design where appropriate. KCP&L considered all of the process
11 recommendations to be learning tools to enhance our programs.

12 With respect to the impact evaluation, KCP&L adjusted its initial assumed
13 program savings to reflect the results of the EM&V reports, which are based on an
14 independent analysis performed by the third-party administrator. In some cases,
15 KCP&L's initial demand and energy savings assumptions were adjusted upward and in
16 others, they were adjusted downward.

17 **Q: Why would savings assumptions need to be adjusted upward or downward?**

18 A: When KCP&L first proposed its DSM portfolio in 2004, we were admittedly on a steep
19 learning curve. However, since then, KCP&L has implemented twelve DSM programs in
20 Kansas (fourteen in Missouri) and has gained significant experience in program design,
21 implementation, and evaluation.

1 When KCP&L proposed its programs, it relied upon external expertise to help
2 develop the initial estimates of the demand and energy savings for the programs; actual
3 results from customer participation in its programs obviously yield more accurate
4 estimates. Thus, KCP&L adjusted its programs based on the results of the EM&V
5 evaluations.

6 **Q: Does that conclude your testimony?**

7 A: Yes, it does.

**BEFORE THE STATE CORPORATION COMMISSION
OF THE STATE OF KANSAS**

In the Matter of the Application of Kansas)
City Power & Light Company for Approval)
To Transition to Permanent Status) Docket No. 11-KCPE-___-TAR
Certain Demand Side Management Programs)

AFFIDAVIT OF JASON D. JONES

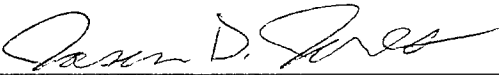
STATE OF MISSOURI)
) ss
COUNTY OF JACKSON)

Jason D. Jones, being first duly sworn on his oath states:

1. My name is Jason D. Jones. I work in Kansas City, Missouri, and I am employed by Kansas City Power & Light Company as Manager, Products and Services.

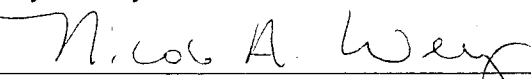
2. Attached hereto and made a part hereof for all purposes is my Direct Testimony on behalf of Kansas City Power & Light Company consisting of thirteen (13) pages, having been prepared in written form for introduction into evidence in the above-captioned docket.

3. I have knowledge of the matters set forth therein. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded, including any attachments thereof, are true and accurate to the best of my knowledge, information and belief.



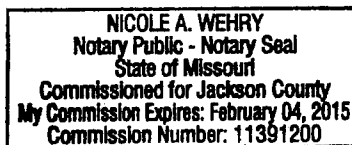
Jason D. Jones

Subscribed and sworn before me this 26th day of May 2011.



Notary Public

My commission expires: Feb. 4 2015



Kansas City Power & Light Company

ENERGY OPTIMIZER PROGRAM

The following information regarding KCP&L's Residential, Small and Medium General Service Energy Optimizer program, Schedule EO, (formerly called the Air Conditioning Cycling Rider, Schedule ACC) is provided in compliance with Appendix A of the Commission's November 14, 2008 Final Order issued in Docket No. 08-GIMX-441-GIE. This Program is set forth in KCP&L's proposed tariff Schedule 7, also referred to as Schedule EO, provided with this filing.

1. Program Description

KCP&L's Residential, Small and Medium General Service Energy Optimizer Program addresses the need for load reduction on KCP&L's system on peak summer days. This demand response program focuses on residential and small to mid-tier commercial customers with peak demand less than 200 kW.

Customers who partner with KCP&L in this program receive a free programmable thermostat that they can use to help manage their energy usage throughout the year. Programmable thermostats can reduce heating and cooling costs by automatically adjusting temperature settings throughout the day to match homeowners' or businesses' schedules. The thermostat is maintained by KCP&L, free of charge to the customer, and can be accessed by the customer via the Internet as long as the customer remains a participant in the program.

The Company achieves load reduction with the Energy Optimizer Program by sending a signal to each participating customer's thermostat. The signal contains instructions that are used by the thermostat to enact one of several possible load reduction strategies:

- The thermostat can cycle the outdoor compressor on and off at a level set by KCP&L;
- The thermostat can adjust the temperature by immediately raising the temperature several degrees at the beginning of an event;
- The thermostat can raise the temperature one degree per hour for a few hours; or
- A one hour pre-cooling option is available whereby the temperature of a building is lowered by a few degrees before the start of a cycling event.

The Energy Optimizer Program is designed to run from June 1 to September 30 each year. Curtailments can be called on weekdays only, with no limit on the

total number of curtailments or number of consecutive days curtailed. Curtailment length is limited to a maximum of four hours per day per participant. The overall curtailment period can be lengthened by strategically and sequentially curtailing load across the service territory (although this will reduce the maximum load reduction available for any one event). Program participants are permitted to override the system once per month and must communicate their override request via the Internet or by phone.

2. Program Goal

A. Expected energy and demand savings:

As of March 31, 2011, the program had 19,585 participants in Kansas, providing 17.4 MW of load reduction. Historically, based upon evaluation, measurement and verification (EM&V) studies of KCP&L's Energy Optimizer Program, savings achieved have equated to approximately 1 kW of load reduction per unit in single family homes and approximately 0.5 kW of load reduction in multi-family housing units. The commercial market has not undergone an EM&V study to date because, at the time the EM&V study was being conducted, there were not enough commercial participants to perform a valid evaluation. It is anticipated that the commercial aspect of the program will be fully reviewed during the next evaluation and it is anticipated that the savings from commercial participants will be significantly higher than those achieved in the single-family residential market.

3. Program Framework/Strategy

A. Relationship to other programs

The Energy Optimizer Program has significant brand awareness throughout the KCP&L service territory. This awareness serves as a natural conduit to promote other demand-side management (DSM) programs and energy efficiency in general.

B. Marketing strategy

For at least the next year, KCP&L will not initiate marketing efforts to obtain new customers in the Energy Optimizer program. The marketing strategy will consist of tactics to maintain customers in the program. Examples of messaging may include reminding customers how to program their thermostat to achieve maximum energy savings, notices when the curtailment season begins, and information on and what to expect during the season. Various channels to communicate these messages may include, but are not limited to, bill inserts, direct mail, html emails, and the KCP&L website. The five-year budget indicates a continuation of this marketing strategy throughout the five-year period; however, the strategy will be re-evaluated each year with any changes brought to the attention of the Commission Staff.

C. Program Delivery

This Energy Optimizer program is a turn-key program provided by Honeywell Utility Solutions. Honeywell supplies the call center, marketing, appointment setting, installation and service. This program is managed by a KCP&L Product Manager.

