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Exhibit No.: Issue: Minimum Filing Requirements; Annualized/Normalized Revenues; Class Cost of Service; and Rate Design Witness: Marisol E. Miller Type of Exhibit: Direct Testimony Sponsoring Party: Kansas City Power & Light Company Case No.: ER-2016-0285 Date Testimony Prepared: July 1, 2016

#### MISSOURI PUBLIC SERVICE COMMISSION

#### CASE NO.: ER-2016-0285

#### DIRECT TESTIMONY

OF

#### MARISOL E. MILLER

#### **ON BEHALF OF**

#### **KANSAS CITY POWER & LIGHT COMPANY**

Kansas City, Missouri July 2016

LCPL Exhibit No. 136 Late 2/22/17 Reporter M File No. 52 - 2016 - 028

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#### DIRECT TESTIMONY

#### $\mathbf{OF}$

#### MARISOL E. MILLER

#### Case No. ER-2016-0285

- 1 Q: Please state your name and business address.
- A: My name is Marisol E. Miller. My business address is 1200 Main, Kansas City, 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 "Company") as
  6 Supervisor Regulatory Affairs.
- 7 Q: On whose behalf are you testifying?
- 8 A: I am testifying on behalf of KCP&L.
- 9 Q: What are your responsibilities?

A: My general responsibilities are to provide support for the Company's regulatory activities
 in the Missouri and Kansas jurisdictions. Specifically, my duties include class cost of
 service support, rate design, tariff management, filing preparation, and load research
 support. I also manage certain analytical activities for the department including rate
 change implementation, billing determinant calculation, and retail revenue calculation.

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

16 A: I hold a Masters of Business Administration degree from Rockhurst University with an
17 emphasis in Management. I also was awarded a Bachelor of Science in Business
18 Administration Magna Cum Laude with an emphasis in Business Finance and
19 Banking/Financial Markets from the University of Nebraska at Omaha. In addition to

those academic credentials, the Institute of Internal Auditor's (IIA) and the Association
 of Certified Fraud Examiners (ACFE) have certified me as a Certified Internal Auditor
 and Certified Fraud Examiner respectively.

I began my career at First Data Corporation working as Financial Analyst/Senior
Financial Analyst from October of 1999 until June of 2003. My primary responsibilities
included Financial Analysis, Forecasting, & Reporting. I then joined the Sprint
Corporation working there from 2003 until 2006, where my role evolved from work as a
Financial Analyst to Internal Audit work focused on Sarbanes Oxley Compliance.

9 I joined KCP&L in August of 2006 working as a Senior/Lead Internal Auditor. I
 10 led various projects of increasing complexity and most notably was the on-site Internal
 11 Auditor for the approximately \$2 billion Comprehensive Energy Plan Iatan 2
 12 Construction project.

I have worked in the Regulatory Affairs Department since 2011 holding various
 positions covering areas including Integrated Resource Planning (IRP), Missouri Energy
 Efficiency Investment Act ("MEEIA")/Demand-Side Management (DSM), compliance
 reporting for multiple areas in transmission and delivery, and rate case support.

Q: Have you previously testified in a proceeding before the Missouri Public Service
Commission ("Commission" or "MPSC") or before any other utility regulatory
agency?

20 A: No.

- 21 Q: What is the purpose of your testimony?
- 22 A: The purpose of my testimony is to:

1		Ι.	Expla	in how the Company satisfied the MPSC's minimum filing requirements
2			("MF	R") under 4 CSR 240-3.030 for this rate case filing;
3		II.	Expla	in and support the Company's annualized/normalized revenues;
4		III.	Expla	in the Electric Class Cost of Service Study; and
5		IV.	Expla	in and support the Company's Electric Rate Design.
6				I. MINIMUM FILING REQUIREMENTS
7	Q:	Wha	t is the	purpose of this part of your testimony?
8	A:	The p	purpose	of this part of my testimony is to confirm that KCP&L has satisfied the
9		MPS	C's MFI	R, as set forth in 4 CSR 240-3.030.
10	Q:	How	did KC	P&L satisfy the MFR?
11	A:	The f	ollowin	g information was prepared and attached to the Company's Application filed
12		concu	urrently	with this testimony, to address the specific requirements of the MFR as
13		outlin	ed in 4	CSR 240-3.030(3):
14		A.	Letter	of transmittal;
15		В.	Gener	al information, including:
16			1.	The amount of dollars of the aggregate annual increase and percentage
17				over current revenues;
18			2.	Names of counties and communities affected;
19			3.	The number of customers to be affected;
20			4.	The average change requested in dollars and percentage change from
21				current rates;
22			5.	The proposed annual aggregate change by general categories of service
23				and by rate classification;

1		6. Press releases relative to the filing; and
2		7. A summary of reasons for the proposed changes.
3		II. ANNUALIZED/NORMALIZED REVENUES
4	Q:	Were the retail revenues included in this filing prepared by you or under your
5		supervision?
6	A:	Yes, they were.
7	Q:	Will you describe the method used in developing the revenues for this case?
8	A:	Both the weather-normalized kWh sales and customer growth levels by rate class were
9		developed by Company witness Albert R. Bass, Jr. Mr. Bass explains those figures in his
10		Direct Testimony. The test year used by the Company in this case was the 12 months
11		ending December 31, 2015, which we expect will be updated for known and measurable
12		changes through December 31, 2016. The monthly bill frequencies for the 12 months
13		ending December 31, 2015, that contain the billing units for each of the billing blocks for
14		the various rate components, were developed under my supervision. These bill
15		frequencies were developed by collecting the actual usage and customer counts billed in
16		each month of the test period and applying them to the existing rate structures. By
17		applying the existing rates to the usage in each of the billing blocks, the revenues were
18		reproduced, providing a basis for determining the overall revenues to be used in this case.
19		The Company determined monthly revenues by applying the normalized sales and
20		customer levels for each month represented in the test period to the corresponding billing
21		frequency. The normalized sales and customer levels from this were then multiplied by
22		the rates that took effect on September 29, 2015 to obtain the weather normalized
23		monthly revenues available. The sum of the monthly revenues was compared to the

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1		actual revenues for the test year ending December 31, 2015 to determine the revenue
2		adjustment contained in the Summary of Adjustments attached to the Direct Testimony of
3		Company witness Ronald A. Klote as Schedule RAK-4 (adjustment no. R-20).
4	Q:	The Company has several riders in place to recover particular costs. How will these
5		mechanisms affect the requested increase in this case?
6	A:	The Demand-Side Investment Mechanism ("DSIM") is separate from the revenue
7		requirement requested in this case and thus the associated DSIM revenues have been
8		removed from the total revenues available. The fuel adjustment clause ("FAC") rider
9		base amount has been re-based within the current revenue requirement. In addition to my
10		testimony on the FAC, please see the Direct Testimony of Tim M. Rush for the primary
11		details concerning the FAC in this case.
12		III. ELECTRIC CLASS COST OF SERVICE STUDY
13	Q:	Has the Company performed an electric Class Cost of Service ("CCOS") study for
14		this case?
15	A:	Yes, the Company performed a CCOS study representative of the KCP&L jurisdiction.
16		A summary of the results of the Company's CCOS studies are attached and marked as
17		Schedule MEM-1.
18	Q:	Was the study prepared by you or under your direct supervision?
19	A:	Yes, it was. Consistent with prior filings, the Company retained the services of
20		Management Applications Consulting who performed the primary CCOS modeling using
21		their proprietary software and data provided by the Company.
22	Q:	Has the Company filed a CCOS in previous rate cases?
23	A:	Yes. In all rate cases filed since 2005, the Company has filed a CCOS study.

1 Q:

#### What is the purpose of the CCOS study?

A: The purpose of the CCOS study is to directly assign or allocate each relevant component
of cost on an appropriate basis in order to determine the contribution that each customer
class and rate makes toward the Company's overall rate of return. The CCOS analysis
strives to attribute costs in relationship to the cost-causing factors of demand, energy and
customers.

- 7 Q: Would the CCOS study serve as the basis for the determination of increasing or
  8 decreasing overall revenue levels for KCP&L?
- 9 A: No. Determination of the revenue requirement requested in this case is accomplished
  10 using the jurisdictional model sponsored by Company witness Ronald A. Klote. The
  11 CCOS model uses the information from the jurisdictional model as an input for the
  12 primary purpose of exploring the distribution of costs to the respective classes.

13 Q: What classes are used as a basis for this CCOS study?

A: The primary classes the Company used in its analysis are Residential, Small General
 Service, Medium General Service, Large General Service, Large Power Service, and
 Lighting. Additionally, the study includes details at the rate level, expressed by season.

17 Q: Do these classes and rates conform to the proposed electric rate tariffs?

A: Generally, they do. The Residential class has several rate classifications available to it
 that include general use, one-meter general use and heat, and a two-meter rate with
 general use on one meter and a separate meter for space heating. The Small General
 Service, Medium General Service and Large General Service classes also have general
 usage rates and all electric rates, plus they can be specific to the voltage level at which
 the customer receives service. The Large Power Service class is distinguished by the

	1		specific voltage at which the customer receives service. In total, the Company has five
	2		classes of service (plus Lighting), but has approximately 61 rates to meet the specific
	3		needs of the customer and reporting and billing requirements.
	4	Q:	What test year was used for the CCOS study?
	5	A:	The study is based on a historical test year of the 12 months ending December 31, 2015,
	6		with known and measurable changes projected through December 31, 2016.
	7	Q:	What general categories of cost were examined and considered in the development
	8		of the CCOS study?
	9	A:	An analysis was made of all elements of cost as defined by the Federal Energy
	10		Regulatory Commission Uniform System of Accounts, including investment (rate base)
	11		and expense (cost of service) for the purpose of allocating these items to the customer
	12		classes. To achieve this allocation we begin by functionalizing and classifying costs.
	13	Q:	Please explain what you mean.
	14	A:	In order to make the appropriate assignment of costs to the appropriate class of customer,
	15		it is necessary to first group the costs according to their function. The functions used in
	16		the CCOS study were production, transmission, distribution, and other costs. The next
	17		step was to classify the costs. Costs are classified as customer-related, energy-related, or
	18		demand-related.
	19	Q:	What do you mean by customer-related, energy-related and demand-related?
	20	A:	Customer-related costs are those costs necessary to provide electric service to the
	21		customer independent of any usage by the customer. Some examples of these costs
4	22		include meter reading, customer accounting, billing and some investment in plant
2	23		equipment such as the meter and service line, facilities that are all necessary to make

service available. Portions of the distribution facility are separated between the customer
 costs and the demand costs.

