# BEFORE THE STATE CORPORATION COMMISSION OF THE STATE OF KANSAS

### **DIRECT TESTIMONY OF**

### **ALLEN D. DENNIS**

# ON BEHALF OF KANSAS CITY POWER & LIGHT COMPANY

# IN THE MATTER OF THE APPLICATION OF KANSAS CITY POWER & LIGHT COMPANY TO MODIFY ITS TARIFFS TO CONTINUE THE IMPLEMENTATION OF ITS REGULATORY PLAN

### DOCKET NO. 09-KCPE-\_\_\_-RTS

- 1 Q: Please state your name and business address.
- 2 A: My name is Allen D. Dennis. My business address is 1201 Walnut, Kansas City,
- 3 Missouri 64106-2124.
- 4 Q: By whom and in what capacity are you employed?
- 5 A: I am employed by Kansas City Power & Light Company ("KCP&L") as Director,
- 6 Products and Services.
- 7 Q: What are your responsibilities?

8 A: My responsibilities include providing leadership and direction to the Energy Efficiency,

9 Demand Response, Market Competitiveness and Market Intelligence Teams. My duties

- 10 include initiating and bringing to market new products, as well as improvements and
- 11 innovations to existing affordability, energy efficiency, and demand response programs
- 12 products and services.
- 13 Q: Please describe your education, experience and employment history.

1	A:	I graduated from Colorado State University with a Bachelor of Science degree in
2		Mechanical Engineering in 1981. I have 25 years of experience in the electric and natural
3		gas industry. I was first employed at KCP&L in 2004 as the Manager, Market
4		Management. In this capacity, I manage KCP&L's Energy Consultants, and Commercial
5		and Residential Sales functions. Prior to my employment at KCP&L, I served as a
6		Director in the Enterprise Consulting Division for Black & Veatch and was responsible
7		for the energy practice and consulting with clients on integrated resource plans, risk
8		management and operational improvements. Additionally, I was Executive Vice
9		President and co-founder of Enserco Energy, an energy trading, marketing, and services
10		company, and co-founder and board member of Hometown Connections, a company
11		focused on offering products and services to public power utilities. Prior to Enserco
12		Energy, I served as Director, Power Marketing for KN Energy, where I formed the
13		electric trading and marketing area. I began my utility career at Public Service Company
14		of Colorado and, over the course of 14 years, held various positions including marketing
15		engineer, marketing project specialist, manager of electric wholesale and cogeneration
16		markets, and manager of bulk power business development.
17	Q:	Have you previously testified in a proceeding at the Kansas Corporation
18		Commission ("KCC") or before any other utility regulatory agency?
19	A:	No, I have not.
20	Q:	What is the purpose of your testimony?
21	A:	The purpose of my testimony is to provide a progress report on the development and
22		implementation of KCP&L's Affordability, Energy Efficiency, and Demand Response
23		programs. For these programs, I will provide an update explaining what steps KCP&L

1		has taken thus far with respect to these initiatives, including program participation and
2		expenditures through December 31, 2007 and program updates through June 30, 2008, as
3		well as developments in the implementation of our credit card payment program.
4	Q:	What did the Regulatory Plan Stipulation and Agreement in Docket No. 04 -KCPE-
5		1025-GIE ("Regulatory Plan Stipulation") provide concerning KCP&L's
6		Affordability, Energy Efficiency and Demand Response programs?
7	A:	The filed and effective date of each program tariff and its associated approved budget is
8		outlined in Schedule ADD-1 of this testimony.
9	Q:	What were those programs?
10	A:	There were two proposed Affordability programs, five proposed Energy Efficiency
11		programs, two proposed Demand Response programs, and one proposed additional
12		funding area. Specifically, the proposed programs are as follows:
13		Affordability
14		• Affordable New Homes (New Construction); and
15		• Low-Income Weatherization.
16		Energy Efficiency
17		Residential:
18		• Online Energy Information (Home Energy Analyzer); and
19		• Cool Homes Program (High Efficiency Cooling Rebates).
20		Commercial/Industrial ("C&I"):
21		• Online Energy Information and Analysis (Business Energy Analyzer);
22		• Energy Audit and Energy Saving Measures Rider; and
23		• Building Operator Certification (Training).