D. Partners

Honeywell Utility Solutions is currently the primary partner for the Energy Optimizer program, providing marketing, appointment setting, installation, thermostat maintenance, and ongoing customer service.

4. Program Budget (Five-Year)

The expected budget for the Energy Optimizer Program over the five-year period is shown below.

	Program Delivery	Admin	Marketing	Customer Incentive	EM&V	Total
Year 1	** [REDACTED]		[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]**
Year 2	** [REDACTED]		[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]**
Year 3	** [REDACTED]		[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]**
Year 4	** [REDACTED]		[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]**
Year 5	** [REDACTED]		[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]**
Total	** [REDACTED]		[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]**

5. Program Beneficiaries

A. Number of participants by customer class

KCP&L currently expects to maintain the current level of participation and load reduction over the next five years without adding any incremental participants; however, as noted previously, KCP&L will re-evaluate desired participation levels annually and bring any proposed changes to the attention of Commission Staff.

Participation among customer classes program-to-date as of March 31, 2011 was as follows:

Market Segment	Program To Date Installations
Single Family	16,835
Multi-Family	460
Commercial	2,290
Total	19,585

B. Other beneficiaries

Demand response programs such as the Energy Optimizer program are designed to postpone the need for new peaking power plants – plants that provide energy only during peak demand periods. While the direct financial beneficiaries of the Energy Optimizer program are the customers who participate in the program, to the extent that construction of new peaking power plants is postponed, all KCP&L customers will benefit, not just the program participants.

6. Program Benefit-Cost Analysis

All five benefit-cost tests are shown below. The dollar values below are on a present value basis with the assumption that all future cash flows start at the beginning of each annual period, discounted at the appropriate discount rate.

Energy Optimizer Program		
Test Name	Market Based Test Results	Cost Based Test Results
Utility Test	16.33	16.33
TRC Test	16.33	16.33
RIM Test	16.33	16.33
RIM (Net Fuel)	16.33	16.33
Participant Test	N/A	N/A
Societal Test 3% / \$10	16.33	16.33
Societal Test 3% / \$25	16.33	16.33
Societal Test 3% / \$40	16.33	16.33
Societal Test 7% / \$10	16.33	16.33
Societal Test 7% / \$25	16.33	16.33
Societal Test 7% / \$40	16.33	16.33

Assumptions	
Utility Discount Rate (%)	** [REDACTED] **
Participant Discount Rate (%)	10.00%
Electric Losses (%)	** [REDACTED] **
Societal Discount Rate1 (%)	3.00%
Societal Discount Rate2 (%)	7.00%

Avoided Costs	
Avoided T&D (\$ / kW)	** [REDACTED] **

Avoided Market-Based Ancillary Service Charges (OATT)	** [REDACTED] **
Cost-Based Proxy for Avoided Capacity (\$ / kW Annualized)	** [REDACTED] **
CO ₂ emissions (kG/kWh)	** [REDACTED] **

Cost Based Avoided Electric Production	** [REDACTED] **
Avoided T&D Electric, w OATT	** [REDACTED] **
Avoided Electric Capacity	** [REDACTED] **
Total Cost Based Avoided Costs	** [REDACTED] **

Market Based Avoided Electric Production Costs	** [REDACTED] **
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Program Costs	
Administration Costs	** [REDACTED] **
Implementation / Participation Costs	** [REDACTED] **
Customer Incentives	** [REDACTED] **
Other / Miscellaneous Costs	** [REDACTED] **
Total Program Cost	** [REDACTED] **

Participant Cost	** [REDACTED] **
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Environmental Benefits	@ 3% Discount Rate	@ 7% Discount Rate
\$10 per Ton	** [REDACTED] **	** [REDACTED] **
\$25 per Ton	** [REDACTED] **	** [REDACTED] **
\$40 per Ton	** [REDACTED] **	** [REDACTED] **

Other Environmental Benefits, NOx SOx	** [REDACTED] **
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Lost Revenue	
Gross Lost Revenue, Electric	** [REDACTED] **
Net Fuel Lost Revenue, Electric	** [REDACTED] **

7. Program Evaluation, Measurement and Verification Plan

Program EM&V provides a key element of demand side management (DSM) programs. EM&V is used to document and measure the effects of a program and determine whether the program met its goal with respect to being a reliable

resource. EM&V is also used to help understand why certain effects occurred and identify ways to improve current programs and to select future programs.

The two types of evaluation KCP&L has utilized are:

Process evaluation: Process evaluation assesses program delivery, from design to implementation, in order to identify bottlenecks, efficiencies, what did and did not work, constraints and potential improvements.

Evaluation plans were developed by KCP&L's evaluation contractor(s) and describe all necessary data collection, process evaluation tasks and impact evaluation tasks by program. Evaluation Plans include the following information:

- Study Methodology by Program;
- Data Collection Strategies;
- Data Requests by Program; and
- Detailed Work Plan and Schedule.

Impact evaluation: Impact evaluation determines the impacts (energy and demand savings) and co-benefits (avoided emissions, energy security, transmission/distribution benefits) that directly result from a program. Impact evaluations also support cost-effectiveness analyses aimed at identifying relative program costs and benefits.

The Monitoring and Verification (M&V) process acts as a quality control and quality assurance process for the savings, tracking and accounting for the program.

Monitoring: This is the monitoring of installations when needed to determine or verify savings from a measure that is applied in a unique way, is significant in savings, or is new to the market. Working with the evaluation contractor, guidelines are developed to determine which projects should be monitored.

Verification: During the processing of an application for customer incentives (rebates), KCP&L reviews the equipment specifications by model number to determine if that measure qualifies. This "paper" verification occurs on all applications. Additionally, there are random field visits to assure the correct number and types of measures were installed at the customer's facility.

Historically, KCP&L retained one or more EM&V contractors to perform process and impact evaluations for its programs in order to avoid conflicts of interest and to insure credibility of the evaluation results. EM&V was conducted by the implementation team with advice of the EM&V contractor.

Going forward, EM&V of the Energy Optimizer Program will be completed consistent with requirements established by the Commission in Docket No. 08-

GIMX-442-GIV and Docket No. 10-GIMX-013-GIV (the "013 Docket"). As shown in the five-year budget included in this Appendix A information, KCP&L expects that EM&V evaluation will be conducted on the Energy Optimizer program in Years 3 and 5; however, given the Commission's Order in the 013 Docket, Staff and the Commission will ultimately determine the timing and cost of such EM&V evaluations.