Energy-related costs are directly related to the generation and consumption of
energy and consist of such things as fuel and purchased power and certain transmission
costs.

Demand-related costs relate to the investment and expenses associated with the
Company's facilities necessary to supply the customer's full load requirements
throughout the year. The majority of demand-related costs consist of generation,
transmission plant and the non-customer portion of distribution plant.

- 10 Q: After the above classification of plant investment and operating costs into customer-11 energy- and demand-related components, what was the next step in the CCOS 12 study?
- A: The next step was to allocate each of the three categories of cost to each customer class
  utilizing allocation factors appropriate for each of the above categories of cost.
- 15 Q: How are the allocation factors generally determined?

A: Costs are evaluated to determine the cause driving the cost to be incurred and to establish
an allocation method that best distributes the cost based on that causation. Customerrelated costs are generally allocated on the basis of the number of customers within each
class. Data for the development of the customer-related allocation factors came from
Company billing and accounting records. Some of the customer-related accounts were
allocated based on a weighted number of customers to reflect the weighting associated
with serving those customers.

Energy-related allocation factors were derived on the basis of each customer
 classes' respective energy (kiloWatt hour) requirements. KiloWatt-hour sales to each
 customer class were available from Company records. The sales data was adjusted to
 reflect normal weather, system losses and unaccounted for, in order to assign the
 Company's total system output.

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#### Q: How are class demand allocation factors generally determined?

7 A: The data necessary to develop class demand allocation factors (production and
8 transmission) were derived from the Company's load research data. Such data consisted
9 of the hour-by-hour use of electricity by each customer class throughout the study period.

10 Q: Was KCP&L's load research data used to develop any other allocators?

11 A: Yes, it was used to develop distribution plant allocators based on customer's non-12 coincident loads within each class.

13 Q: Are any costs assigned directly to classes?

14 A: Yes. In those instances where the costs are clearly attributable to a specific class, they15 are directly assigned to that class.

#### 16 Q: What method do you propose to allocate production plant?

A: Production plant is the single, largest component cost to allocate to the classes within the
study. As such, the production allocator has the most impact on the outcome of the
CCOS study. In 2012, the Company reviewed industry data and information available
within the public domain, including the National Association of Regulatory Utility
Commissioners' ("NARUC's") "Electric Utility Cost Allocation Manual" published in
January 1992 with the objective of validation of the production plant allocation method
being used or exploring other possible alternatives. The Company reviewed an informal

1 survey performed by the Edison Electric Institute on plant allocation methods. Finally, 2 we looked at testimony from recent Missouri and Kansas rate proceedings, exploring the 3 positions offered by parties on the topic. The evaluation considered the three main 4 categories of production allocation defined in the NARUC materials; Peak Demand, 5 Energy Weighted, and Time Differentiated methods. After considering all allocation 6 theories and ensuring that the selected method aligned with the principles of reflecting 7 actual planning and operating characteristics, cost causation, recognizing the broad set of 8 customer class characteristics and their usage, and producing stable results on a year to 9 year basis, the Company selected the utilization of the Energy Weighted approach, 10 specifically the Average & Peak Production Plant Allocation method, incorporating a 11 four (4) Coincident Peak (CP) component. An Energy Weighted approach was viewed to 12 be cost effective, balanced through its incorporation of energy, and less subjective than 13 other methods. Utilization of the Average & Peak method is an energy-weighted method 14 of production plant allocation that gives classes recognition for both usage and 15 contribution to peak load.

#### 16 Q: Has this allocation method been proposed before?

17 A: Yes. The Average & Peak method has been proposed by KCP&L most recently in Case
18 No. ER-2014-0370 and by Greater Missouri Operations (GMO) Company in Case No.
19 ER-2016-0156. Additionally, KCP&L had also used the Average & Peak method in
20 Case No. ER-2006-0314 and ER-2007-0291.

1 Q: How were the fuel costs associated with the production plant allocated in the CCOS
2 study?

A: Fuel costs were allocated using a seasonal, monthly kWh allocator. Based on monthly
fuel costs from the Company for the 12 months ended December 31, 2015, each month's
fuel costs were allocated to each customer class's corresponding calendar month kWh
sales adjusted for losses. These allocated results were summed seasonally, by rate and
major customer class to identify a proxy fuel allocator which was then used to allocate
the actual fuel costs shown in the CCOS study.

9 Q: How were the off system sales margins that KCP&L receives from its external sales
10 of energy allocated?

- 11 A: They were allocated using the Energy allocator.
- 12 Q: What method did you use to allocate transmission plant costs?

13 A: Transmission plant costs were allocated using Average & Peak-4CP.

14 Q: What method did you use to allocate Distribution Plant?

A: Distribution Plant was primarily allocated using a Non-Coincident Peak (NCP) demand
allocator based on the use of NCP class demands for Primary Plant in Accounts 360
through 367, with the exception of Account 363, which used a 12-CP demand allocation.
Also, Accounts 364, 365, 366 and 367 included methods to recognize primary and
secondary voltage cost separation.

- 20 Q: What method did you use to allocate Line Transformers and secondary plant?
- A: Line Transformers and secondary plant costs were allocated to customers receiving
   secondary service based on the weighted average of the diversified class demands (NCP)
   and undiversified individual customer maximum demands.

1	Q:	What method did you use to allocate Services?
2	A:	Since we consider services customer-related, these costs were allocated based on the
3		customers total undiversified maximum customer demands.
4	Q:	What method did you use to allocate Meters?
5	A:	Meter costs, recorded to Account 370, are also customer-related and were allocated using
6		an assignment of all meters and metering devices to customer rates.
7	Q:	Did you include any other rate base elements in the study?
8	A:	Yes, multiple rate base elements have been included. The following details their
9		allocation:
10		• Additions to net plant included cash working capital, materials and supplies,
11		prepayments, fuel inventory, and various regulatory assets.
12		• The cash working capital component of rate base was developed and allocated on
13		related expenses or plant in the CCOS study.
14		• Materials and supplies were allocated on total plant and demand allocation
15		factors.
16		• Prepayment items were allocated using total plant, customers, and demand
17		allocation factors.
18		• Fuel inventory was allocated on energy.
19		• The regulatory assets were allocated on labor, energy, or demand allocation
20		factors depending on the costs tracked.
21		• The accumulated deferred taxes were allocated on total plant.
22		• Customer advances for construction were allocated on total distribution plant.

1		• Customer deposits were developed using the data analysis by customer group
2		available from the Company.
3	Q:	What revenues did you use for this study?
4	A:	The class and rate revenues were developed under my supervision and were discussed
5		earlier in this testimony. Other sources of revenues such as Miscellaneous Revenues
6		were allocated consistent with the revenue source.
7	Q:	How were Operation and Maintenance ("O&M") Expenses allocated?
8	A:	O&M Expenses were allocated using various methods dependent of the cost causation.
9		O&M for production, transmission and distribution plant were allocated to customer
10		classes following plant. Customer Accounts Expenses, Customer Services and
11		Information Expenses, Sales Expenses, and Administrative and General Expenses were
12		allocated based on the results of individual allocation studies. Administrative & General
13		expenses were primarily allocated on the labor allocator with the exception of the
14		following:
15		• Account 930.1, General Advertising, which was allocated based on the number of
16		customers
17		• Account 928, Regulatory Commission expenses, which was primarily allocated to
18		classes on revenues at the uniform claimed rate of return
19		• Account 935 Maintenance of General Plant, which was allocated on general plant.
20	Q:	What is the next step after the allocations are applied?
21	A:	The next step is to determine the relative return on rate base for each of the classes and
22		rates in the study. The ratio of class revenues less expense (net operating income)
23		divided by class rate base will indicate the rate of return being earned by the Company

that is attributable to a particular class. It is necessary to keep in mind that this
calculation only represents a snapshot in time. The results of the CCOS study will most
likely vary over time. The results of the study will also vary if you apply different
allocation factors to the study. By applying different methods to the allocation process,
you can change the outcome of the CCOS study.

6 Q: What were the results of the CCOS study?

7 A: The jurisdictional rate of return was calculated to be 5.5%. Individual classes' rates of
8 return at current rates vary, and based on the current costs, are shown in the following
9 table.

Residential	Small	Medium	Large	Large	Other
	General	General	General	Power	Lighting
	Service	Service	Service	Service	
4.0%	8.2%	7.0	7.2%	4.9%	9.4%

10 Q: If rates were changed so that KCP&L earned the same rate of return from each
11 customer class, how much would each class's rates need to change?

12 A: To achieve the jurisdictional revenue increase of 10.8%, the classes should be adjusted by

13 the percentages in the table below.