1		Demand Response:
2		• Residential, Small and Medium General Service Air Conditioner Cycling Rider
3		Energy Optimizer Program (Energy Optimizer); and
4		• The Alliance, an Energy Partnership (C&I Curtailment - MPower).
5		The funding area is for Demand-Side Management ("DSM") research.
6	Q:	Could you please describe the programs and provide an update as to the status of
7		their implementation?
8	A:	Yes, the following is a program-by-program description, including the status of each
9		program.
10		Affordable New Homes (New Construction):
11		The Affordable New Homes program is designed to be a partnership between KCP&L
12		and organizations to achieve qualifying energy efficient affordable new housing for the
13		low-income community. Financial incentives are available up to \$800 for the
14		incremental cost for high efficiency cooling systems, either central air conditioners or
15		heat pumps. An incentive of up to \$200 is available toward the purchase of an ENERGY
16		STAR <sup>®</sup> rated refrigerator, up to \$100 for the purchase of ENERGY STAR <sup>®</sup> rated lighting
17		fixtures and up to \$400 for additional attic, floor or crawlspace insulation.
18		The tariff for this program became effective July 23, 2007. There has been no
19		participation to date in the Affordable New Homes program and 17% of the budget was
20		spent through year-end 2007. Due to lack of interest in this program, KCP&L is
21		considering modifications. KCP&L continues to seek feedback from Community Action
22		Program ("CAP") agencies regarding the program.

#### **Low-Income Weatherization Program:**

2 Qualified lower income customers can receive assistance managing their energy use and 3 bills through KCP&L's Low-Income Weatherization program. The program works 4 directly with local CAP agencies that already provide weatherization services to low-5 income customers. KCP&L will provide supplemental funds to the CAPs to cover the 6 cost of additional cost-effective weatherization measures. KCP&L residential customers 7 in owner-occupied one- to four-unit structures with income up to 185% of the federal 8 poverty guidelines may participate. Renters are allowed to participate if the landlord 9 pays 50% of the weatherization cost and agrees not to raise the rent for a pre-agreed 10 period of time.

11 To improve the process of referring potential applicants to the Low-Income 12 Weatherization program, KCP&L developed a list of its customers who received third-13 party assistance in paying their bills and who met other weatherization eligibility 14 requirements. KCP&L sent a letter to these customers informing them of the availability 15 of the program in the event they or someone they know may be interested. The KCP&L 16 Customer Care Center and KCP&L's Credit and Collections department are informing 17 customers of the availability of this service. Additionally, KCP&L is increasing its 18 promotion of the program through CAP agencies to help create an awareness and 19 education of the benefits of weatherization. 20 The tariff for this program became effective December 9, 2005. At year-end 21

2007, participation was at 31% of the target for the Low-Income Weatherization program

22 and 59% of the program-to-date budget had been spent.

#### Home Energy Analyzer:

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

5 KCP&L is looking to this program to be the "starting point" and "direction
6 provider" for customers. Customers come to the Energy Analyzer site and, based on their
7 needs and interests, get routed to various programs that may be of benefit to them.

8 The tariff for this program became effective March 7, 2006. Participation was at
9 302% of target in the Home Energy Analyzer program and 103% of the budget was spent
10 program-to-date at the end of 2007.

# 11 <u>Cool Homes Program</u>:

12 This program is designed to incent customers to install high efficiency cooling 13 equipment, before failure of their existing equipment, to maximize the energy savings 14 benefit. Early replacement targets replacement of equipment with a Seasonal Energy 15 Efficiency Ratio ("SEER") 6 to 8 with SEER 14 or higher rated equipment. KCP&L has 16 redesigned the program as a re-commissioning/early replacement program in place of the 17 original program design. Originally, the program threshold was a rating of SEER 13 or 18 higher based upon a minimum standard efficiency rating of SEER 10; however, the 19 minimum federal standard efficiency for manufacturing cooling equipment was increased 20 to SEER 13 in January 2006, so the program threshold was raised to a minimum of 21 SEER 14.

Proper installation measures are required as part of the program, wherein all
installations under the program must utilize CheckME!<sup>™</sup>, a software program that ensures

