

**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 Extend its Demand-Side Management ) Docket No. 18-KCPE-124-TAR  
Programs )

**APPLICATION OF  
KANSAS CITY POWER & LIGHT COMPANY  
FOR APPROVAL TO EXTEND  
DEMAND-SIDE MANAGEMENT PROGRAMS**

COMES NOW Kansas City Power & Light Company (“KCP&L” or the “Company”), and hereby requests from the State Corporation Commission of the State of Kansas (“Commission” or “KCC”) approval to extend five of its Demand-Side Management (“DSM”) pilot programs for an additional five years and terminate one of its DSM programs. In furtherance of this Application, KCP&L states as follows:

**I. BACKGROUND**

1. KCP&L is a Missouri corporation and a vertically integrated electric public utility company under the jurisdiction of the Commission engaged in the production, transmission, delivery and furnishing of power within the meaning of K.S.A. 66-104, in legally designated areas of Kansas. KCP&L holds a certificate of convenience and authority issued by the Commission, authorizing KCP&L to engage in such utility business. KCP&L has previously filed with the Commission certified copies of its Articles of Incorporation under which it was organized, its Certificate of Registration as a Foreign Corporation authorized to do business in Kansas, and all amendments thereto and restatements thereof, and the same are incorporated herein by reference.

2. In Docket No. 16-KCPE-446-TAR the Commission approved continuation of KCP&L's current portfolio of six DSM pilot programs.<sup>1</sup> Those programs currently are set to expire on September 30, 2017. KCP&L will use the five-year extension to explore options for the future of its DSM program portfolio.

## II. PORTFOLIO OF DSM PROGRAMS FOR APPROVAL

3. With this Application KCP&L is requesting Commission approval to continue its five active pilot DSM programs for five additional years or until September 30, 2022, with some minor modifications as requested in this filing.<sup>2</sup> These programs were originally implemented as pilot programs under the Settlement Agreement in Docket No. 04-KCPE-1025-GIE ("1025 Docket").<sup>3</sup> The six programs comprising KCP&L's current DSM portfolio are as follows:

### **Portfolio of Existing Pilot DSM Programs:**

- |                                   |                             |
|-----------------------------------|-----------------------------|
| ▪ Low Income Weatherization       | Approved December 9, 2005   |
| ▪ Home Energy Analyzer            | Approved March 7, 2006      |
| ▪ Business Energy Analyzer        | Approved December 22, 2006  |
| ▪ Building Operator Certification | Approved May 15, 2007       |
| ▪ Programable Thermostat          | Approved January 10, 2006   |
| ▪ Demand Response Incentive Rider | Approved September 25, 2006 |

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<sup>1</sup> See *Order Amending Procedural Schedule*, 446 Docket, issued December 15, 2016.

<sup>2</sup> KCP&L has three additional DSM pilot programs which are currently frozen to new activity. See Commission Orders issued June 22 and July 13, 2011 in Docket Nos. 11-KCPE-690-TAR (Energy Star<sup>®</sup> New Homes), 11-KCPE-694-TAR (Energy Audit and Energy Saving Measures), and 11-KCPE-695-TAR (Cool Homes).

<sup>3</sup> See Joint Motion to Approve Stipulation and Agreement, Appendices B and B-1, filed April 27, 2005, in the 1025 Docket and *Order Approving Stipulation and Agreement*, issued August 5, 2005, also in the 1025 Docket.

4. Of the above programs, Home Energy Analyzer, Business Energy Analyzer, and Building Operator Certification are classified by KCP&L as Educational Programs, consistent with the guidelines set out by the Commission in Docket No. 08-GIMX-442-GIV.<sup>4</sup>

5. This Application identifies proposed tariff language changes for the Building Operator Certification program and provides the information required to be filed with program applications as defined in Appendix A of the Commission’s November 14, 2008 Order in Docket No. 08-GIMX-441-GIV, including new five-year budgets for the programs.<sup>5</sup>

Attachment 1 – Income-Eligible Weatherization - Appendix A Information

Attachment 2 – Home and Business Energy Analyzers - Appendix A Information

Attachment 3 – Building Operator Certification - Tariff and Appendix A Information