Residential	Small	Medium	Large	Large	Other
	General	General	General	Power	Lighting
	Service	Service	Service	Service	
20.0%	-2.3%	3.4%	2.3%	14.2%	-6.8%

#### 14 Q: What general conclusion can be made from these results?

A: The results of the CCOS study show that each class of customers recovers the cost of
service to that class and provides a return on investment. The results also show the
Residential and Large Power class revenues are below the Total MO Retail rate of return
level while the Small General, Medium General and Large General class revenues are

1		above. The revenues for the lighting class appear well above the Total MO Retail rate of
2		return.
3	Q:	In addition to the class results, was the study used to provide any additional
4		information?
5	A:	Yes, another element of the study was to explore costs at the rate level and the season
6		level. This data provides additional information to aid the Company in preparing its rate
7		design.
8	Q:	What were the results at the rate and season level?
9	A:	Adding these multiple levels of detail increase the amount of data so it is best to present
10		the results in the form of tables. Schedule MEM-2 is attached to provide that
11		information. Review of the results show that the summer and winter rates for each class
12		provide recovery of the cost of service and a return on the investment. The CCOS study
13		demonstrates that rates charged during the winter, in nearly every case, provide a higher
14		contribution to the average return on investment than the summer rates.
15	Q:	Are you proposing any changes to the class revenues based on the results of the
16		study?
17	A:	Yes. Utilizing the results from the study prepared based on the Average & Peak
18		production allocation; the Company has identified the following:
19		• Apply no increase to the Lighting class (unmetered),
20		• Apply the increase equally to the remaining classes (adjusted for pre-MEEIA opt-
21		out revenues), and
22		Application of these proposals to the electric rates is discussed further in the rate design
23		section of this testimony.

1		IV. ELECTRIC RATE DESIGN
2	Q:	Are you sponsoring the electric tariffs filed in this case?
3	A:	Yes, I am.
4	Q:	Please summarize the proposed rate design recommendation for the electric tariffs
5		and any additional proposed changes to the tariffs?
6	A:	The Company is requesting an annual aggregate increase over current revenues reflecting
7		impacts before the rebasing of fuel for the fuel adjustment clause, in the amount of \$62.9
8		million (7.52%). The aggregate annual increase over current revenues including the
9		rebasing of fuel for the fuel adjustment clause is \$90.1 million (10.77%). The Company
10		is proposing that the requested increase be applied to all metered classes on an equal
11		percentage basis, with the exception of the Lighting class. The summary of revenues and
12		proposed increase by class may be found in Schedules MEM-5 and MEM-5A.Q: Are
13		there any new tariffs being filed as part of this case?
14	A:	Yes, the Company is proposing a new tariff for electric vehicle charging stations resulting
15		from KCP&L's Clean Charge Network program. Company Witness Tim M. Rush
16		explains this in detail in his Direct Testimony.
17	Q:	Please summarize the proposed changes to rules & regulation tariffs?
18	A:	Proposed changes are minimal and are proposed to better align the rules & regulations
19		with current costs or planned business practices. The specific, proposed changes to rules
20		and regulations and non-base rate tariffs may be found in Schedule MEM-4.
21	Q:	Does the Company propose any changes to the KCP&L Lighting class?
22	A:	No. As mentioned previously, the CCOS studies indicated the unmetered Lighting class
23		did not need to be increased. Further, the Company made a filing to introduce Light

1		Emitting Diode ("LED") in KCP&L's jurisdiction in tariff filing JE-2016-0344 on June
2		1, 2016 with rates effective on July 1, 2016. The Company requested approval of tariffs
3		which will allow it to pursue a structured conversion of all roadway lighting (non-
4		decorative, pole mounted, over road lighting) to LED fixtures. Over an approximately
5		six month conversion, KCP&L proposes to convert approximately 7,500 lights.
6	Q:	Are you proposing any additional tariff changes?
7	A:	Yes, there have also been changes to the FAC tariffs that are explained in detail in the
8		Direct Testimony of Company witness Tim. M. Rush
9	Q:	Does that conclude your testimony?

10 A: Yes, it does.

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

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In the Matter of Kansas City Power & Light Company's Request for Authority to Implement A General Rate Increase for Electric Service

Case No. ER-2016-0285

#### **AFFIDAVIT OF MARISOL E. MILLER**

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

Marisol E. Miller, being first duly sworn on his oath, states:

1. My name is Marisol E. Miller. I work in Kansas City, Missouri, and I am employed by Kansas City Power & Light Company as Supervisor - Regulatory Affairs.

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 Scutter (17) pages, having been prepared in written form for introduction into evidence in the abovecaptioned 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 thereto, are true and accurate to the best of my knowledge, information and belief.

Marisol E. Miller

\\_\_\_\_\_ day of \_\_\_\_\_ Subscribed and sworn before me this 2016.

Nicol A.

NICOLE A. WEHRY Notary Public - Notary Seat State of Missouri Commissioned for Jackson County My Commission Expires: February 04, 2019 Commission Number: 14391200

Notary Public

My commission expires: \_\_\_\_\_\_ H\_2019

#### Kansas City Power & Light Company 2016 RATE CASE - Direct COST OF SERVICE - Missouri Jurisdiction TY 12/31/15; Update TBD; K&M 12/31/16

#### MISSOURI SMALL MEDIUM LARGE LARGE TOTAL SCH LINE ALLOCATION RETAIL RESIDENTIAL GEN. SERVICE GEN. SERVICE GEN. SERVICE PWR SERVICE LIGHTING NO. NO. DESCRIPTION BASIS (b) (C) (1) (g) (i) (j) (k) (a) (e) (h) 1 0010 SCHEDULE 1 - SUMMARY OF OPERATING INC & RATE BASE 1 1 0020 Reference 0030 **OPERATING REVENUE** 1 0040 RETAIL SALES REVENUE **TSFR 9 90** 837,233,404 315,251,522 55,236,249 121,694,450 188,383,024 146,155,580 10,512,579 1 OTHER OPERATING REVENUE 12,646,823 0050 TSFR 9 340 250,855,503 77,386,264 35,518,208 63,134,718 59,580,486 2,589,005 1 0060 TOTAL OPERATING REVENUE 1,088,088,907 392,637,785 67,883,073 157,212,658 251,517,742 1 205,736,066 13,101,584 1 0070 OPERATING EXPENSES 1 0080 1 0090 FUEL TSFR 9 4090 158,701,965 48.810.420 7.970.002 22.480.913 39,982,527 37.860.280 1,597,822 1 0100 PURCHASED POWER TSFR 9 4100 222,730,875 68,045,349 11,174,536 31,551,320 56,350,176 53,324,669 2,284,824 **OTHER OPERATION & MAINTENANCE EXPENSES** 1 0110 TSFR 9 4110 306,891,041 137,653,947 18,905,490 37,897,728 57.848.315 51,009,253 3.576.307 DEPRECIATION EXPENSES (AFTER CLEARINGS) TSFR 5 1430 0120 127,861,126 52,953,452 7,565,080 18,199,136 26,208,065 21,673,239 1.262,154 1 AMORTIZATION EXPENSES TSFR 9 4590 1 0130 20,874,322 8,345,778 1,205,825 2,959,925 4,428,850 3,710,786 223,157 TAXES OTHER THAN INCOME TAXES 65,449,969 0140 **TSFR 9 4710** 3,845,853 9,095,574 13,575,211 1 26,814,869 11,395,557 722,906 0150 CURRENT INCOME TAXES TSFR 11 620 29,136,031 2,754,936 4,243,825 11,230,920 7,632,427 2,430,544 843,379 1 DEFERRED INCOME TAXES 0160 TSFR 11 690 13,528,201 5.561.049 793.818 1.895.522 2,802,056 2.326.207 149,549 1 TOTAL ELECTRIC OPERATING EXPENSES 1 0170 945.173.529 350,939,800 55,704,430 131 712,546 212,426,121 183,730,534 10,660,099 1 0180 0190 NET ELECTRIC OPERATING INCOME 142,915,379 41,697,985 12,178,643 25,500,112 39,091,621 22,005,532 2,441,485 1 0200 1 RATE BASE 1 0210 TOTAL ELECTRIC PLANT **TSFR 3 190** 5,274,249,638 2,152,742,391 308,060,262 738,886,948 1,099,632,949 56,704,355 0220 918.222.734 2.072,173,694 LESS: ACCUM, PROV, FOR DEPREC TSFR 6 1700 121,333,189 0230 844,030,676 287,261,508 431,949,865 363,923,703 23.674.752 1 0240 NET PLANT 3,202,075,945 186,727,073 451,625,440 667,683,083 554,299,031 33,029,604 1,308,711,715 1 0250 PLUS: 1 CASH WORKING CAPITAL **TSFR 2 30** (62.071.389) (3.837.641) (13.259.163) 1 0260 (24.750.482)(8.834.004)(10.667.113)(722.986)1 0270 MATERIALS & SUPPLIES **TSFR 2 100** 59.031.048 22,800,474 3,336,477 8,375,969 12.898.182 11.066.946 553,000 0280 PREPAYMENTS **TSFR 2 170** 7,124,681 2,722,398 397,720 982,272 1.574,620 1,397,750 49,922 1 16.742.995 1 0290 FUEL INVENTORY **TSFR 2 240** 66.320.675 20.308.703 3.324.416 9,393,610 15.874.130 676,821 0300 REGULATORY ASSETS 17,558,117 630,533 **TSFR 2 330** 74,763,183 26,974,310 4,049,004 14,938,798 1 10,612,421 0310 LESS: 1 0320 CUSTOMER ADVANCES FOR CONSTRUCTION **TSFR 2 380** 1,667,781 921,050 119,681 234,735 235,189 114.509 42.618 1 0330 CUSTOMER DEPOSITS TSFR 2 390 4,020,118 2,138,954 1,507,973 315,716 53.293 1 4,181 n 0340 DEFERRED INCOME TAXES TSFR 2 400 729,963,824 297,942,679 42,635,988 102,263,029 152,190,800 127,083,362 7,847,965 1 0350 DEFERRED GAIN ON SO2 EMISSIONS ALLOWANCE **TSFR 2 410** 35,319,134 10,790,165 1,771,981 5,003,192 8,935,624 8,455,860 362,312 0360 DEFERRED GAIN(LOSS) EMISSIONS ALLOWANCE **TSFR 2 420** 0 Ô 0 0 0 0 0 0370 TOTAL RATE BASE 2,576,273,286 1,044,974,270 147,961,424 364,339,038 541,782,927 451,251,629 25,963,999 1 0380 1 RATE OF RETURN 5.547% 3,990% 8.231% 7.215% 9,403% 0390 6.999% 4.877% 1 0400 RELATIVE RATE OF RETURN 1.00 0.72 1.48 1.26 1.30 0.88 1.70 1 0410 1 0420 1