8. Program Specific Tariff Schedule

Please see the tariff attached as Schedule MBT-3 to the direct testimony of KCP&L witness Mary Turner for KCP&L's Residential and Small and Medium General Service Energy Optimizer program, Schedule 7, also referred to as Schedule EO.

Kansas City Power & Light Company

MPOWER PROGRAM

The following information regarding KCP&L's MPower Program is provided in compliance with Appendix A of the Commission's November 14, 2008 Final Order issued in Docket No. 08-GIMX-441-GIE. This Program is set forth in KCP&L's proposed tariff Schedule 76, also referred to as Schedule MP, provided with this filing.

1. Program Description

MPower is a commercial and industrial customer peak electric load reduction program. KCP&L collaborates with customers to curtail (or reduce) their energy use during times of peak electric demand during the months of June through September. The customer can accomplish the required curtailment by reducing lighting and HVAC load, shutting down equipment, or switching facility load to a generator.

MPower provides two forms of payment to participating customers. Participants receive a monthly "participation payment" for signing up for the program and being "on call" to reduce power consumption at KCP&L's request. Participating customers also receive an additional "event payment" for successfully reducing demand each time they are called upon to do so.

2. Program Goal

As of March of 2011, the MPower program had 24,891 kW of curtailable load under contract in Kansas (net of free riders). KCP&L expects the following capacity reductions to be available through the MPower program over the next five years:

	Net Free Curtailable Load (kW)	Net Free Energy Saved (kWh)
Year 1	25,735	185,195
Year 2	19,279	138,751
Year 3	8,216	59,129
Year 4	3,765	27,090
Year 5	253	1,712

3. Program Framework/Strategy

A. Relationship to other programs

Mpower is a demand response program for commercial customers with peak loads greater than 200 kW. It is designed to reduce system load during times of peak demand. It is one of two programs in KCP&L's demand response portfolio with the other being the Energy Optimizer program which is designed for residential and small commercial customers with peak loads under 200 kW.

B. Marketing strategy

The Mpower program is currently under a moratorium to new participants due to a decline in demand caused by the economic downturn as well as the start-up of KCP&L's new latan 2 power plant in August 2010. As a result, the program is not being actively marketed at this time. Current participating customers wishing to continue their participation are being re-signed for a single year at a time. Customers who express an interest in participating are added to a waiting list and will be brought into the program when the supply/demand equation indicates it is time to do so. The Company plans to re-evaluate program participation levels each year with any changes brought to the attention of Commission Staff. Marketing efforts will be resumed when market conditions indicate it is necessary to do so.

C. Program Delivery

The Mpower program is managed by an internal KCP&L product manager. Back-office systems and support are handled by a third party vendor, currently Ziphany.

The product manager is responsible for educating and training account managers, analyzing customer loads and curtailment capabilities, processing contracts, setting customers up in the Mpower database, conducting market analyses, forecasting, developing marketing strategies and materials, processing payments and penalties and conducting annual baseline reviews for each account. The product manager also executes curtailments at the direction of KCP&L's power supply group.

Ziphany, the back-office support vendor, manages the customer database, produces reports, provides event notification services, analyzes event meter data and supplies the product manager with monthly customer credit and penalty tables, which the product manager then reviews and submits to KCP&L's billing and accounting departments for the application of monthly credits and penalties to customer bills.

D. Partners

KCP&L partners with Ziphany for back-office support and meter data management services. It also relies on various meter manufacturers for support in providing necessary data to customers and the company.

4. Program Budget (Five-Year)

Since the MPower Program is an established program, KCP&L does not have any start-up costs. The expected budget for the MPower Program over the five-year period is shown below.

	Program Delivery	Admin	Marketing	Customer Incentive	EM&V	Total
Year 1	\$20,000	\$0	\$40,800	\$1,638,611	\$ 0	\$1,699,411
Year 2	20,000	0	40,800	1,154,064	0	1,214,864
Year 3	20,000	0	0	523,891	100,000	643,891
Year 4	20,000	0	0	228,629	0	248,629
Year 5	0	0	0	17,280	100,000	117,280
Total	\$80,000	\$0	\$81,600	\$3,562,475	\$200,000	\$3,924,075

5. Program Beneficiaries

A. Expected number of participants by customer class or subclass

Historically, about 85 percent of MPower participants are on a large general service rate and 15 percent are on a medium general service rate. Customers on a small commercial rate are generally unable to meet the program's minimum curtailable load requirement. Customer counts by class in Kansas are expected to be as follows over the next five years:

	Year 1	Year 2	Year 3	Year 4	Year 5
Small	-	-	-	-	-
Medium	20	15	6	3	-
Large	114	84	36	16	1
Total	134	99	42	19	1

B. Other beneficiaries

Demand response programs such as the MPower program are designed to postpone the need for new peaking power plants – plants that provide energy only during peak demand periods. While the direct financial beneficiaries of the MPower program are the customers who participate in the program, to the extent that construction of new peaking power plants is postponed, all KCP&L customers will benefit.

6. Program Benefit-Cost Analysis

All five benefit-cost tests are shown below. The dollar values presented below are on a present value basis with the assumption that all future cash flows start at the beginning of each annual period, discounted at the appropriate rate.

Mpower Program		
Test Name	Market Based Test Results	Cost Based Test Results
Utility Test	1.866	1.866
TRC Test	1.866	1.866
RIM Test	1.244	1.244
RIM (Net Fuel)	1.247	1.247
Participant Test	N/A	N/A
Societal Test 3% / \$10	1.868	1.868
Societal Test 3% / \$25	1.870	1.870
Societal Test 3% / \$40	1.871	1.871
Societal Test 7% / \$10	1.868	1.868
Societal Test 7% / \$25	1.870	1.870
Societal Test 7% / \$40	1.871	1.871

Assumptions	
Utility Discount Rate (%)	** [REDACTED] **
Participant Discount Rate (%)	10.00%
Electric Losses (%)	** [REDACTED] **
Societal Discount Rate1 (%)	3.00%
Societal Discount Rate2 (%)	7.00%

Avoided Costs	
Avoided T&D (\$ / kW)	** [REDACTED] **
Avoided Market-Based Ancillary Service Charges (OATT)	** [REDACTED] **
Cost-Based Proxy for Avoided Capacity (\$ / kW Annualized)	** [REDACTED] **
CO2 emissions (kg/kWh)	** [REDACTED] **

Cost Based Avoided Electric Production	** [REDACTED] **
Avoided T&D Electric, w OATT	** [REDACTED] **
Avoided Electric Capacity	** [REDACTED] **
Total Cost Based Avoided Costs	** [REDACTED] **