Attachment 4 – Programmable Thermostat - Appendix A Information

6. The proposed budgets for the five programs are summarized in the schedule below:

KCP&L DSM Program Portfolio Proposed 5-Year Budget							
Program	2017	2018	2019	2020	2021	2022	Total
Low Income Weatherization	\$ 10,750	\$ 43,000	\$ 44,200	\$ 56,744	\$ 46,709	\$ 36,065	\$ 237,468
Home/Business Energy Analyzer	\$ 23,750	\$ 95,000	\$ 97,400	\$ 124,733	\$ 102,418	\$ 78,781	\$ 522,082
Building Operator Certification	\$ 4,833	\$ 20,433	\$ 20,433	\$ 25,536	\$ 20,433	\$ 15,503	\$ 107,169
Programmable Thermostat	\$ 56,250	\$ 240,000	\$ 246,750	\$ 316,827	\$ 260,864	\$ 204,930	\$ 1,325,620
<b>Total</b>	<b>\$ 95,583</b>	<b>\$ 398,433</b>	<b>\$ 408,783</b>	<b>\$ 523,840</b>	<b>\$ 430,423</b>	<b>\$ 335,278</b>	<b>\$ 2,192,340</b>

(1) 2017 budget is shown for 10/1/2017-12/31/2017. 2022 budget is shown for 1/1/2022-9/30/2022.  
(2) All budgets include EM&V costs of 5%. EM&V is proposed to be completed in 2020.

<sup>4</sup> See Order Following Collaborative on Benefit-Cost Testing and Evaluation, Measurement, and Verification, at ¶¶ 29-32, issued April 13, 2009.

<sup>5</sup> See Final Order in 441 Docket (also known as “441 Order”), ¶ 34, p.12, Ordering ¶ E, p. 38 and Appendix A, pp. 40-41.

### **III. COST RECOVERY/INCENTIVE MECHANISM**

7. KCP&L is not requesting any changes to its EE Rider mechanism at this time. Should the Commission approve this Application for KCP&L to continue to offer the five programs herein as filed, it is KCP&L's intent to continue to recover the costs of those programs through its EE Rider mechanism.

### **IV. TARIFF AND CONTACT INFORMATION**

8. **Proposed Tariffs.** The proposed program tariffs for approval are attached to this Application. Redlined copies of these tariffs showing any changes to the currently approved tariffs for these programs are also attached. Appendix A information, including benefit/cost analysis where applicable, for each of the DSM programs KCP&L is requesting approval for as part of its portfolio is attached to this Application as well. (See Attachments 1 through 4.)

9. The changes to the program tariffs are minor in nature.
- a. KCP&L is seeking to increase the amount of reimbursement in the Building Operator Certification program due to increases in the cost of attending certification programs.
  - b. Since there are no customers using the Demand Response Incentive Rider and the Company has no plans to offer it in the near future, the Company is requesting that the program be terminated.

10. **Contact Information.** In addition to signatory counsel, communications and correspondence in regard to this Application should be addressed to:

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## V. MISCELLANEOUS

11. **Schedule Requirements.** As previously noted, KCP&L's existing programs will expire on September 30, 2017 if some action is not taken by the Commission in this docket prior to that time. In light of these timing issues, KCP&L, Staff and CURB have filed a Joint Motion concurrently with the filing of this Application requesting the Commission issue an Order (1) allowing continuation of the five DSM pilot programs until such further Order of the Commission, and (2) approving the use of unspent budget to allow continuation of the subject DSM pilot programs until such time as the Commission reaches a final decision on this Application.

WHEREFORE, KCP&L respectfully requests that the Commission approve the tariffs for the portfolio of DSM programs proposed in this Application and grant the Joint Motion of KCP&L, Staff and CURB filed concurrently with this application.

Respectfully submitted,

*/s/ Roger W. Steiner*

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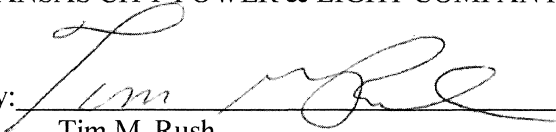
**ATTORNEYS FOR  
KANSAS CITY POWER & LIGHT COMPANY**

VERIFICATION

STATE OF MISSOURI     )  
                                  ) ss.  
COUNTY OF JACKSON    )

I, Tim M. Rush, being duly sworn, on oath state that I am Director – Regulatory Affairs of Kansas City Power & Light Company, that I have read the foregoing Application and know the contents thereof, and that the facts set forth therein are true and correct to the best of my knowledge and belief.