- 1 0430
- 1 0440

1 0450

Allocation Method: Production - Avg & Pk 4 CP, Transmission - Avg & Pk 4 CP

1 0460

1 0470

1 0480

1 0490

Schedule MEM-1

#### Kansas City Power & Light Company - Missouri Table 3 Cost of Service Results – Class ROR and Index of Return

	Index of Return	R	ate of Return % -	
Customer Class	Annual	Annual	Seaso	nal
			<u>Summer</u>	<u>Winter</u>
RESIDENTIAL	0.72	3.990%	2.002%	6.512%
Regular	0.75	4.155%	1.947%	7.213%
Time of Day	0.69	3.807%	2.786%	5.111%
All Electric	0.67	3.741%	2.436%	5.092%
Separately Metered	0.47	2.634%	1.147%	3.837%
SMALL GS	1.48	8.231%	3.744%	13.714%
Primary & Secondary	1.48	8.233%	3.753%	13.763%
Other (Unmetered)	1.88	10.457%	4.365%	17.682%
All Electric	1.34	7.445%	2.854%	12.110%
Separately Metered	1.26	6.997%	4.377%	9.324%
MEDIUM GS	1.26	6.999%	2.424%	12.700%
Primary	1.80	9.982%	4.546%	15.115%
Secondary	1.28	7.109%	2.449%	13.055%
All Electric	1.05	5.832%	2.023%	9.719%
Separately Metered	1.11	6.131%	2.228%	10.881%
LARGE GS	1.30	7.215%	2.279%	13.269%
Primary	1.33	7.404%	2.241%	14.086%
Secondary	1.35	7.486%	2.419%	14.094%
All Electric	1.19	6.585%	1.929%	11.664%
Separately Metered	1.63	9.065%	4.126%	14.783%
LARGE POWER SERVICE	0.88	4.877%	0.623%	10.395%
Primary	1.01	5.602%	1.253%	10.975%
Secondary	1.08	5.963%	1.463%	11.600%
Substation	0.20	1.090%	-1.760%	4.974%
Transmission	0.80	4.463%	-0.383%	12.222%
TOTAL LIGHTING	1.70	9.403%		
MISSOURI RETAIL	1.00	5.547%		

Note - Allocation Method: Production - Avg & Pk 4 CP, Transmission - Avg & Pk 4 CP

#### Kansas City Power & Light Company - Missouri Table 4 f Service Results - Unbundled Customer, Demand and Energy Cost Cos

	Uniform Rate of Retu				urn @ 7.7%				
	Monthly (\$)	Annual			Dema	and Costs (\$/k)	//h)		
	Customer	Energy	Seasonal	Energy					
Customer Class	<u>Charge</u>	Costs (\$)	Costs	(\$)	<u>Annual</u>	Sease	<u>onal</u>		
			<u>Summer</u>	Winter		Summer	Winter		
RESIDENTIAL	\$16.68	0.0214	0.0226	0.0207	0.1076	0.1553	0.0762		
Regular	\$16.34	0.0215	0.0226	0.0207	0.1115	0.1563	0.0784		
Time of Day	\$23.26	0.0214	0.0227	0.0205	0.1036	0.1438	0.0747		
All Electric	\$16.99	0.0212	0.0225	0.0206	0.0973	0.1491	0.0709		
Separately Metered	\$21.41	0.0211	0.0226	0.0206	0.0988	0.1652	0.0741		
SMALL GS	\$22.38	0.0211	0.0227	0.0202	0.0911	0.1421	0.0621		
Primary & Secondary	\$22.84	0.0211	0.0227	0.0202	0.0913	0.1419	0.0621		
Olher (Unmetered)	\$10.06	0.0212	0.0228	0.0205	0.0877	0.1424	0.0603		
All Electric	\$25.58	0.0210	0.0224	0.0203	0.0873	0.1458	0.0615		
Separately Metered	\$37.00	0.0209	0.0225	0.0203	0.0893	0.1532	0.0642		
MEDIUM GS	\$43.50	0.0211	0.0226	0.0202	0.0833	0.1287	0.0576		
Primary	\$24.48	0.0205	0.0222	0.0199	0.0726	0.1285	0.0516		
Secondary	\$42.48	0.0211	0.0227	0.0201	0.0835	0.1283	0.0576		
All Electric	\$55.54	0.0209	0.0225	0.0202	0.0821	0.1336	0.0588		
Separately Metered	\$64.59	0.0211	0.0227	0.0202	0.0832	0.1295	0.0577		
LARGE GS	\$58.80	0.0209	0.0225	0.0200	0.0700	0.1106	0.0484		
Primary	\$57.45	0.0205	0.0222	0.0196	0.0672	0.1071	0.0456		
Secondary	\$57.52	0.0210	0.0226	0.0201	0.0715	0.1106	0.0490		
All Electric	\$57.52	0.0208	0.0224	0.0201	0.0687	0.1117	0.0484		
Separately Metered	\$99.35	0.0210	0.0227	0.0201	0.0711	0.1134	0.0496		
LARGE POWER SERVICE	\$616.33	0.0205	0.0219	0.0197	0.0607	0.0936	0.0418		
Primary	\$652.22	0.0205	0.0219	0.0197	0.0622	0.0951	0.0437		
Secondary	\$551.56	0.0210	0.0225	0.0202	0.0656	0.0989	0.0461		
Substation	\$648.09	0.0203	0.0215	0.0196	0.0553	0.0875	0.0370		
Transmission	\$647.68	0.0199	0.0216	0.0188	0.0550	0.0880	0.0346		
TOTAL LIGHTING		0.0209			0.0436				

Cost of Service Results - Unbundled Customer, Demand and Energy Cost Components

.

Note - Allocation Method: Production - Avg & Pk 4 CP, Transmission - Avg & Pk 4 CP

	AB	C I	D	E F	G H I	J
	KCP&L-MO LARGE POWER SE	RVICE				
÷						
4	ED 2016 0295					
3	EK-2016-0285					
4						
5	IN	POTFORMODEL	Rates With	PROPOSED		1
6	Cust Chg	Current Rates	Increase	RATES	Proposed Scenarios	
7						-
8			0.11	1		4
9	WHEN PERSON NO. OF THE OWNER OF THE OWNER	The second second second		and an and the set		1
0		and the second				
12	A COSTOMER CHARGE	1,106.30	1,106.30	1,226.93		
3				•		
4			-	•		
5		-	-	- /		1
6	B: FACILITIES CHARGE	3 705	3 705	4 109		
8	PRIMARY:	3.071	3.071	3.406		
9	SUBSTATION VOLTAGE	0.927	0.927	1.028		T I
0	TRANSM VOLTAGE		-	-		1
1		-				1
2	C: DEMAND CHARGE		-			
3	SECONDART-SUMMER:	14 374	14.374	15.942		
5	Next 2443 kw	11.498	11.498	12.752		1
26	Next 2443 kw	9.632	9.632	10.682		
27	All kw over 7329 kw	7.031	7.031	7.798		1
28	SECONDARY-WINTER	0.774	0.774	10.937		1
29	First 2443 kw	7.624	7 624	8.455		
11	Next 2443 kw	6.726	6.726	7.459		
32	All kw over 7329 kw	5.178	5.178	5.743		
33		-	-	-		
34	PRIMARY-SUMMER	-		45 570		
35	First 2500 kw	14.044	14.044	12 461		
17	Next 2500 kw	9 411	9.411	10.437		
38	All kw over 7500 kw	6.871	6.871	7.620		1
39	PRIMARY-WINTER		-	-		
0	First 2500 kw	9.545	9.545	10.587		
11	Next 2500 kw	7.451	7.451	8.263		1
2	Next 2500 kw	6.572	5.061	5.613		1
13	AN KW UVEL / DUU KW	5.001	-	-		1
5	SUBSTATION-SUMMER		-	•		
6	First 2530 kw	13.876	13.876	15.389		
7	Next 2530 kw	11.101	11.101	12.311		
8	All by over 7590 km	9,299	6 790	7.530		
50	SUBSTATION-WINTER	-	-			
51	First 2530 kw	9.434	9.434	10.463		1
52	Next 2530 kw	7.363	7.363	8.166		1
53	Next 2530 kw	6.496	6.496	7.204		
4	All kw over 7590 kw	5.001	5.001	0.040		
56	TRANSMISSION-SUMMER					
57	First 2553 kw	13.757	13.757	15.257		
58	Next 2553 kw	11.002	11.002	12.202		
59	Next 2553 kw	9.214	9.214	10.219		
0	All kw over 7659 kw	6,729	6.729	1.403		
2	First 2553 kw	9.349	9.349	10.368		
3	Next 2553 kw	7.297	7.297	8.093		
4	Next 2553 kw	6.438	6.438	7.140		1
5	All kw over 7659 kw	4.956	4.956	5.496		1
6	D. ENEDOY OUMDOF	•	-			1
2	SECONDARY-SUMMER		-			
9	0-180 hrs use per month	0.09000	0.09000	0.10008		
0	181-360 hrs use per month	0.05348	0.05348	0.05958		
1	361+ hrs use per month	0.02566	0.02566	0.02865		1
2	SECONDARY-WINTER:	0.00000	0.07000	0.09490		
3	0-180 hrs use per month	0.07630	0.07630	0.08489		1
4	361+ brs use per month	0.04866	0.04566	0.02837		1
6	out - the use per motor	0.00000		-		
7	PRIMARY-SUMMER:	0.00000	-	-		1
78	0-180 hrs use per month	0.08794	0.08794	0.09780		1
70	181-360 hre use per month	0.05228	0.05228	0.05825		