Market Based Avoided Electric Production Costs	** [REDACTED] **
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Program Costs	
Administration Costs	** [REDACTED] **
Implementation / Participation Costs	** [REDACTED] **
Customer Incentives	** [REDACTED] **
Other / Miscellaneous Costs	** [REDACTED] **
Total Program Cost	** [REDACTED] **

Participant Cost	** [REDACTED] **
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Environmental Benefits	@ 3% Discount Rate	@ 7% Discount Rate
\$10 per Ton	** [REDACTED] **	** [REDACTED] **
\$25 per Ton	** [REDACTED] **	** [REDACTED] **
\$40 per Ton	** [REDACTED] **	** [REDACTED] **

Other Environmental Benefits, NOx SOx	** [REDACTED] **
Lost Revenue	
Gross Lost Revenue, Electric	** [REDACTED] **

7. Program Evaluation, Measurement and Verification Plan

Program evaluation, measurement and verification (EM&V) are key elements of demand-side management (DSM) programs. EM&V is used to document and measure the effects of a program and determine whether the program met its goal with respect to being a reliable energy resource. EM&V is also used to help understand why certain effects occurred and identify ways to improve current programs and to select future programs.

The two types of evaluation utilized by KCP&L are:

Process evaluation: Process evaluation assesses program delivery, from design to implementation, in order to identify bottlenecks, efficiencies, what did and did not work, constraints and potential improvements.

Evaluation plans are developed by KCP&L's evaluation contractor(s) and describe all necessary data collection, process evaluation tasks and impact evaluation tasks by program. Evaluation Plans include the following information:

- Study Methodology by Program;
- Data Collection Strategies;
- Data Requests by Program; and
- Detailed Work Plan and Schedule.

Impact evaluation: Impact evaluation determines the impacts (energy and demand savings) and co-benefits (avoided emissions, energy security, transmission/distribution benefits) that directly result from a program. Impact evaluations also support cost-effectiveness analyses aimed at identifying relative program costs and benefits.

The Monitoring and Verification (M&V) process acts as a quality control and quality assurance process for the savings, tracking and accounting for the program.

Monitoring: This is the monitoring of installations when needed to determine or verify savings from a measure that is applied in a unique way, is significant in savings, or is new to the market. Working with the evaluation contractor, guidelines are developed to determine which projects should be monitored.

Verification: During the processing of an application for customer incentives (rebates), KCP&L reviews the equipment specifications by model number to determine if that measure qualifies. This "paper" verification occurs on all applications. Additionally, there are random field visits to assure the correct number and types of measures were installed at the customer's facility.

Historically, KCP&L retained one or more EM&V contractors to perform process and impact evaluations for its programs in order to avoid conflicts of interest and to insure credibility of the evaluation results. EM&V is conducted by the implementation team with advice of the EM&V contractor.

Going forward, EM&V of the MPower program will be completed consistent with requirements established by the Commission in Docket No. 08-GIMX-442-GIV and Docket No. 10-GIMX-013-GIV (the "013 Docket"). As shown in the five-year budget included in this Appendix A information, KCP&L expects that EM&V evaluation will be conducted on the MPower program in Years 3 and 5; however,

given the Commission's Order in the 013 Docket, Staff and the Commission will ultimately determine the timing and cost of such EM&V evaluations.

8. Program Specific Tariff Schedule

Please see the tariff attached as Schedule MBT-7 to the direct testimony of KCP&L witness Mary Turner for KCP&L's MPower Rider, Schedule 76, also referred to as Schedule MP.

Kansas City Power & Light Company

ONLINE ENERGY INFORMATION AND ANALYSIS PROGRAMS

The following information regarding KCP&L's Online Energy Information and Analysis Programs, also referred to as the Home Energy Analyzer and Business Energy Analyzer, is provided in compliance with Appendix A of the Commission's November 14, 2008 Final Order issued in Docket No. 08-GIMX-441-GIE. These programs were originally approved in Docket Nos. 06-KCPE-548-TAR and 06-KCPE-1190-ACT. They are not tariffed programs.

1. Program Description

KCP&L offers online energy information and analysis programs for its residential and commercial customers. These programs are referred to as the Home Energy Analyzer and the Business Energy Analyzer, respectively.

The Home Energy Analyzer allows Kansas residential customers with Internet capability to electronically access their billing information and compare their usage on a daily, weekly, monthly or annual basis. This tool will analyze the percentage of the customer's usage comprised by each end use and provide information on ways the customer can save energy by end use through a searchable resource center. This tool also allows a customer to analyze why their bill may have varied from one month to another. A home comparison also displays a comparison of the customer's home versus an average similar home via an energy guide label concept.

Similarly, the Business Energy Analyzer allows Kansas business and non-profit customers with Internet capability to electronically access their billing information and compare their usage on a daily, weekly, monthly or annual basis. As with the residential tool, business customers can see the percentage of their usage comprised by each end use and view information on ways to save energy by end use through a searchable resource center. Targeted case studies are also included to provide energy saving ideas relevant to the customer's industry. This tool also allows the customer to analyze why their bill may have varied from one month to another. A business comparison also displays usage benchmarking data versus similar types of businesses.

2. Program Goal

A. Expected energy and demand savings – time horizon

Because the Home and Business Energy Analyzers are educational programs, no energy and demand savings are attributed to these programs.

3. Program Framework/Strategy

A. Relationship to other programs

The Home and Business Energy Analyzers are considered a first step toward becoming energy efficient; they educate customers. These programs require a relatively small time investment from the customer and no financial investment from the customer to learn how to save energy.

B. Marketing strategy

The Home and Business Energy Analyzers will follow an integrated marketing strategy as needed. This strategy could involve utilizing online and offline media including traditional KCP&L channels such as bill inserts, bill messaging, and customer newsletters. Typically, there will be a marketing calendar created each year to stage awareness and participation campaigns with a focus on the summer months.

C. Program delivery

The two Analyzer programs will be managed by a KCP&L staff member and will involve the coordination of vendors for delivery of the online tools. The Home and Business Energy Analyzers will require a vendor to maintain, deliver, and support the online assessment tools.

4. Program Budget (Five-Year)

Since the Programs are established programs, KCP&L does not have any start-up costs. The expected budgets for the Home and Business Energy Analyzers, respectively, over the five-year period are shown below.