1 quality installation through proper charging of the refrigerant and airflow over evaporator 2 coils, while the contractor is at the premise. Those who request and receive a cooling 3 system evaluation also receive compact fluorescent light bulbs ("CFLs"), adding to the 4 savings achieved through this program. 5 The tariff for this program was effective on July 12, 2007. Participation levels 6 were at 60% of the target for the Cool Homes program and 41% of the budget was spent 7 program-to-date as of the end of 2007. Through June of 2008, the program acquired several new contractors, bringing the total number of CheckME!<sup>™</sup> trained contractors 8 9 from 93 in December of 2007 to 248. The number of HVAC companies has also grown 10 from 24 companies in December 2007 to 61 in July 2008. This number is expected to 11 grow throughout the remainder of the year as more training is scheduled. To date, the 12 program has had a very successful year and remains above goal in the number of 13 participants, systems replaced, recommissioning, and CFL's distributed. Of the 3,536 homes that have been visited since tariff approval, CheckME!<sup>™</sup> analysis has been 14 15 performed on 3,843 systems, of which 1,403 systems have been recommissioned, and 16 848 air conditioners and heat pumps have been replaced with high efficiency units. 17 **Market Research:** 18 KCP&L engaged several consultants to determine the market opportunity for ENERGY 19 STAR® appliances, a refrigerator pickup program and office equipment, among other 20 potential programs. KCP&L is currently in the process of developing these programs. 21 **Business Energy Analyzer:** The Business Energy Analyzer ("BEA") provides information to business customers on 22 23 how they use energy based on their specific usage data. It provides information on ways

1 they can save energy and what their payback might be based on the improvements made. 2 It also allows businesses to benchmark themselves against like businesses. Program 3 participation goals were set based upon the significant response rate in the residential 4 market; however, despite promotions, the commercial market has been slower to adopt 5 the benefits of this program. 6 The vendor and KCP&L are working together to make improvements to the 7 Website, and KCP&L will continue to actively promote this service. The tariff for this 8 program became effective December 22, 2006. There was 69% of the participation target 9 in the BEA program and 70% of the budget was spent program to date ending 2007. 10 **Energy Audit and Energy Saving Measures Rider (Energy Savings Measures):** 11 The Energy Audit portion of this Rider offers rebates to customers to cover 50 percent of 12 the cost of an energy audit, up to \$300 for customers with facilities less than 13 25,000 square feet and up to \$500 for customers with facilities over 25,000 square feet. 14 In order to receive the rebate, the customer must implement at least one of the audit 15 recommendations that qualify for a KCP&L C&I Custom Rebate. 16 The Energy Savings Measures portion of this Rider offers commercial and 17 industrial customers rebates to install, replace or retrofit qualifying electric savings 18 measures including HVAC systems, motors, lighting, pumps, etc. Custom rebates are 19 calculated as the lesser of a buy-down to a two-year payback or 50 percent of the 20 incremental cost. 21 Originally, KCP&L proposed to implement the New Construction Custom Rebate 22 program in Year 1 and the Audit Rebate and Retrofit Custom Rebate programs in Year 2; 23 however, due to the similarities of the programs, KCP&L decided to implement all three

programs at the same time and promote them together. KCP&L tracks activities and
 expenditures for each program area separately.

3 The tariff for this program became effective January 17, 2007. There was 7% of 4 the participation target and 71% of the program budget was spent to date ending 2007. 5 For the New Construction program, the issue is that these projects have long lead times 6 and require more consultation and evaluation to get to the approval stage. On the average 7 it requires 2 months to pre-approve a project from the date it is submitted. Likewise, it 8 takes 12 months to move the project from application to completion. Comparatively, the 9 retrofit program requires an average of 3 months to move a project from application to 10 completion. KCP&L is investigating those program issues and challenges. 11 **Building Operator Certification (Training):** 12 Building Operator Certification is a market transformation effort to train facility 13 operators in efficient building operations and management ("O&M"), establish 14 recognition of and value for certified operators, support the adoption of resource-efficient 15 O&M as the standard in building operations, and create a self-sustaining entity for 16 administering and marketing the training 17 The tariff for this program became effective May 15, 2007. KCP&L has spent 18 54% of the program budget ending 2007. The program continues to be very well 19 received in the industry. Three level one classes have been filled. Two of the classes 20 have completed with attendees receiving their certification. A fourth class is planned for 21 September 2008.

#### **Energy Optimizer:**

The Energy Optimizer program is an air conditioning cycling program by which KCP&L can reduce residential and small commercial air conditioning load during peak summer days. This load reduction is achieved by sending a paging signal to a control device in a thermostat attached to the customer's air conditioner. The control device then turns the air conditioner off and on or ramps up the temperature over a period of time depending on the load reduction strategy established by KCP&L.

8 Through a bidding process, Honeywell Utility Solutions was selected to partner 9 with KCP&L in implementing this program. Honeywell has opened an office in Kansas 10 City and hired office and field personnel to ensure the success of the program. Various 11 methods of marketing the program have been implemented including Website, bill 12 inserts, direct mail, trade show and festival participation, news releases, short vignettes 13 on several news and talk show programs, customer on-site presentations, and interviews 14 on radio talk shows.