KANSAS CITY POWER & LIGHT COMPANY

By:   
Tim M. Rush

The foregoing Application was subscribed and sworn to before me this September 11<sup>th</sup>, 2017.

  
Notary Public

My Commission Expires:

4/26/2021



## **Kansas City Power & Light Company**

### **INCOME-ELIGIBLE WEATHERIZATION PROGRAM**

The following information regarding KCP&L's Income-Eligible Weatherization Program (Schedule IEW) 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 was originally approved by the Commission in December 2005. This program is set forth in KCP&L's proposed tariff Schedule 6, also referred to as Schedule IEW, provided with this filing.

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

The Weatherization Assistance Program (WAP) 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 under the WAP reduces a home's energy bills by \$413 annually, depending upon fuel prices.

KCP&L's Income-Eligible Weatherization program is built around the DOE Weatherization Assistance Program. To deliver its Income-Eligible Weatherization program, KCP&L partners with Kansas Housing Resources Corporation (KHRC) 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 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 Income-Eligible Weatherization Program over the estimated useful life of the measure are shown below.

	<b>Program Energy Savings (kWh)</b>	<b>Program Demand Savings (kW)</b>
<b>2017</b>	3,180	0
<b>2018</b>	17,180	10.00
<b>2019</b>	31,180	20.00
<b>2020</b>	45,180	30.00
<b>2021</b>	59,180	40.00
<b>2022</b>	70,000	50.00
<b>2023</b>	70,000	50.00
<b>2024</b>	70,000	50.00
<b>2025</b>	70,000	50.00
<b>2026</b>	70,000	50.00
<b>2027</b>	66,820	50.00
<b>2028</b>	52,820	40.00
<b>2029</b>	38,820	30.00
<b>2030</b>	24,820	20.00
<b>2031</b>	10,820	10.00

## 3. Program Framework/Strategy

### A. **Relationship to other programs**

The Income-Eligible 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
- Programmable Thermostat Program.

Each program offers opportunity for cross-promotion of these residential DSM

programs when appropriate.

## **B. Marketing Strategy**

KCP&L will seek to implement the following marketing strategy for its Income-Eligible 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.

## **C. Program delivery**

The Income-Eligible Weatherization Program is administered by the KHRC. KHRC is responsible for working with the community based partners (CAP agencies), who assist participants through the application process for the installation of weatherization measures.

The CAP agencies 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 agencies are also responsible for determining the work to be done at the customer's home and hiring the contractors to complete the services.

## **D. Partners**

KCP&L will contract with KHRC to deliver the program; however other specific Kansas community-based partners include:

- East Central Kansas Economic Opportunity Corporation;
- Community Action, Inc.; and
- Southeast Central Kansas Economic Development District.

## **4. Program Budget (Five-Year)**

Because the Program is an established program, KCP&L does not have any start-up costs. As required, the expected budget for the Income-Eligible Weatherization Program over the five-year period 2017 to 2022 is shown below. The budget amount for 2017 is shown for October through December given that programs are subject to Commission renewal on September 30, 2017. Budget for 2018 is shown for January 1 through September 30, 2022.

	Program Delivery	Admin	Marketing	Customer Incentive	EM&V	TOTAL
2017	\$0	\$0	\$ 750	\$ 10,000	\$ 0	\$ 10,750
2018	0	0	3,000	40,000	0	43,000
2019	0	0	3,000	41,200	0	44,200
2020	0	0	3,000	42,436	11,308	56,744
2021	0	0	3,000	43,709	0	46,709
2022	0	0	2,300	33,765	0	36,065
<b>TOTAL</b>	<b>\$0</b>	<b>\$0</b>	<b>\$15,050</b>	<b>\$211,110</b>	<b>\$11,308</b>	<b>\$237,468</b>

## 5. Program Beneficiaries

### A. Expected number of participants by customer class or subclass

The number of income-eligible residential Kansas customers (net-free) expected to participate over the five-year period 2017 to 2022 is shown below.