Home Energy Analyzer						
	Program Delivery	Admin	Marketing	Customer Incentive	EM&V	Total
Year 1	** [REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]**
Year 2	** [REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]**
Year 3	** [REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]**
Year 4	** [REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]**
Year 5	** [REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]**
Total	** [REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]**

Business Energy Analyzer						
	Program Delivery	Admin	Marketing	Customer Incentive	EM&V	Total
Year 1	** [REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]**
Year 2	** [REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]**
Year 3	** [REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]**
Year 4	** [REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]**
Year 5	** [REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]**
Total	** [REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]**

5. Program Beneficiaries

A. Expected number of participants by customer class or subclass

The expected numbers of residential and commercial participants over the five year period are shown below for the Home and Business Energy Analyzers, respectively.

	Kansas Residential Participants	Kansas Commercial Participants
Year 1	4,500	225
Year 2	4,500	225
Year 3	4,500	225
Year 4	4,500	225
Year 5	4,500	225
Total	22,500	1,125

B. Other beneficiaries

No other beneficiaries have been observed.

6. Program Benefit-Cost Analysis

In Docket No. 08-GIMX-441-GIV, page 16, the Commission ordered "...the Commission finds that it will not subject education programs to benefit-cost analysis but will require utilities to provide extensive explanations of the programs and their attendant costs, evidence of usefulness in other jurisdictions, and any additional information the utility believes will support the implementation of an education program." Therefore, because the Home and Business Energy Analyzers are considered education programs, we have not included a program benefit-cost analysis.

7. Program Evaluation, Measurement and Verification Plan

Program evaluation, measurement and verification (EM&V) are key elements of demand-side management (DSM) programs. EM&V is used to document and measure the effects of a program and determine whether the program met its goal with respect to being a reliable energy resource. EM&V is also used to help understand why certain effects occurred and identify ways to improve current programs and to select future programs.

The two types of evaluation utilized by KCP&L are:

Process evaluation: Process evaluation assesses program delivery, from design to implementation, in order to identify bottlenecks, efficiencies, what did and did not work, constraints and potential improvements.

Evaluation plans are developed by KCP&L's evaluation contractor(s) and describe all necessary data collection, process evaluation tasks and impact evaluation tasks by program. Evaluation Plans include the following information:

- Study Methodology by Program;
- Data Collection Strategies;
- Data Requests by Program; and
- Detailed Work Plan and Schedule.

Impact evaluation: Impact evaluation determines the impacts (energy and demand savings) and co-benefits (avoided emissions, energy security, transmission/distribution benefits) that directly result from a program. Impact evaluations also support cost-effectiveness analyses aimed at identifying relative program costs and benefits.

Going forward, evaluation, measurement and verification of the Home and Business Energy Analyzer programs will be completed consistent with requirements established by the Commission in Docket No. 08-GIMX-442-GIV and Docket No. 10-GIMX-013-GIV (the "013 Docket"). As these are education programs, only a process evaluation will be conducted. As shown in the five-year budget included in this Appendix A information, KCP&L expects that evaluation will be conducted in Years 3 and 5; however, given the Commission's Order in the 013 Docket, Staff and the Commission will ultimately determine the timing and cost of such EM&V evaluations.

8. Program Specific Tariff Schedule

Not applicable.

Kansas City Power & Light Company

BUILDING OPERATOR CERTIFICATION PROGRAM

The following information regarding KCP&L's Building Operator Certification Program is provided in compliance with Appendix A of the Commission's November 14, 2008 Final Order issued in Docket No. 08-GIMX-441-GIE. This Program is set forth in KCP&L's proposed tariff Schedule 8, also referred to as Schedule BOC, provided with this filing.

1. Program Description

The Building Operator Certification (BOC) program is a competency-based training and certification program for building operators, managers and consultants, offering improved job skills and more comfortable and energy efficient facilities. The certification also provides a credential for professional development while offering employers a way to identify skilled operators.

Over 5,000 operators hold BOC certifications nationally. The certificate is registered with the Building Owners and Managers Institute (BOMI), the Association for Facilities Engineering (AFE) and the International Facilities Management Association (IFMA) for continuing education maintenance points.

The BOC program is licensed from the Northwest Energy Efficiency Council (NEEC) by program administrators across the country. NEEC is a non-profit regional consortium of utilities, government, public interest groups and the private sector dedicated to transforming markets for energy efficient products and services. NEEC provided support for the development of the BOC program. In the Midwest, the Midwest Energy Efficiency Alliance (MEEA) administers the Program. MEEA is a non-profit regional consortium of utilities, government, public interest groups and the private sector dedicated to transforming markets for energy efficient products and services.

In the KCP&L service territory, BOC Level I and Level II training courses will be offered. Both certification levels are earned by a combination of classroom training, written exams, and hands-on projects conducted at the operator's facility. Level I training emphasizes energy efficient building maintenance practices and is a series of eight courses conducted over seven months. Level II stresses advanced equipment troubleshooting and preventive maintenance and is a series of seven courses conducted over six months. Class sizes are typically between 18 and 25 students.

To encourage participation in the program KCP&L offers participants a rebate for a portion of their tuition cost. Each student in the class that is associated with a commercial property receiving electrical service from KCP&L and that successfully completes the certification process is eligible for the rebate.

Below is a description of the current BOC courses.

Level I Course Descriptions

BOC 101 - Building Systems Overview (1 Day)

Provides an overview of preventive maintenance, energy efficiency principles, and fundamentals of building systems, equipment, and operations.

Project: Facility and Equipment Floor Plan

BOC 102 - Energy Conservation Techniques (1 Day)

Helps operators gain a better understanding of how energy is used in commercial buildings and how to identify and prioritize conservation opportunities.

Project: Energy Use Profile for Facility

BOC 103 - HVAC Systems and Controls (2 Days)

Focuses on operation and maintenance of equipment and components typically found in commercial buildings, including central heating, cooling, air and ventilating systems in buildings.

Project: Heating System Operational Review

BOC 104 - Efficient Lighting Fundamentals (1 Day)

Covers lighting fundamentals and types of lighting for economical and energy-efficient lighting systems.

Project: Lighting Survey for Facility

BOC 105 - Operation and Maintenance Practices For Sustainable Buildings (1 Day)

Focuses on a set of best practices for operations and maintenance that create and sustain green or high performance buildings.

BOC 106 - Indoor Air Quality (1 Day)

Introduces the basic causes of indoor air quality problems and begins to develop a method of diagnosis and solution.

BOC 107 - Facility Electrical Systems (1 Day)

Develops an understanding of how electricity is distributed in a facility and common electrical distribution problems.

Project: Electrical Distribution Sketch for Facility

Level II Course Descriptions

BOC 201 - Preventive Maintenance & Operations (1 Day-Core)

Covers the step-by-step process for starting and operating a preventive maintenance program that produces energy savings and equipment reliability.