Honeywell's current thermostat serves single-stage systems and not the double-stage
systems often used in commercial applications. A *beta* testing of the next generation
UtilityPro 8000 thermostat is being conducted. This thermostat will handle multi-stage
commercial equipment, and have the ability to keep the system fan running. This will
allow KCP&L to make inroads into the commercial market.

The tariff for this program became effective October 3, 2007. There was 158% of
the participation target in the Energy Optimizer program and 196% of the budget was
spent program to date ending 2007.

#### **MPower:**

2 MPower is a C&I curtailment program whereby customers with the ability to curtail 3 25 kW or more are incented to contract with KCP&L to curtail their load when requested 4 by KCP&L. Under MPower, the customer is invited to use the curtailment method(s) 5 that best meets their capabilities and needs. This could include turning on a back-up 6 generator, shutting off lights or production lines, raising their cooling system temperature 7 several degrees, or stopping operations and sending their employees home.

8 MPower was redesigned in January of 2007 based on feedback obtained from 9 customers. The program has grown at a very rapid pace since then. KCP&L contracted 10 with an outside vendor, Energy Curtailment Specialists, Inc. ("ECS") of Buffalo, New 11 York, to help promote the product to our small and mid-size commercial and industrial 12 customers.

13 The tariff for this program became effective June 18, 2007. There was 66% of the 14 participation target in the MPower program and 45% of the budget was spent program to 15 date ending 2007.

16 **Q**: Have any evaluations been completed to date on the programs KCP&L has 17

implemented and, if so, what were the results of those evaluations?

18 Opinion Dynamics Corporation ("ODC") performed a process-based survey and impact **A**: 19 evaluation on the Energy Optimizer program. The load reduction analysis found that the 20 program does produce substantive and measurable effects on the air condition load during 21 control periods. The evaluation showed, for a moderate cycling approach (50% cycling, 22 e.g., 15 minutes on and 15 minutes off), a decrease of 1.04 kW for each hour of control 23 for a single family house and 0.48 kW for multi-family home. It is KCP&L's intent to

re-run the benefit-cost analysis and based on the analysis results provide a

2 recommendation on the future of this program.

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### **Q:** When will other evaluations be completed?

A: For programs that have an evaluation plan, we have committed to completing the
evaluation of the initial two years of each program within six months of the end of each
program's second year. We have the option, especially for programs with large budgets,
to perform evaluations earlier to ensure we are being efficient and effective.

### 8 Q: Are there other circumstances that may impact the budget?

9 A: Yes. For example, as I noted earlier in my testimony, the Cool Homes program design 10 was changed due to changes in Federal regulations that required all new cooling systems 11 manufactured to be a minimum of SEER 13. Therefore, rather than providing a rebate 12 for equipment replacement at failure, the program was redesigned to be a 13 re-commissioning and early replacement program, requiring a higher incentive for the 14 latter. Another example is higher than expected market demand for our programs. 15 Demand for the Energy Optimizer, for example, was so high that a three-year goal was 16 actually accomplished in 14 months. This depleted the budget much sooner than 17 expected. The total costs, and the proposed allocation by state, are also detailed in 18 Appendix C to the Regulatory Plan Stipulation. The MPower program is also now 19 accelerating, and the number of customers signing five-year contracts is much greater 20 than initially projected. Therefore, we are at the point that, while our current budget will 21 cover outflows of payments to customers for the next couple of years, it will not cover 22 future obligations extending out beyond five years.

#### Q: Is KCP&L requesting any additional programs?

- 2 A: Yes, KCP&L is requesting two additional programs, an Economic Relief Pilot Program
  3 ("ERPP") and Supplemental Weatherization and Minor Home Repair.
- 4 Q: Please describe each of these new programs.

5 A: The ERPP is a program designed to deliver energy affordability benefits to KCP&L's 6 qualifying low-income residential customers. This Program delivers a \$50 per month 7 "fixed credit" to low-income customers in an effort to improve low-income home energy 8 affordability. ERPP will be operated by KCP&L in order to generate affordable home 9 electric bills to ERPP participants, thus allowing those participants to make full and 10 timely payments on their monthly bills. Based on 1,000 participants, the annual proposed 11 budget is \$630,000. Company witness Chris Giles includes in his Direct Testimony a 12 request that 50% of the costs of the program be deferred until KCP&L's next rate case 13 and considered for recovery at that time.

14 The proposed Supplemental Weatherization and Minor Home Repair Program is 15 intended to assist qualified residential customers in reducing their energy usage by 16 weatherizing their home. Efficiency efforts include insulation enhancements, infiltration 17 reduction, heating and cooling service, lighting upgrades, installation of setback 18 thermostats and energy efficiency education. Home repair efforts include hazards, 19 including installation of smoke alarms and CO<sub>2</sub> detectors. Replacement of basic systems 20 including heating, electrical, plumbing, and roofing when considered an immediate health 21 / safety risk or emergency repair.