	Kansas Residential Participants (Net Free)
2017	2
2018	6
2019	6
2020	6
2021	6
2022	5
<b>TOTAL</b>	<b>31</b>

### 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.

<b>Income-Eligible Weatherization Program</b>		
<b>Test Name</b>	<b>Market Based Test Results</b>	<b>Cost Based Test Results</b>
Utility Test	0.38	0.36
TRC Test	0.38	0.36
RIM Test	0.30	0.29
RIM (Net Fuel)	0.32	0.30
Participant Test	N/A	N/A
Societal Test	0.37	0.34

<b>Assumptions</b>	
Utility Discount Rate (%)	** [REDACTED] **
Participant Discount Rate (%)	10.00%
Electric Losses (%)	** [REDACTED] **
Societal Discount Rate (%)	3.00%

<b>Avoided Costs</b>	
Avoided T&D (\$ / kW)	** [REDACTED] **
Avoided Market-Based Ancillary Service Charges (OATT)	** [REDACTED] **
Year 1 Cost-Based Proxy for Avoided Capacity (\$ / kW Annualized)	** [REDACTED] ** 1

Cost Based Avoided Electric Production	** [REDACTED] **
Avoided T&D Electric	** [REDACTED] **
Avoided Electric Capacity	** [REDACTED] **
<b>Total Cost Based Avoided Costs</b>	** [REDACTED] **

<b>Market Based Avoided Electric Production Costs</b>	** [REDACTED] **
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<b>Program Costs</b>	
Administration / Marketing Costs	\$ 15,050

<sup>1</sup> The Avoided Capacity Cost is based on KCP&L's 2015 IRP amount of \$116.33 adjusted for an annual inflation rate of 2.5%.

Income-Eligible Weatherization Program

**CONFIDENTIAL**

Implementation / Participation Costs	\$0
Customer Incentives	\$ 211,110
EM&V Costs	\$ 11,308
<b>Total Program Cost</b>	<b>\$237,468</b>

<b>Participant Cost</b>	** [REDACTED] **
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<b>Lost Revenue</b>	
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 DSM programs. EM&V is used to document and measure the effects of a program and to 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 to identify ways to improve current programs and to select future programs.

EM&V of the Income-Eligible 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 Income-Eligible Weatherization program in 2020; 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.

The two types of evaluation 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 are developed by the 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.



## **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 by the Commission in March 2006 and December 2006 respectively 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.

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 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.

#### C. Program Delivery

The two Analyzer programs are managed by a KCP&L staff member and involve the coordination of a vendor for delivery of the online tools. Currently, the Home and Business Energy Analyzers require a single vendor (OPower) to maintain, deliver, and support the online assessment tools.

### 4. Program Budget (Five-Year)

Because the Programs are established programs, KCP&L does not have any start-up costs for the budget period. As required, the expected budgets for the Home and Business Energy Analyzers, respectively, over the five-year period 2017 to 2022 are shown below. The budget amount for 2017 is shown for October through December given that programs are subject to Commission renewal on September 30, 2017. Budget for 2018 is shown for January 1 through September 30, 2022.

Home and Business Energy Analyzers						
	Program Delivery	Admin	Marketing	Customer Incentive	EM&V	TOTAL
2017	\$20,000	\$0	\$3,750	\$0	\$0	\$23,750
2018	80,000	0	15,000	0	0	95,000
2019	82,400	0	15,000	0	0	97,400
2020	84,872	0	15,000	0	24,861	124,733
2021	87,418	0	15,000	0	0	102,418
2022	67,531	0	11,250	0	0	78,781
<b>TOTAL</b>	<b>\$422,221</b>	<b>\$0</b>	<b>\$75,000</b>	<b>\$0</b>	<b>\$24,861</b>	<b>\$522,082</b>



## 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 2017 to 2022 are shown below for the Home and Business Energy Analyzers, respectively.