	A	В	C	D	E	F	G	Н	1	J	K
80		361+ hrs use per month	0.02507	0.02507	0.02798						
81		PRIMARY-WINTER:	0.00000	-	-	11					
82		0-180 hrs use per month	0.07456	0.07456	0.08296						
83		181-360 hrs use per month	0.04754	0.04754	0.05299						
84		361+ hrs use per month	0.02484	0.02484	0.02773						
85			0.00000	-							
86		SUBSTATION-SUMMER	0.00000	-	-						
87		0-180 hrs use per month	0.08692	0.08692	0.09667						1
88		181-360 hrs use per month	0.05167	0.05167	0.05757						
89		361+ hrs use per month	0.02477	0.02477	0.02760						
90		SUBSTATION-WINTER	0.00000	-							- 1
91		0-180 hrs use per month	0.07370	0.07370	0.08201	11					
92		181-360 hrs use per month	0.04698	0.04698	0.05237						
93		361+ hrs use per month	0.02454	0.02454	0.02735						
94			0.00000	-	-						
95		TRANSMISSION-SUMMER	0.00000								
96		0-180 hrs use per month	0.08615	0.08615	0.09581						
97		181-360 hrs use per month	0.05120	0.05120	0.05705						
98		361+ hrs use per month	0.02456	0.02456	0.02737						
99		TRANSMISSION-WINTER	0.00000	-							
100		0-180 hrs use per month	0.07302	0.07302	0.08125						
101		181-360 hrs use per month	0.04656	0.04656	0.05191						
102		361+ hrs use per month	0.02431	0.02431	0.02709						- 1
103			0.00000	-							
104 E	REA	CTIVE DEMAND ADJUSTMENT	0.930	0.930	1.031						
105				-							
106 L	GS Se	condary	100.00%	A CONTRACTOR OF	11.20%				1. 2. 2.		
107 L	GS Pri	imary	100.00%		11.21%				A COL		
108 L	GS Su	bstation Voltage	100.00%		11.25%						
109 L	GS Tr	ansmission Voltage	100.00%	100 2000 1000	11.24%				1000		- 1
110 L	GS Ov	verall Change (*)	0.00%		11.22%				and the state		- 1
111 V	Winter I	Price Below Summer (SUM-WIN)/SUM	14.2%	and the second	14.2%						
112 0	verall	Change			11.22%						
113											- 1
114		Revenue	\$148,044,229	\$148,306,275	\$164,650,793						- 1
115	3	Change in Revenue			\$16,606,565						
116											
117		Proposed change per Revenue Summary			\$16,606,615	_					

A B	С	D	E F	G H I			
KCP&L-MO LARGE GENERAL SEF	RVICE						
2							
3 ER-2016-0285							
4							
5 INPUT	FOR MODEL	Dates With					
6 Cust Cha	Current Rates	Rates with	Proposed Pate	Proposed Scenarios			
7	Guitein Rates	Increase	Floposed Rate	Proposed Scenarios			
8		0.11					
9							
0			Net Statistics				
1 A: CUSTOMER CHARGE	444.20	114.20	100 05				
2 0-24 KW	114.38	114.38	126.85				
4 200-999 KW	114.38	114.38	126.85				
5 1001+ KW	976.54	976.54	1,083.02				
6 Separately Metered Space Heat	2.62	2.62	2.91				
8 B: FACILITIES CHARGE			and the second	and the second s			
9 SECONDARY:	3.272	3.272	3.629	and the second s			
0 PRIMARY:	2.713	2.713	3.009				
2 C. DEMAND CHARGE							
3 SECONDARY-SUMMER:	6.534	6.534	7.246				
4 SECONDARY-WINTER	3.516	3.516	3.899				
5 PRIMARY-SUMMER	6.386	6.386	7.082				
6 PRIMARY-WINTER 7 SECONDARY-WINTER - ELEC ONLY	3.436	3.436	3.811				
8 PRIMARY-WINTER - ELEC ONLY	3.179	3.179	3.526				
9		50					
0 D: ENERGY CHARGE	A CONTRACT		and the second				
1 SECONDARY-SUMMER:	0.00506	0.00506	0 10550				
3 181-360 hrs use per month	0.06615	0.06615	0.07363				
4 361+ hrs use per month	0.04260	0.04260	0.04736				
5 SECONDARY-WINTER:	0.00000	-	-				
6 0-180 hrs use per month	0.08818	0.08818	0.09807				
B 361+ brs use per month	0.03580	0.03580	0.03981				
9		0.00000	0.00001				
0 PRIMARY-SUMMER:							
1 0-180 hrs use per month	0.09381	0.09381	0.10431				
3 361+ hrs use per month	0.04160	0.04160	0.04614				
4 PRIMARY-WINTER:	0.00000	-	-				
5 0-180 hrs use per month	0.08617	0.08617	0.09584				
6 181-360 hrs use per month 361+ brs use per month	0.04963	0.04963	0.05531				
	0.00010	0.00010	0.00004				
SECONDARY-WINTER - ALL ELECTRIC		a line and a susception of					
0 0-180 hrs use per month	0.08479	0.08479	0.09431				
361+ brs use per month	0.04549	0.04549	0.03949				
PRIMARY-WINTER - ALL ELECTRIC	0.00000	-	-				
0-180 hrs use per month	0.08301	0.08301	0.09233				
181-360 hrs use per month	0.04449	0.04449	0.04961				
30 I + his use per month	0.03483	0.03483	0.03874				
E: SEPARATELY METERED S/H-WINTER							
SECONDARY	0.05932	0.05932	0.06579				
PRIMARY	0.00000	-	•				
F: REACTIVE DEMAND ADJUSTMENT	0.821	0.821	0.91052				
LGS Secondary	100.00%	0.08%	11.16%				
LGS Primary	100.00%	0.27%	11.17%				
LGS Overall Change (*)	0.00%	0.11%	11.16%				
LGA Primary	100.00%	0.00%	11 18%				
LGA Winter Energy Overall Change		0.00%	10.15%				
LGA Overall Change (*)	0.00%	0.53%	11.16%				
Winter Price Below Summer (SUM-WIN)/SUM	28.0%	17.6%	17.5%				
Toverall originge		0.242%	11.10%				
Revenue	\$189,041,225	\$189,498,426	\$210,135,380				
Change in Revenue			\$21,094,155				
Proposed change per Periopire Summer			\$21 004 107				
- Proposed change per revenue sommary			421,054,197				

-	Δ		D	E 16		U U	1	1	
-		VICE	U	EF	I G	ГН		J	
1	INGPOL-ING WEDIUM GENERAL SER	VICE							
2	4								
3	ER-2016-0285								
4									
5	INPUTF	OR MODEL							
	A state of the state of the state of the state of the		Rates With	PROPOSED					
6	Cust Chg	Current Rates	Increase	RATES		Proposed Scena	rios	_	
0		-	0.44		-			-	
9			0.11					-	
10		The second second							
11	A: CUSTOMER CHARGE	A STREET		instant when				1	
12	0-24 KW	53.21	53.21	59.01					
13	25-199 KW	53.21	53.21	59.01					
14	1001+ KW	108.07	108.07	119.85					
16	Separately Metered Space Heat	248	922.15	275					
17	- openancy motores optice right	6,40	2.40	2.10					
18	B: FACILITIES CHARGE	100000000000000000000000000000000000000		1				× .	
19	SECONDARY:	3.092	3.092	3.430					
20	PRIMARY:	2.563	2.563	2.842					
22	C: DEMAND CHARGE	The Stripping	54						
23	SECONDARY-SUMMER:	4.045	4.045	4.486					
24	SECONDARY-WINTER	2.058	2.058	2.282					
25	PRIMARY-SUMMER	3.951	3.951	4.382					
26	PRIMARY-WINTER	2.009	2.009	2.228					
27	PRIMARY WINTER - ELEC ONLY	2.914	2.914	3.232					
29	PRIMART-WINTER - ELEG UNLT	2.001	2.601	3.102					
30	D: ENERGY CHARGE	Statistics -		지수는 영습금복					
31	SECONDARY-SUMMER;								
32	0-180 hrs use per month	0.10573	0.10573	0.11753					
33	181-360 hrs use per month	0.07232	0.07232	0.08048					
34	SECONDARY-WINTER	0.06099	0.06099	0.06764					
36	0-180 hrs use per month	0.09136	0.09136	0.10159					
37	181-360 hrs use per month	0.05468	0.05468	0.06091					
38	361+ hrs use per month	0.04586	0.04586	0.05086				1	
39	PRIMARY-SUMMER:		10 generation						
40	0-180 hrs use per month	0.10320	0.10320	0.11472					
41	361+ hrs use per month	0.07069	0.07069	0.07867					
43	PRIMARY-WINTER:	0.00000	0.00000	0.00000					
44	0-180 hrs use per month	0.08922	0.08922	0.09922					
45	181-360 hrs use per month	0.05342	0.05342	0.05952					
46	361+ hrs use per month	0.04498	0.04498	0.05008					
4/	0-180 brs use per month	0.09046	0.00010	0.09017					
49	181-360 hrs use per month	0.04586	0.04586	0.05099					
50	361+ hrs use per month	0.03982	0.03982	0.04416					
51	PRIMARY-WINTER - ALL ELECTRIC		x.3.635350939						
52	0-180 hrs use per month	0.07836	0.07836	0.08717					
53	181-360 hrs use per month	0.04472	0.04472	0.04973					
55	Solt ins use per month	0.03907	0.03907	0.04333					
56	E: SEPARATELY METERED S/H-WINTER	Server Colorida		Case Building and					
57	SECONDARY	0.05974	0.05974	0.06625					
58	PRIMARY	0.00000	A de la contraction de la contractica de la cont	-					
59									
60	H: REACTIVE DEMAND ADJUSTMENT	0.775	0.775	0.860				- 1	
62	MGS Primary	100.00%	0.65%	11 14%					
63	MGS Overall Change (*)	0.00%	0.02%	11,13%					
64	MGA Secondary	100.00%	0.00%	11.11%		12 12 2 2	and the second		
65	MGA Primary	100.00%	0.00%	11.12%					
66	MGA Winter Energy Overall Change	0.000	0.00%	10.07%					
68	MGS Secondary-Space Heat	100.00%	0.00%	11.11%		and a start the	and the second		
69	Winter Price Below Summer (SUM-WIN)/SUM	21.6%	21.6%	21.6%		Se patra	1		
70	Overall Change		0.01%	11.12%		The Province	SAUN SHEP		
71		No. Parlance and the state of the second	a second s						
72	Revenue Chasses in Devenue	\$121,657,901	\$121,676,024	\$135,191,645					
13	Unange in Revenue			\$13,533,744					
75	Proposed change per Revenue Summary			\$13,533,843				1	
76	server analige per revenue continualy			(\$99)					