The program will be administered by KCP&L and implemented by qualified
 weatherization and home repair contractors. KCP&L will work collaboratively with

1		agencies to develop this program. Based on 100 weatherization participants and 100
2		minor home repair participants, the annual proposed budget is \$1,190,000. KCP&L has
3		not proposed cost recovery in this rate case, but rather will collaborate with the Staff and
4		the Citizens' Utility Ratepayer Board on cost recovery and other aspects of the program.
5	Q:	Could you please provide an update of KCP&L's implementation of its credit card
6		payment program?
7	A:	KCP&L began offering credit card payment options to its residential customers in 2007,
8		beginning with acceptance through the interactive voice response system ("IVR") and
9		one-time payments through the KCP&L Website. In February, 2008, the Company
10		began offering a recurring card payment option with enrollment through its Website.
11		KCP&L has contracted with Western Union to act as a payment processor to help ensure
12		that customer card information is handled, processed and stored securely. Western
13		Union, through its SpeedPay system, is one of the largest processors of credit card
14		payments in the United States.
15	Q:	What does KCP&L estimate its annualized credit card payment program costs will
16		be as of April 30, 2009?
17	A:	We expect our annualized costs at that time to be \$517,000 and Adj. 56 on Schedule
18		JPW-2 for \$144,476 (total company) attached to the Direct Testimony of Company
19		witness John Weisensee reflects this projected cost.
20	Q:	Does that conclude your testimony?
21	A:	Yes, it does.

### BEFORE THE STATE CORPORATION COMMISSION OF THE STATE OF KANSAS

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In the Matter of the Application of Kansas City Power & Light Company to Modify Its Tariffs to Continue the Implementation of Its Regulatory Plan

Docket No. 09-KCPE-\_\_\_-RTS

#### **AFFIDAVIT OF ALLEN D. DENNIS**

### STATE OF MISSOURI ) ) ss COUNTY OF JACKSON )

Allen D. Dennis, being first duly sworn on his oath, states:

1. My name is Allen D. Dennis. I work in Kansas City, Missouri, and I am

employed by Kansas City Power & Light Company as Director, Products and Services.

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 thereto, are true and accurate to the best of my knowledge, information and belief.

Allen D. Dennis

Subscribed and sworn before me this \_4 day of August 2008.

Micon A. C. Notary Public

My commission expires: Feb. 42011

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"NOTARY SEAL "
Nicole A. Wehry, Notary Public
Jackson County, State of Missouri
My Commission Expires 2/4/2011
Commission Number 07391200

# PROGRAM UPDATE Kansas

PROGRAM	Tariff Filed	Tariff Effective	Approved Budget (\$)
Affordability Programs			
Affordable New Homes	01/24/07	07/23/07	295,500
Low Income Weatherization	11/01/05	12/09/05	2,870,500
Energy Efficiency - Residential			
Home Energy Analyzer	11/22/05	03/07/06	1,121,900
Home Performance w/ Energy Star	12/17/07	Pending	707,500
Cool Homes	02/28/07	07/12/07	9,629,491
Energy Star Homes	03/10/08	Pending	6,105,000
PAYs type Program		Not Filed	525,000
Energy Efficiency – C&I			
Business Energy Analyzer	01/10/06	12/22/06	758,700
C&I Audit	05/22/06	01/17/07	7,372,500
Building Operator Certification	01/02/07	05/15/07	525,000
Demand Response			
Energy Optimizer (A/C Cycling)	09/06/07	10/03/07	13,155,861
MPower	04/09/07	06/18/07	14,163,531

\*Note: A revision to the Energy Optimizer Tariff (also referred to as the A/C Cycling Tariff) was filed on 09/06/2007 in both Kansas and Missouri. It was approved by the KCC on 10/03/2007 and by the MPSC on 10/06/2007.

A revision to the MPower Tariff was filed on 04/09/2007 in both Kansas and Missouri. It was approved by the KCC on 06/18/2007 and by the MPSC on 05/05/2007. A second revision to the MPower Tariff was filed on 04/30/2008 in both Kansas and Missouri. It was approved by the KCC on 6/24/2008 and by the MPSC on 5/30/2008.

\*\* The Change a Light program is filed annually for approval. The 2006 and 2007 budgets are included in the 2005 Change a Light \$762,500 budget.