	<b>Kansas Residential Participants</b>	<b>Kansas Commercial Participants</b>
<b>2017</b>	1,250	25
<b>2018</b>	5,000	100
<b>2019</b>	5,000	100
<b>2020</b>	5,000	100
<b>2021</b>	5,000	100
<b>2022</b>	3,750	75
<b>TOTAL</b>	<b>25,000</b>	<b>500</b>

### 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, no benefit-cost analysis is included.

## 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 to 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 to identify ways to improve current programs and to select future programs.

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 EM&V evaluation will be conducted in 2020; 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.

The two types of evaluation 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 are developed by the 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.

## **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. Commission approval for this program was first granted in May 2007 in Docket No. 06-KCPE-683-MIS. 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 20,000 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 also 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 are 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 8 and 12 students.

To encourage participation in the program KCP&L offers participants a rebate for a portion of their tuition cost, or 50 percent. Each student in the class that is associated with a commercial property receiving electrical service from KCP&L and successfully completes the certification process is eligible for the rebate.

Below is a description of the current BOC courses.

### **Level I Course Descriptions**

#### **BOC 1001 – Energy Efficient Operation of Building HVAC Systems (1 Day-Core)**

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 1002 – Measuring & Benchmarking Energy Performance (1 Day-Core)**

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 1003 – Efficient Lighting Fundamentals (1 Day-Core)**

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

Project: Lighting Survey for Facility

#### **BOC 1004 – HVAC Controls Fundamentals (1 Day-Core)**

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

#### **BOC1005 – Indoor Environmental Quality (1 Day-Core)**

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

#### **BOC 1006 – Common Opportunities for Low Cost Operational Improvement (1 Day-Core)**

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

### **Supplemental Courses: One offered per course series**

#### **BOC 1007 – Facility Electrical Systems (1 Day)**

Introduces basic electrical theory, safety procedures, power distribution, and energy conservation to develop a practical understanding of electricity and its use in commercial facilities. Also covers basic troubleshooting in order to effectively work with licensed staff and/or contractors with ongoing electrical problems and maintenance support.

*BOC 1008 – Operation & Maintenance Practices for Sustainable Buildings (1 Day)*

Covers O&M best practices for green or high performance buildings including exterior site issues, water efficiency, cleaning products, material and supply purchasing, energy, and indoor environmental quality to improve the performance of both existing buildings and newly-designed green buildings.

*BOC 1009 – Building Scoping for Operational Improvement (1 Day)*

Focuses on creating a prioritized scope of work for finding opportunities for energy saving operational adjustments.

Project: E-learning module and collection and analysis of data from their facility.

*BOC 1010 – Energy Efficient Ventilation Strategies and High Performance Heating and Cooling Equipment (1 Day)*

Covers the theory, design, and operational practices for displacement ventilation strategies, under-floor air distribution systems, and naturally ventilated and mixed mode strategies in buildings, including new HVAC equipment technologies being installed in high performance buildings. Includes the financial, energy, operations, maintenance and indoor environmental quality considerations related to high performance HVAC equipment.

*BOC 1011 – Energy Efficient Ventilation Strategies and Energy Savings through Energy Recovery (1 Day)*

Covers the theory, design, and operational practices for displacement ventilation strategies, under-floor air distribution systems, naturally ventilated and mixed mode strategies in buildings, and energy recovery from air and water source systems. Includes methods for capturing heating and cooling energy before it is vented or wasted, and related technologies currently available in the market.

*BOC 1012 – High Performance Heating and Cooling Equipment and Energy Savings through Energy Recovery (1 Day)*

Focuses on new HVAC equipment technologies being installed in high performance buildings. The course covers the financial, energy, operations, maintenance and indoor environmental quality considerations related to high performance HVAC equipment. Covers methods for capturing heating and cooling energy from air and water source systems before it is vented or wasted, and about related technologies currently available in the market.

**Level II Course Descriptions**

*BOC 201 – Preventive Maintenance & Troubleshooting Principles (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 Systems 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 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 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-demand-side management programs that are designed for the commercial customer segment. Those programs include AccountLink, AccountLink Advantage and ApartmentLink.

### B. Marketing Strategy

The target market for Building Operator Certification 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.