BOC 202 - Advanced Electrical Diagnostics (1 Day-Core)

Learn to locate and repair electrical opens, shorts, overloads, and high resistance.

Project: Power Quality Upgrade Plan

BOC 203 - HVAC Troubleshooting & Maintenance (2 Days-Core)

Learn to troubleshoot and improve the efficiencies of the primary heating, cooling and ventilation systems of commercial buildings.

Project: HVAC System Comparison

BOC 204 - HVAC Controls & Optimization (1 Day-Core)

Learn energy efficient operation, maintenance, and service of HVAC controls and related devices for central air systems commonly found in commercial buildings.

Project: Controls System Diagram

Supplemental Courses: Two offered per course series

BOC 210 - Advanced Indoor Air Quality (1 Day)

Learn to use the EPA recommended procedures for preventing and troubleshooting Indoor Air Quality problems for equipment and building operations.

BOC 211 - Motors in Facilities (1 Day)

Understand how motors work and identify their uses and applications in facilities.

BOC 212 - Water Efficiency for Building Operators (1/2 Day)

Identify water savings measures in commercial and institutional facilities through detection and repair of leaks, operational changes, and low-cost equipment improvements.

BOC 213 - Mastering Electrical Control Circuits (1/2 Day)

Introduces basic electric control concepts, wiring schematic fundamentals and blueprint to panel-board recognition.

BOC 214 - Introduction to Building Commissioning (1 Day)

Introduces the building commissioning process for new and existing buildings with an emphasis on existing building commissioning and the building operator's role.

BOC 215 - Electric Motor Management (1/2 Day)

Learn how to calculate power costs for electric motors, and to identify improvements in motor management practices that make big differences in system reliability and electricity bills.

BOC 216 - Enhanced Automation & Demand Reduction (1 Day)

Introduces technologies to help building personnel better manage their energy use, reduce electrical demand, and maintain or even improve the comfort of building occupants.

2. Program Goal

A. Expected energy and demand savings – time horizon

Because the BOC program is an educational program, no energy and demand savings will be attributed to the program; however, it is expected that operational savings that will be achieved by participants.

3. Program Framework/Strategy

A. Relationship to other programs

The BOC program is designed for commercial and industrial building operators; therefore, the program provides a natural opportunity for customers to learn about the Business Energy Analyzer program. In addition, there are a number of other non-DSM programs that are designed for the commercial customer segment. Those programs include AccountLink, AccountLink Advantage and ApartmentLink.

B. Marketing strategy

The target market for BOC is defined as the person or persons responsible for maintaining a building's operating facilities on a daily basis. Most facilities have a specific person responsible for this function; however, only larger facilities, usually 50,000 square feet or more, will have a person designated full-time for this function. The BOC program is designed for building operators, building managers, maintenance staff and utility representatives. The following business sectors are targeted:

- Education
- Government
- Health Care
- Hospitality
- Municipal and County Government
- Property Management
- Retail

There is a two-tiered customer value proposition for the building owner, or facility manager, and the building operator.

Building Owner or Facility Manager	Building Operator
<ul style="list-style-type: none">▪ Lower energy expenditures potential in the 5-15% range	<ul style="list-style-type: none">▪ Receive recognition for industry expertise
<ul style="list-style-type: none">▪ Increase tenant satisfaction and retention rates by providing better comfort, air quality and safety	<ul style="list-style-type: none">▪ Potential additional compensation due to documented industry expertise

Marketing Tactics

KCP&L may utilize the methods described below to reach the targeted building owner, facility manager, or building operator:

- Promote the BOC program to specific customers through KCP&L Energy Consultants and Commercial Consultants.
- Utilize newsletter communications such as the commercial version of The Wire and the Customer Solutions monthly electronic newsletter called Energy Talk, which is emailed to approximately 750 contacts.
- Advertise in industry publications/newsletters.
- Promote Program on www.kcpl.com Home Page, within site and in AccountLink Advantage portal.
- Include information on customers' bills (bill message).
- Reach out to industry associations such as BOMI through their websites, electronic newsletters, speaking opportunities, and testimonials.

C. Program Delivery

In Missouri, the Department of Energy of the Missouri Department of Natural Resources (MDNR) operates BOC on behalf of MEEA. This is done with support from KCP&L, and other utilities, to offer the training in their respective Missouri service areas. MDNR Department of Energy is a non-regulatory state agency that works to protect the environment and stimulate the economy through energy efficiency and renewable energy resources and technologies.

In Kansas, MEEA operates the BOC program directly. The program is supported in Kansas by KCP&L, Westar, and Midwest Energy.

KCP&L customers may take the BOC program courses in Missouri or Kansas with the partnerships that are in place.

KCP&L will have an internal staff person manage the BOC program.

D. Partners

KCP&L will continue to use its existing partners in the BOC program. These include the following:

- NEEC provides support for the development of the BOC program. NEEC is a non-profit regional consortium of utilities, government, public interest groups and the private sector dedicated to transforming markets for energy efficient products and services.
- MEEA is the leading source and champion for advancing sound energy-efficiency policies, programs and priorities to stretch essential resources. MEEA balances the interests of its diverse members, creating a common ground to affect positive change. Through MEEA, utilities, local and state governments, non-profits, manufacturers, retailers, consultants and others work together toward a shared vision for energy efficiency in the Midwest.

- MDNR Department of Energy is a non-regulatory state agency that works to protect the environment and stimulate the economy through energy efficiency and renewable energy resources and technologies.

4. Program Budget (Five-Year)

Since the BOC program is an established program, KCP&L does not have any start-up costs. The expected budget for the BOC program over the five-year period is shown below.

	Program Delivery	Admin	Marketing	Customer Incentive	EM&V	Total
Year 1	\$17,500	\$0	\$1,300	\$5,750	\$0	\$24,550
Year 2	4,900	0	400	3,450	0	8,750
Year 3	1,400	0	300	2,300	950	4,950
Year 4	1,400	0	300	2,300	0	4,000
Year 5	1,400	0	300	2,300	950	4,950
Total	\$26,600	\$0	\$2,600	\$16,100	\$1,900	\$47,200

5. Program Beneficiaries

A. Expected number of participants by customer class or subclass

The expected number of participants over the five-year period is shown below.

	Kansas Commercial/Industrial Participants*
Year 1	10
Year 2	6
Year 3	4
Year 4	4
Year 5	4
Total	28
*Classes consist of customers from all KCP&L jurisdictions in Kansas, Missouri, and GMO.	

B. Other beneficiaries

No other beneficiaries have been observed.