	C	D	E	F G H I		
THE SMALL GENERAL SER	VICE					
			1			
5 INPUT F	ORMODEL	Rates With	PROPOSED			
6 Cust Chg	Current Rates	Increase	RATES	Proposed Scenarios		
	Art I want to a stress					
		0.11				
	R THERE					
1 A. CUSTOMER CHARGE	and when the second second					
2 Metered Service:			1. 1. 1. 1. 1. 1.			
3 0-24 KW	18.37	18.37	20.37			
4 25-199 KW	50.92	50.92	56.47			
5 200-999 KW	103.45	103.45	114.73			
7 Unmetered Service	7.71	7.71	8.55			
8 Separately Metered Space Heat	2.37	2.37	2.63			
9						
B: FACILITIES CHARGE	15 horester Salar	6505				
2 0-25 KW						
3 26+ KW	2.959	2.959	3.282			
4 PRIMARY:		-				
5 0-26 KW	-	-				
2/+ KW	2.890	2.890	3.205			
B C: ENERGY CHARGE	Parts The Las					
SECONDARY-SUMMER:						
0 0-180 hrs use per month	0.16395	0.16395	0.1821			
1 181-360 hrs use per month	0.07779	0.07779	0.0865			
3 SECONDARY-WINTER	0.00931	0.06931	0.0769			
4 0-180 hrs use per month	0.12739	0.12739	0.1415			
5 181-360 hrs use per month	0.06220	0.06220	0.0692			
3 361+ hrs use per month	0.05614	0.05614	0.0623			
	1. 221 91 14 925	1				
0-180 hrs use per month	0.16020	0.16020	0.17794	1		
181-360 hrs use per month	0.07601	0.07601	0.08430			
361+ hrs use per month	0.06771	0.06771	0.07509	1 1		
PRIMARY-WINTER:	0 12440	0 12440	0 12922			
181-360 hrs use per month	0.06077	0.06077	0.06760			
361+ hrs use per month	0.05483	0.05483	0.06081			
	New States			1 1		
SECONDARY-WINTER - ALL ELECTRIC	0.44660	0.44660	0 40007			
181-360 hrs use per month	0.11668	0.11668	0.06898			
) 361+ hrs use per month	0.05614	0.05614	0.06226			
PRIMARY-WINTER - ALL ELECTRIC		15,5247 011 (2004)				
0-180 hrs use per month	0.11402	0.11402	0.12672			
361+ brs use per month	0.06077	0.06077	0.06740			
	0.00400	0.00400	0.00001			
D: SEPARATELY METERED S/H-WINTER			S. Barris			
SECONDARY	0.06822	0.06822	0.07566			
SGS Secondary	100.00%	100.01%	111.07%			
SGS Primary	100.00%	100.00%	111.03%			
SGS Overall Change (*)	0.00%	0.01%	11.08%			
SGA Secondary	100.00%	100.00%	111.06%			
SGA Winter Energy Querell Change	100.00%	#DIV/0!	#DIV/0!			
SGA Overall Change (*)	0.00%	0.00%	11.06%			
SGS Secondary Space Heat	100.00%	100.00%	111.02%			
SGS Secondary Unmetered	0.00%	#DIV/0!	#DIV/0!	And the second		
Winter Price Below Summer (SUM-WIN)/SUM	18.5%	18.5%	18.5%			
overan change	E Reg Jalog/COS\16.ClasseC	U.U1%	11.08%	A WORWOON WO SGS (SGS-SGA) VICTRATE SUMMARIES		
Revenue	\$55,207,502	\$55,210,833	\$61,322,320			
Change in Revenue		co na 1954	\$6,114,818			
Proposed observe and Davagers Commence			CG 114 0F4			
Froposed change per Revenue Summary			\$0,114,001			

_	A	В	С	DE	FGHI				
1	KCP&L-MO RESIDENTIAL								
2									
3	ER-2016-0285								
A									
5	INPUT FO	R MODEL							
		and the second	Rates With	Proposed					
6	Cust Chg	Current Rates	Increase	Rates	Proposed Scenarios				
8			0.11						
9		a strategy and the							
10	CUSTOMER CHARGE								
11	One Meter Two Meters - Standard	11.88	11.88	13.18					
13	Two Meters - Additional	2.25	2.25	2.50					
14		14.13	14.13	15.67					
15	ENERGY CHARGE								
17	0-600	0.13328	0.13328	0,14781					
18	600-1000	0.13328	0.13328	0.14781					
19	1000+	0.13328	0.13328	0.14781					
20	Winter Rates								
22	0-600	0.11982	0.11982	0.13289					
23	600-1000	0.07183	0.07183	0.07966					
24	1000+ Winter Consecut DECD	0.06003	0.06003	0.06658					
25	Winter Gen&S/H - RESB 0-600	0.09367	0.09367	0 10388					
27	600-1000	0.09367	0.09367	0.10388					
28	1000+	0.05887	0.05887	0.06529					
29	Sep Space Heat Mir	0.00002	0.00000	0.00000					
31	Summer	0.13328	0.13328	0.14781					
32	Other Use			unself automotions					
33	Winter	0.13450	0.13450	0.14917					
34	Summer	0.17310	0.17310	0.19198					
36	Customer Charge	15.39	15.39000	17.07					
37	Summer On-Peak	0.20439	0.20439	0.22668					
38	Summer Off-Peak	0.11387	0.11387	0.12629					
40	AAUITCI	0.08417	0.06417	0.09335					
41	SmartGrid TOU		5	Sector Sector					
42	Summer On-Peak	0.4149	0.41486	0.46010					
43	Summer Off-Peak Winter TOLLGeneral Lise	0.0692	0.06918	0.07672					
45	0-600	0.10869	0.10869	0.12054					
46	600-1000	0.06518	0.06518	0.07229					
47		0.05447	0.05447	0.06041					
4ð 19	o-1000	0.08093	0.08093	0.08975					
50	1000+	0.05341	0.05341	0.05923					
51									
52	Factor RESA	100.00%	100.00%	110.90%					
54	Factor RESB	100.00%	100.00%	110.90%					
55	Factor RESB - Winter	100.00%	100.00%	110.90%					
56	Factor RESC	100.00%	100.00%	110.90%					
58	Factor RESC - Winter	100.00%	100.00%	110.91%					
59	Overall Change (*)	100.00%	0.00%	10.90%					
60	Winter Price Below Summer (SUM-WIN)/SUM	28.8%	28.8%	28.8%					
61	Pausaus	\$315 000 535	\$315 090 725	\$340 437 631					
53	Change in Revenue	\$315,080,525	\$315,060,735	\$349,457,621					
64	enange in referide								
35	Design Revenue per Revenue Summary			\$34,357,101					
i6				(\$5)					

	A	B Based Non-Rate Tariff B	C	I p
H	Schedule	Sheet No.	Proposed Change	Support
2	Table of Contents	TOC-1	Updated language to include the Thermal Storage Rider and Public Electric Vehicle Charging Station Service.	The Company is proposing: (1) to adjust the language within the Table of Contents to incorporate both the proposed Public Electric Vehicle Charging Station Service and the present Thermal Storage Rider. Currently, Sheet No. 22 within the tariff holds the Company's Thermal Storage Rider and was marked "Reserved for Future Use," within the Table of Contents.
3		TOC-2	Updated language to include the Public Electric Vehicle Charging Station Service.	The Company is proposing: (1) to adjust the language within the Commercial & Industrial section of the Table of Contents to incorporate the newly proposed Public Electric Vehicle Charging Station Service.
5		TOC-2A	Updated language to include the Thermal Storage Rider.	The Company is proposing: (1) to adjust the language within the Riders & Surcharges section of the Table of Contents to include the Thermal Storage Rider.
	Residential Other Use	6	Removed Summer and Winter above Customer Charge.	The Company is proposing: (1) to remove the differentiation of Summer and Winter for the Customer Charge given the Customer Charge is the same for both Summer and Winter.
7	Public Electric Vehicle Charging Station Service	24, 24A, 24B	Utilize Sheet Nos. 24, 24A, and 24B to incorporate the new Schedule CCN.	The Company is proposing: (1) to remove the "Reserved for Future Use" from Sheet Nos. 24, 24A, and 24B in order to utilize each for tariff language of the newly proposed Public Electric Vehicle Charging Station Service.
0	Economic Relief Pilot Program	43Z.1	Corrected a spelling error within the header.	The Company is proposing: (1) to correct a spelling error found within the header of Sheet No. 43Z.1 showing a (space) was missing between 'Revised' and 'Sheet'. Correction of this change will ensure that Sheet No. 43Z.1 is consistent with the remainder of the tariff.
0	FAC	50, 50.1, 50.2, 50.3, 50.4, 50.5, 50.6, 50.7, 50.8, 50.9	Updated the header information.	The Company is proposing: (1) to resubmit the current FAC tariff identified on Sheet Nos. 50, and 50.1 - 50.9 with an update to the language within the subtille of each making them applicable for service provided from September 29, 2015 through the effective date of the proposed ER-2016-0285 rate case, as these are the FAC rules and rates currently in effect. Because of the way the FAC is structured, these tariff sheets will remain active and in effect until the recovery and accumulation periods have run out and a prudence review has been conducted by the Commission Staff.