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

### 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.
- Utilize newsletter communications such as the commercial version of The Wire and the Customer Solutions monthly electronic newsletter called Energy Talk.
- Advertise in industry publications/newsletters.
- Promote Program on [www.kcpl.com](http://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 Economic Development (MoDED) 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.

Due to the small number of KCP&L Kansas participants, KCP&L does not offer the program separately in Kansas but provides for KCP&L Kansas customers to take the BOC program courses through its Missouri partnership.

### **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.
- MoDED, Division of Energy is a non-regulatory state agency that assists, educates, and encourages Missourians to advance the efficient use of diverse energy resources to provide for a healthier environment and to achieve greater energy security for future generations.



**4. Program Budget (Five-Year)**

Since the BOC program is an established program, KCP&L does not have any start-up costs for the budget period. As required, the expected budget for the BOC program over the five-year period 2017 to 2022 is shown below. The budget amount for 2017 is shown for October through December given that programs are subject to Commission renewal on September 30, 2017. Budget for 2018 is shown for January 1 through September 30, 2022.

	<b>Program Delivery</b>	<b>Admin</b>	<b>Marketing</b>	<b>Customer Incentive</b>	<b>EM&amp;V</b>	<b>TOTAL</b>
<b>2017</b>	\$2,850	\$0	\$500	\$ 1,483	\$0	\$ 4,833
<b>2018</b>	\$12,500	0	2,000	5,933	0	20,433
<b>2019</b>	\$12,500	0	2,000	5,933	0	20,433
<b>2020</b>	\$12,500	0	2,000	5,933	5,103	25,536
<b>2021</b>	\$12,500	0	2,000	5,933	0	20,433
<b>2022</b>	\$9,375	0	1,545	4,583	0	15,503
<b>TOTAL</b>	<b>\$62,225</b>	<b>\$0</b>	<b>\$10,045</b>	<b>\$29,796</b>	<b>\$5,103</b>	<b>\$107,169</b>

**5. Program Beneficiaries**

**A. Expected number of participants by customer class or subclass**

The expected average number of participants per year over the five-year period 2017 to 2022 is shown below.

	<b>Kansas Commercial/Industrial Participants*</b>
<b>2017</b>	2
<b>2018</b>	7
<b>2019</b>	7
<b>2020</b>	7
<b>2021</b>	7
<b>2022</b>	5
<b>Total</b>	<b>35</b>
*Classes may 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 KCP&L’s Building Operator Certification program is considered an education program, no benefit-cost analysis is included.

## **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 to 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 to identify ways to improve current programs and to select future programs.

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 a third party vendor EM&V evaluation will be conducted on the BOC program in 2020; 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.

The two types of evaluation 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 are developed by the 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.

## **8. Program Specific Tariff Schedule**

Please see the tariff included as part of this Attachment 3 for KCP&L's Building Operator Certification Program, Schedule 8, also referred to as Schedule BOC.

**KANSAS CITY POWER & LIGHT COMPANY**

(Name of Issuing Utility)

Replacing Schedule 8 Sheet 1

Rate Areas No. 2 & 4

(Territory to which schedule is applicable)

which was filed May 27, 2011

No supplement or separate understanding shall modify the tariff as shown hereon. Sheet 1 of 1 Sheets

**BUILDING OPERATOR CERTIFICATION PROGRAM  
Schedule BOC**

**PURPOSE:**

This voluntary Program is designed to establish and encourage Building Operator Certification through the Northwest Energy Efficiency Council's Building Operator Certification Level I and Level II curriculums to encourage energy efficient operation of buildings. In support of a partnership with the Midwest Energy Efficiency Alliance (MEEA), the Company will:

- Reimburse the annual cost to license the Level I and Level II curriculums for the Company's Kansas service territory.
- Reimburse portions of the tuition costs for Building Operators associated with properties in the Company's service area who successfully complete the certifications.

**AVAILABILITY:**

The certification courses funded by this Program will be available through MEEA for any building operators, managers and consultants employed by or associated with a company having at least one Kansas commercial property receiving electrical service from the Company.

Reimbursements for the successful completion of the certifications are available to any participant associated with at least one Kansas commercial property receiving electrical service from the Company.

The Company reserves the right to modify or terminate the program at any time, subject to Commission approval.