6. Program Benefit-Cost Analysis

In Docket No. 08-GIMX-441-GIV, page 16, the Commission ordered "...the Commission finds that it will not subject education programs to benefit-cost analysis but will require utilities to provide extensive explanations of the programs and their attendant costs, evidence of usefulness in other jurisdictions, and any additional information the utility believes will support the implementation of an education program." Therefore, because Building Operator Certification is considered an education program, we have not included a program benefit-cost analysis.

7. Program Evaluation, Measurement and Verification Plan

Program evaluation, measurement and verification (EM&V) are key elements of demand-side management (DSM) programs. EM&V is used to document and measure the effects of a program and determine whether the program met its goal with respect to being a reliable energy resource. EM&V is also used to help understand why certain effects occurred and identify ways to improve current programs and to select future programs.

The two types of evaluation utilized by KCP&L are:

Process evaluation: Process evaluation assesses program delivery, from design to implementation, in order to identify bottlenecks, efficiencies, what did and did not work, constraints and potential improvements.

Evaluation plans are developed by KCP&L's evaluation contractor(s) and describe all necessary data collection, process evaluation tasks and impact evaluation tasks by program. Evaluation Plans include the following information:

- Study Methodology by Program;
- Data Collection Strategies;
- Data Requests by Program; and
- Detailed Work Plan and Schedule.

Impact evaluation: Impact evaluation determines the impacts (energy and demand savings) and co-benefits (avoided emissions, energy security, transmission/distribution benefits) that directly result from a program. Impact evaluations also support cost-effectiveness analyses aimed at identifying relative program costs and benefits.

Going forward, EM&V of the BOC program will be completed consistent with requirements established by the Commission in Docket No. 08-GIMX-442-GIV and Docket No. 10-GIMX-013-GIV (the "013 Docket"). Because the BOC program is an education program, only a process evaluation will be conducted. As shown in the five-year budget included in this Appendix A information, KCP&L expects that EM&V evaluation will be conducted on the BOC program in Years 3 and 5; however, given the Commission's Order in the 013 Docket, Staff and the Commission will ultimately determine the timing and cost of such EM&V evaluations.

8. Program Specific Tariff Schedule

Please see the tariff attached as Schedule MBT-5 to the direct testimony of KCP&L witness Mary Turner for KCP&L's Building Operator Certification Program, Schedule 8, also referred to as Schedule BOC.

Kansas City Power & Light Company

LOW INCOME WEATHERIZATION PROGRAM

The following information regarding KCP&L's Low Income Weatherization Program is provided in compliance with Appendix A of the Commission's November 14, 2008 Final Order issued in Docket No. 08-GIMX-441-GIE. This Program is set forth in KCP&L's proposed tariff Schedule 6, also referred to as Schedule LIW, provided with this filing.

1. Program Description

The Weatherization Assistance Program run by the U.S. Department of Energy (DOE) enables low income families to permanently reduce their energy bills by making their homes more energy efficient. It is the nation's core method for delivering energy efficiency services to low income households. Weatherization reduces dependency on energy and liberates these funds for spending on more pressing family needs. On average nationwide, weatherization reduces energy bills by 31 percent.

KCP&L's Low Income Weatherization program is built around the DOE Weatherization Assistance Program. To deliver its Low Income Weatherization program, KCP&L partners with Community Action Program (CAP) agencies to provide services under the Weatherization Assistance Program. Professionally trained weatherization crews perform on-site home energy audits using state-of-the-art equipment to identify outside drafts and inspect heating and cooling systems for efficiency. Typical weatherization services include: installing insulation, caulking windows, and conducting repairs to heating and central cooling systems.

A homeowner must meet the following requirements to qualify:

- Household income cannot exceed the income levels established by the DOE, which currently is 200% of Federal Poverty Income Guidelines.
- Owner of the home must have received electric service from KCP&L for a minimum of one year immediately preceding the date of application.
- Household energy consumption must be greater than 3,000 kWh per year.
- Applicant must have made attempts to maintain a payment history, no matter how small.

To qualify, a renter must meet the homeowner requirements plus:

- Must be fully responsible for the payment of electric bills.
- Landlord must agree under contract with the CAP agency to:

- Pay no less than 50% of the total cost of the weatherization measures; and
- Not raise the rent for at least two years from the date of completion of installation of the weatherization measures.

2. Program Goal

A. Expected energy and demand savings – time horizon

The expected annual, cumulative energy and demand savings for the Low Income Weatherization Program over the estimated life of the program is shown below.

	Program Energy Savings (kWh)	Program Demand Savings (kW)
Year 1	12,894	0.51
Year 2	25,531	1.00
Year 3	37,909	1.49
Year 4	50,030	1.96
Year 5	61,892	2.43
Year 6	60,603	2.38
Year 7	59,313	2.33
Year 8	58,024	2.28
Year 9	56,735	2.23
Year 10	55,445	2.18
Year 11	54,156	2.13
Year 12	42,809	1.68
Year 13	31,720	1.25
Year 14	20,889	0.82
Year 15	10,315	0.41

3. Program Framework/Strategy

A. Relationship to other programs

The Low Income Weatherization Program is offered to residential customers; therefore, the program has a relationship with KCP&L's other residential demand-side management (DSM) programs:

- Home Energy Analyzer; and
- Energy Optimizer.

Each program offers significant opportunity for cross-promotion of KCP&L's other residential DSM programs when appropriate.

B. Marketing strategy

KCP&L will seek to implement the following marketing strategy for the Low Income Weatherization Program.

- Promote Program on www.kcpl.com Home Page and within website.
- Allow for Program-specific bill messaging on KCP&L's Kansas residential bills.
- Improve awareness of the Program by providing community education externally, as well as to KCP&L's Call Center.
- Supply collateral materials to local CAP agencies. KCP&L will send updates on the Program to CAP outreach coordinators. As budget allows, supplement marketing dollars for CAP agencies since these agencies tend to have limited capabilities to create marketing collateral.
- As budget allows, consider contacting households that seek help in keeping their electric service connected since this segment would likely income qualify for the Program. Contact would be through a third party via direct marketing or telemarketing.

C. Program delivery

The Low Income Weatherization Program is administered by community-based partners (CAP agencies). The community-based partners are responsible for the application process of participants through the installment of weatherization measures. KCP&L supports the program through marketing, customer referrals and financial support.

The agency will educate the customer on how to apply for weatherization, determine if the customer qualifies for the services, and help the customer understand the entire weatherization process. The agency is also responsible for determining the work to be done at the customer's home and hiring the contractors to complete the services.