[	A	8	C	D
1	KCPL-MO Pro	posed Non-Rate Tariff I	Revisions - ER-2016-0285	
2	Schedule	Sheet No.	Proposed Change	Support
10		50.11, 50.12, 50.13, 50.14, 50.15, 50.16, 50.17, 50.18, 50.19, 50.20, 50.21	Original documents being implemented into the KCP&L-MO tariff.	The Company is proposing: (1) to submit a new set of Original tariff sheets 50.11 through 50.21 as part of our ER-2016-0285 Rate Case that will include new language presently not contained within the Company FAC (50, 50.1 - 50.10) that will better define the FERC accounts impacted by the FAC and allow for the FAC to be more consistent with the recently submitted KCP&L-GMO (ER-2016- 0156) Rate Case FAC tariff; and (2) to include new language re-calculating the FAC Rate Base to reflect current fuel and fuel handling costs as well as an inclusion of transmission costs into the FAC since these costs are directly linked to the Company's fuel and purchased power requirements and can vary significantly from year-to-year.
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1	KCPL-MO Prop	osed Rules & Regulati	on Revisions Tariff Revisions - ER-2016-0285	
5	Section	Rule & Sheet No.	Proposed Change	Support
2	Table of Contents	Sheet No. 1.04	Updated language within the Table of Contents to reflect changes made to Rule 10.03.	The Company is proposing to: (1) update the language within the Table of Contents to incorporate a change to the beginning of Rule 10.03 from Sheet No. 1.33B to Sheet No. 1.33A as a result of efforts made by the Company to clean-up its tariff.
4	Metering	Rule 6.09(E) on Sheet No. 1.24A	Update language in Rule 6.09(E) to refer the Customer to Rule 4.10 and not Rule 5.04(D) and added language to the existing Rule 6.09(E).	In order to fully reflect tariff revisions intended in Case No. ER-2014-0370, the Company is proposing: (1) to update the language of Rule 6.09(E) to reference the current period a customer may elect to pay any billing adjustment found based on a Customer being undercharged to at least double the period of time covered by the adjusted bill; and (2) to change the reference of Rule 5.04(D) to Rule 4.10 as it pertains to tampering of Company facilities.
5	Billing and Payment	Rule 8.09 on Sheet No. 1.28	Change made to Non-MEEIA rate.	The Company is proposing: (1) to update its current Non-MEEIA rate that customers will receive on their bill if they opt-out of the Non-MEEIA rate.
6	Extension Policy	Rule 9.01 on Sheet Nos. 1.31 and 1.32	Updated language in Rule 9.01 to allow for some flexibility in the single family residential line extension policy.	The Company is proposing: (1) to mirror the language of the previously filed KCP&L-GMO Rate Case (ER-2016-0156) as a way to bring consistency throughout all Company territories; (2) to update the language of Rule 9.01 to be more general with the terminology so as to favor the Customer by allowing some flexibility of how to achieve a "Free of Charge" extension; and (3) to reformat both Sheets 1.31 and 1.32 with respect to efforts made by the Company to clean up its tariff.
	Underground Distribution Policy	Rule 10.02(d) on Sheet Nos. 1.33 and 1.33A	Reformat of Rule 10.02(d) to no longer be on Sheet No. 1.33A and updates made to the language referring a Customer to sections of the Company's Electric Service Standards.	In order to ensure that all references regarding underground primary and secondary distribution facilities are the same throughout each territory, the Company is proposing: (1) to update the language of Rule 10.02(d) and refer the reader to specific sections within the Company's Electric Service Standards; and (2) to open Sheet No. 1.33A for additional efforts made by the Company to clean up its tariff.
8		Rule 10.03(a) on Sheet Nos. 1.33B and 1.33C	Reformat of Rule 10.03(a) to begin on Sheet No. 1.33A and an update to the language of Rule 10.03(a)(iv) on top of adding a Rule 10.03(a)(ix) that defines the Company's Electric Service Standards.	The Company is proposing: (1) to reformat Rule 10.03 and Rule 10.03(a) so that both may begin on Sheet No. 1.33A instead of Sheet No. 1.33B; (2) to update the language of Rule 10.03(a) so that the Company may remain consistent throughout all its territories by redefining a Subdivision within Rule 10.03(a)(iv) as land divided into "five" or more lots instead of "two" or more; and (3) to reformat Rule 10.03(a) to include a Rule 10.03(a)(ix) defining the Company's Electric Service Standards and inform a Customer where they may find the document on the Company's website.

	A	В	С	D
1	KCPL-MO Propo	esed Rules & Regulation	on Revisions Tariff Revisions - ER-2016-0285	
2	Section	Rule & Sheet No.	Proposed Change	Support
		Rule 10.03(b) on Sheet No. 1.33D	Reformat of Rule 10.03(b) to begin on Sheet No. 1.33C.	The Company is proposing: (1) to reformat Rule 10.03(b) so that it may begin on Sheet No. 1.33C instead of Sheet No. 1.33D to facilitate efforts made by the Company to clean up its tariff.
		Rule 10.03(c) on Sheet Nos. 1.33E, 1.33F, 1.33G, 1.33H, and 1.33I	Reformat of Rule 10.03(c) to begin on Sheet No. 1.33D and updates to the existing language of Rules 10.03(c)(i)(1)(A - B), 10.03(c)(i)(2), and 10.03(c)(ii - vi) to include a reference of specific sections in the Company's Electric Service Standards.	The Company is proposing: (1) to reformat Rule10.03(c) to begin on Sheet No. 1.33D instead of Sheet No. 1.33E with respect to efforts made by the Company to clean up its tariff; and (2) to update the language within Rules 10.03(c)(i)(1)(A - B), Rule 10.03(c)(i)(2), and Rules 10.03(c)(ii - iii) to include language that refers a reader to specific sections within the Company's Electric Service Standards to ensure consistency throughout all Company territories.
10		Rule 10.03(d) on Sheet Nos. 1.33I and 1.33J	Reformat of Rule 10.03(d) to begin on Sheet No. 1.33G and updates to the existing language of Rules 10.03(d)(i - iv) to ensure consistency throughout all Company territories.	The Company is proposing: (1) to reformat Rule 10.03(d) to begin on Sheet No. 1.33G instead of Sheet No. 1.33I with respect to efforts made by the Company to clean up its tariff; and (2) to update and reformat the language within Rules 10.03(d)(i - iv) to bring consistency throughout all Company territories.
11		Rule 10.03(e) on Sheet Nos. 1.33J and 1.33K	Reformat of Rule 10.03(e) to begin on Sheet No. 1.33H and an update to the language of Rules 10.03(e)(i-v) to include a reference of specific sections in the Company's Electric Service Standards.	The Company is proposing: (1) to reformat Rule 10.03(e) to begin on Sheet No. 1.33H instead of Sheet No. 1.33J with respect to efforts made by the Company to clean up its tariff; (2) to update the language within Rules 10.03(e)(i - iv) so that a reference is made to guide a Customer to the Company's Electric Service Standards; and (3) to reformat the language within Rule 10.03(e)(v) to Rule 10.03(e)(i).
12		Rule 10.03(f) on Sheet No. 1.33K and Rule 10.03(g) on Sheet No. 1.33L	Reformat of both Rules 10.03(f - g) to begin on Sheet No. 1.33I.	The Company is proposing: (1) to reformat Rules 10.03(f - g) to both begin on Sheet No. 1.33I instead of either Sheet Nos. 1.33K and 1.33L to facilitate a clean up of its tariff.
13		Rule 10.03(h) on Sheet No. 1.33L	Removal of language.	The Company is proposing to: (1) remove the language within Rule 10.03(h) as given changes in other Sections of the Rule 10.03 address more relevantly.
14	•	Sheet No. 1.33J, 1.33K, 1.33L	Mark as "Reserved For Future Use."	The Company is proposing: (1) to mark these sheets as, "Reserved For Future Use," to facilitate the reformatling of current language within these tariff sheets and the remainder of Rule 10.03.

	KCP&L - Missouri Jurisdiction Class Revenue - For Direct filing - ER-2016-0370												
(A)	К		(B)		(C)		(D)		E=(B-C)		F=(E * 10.9%) 10.90%		(E+F
MISSOURI RATE GROUP	kWh	Rov Rate	enue from Existing is (including DSIM, EDR)	D	ISIM Adjustments	Ę	DR credits & Misc."	Re	venue from Existing Rates less DSIM adjustments	F Exe	lequest increase- cluding EDR gross- up (exci lighting)	P	roposed Revenue
LARGE POWER TOTAL	2,038,230,106	\$	149,408,547	\$	3,529,772	\$	(2,165,455)	\$ \$	145,878,774	\$	15,906,955	\$	161,785,729
LARGE GEN SVC TOTAL	2,111,680,530	\$	194,716,422	\$	6,436,560	\$	(761,362)	ş	188,279,863	\$	20,530,467	\$	208,810,329
MEDIUM GEN SVC TOTAL	1,177,222,033	\$	125,290,276	\$	3,663,276	\$	(30,900)	\$ \$	121,627,000	\$	13,262,486	\$	134,889,487
SMALL GEN SVC TOTAL	416,877,926	\$	56,524,267	\$	1,318,256	\$	(1,491)	\$ \$	55,206,011	\$	6,019,790	\$	61,225,801
RESIDENTIAL TOTAL	2,538,324,789	\$	322,006,343	\$	6,927,513	\$	(1,695)	\$	315,078,830	\$	34,356,916	\$	349,435,746
MO Metered TOTALS	8,280,335,384	\$	847,945,856	\$	21,875,377	\$	(2,960,903)	\$ 5	826,070,479	\$	90,076,613	\$	916,147,092
MO Lighting TOTAL**:	85,231,784	\$	10,506,822	\$		_		š	10,506,822			\$	10,506,822
MO TOTAL	8,365,567,168	\$	858,452,678	\$	21,875,377	\$	(2,960,903)	5	836,577,301	\$	90,076,613	\$	926,653,914

"Misc. included a move of BD actuals to RES A and RES 3 rates.