**PROGRAM ADMINISTRATION:**

The Program will be administered by MEEA. The Company will utilize an internal program manager to conduct its internal oversight of the program.

**PROGRAM FUNDING:**

The Company will provide for incentive payments, marketing costs, evaluation cost, and Program administrative and delivery costs. This Program and its costs shall be eligible for recovery under the Company's Energy Efficiency Rider, Schedule EE, subject to the provisions thereof.

KCP&L will reimburse MEEA for the amount paid annually to license the Level I and Level II curriculums for the KCP&L area.

Tuition reimbursements ~~of \$575~~ of 50 percent per certification level will be paid to the entity paying the tuition. To receive the reimbursement, qualified participants must complete a reimbursement request and submit it to the Company. The reimbursement form is available by contacting the Company directly.

**EVALUATION:**

Evaluation, measurement and verification of the 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.

Issued: <u>July 18, 2013</u> <small>Month Day Year</small>	
Effective: <u>October 23, 2014</u> <small>Month Day Year</small>	
By: <u>Darrin R. Ives</u> <u>Sr. Director</u> <small>Title</small>	

## Kansas City Power & Light Company

### PROGRAMMABLE THERMOSTAT PROGRAM

The following information regarding KCP&L's Residential, Small and Medium General Service Air Conditioner Cycling Rider Programmable Thermostat Program (Schedule PT) 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 was first approved by the Commission in January 2006 in Docket No. 06-KCPE-315-TAR. This program is set forth in KCP&L's proposed tariff Schedule 7, also referred to as Schedule PT, provided with this filing.

#### 1. Program Description

KCP&L's Residential, Small and Medium General Service Programmable Thermostat Program addresses the opportunity 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 Programmable Thermostat 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 Programmable Thermostat 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 August 1, 2017, the program had participants in Kansas, providing MW of load reduction. Historically, based upon evaluation, measurement and verification (EM&V) studies of KCP&L's Energy Programmable Thermostat Program, savings achieved have equated to approximately 1 kW of load reduction per residential unit.

## **3. Program Framework/Strategy**

### **A. Relationship to other programs**

The Programmable Thermostat Program has significant 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**

Through the proposed time period, KCP&L will only initiate marketing efforts to inform current customers of the impending curtailment season. KCP&L will not seek to obtain new customers in the Programmable Thermostat Program.

### **C. Program Delivery**

This Programmable Thermostat Program is on maintenance mode; therefore, no new paging thermostats are being installed. Rather, KCP&L is either removing thermostats where there is a reported issue or replacing broken thermostats with a standard non-paging thermostat. An implementer is performing this function and also supplies the call center, appointment setting, installation and service.

### **D. Partners**

An external implementer (CLEAResult) is currently the primary partner for the Programmable Thermostat Program, providing the call center, appointment setting, installation and service.

## **4. Program Budget (Five-Year)**

As required, the expected budget for the Programmable Thermostat Program over the five-year period 2017 to 2022 is shown below. The budget amount for 2017 is shown for October through December given that programs are subject to

Commission renewal on September 30, 2017. Budget for 2018 is shown for January 1 through September 30, 2022.

	<b>Program Delivery</b>	<b>Admin</b>	<b>Marketing</b>	<b>Customer Incentive</b>	<b>EM&amp;V</b>	<b>TOTAL</b>
<b>2017</b>	\$56,250	\$0	\$ 0	\$0	\$ 0	\$56,250
<b>2018</b>	225,000	0	15,000	0	0	240,000
<b>2019</b>	231,750	0	15,000	0	0	246,750
<b>2020</b>	238,703	0	15,000	0	63,125	316,827
<b>2021</b>	245,864	0	15,000	0	0	260,864
<b>2022</b>	189,930	0	15,000	0	0	204,930
<b>TOTAL</b>	<b>\$1,187,496</b>	<b>\$0</b>	<b>\$75,000</b>	<b>\$0</b>	<b>\$63,125</b>	<b>\$1,325,620</b>

## 5. Program Beneficiaries

### A. Number of participants by customer class

KCP&L currently has approximately 19,740 customers enrolled in the Programmable Thermostat program. KCP&L expects that there will be slight degradation of participation and in turn, load reduction, over the next five years due to thermostats that are exchanged due to repair or upgrade.