D. Partners

Specific community-based partners typically include:

- East Central Kansas Economic Opportunity Corporation;
- Johnson County Housing Services; and
- Southeast Kansas Community Action Program.

4. Program Budget (Five-Year)

Since the Program is an established program, KCP&L does not have any start-up costs. The expected budget for the Low Income Weatherization Program over the five-year period is shown below. Currently, average spending per home as defined by the Department of Energy is \$6,500.

	Start-up	Admin	Marketing	Customer Incentive	EM&V	Total
Year 1	\$0	\$0	\$ 2,468	\$ 39,000	\$ 0	\$ 41,468
Year 2	0	0	2,530	39,000	0	41,530
Year 3	0	0	2,593	39,000	6,296	47,889
Year 4	0	0	2,657	39,000	0	41,657
Year 5	0	0	2,872	39,000	6,296	48,168
Total	\$0	\$0	\$13,120	\$195,000	\$12,592	\$220,712

5. Program Beneficiaries

A. Expected number of participants by customer class or subclass

The number of low income residential Kansas customers (net-free) expected to participate over the five-year period is shown below.

	Kansas Residential Participants (Net Free)
Year 1	6
Year 2	6
Year 3	6
Year 4	6
Year 5	6
Total	30

B. Other beneficiaries

No other beneficiaries have been observed.

6. Program Cost Benefit Analysis

All five benefit-cost tests are shown below. The dollar values below are on a present value basis with the assumption that all future cash flows start at the beginning of each annual period, discounted at the appropriate discount rate.

Low Income Weatherization Program		
Test Name	Market Based Test Results	Cost Based Test Results
Utility Test	0.16	0.08
TRC Test	0.16	0.08
RIM Test	0.13	0.07
RIM (Net Fuel)	0.14	0.07
Participant Test	N/A	N/A
Societal Test 3% / \$10	0.18	0.10
Societal Test 3% / \$25	0.21	0.14
Societal Test 3% / \$40	0.25	0.17
Societal Test 7% / \$10	0.17	0.10
Societal Test 7% / \$25	0.20	0.12
Societal Test 7% / \$40	0.22	0.14

Assumptions	
Utility Discount Rate (%)	** [REDACTED] **
Participant Discount Rate (%)	10.00%
Electric Losses (%)	** [REDACTED] **
Societal Discount Rate1 (%)	3.00%
Societal Discount Rate2 (%)	7.00%

Avoided Costs	
Avoided T&D (\$ / kW)	** [REDACTED] **
Avoided Market-Based Ancillary Service Charges (OATT)	** [REDACTED] **
Cost-Based Proxy for Avoided Capacity (\$ / kW Annualized)	** [REDACTED] **
CO ₂ emissions (kG / kWh)	** [REDACTED] **

Cost Based Avoided Electric Production	** [REDACTED] **
Avoided T&D Electric, w OATT	** [REDACTED] **
Avoided Electric Capacity	** [REDACTED] **
Total Cost Based Avoided Costs	** [REDACTED] **

Market Based Avoided Electric Production Costs	** [REDACTED] **
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Program Costs	
Administration Costs	** [REDACTED] **
Implementation / Participation Costs	** [REDACTED] **
Customer Incentives	** [REDACTED] **
Other / Miscellaneous Costs	** [REDACTED] **
Total Program Cost	** [REDACTED] **

Participant Cost	** [REDACTED] **
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Environmental Benefits	@ 3% Discount Rate	@ 7% Discount Rate
\$10 per Ton	** [REDACTED] **	** [REDACTED] **
\$25 per Ton	** [REDACTED] **	** [REDACTED] **
\$40 per Ton	** [REDACTED] **	** [REDACTED] **

Other Environmental Benefits, NOx SOx	** [REDACTED] **
Lost Revenue	
Gross Lost Revenue, Electric	** [REDACTED] **
Net Fuel Lost Revenue, Electric	** [REDACTED] **

7. Program Evaluation, Measurement and Verification Plan

Program evaluation, measurement and verification (EM&V) are key elements of demand side management (DSM) programs. EM&V is used to document and measure the effects of a program and determine whether the program met its goal with respect to being a reliable energy resource. EM&V is also used to help understand why certain effects occurred and identify ways to improve current programs and to select future programs.

The two types of evaluation utilized by KCP&L are:

Process evaluation: Process evaluation assesses program delivery, from design to implementation, in order to identify bottlenecks, efficiencies, what did and did not work, constraints and potential improvements.

Evaluation plans are developed by KCP&L's evaluation contractor(s) and describe

all necessary data collection, process evaluation tasks and impact evaluation tasks by program. Evaluation Plans include the following information:

- Study Methodology by Program;
- Data Collection Strategies;
- Data Requests by Program; and
- Detailed Work Plan and Schedule.

Impact evaluation: Impact evaluation determines the impacts (energy and demand savings) and co-benefits (avoided emissions, energy security, transmission/distribution benefits) that directly result from a program. Impact evaluations also support cost-effectiveness analyses aimed at identifying relative program costs and benefits.

The Monitoring and Verification (M&V) process acts as a quality control and quality assurance process for the savings, tracking and accounting for the program.

Monitoring: This is the monitoring of installations when needed to determine or verify savings from a measure that is applied in a unique way, is significant in savings, or is new to the market. Working with the evaluation contractor, guidelines are developed to determine which projects should be monitored.

Verification: During the processing of an application for customer incentives (rebates), KCP&L reviews the equipment specifications by model number to determine if that measure qualifies. This “paper” verification occurs on all applications. Additionally, there are random field visits to assure the correct number and types of measures were installed at the customer’s facility.

Historically, KCP&L retained one or more EM&V contractors to perform process and impact evaluations for its programs in order to avoid conflicts of interest and to insure credibility of the evaluation results. EM&V was conducted by the implementation team with advice of the EM&V contractor.

Going forward, EM&V of the Low Income Weatherization program will be completed consistent with requirements established by the Commission in Docket No. 08-GIMX-442-GIV and Docket No. 10-GIMX-013-GIV (the “013 Docket”). As shown in the five-year budget included in this Appendix A information, KCP&L expects that EM&V evaluation will be conducted on the Low Income Weatherization program in Years 3 and 5; however, given the Commission’s Order in the 013 Docket, Staff and the Commission will ultimately determine the timing and cost of such EM&V evaluations.

8. Program Specific Tariff Schedule

Please see the tariff attached as Schedule MBT-1 to the direct testimony of KCP&L witness Mary Turner for KCP&L's Low Income Weatherization program, Schedule 6, also referred to as Schedule LIW.

**SCHEDULES JDJ-6 THROUGH JDJ-9
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