### B. Other beneficiaries

Demand response programs such as the Programmable Thermostat 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 Programmable Thermostat 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. For Benefit-Cost Analysis purposes, KCP&L assumed a 10% degradation in the number of active thermostats per year.



<b>Programmable Thermostat Program</b>	
<b>Test Name</b>	<b>Test Results</b>
Utility Test	8.58
TRC Test	8.58
RIM Test	8.58
RIM (Net Fuel)	8.58
Participant Test	N/A
Societal Test	7.30

<b>Assumptions</b>	<b>No kWh energy savings, only kW demand reduction</b>
Utility Discount Rate (%)	** [REDACTED] **
Participant Discount Rate (%)	10.00%
Electric Losses (%)	** [REDACTED] **
Societal Discount Rate (%)	3.00%

<b>Avoided Costs</b>	
Avoided T&D (\$ / kW)	** [REDACTED] **
Avoided Market-Based Ancillary Service Charges (OATT)	** [REDACTED] **
Cost-Based Proxy for Avoided Capacity (\$ / kW Annualized)	** [REDACTED] ** <sup>1</sup>

Cost Based Avoided Electric Production	** [REDACTED] **
Avoided T&D Electric	** [REDACTED] **
Avoided Electric Capacity	** [REDACTED] **
<b>Total Cost Based Avoided Costs</b>	** [REDACTED] **

<b>Market Based Avoided Electric Production Costs</b>	** [REDACTED] **
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<sup>1</sup> The Avoided Capacity Cost is based on the 2015 IRP amount of \$116.33 adjusted for an annual inflation rate of 2.5%.



<b>Program Costs</b>	
Administration Costs	\$ 0
Implementation / Participation Costs	\$ 1,187,496
Marketing Costs	\$75,000
<u>EM&amp;V Costs</u>	\$63,125
<b>Total Program Cost</b>	<b>\$1,325,620</b>

<b>Participant Cost</b>	** [REDACTED] **
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<b>Lost Revenue</b>	
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 DSM programs. EM&V is used to document and measure the effects of a program and to 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 to identify ways to improve current programs and to select future programs.

EM&V of the Programmable Thermostat 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 Income-Eligible Weatherization program in 2020; 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.

The two types of evaluation 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 are developed by the 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.

# Kansas City Power & Light Company

Docket No.: 18-KCPE\_\_\_\_-TAR

Date: September 11, 2017

## **CONFIDENTIAL INFORMATION**

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The following information is provided to the Kansas Corporation Commission under CONFIDENTIAL SEAL:

<b>Application of Kansas City Power &amp; Light Company for Approval to Extend Demand-Side Management Programs</b>	
<b>Document: Page</b>	<b>Reason for Confidentiality from List Below</b>
Attachment 1: Pages 5 and 6	5, 6, and 7
Attachment 4: Pages 4 and 5	5, 6, and 7

Rationale for the “confidential” designation is documented below:

- “1” Material or documents that contain information relating directly to specific customers, which the Company is obligated to keep private, which failure to do so could open the Company up to damages.
- “2” Employee-sensitive information which the Company is obligated to keep private, which failure to do so could open the Company up to damages.
- “3” Marketing analyses or other market-specific information relating to services offered in competition with others that is contractually obligated to be kept confidential.
- “4” Rreports, work papers or other documentation related to work produced by internal or external auditors or consultants falling under the attorney/client communication or work product privilege or information prepared in anticipation of hearing or other administrative proceedings.
- “5” Strategies employed, to be employed, or under consideration, the disclosure of which would harm the Company competitively, or that could be used by existing or future vendors to the disadvantage and prevent the Company from protecting such information as allowed under Kansas law.
- “6” Contract negotiations, which could be used by existing or future vendors to the disadvantage of the Company, and/or is contractually obligated to be kept private, which failure to do so could open the Company up to damages.
- “7” Information concerning trade secrets, as well as private technical, financial, and business information which could be used by existing or future vendors to the disadvantage of the Company

Should any party challenge Company's assertion of confidentiality with respect to the above information, Company reserves the right to supplement the rationale contained herein with additional factual or legal information.