\*\*No increase for Lighting.

	KCP&L - Missourl Jurisdiction Class Revenue - For Direct filing - ER-2016-0370							( P				
(A)	(K)	(B)		(C)		(D)	E=(B-C)		F=(E * 10.9%) 10,90%	(L)		(E+J)
MISSOURI RATE GROUP	kWh	Revenue from Existing Rates (including DSIM, EDR)	D	SIM Adjustments	EDR cree	dits & Misc.*	Revenue from Existing Rates less DSIM adjustments	R Exc U	equest Increase- Iuding EDR gross- ip (excl lighting)	Adjusted Request Increase-FAC Impact	Pro	opozod Revenue
LARGE POWER TOTAL	2,036,230,105	\$ 149,408,54	75	3,529,772	\$	(2,165,455)	\$ 145,878,774	\$	15,906,955	9,237,760	\$	155,116,534
LARGE GEN SVC TOTAL	2,111,680,530	\$ 194,716,42	2\$	6,436,560	\$	(761,362)	\$ 188,279,863	\$	20,530,467	13,616,203	\$	201,896,066
MEDIUM GEN SVC TOTAL	1,177,222,033	\$ 125,290,27	3\$	3,663,276	\$	(30,900)	\$ 121,627,000 \$	\$	13,282,486	9,383,413	\$	131,010,414
SMALL GEN SVC TOTAL	416,877,925	\$ 56,524,26	7\$	1,318,256	s	(1,491)	\$ 55,206,011 \$	\$	6,019,790	4,610,371	\$	59,816,382
RESIDENTIAL TOTAL	2,538,324,789	\$ 322,006,34	3\$	6,927,513	\$	(1,695)	\$ 315,078,830	\$	34,356,916	26,056,880	\$	341,135,710
MO Metered TOTALS	8,280,335,384	\$ 847,945,85	6\$	21,875,377	\$	(2,960,903)	\$ 826,070,479 \$ -	\$	90,076,613		\$	888,975,106
MO Lighting TOTAL**:	85,231,784	\$ 10,506,82	2 \$				\$ 10,506,822				\$	10,506,822
MO TOTAL	8,365,567,168	\$ 858,452,67	8 \$	21,875,377	5	(2,960,903)	\$ 836,577,301	\$	90,076,613	\$ 62,904,627	\$	899,481,928

\*Mitc. Included a move of BD actuals to REG A and REG B rates.

"No increase for Lighting.

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Exhibit No.: Issue: Customer Growth, Energy Efficiency Adjustment and Historical and Projected Customer Usage Witness: Albert R. Bass, Jr. Type of Exhibit: Surrebuttal Testimony Sponsoring Party: Kansas City Power & Light Company Case No.: ER-2016-0285 Date Testimony Prepared: January 27, 2017

#### MISSOURI PUBLIC SERVICE COMMISSION

CASE NO.: ER-2016-0285

#### SURREBUTTAL TESTIMONY

OF

#### ALBERT R. BASS, JR.

#### **ON BEHALF OF**

#### **KANSAS CITY POWER & LIGHT COMPANY**

Kansas City, Missouri January 2017

**All Such Information Should Be Treated Confidential' Information** Pursuant To 4 CSR 240-2.135.

#### SURREBUTTAL TESTIMONY

#### OF

#### ALBERT R. BASS, JR.

#### Case No. ER-2016-0285

- 1 Q: Please state your name and business address.
- 2 A: My name is Albert R. Bass, Jr. My business address is 1200 Main, 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 "Company") as
- 6 Manager of Market Assessment.
- 7 Q: On whose behalf are you testifying?
- 8 A: I am testifying on behalf of KCP&L.
- 9 Q: Are you the same Albert R. Bass, Jr. who filed Direct and Rebuttal Testimony in
  10 this proceeding?
- 11 A: Yes, I am.
- 12 Q. What is the purpose of your surrebuttal testimony?

A: The purpose of my surrebuttal testimony is to respond to Missouri Public Service
Commission ("Commission" or "MPSC") Staff's rebuttal testimony 1) Matthew R.
Young's adjustment for Customer Growth, 2) Michael L. Stahlman's conclusion on
Energy Efficiency Adjustment To Billing Determinants and 3) the Office of the Public
Counsel ("OPC") rebuttal testimony of Geoff Marke's conclusions on historical &
projected customer usage.

1		I. CUSTOMER GROWTH
2	Q:	Please summarize Staff witness Young's rebuttal on customer growth.
3	A:	Mr. Young sates the revenue adjustment for customer growth in Staff's Direct filing will
4		be revised in the true-up filing after receiving customer information provided by
5		Company in DR 0237T.
6	Q:	Does the Company agree with Staff witness Mr. Young's rebuttal on customer
7		growth?
8	A:	Yes. Company agrees the data used by Staff in its Direct filing to calculate customer
9		growth does not accurately represent the actual rate of customer growth.
10	Q:	Do you agree with Mr. Young that it should be revised?
11	A:	Yes.
12	Q:	Has Company changed its methodology in calculating customer growth?
13	A:	No. Company is using same methodology employed in previous rates cases.
14	Ι	I. ENERGY EFFICIENCY ADJUSTMENT TO BILLING DETERMINANTS
15	Q:	What energy efficiency kWh savings were used in Company's calculated revenues?
16	A:	Both MEEIA Cycle 1 and Cycle 2 kWh savings where included in the Company's
17		revenue adjustment.
18	Q:	What are Mr. Stallman's concerns on the energy efficiency adjustment to billing
19		determinants?
20	A:	Staff believes that MEEIA Cycle 1 programs are not part of the stipulation and agreement
21		filed in KCP&L's MEEIA Cycle 2 docket, in case No. EO-2015-0240.

1	Q:	Does the Company agree with Staffs assertion that MEEIA Cycle 1 programs
2		should not be included?
3	A:	No.
4	Q:	Is the issue of including MEEIA Cycle 1 programs addressed elsewhere in Company
5		testimony?
6	A:	Yes. Please see the rebuttal and surrebuttal testimony of Tim Rush.
7		III. HISTORICAL & PROJECTED CUSTOMER USAGE
8	Q:	Does the Company have an issue with OPC witness Marke's rebuttal testimony?
9	A:	Yes, Mr. Marke states "Mr. Bass's position on GMO's most recent weather normalized
10		billed sales and what he believes is likely GMO's projected future" is incorrect. My
11		testimony in this case is in regards to KCP&L. Given that this rebuttal testimony is
12		concerning KCP&L, one must draw the conclusion Mr. Marke is referencing the
13		discussion of the decline in average used in the KCP&L direct testimony rather than the
14		GMO direct testimony.
15	Q:	What are the Company's concerns with OPC's rebuttal testimony regarding
16		historical and projected customer usage?
17	A:	OPC witness Geoff Marke states that he agrees with only some of the Company's
18		assertions that continued lag from the recession, federal appliance standards, Company
19		energy efficiency programs, a stagnant single family housing market and increasing
20		prices are continuing to have an impact on Company's kWh sales. Mr. Marke asserts that
21		these factors may have some impact, but is more inclined to believe they are minimal and
22		that Company's energy efficiency programs have not significantly impacted the
23		Company's recent historical trend in sales. Rather, Mr. Marke contends that the Company

is experiencing low growth compared to pre-recessionary levels and that future growth is
uncertain based on uncertainty in the weather and economy. Mr. Marke does not explain
how his description of growth in customer usage differs from that of the Company, rather
treating it as a statement without elaboration.

5 The Company does not agree with these assertions. Mr. Marke offers no evidence 6 directly countering the Company's statement that Company sponsored energy efficiency 7 programs have reduced customer usage; nor does he offer evidence to counter the 8 Company's expectation that Company kWh sales growth will not return to the rates seen 9 prior to the housing market collapse and recession occurring in and around 2008. Mr. 10 Marke only offers recent growth in quarterly earnings and sales as evidence that there is 11 uncertainty in weather and the economy. The Company is experiencing

12 kWh sales growth well below the level of growth the Company experienced
13 before the recession, housing market collapse and implementation of energy efficiency
14 programs.

# 15 Q: Please summarize the testimony offered by Mr. Marke regarding the uncertainty in 16 future electricity retail growth?

- 17 A: Mr. Marke offers the following as evidence:
- Great Plains Energy (GPE) year-over-year \$0.14 increase in earnings per share
   and 3.4 percent increase in retail MWh sales in 2016 second quarter due to a 31
   percent increase in cooling degree days compared to the second quarter 2015.
- 2) GPE year-over-year \$0.05 increase in earnings per share and 3.2 percent increase
  in retail MWh sales in 2016 third quarter driven by a 7 percent increase in cooling
  degree days compared to the third quarter 2015.

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1		3) GPE 0.3% growth in weather normalized MWh sales 2016 third quarter YTD,
2		including 1.2% Residential, -0.1% Commercial, -0.6% Industrial.
3		Additionally, Mr. Marke cites two climate change articles as evidence for this statement,
4		"Whether this heat wave represents an anomaly or if more erratic weather patterns are
5		likely to occur can be just as reasonably debated as whether or not the economy will
6		bounce back and induce increased consumption."
7		In concluding that the future of customer usage is uncertain, Mr. Marke does not
8		provide evidence to directly counter the rationale behind the Company's belief that usage
9		will not return to previous rates of growth.
10	Q:	Does the Company agree with Mr. Marke?
11	A:	No. There are several areas where the Company does not agree with his conclusions.
12		First, Mr. Marke bases his arguments on GPE level earnings, revenue, and
13		growth.
14		GPE is comprised of three jurisdictions and each can contribute differently to the GPE
15		total. One cannot conclude that if GPE is experiencing growth that all three jurisdictions
16		are following the same trend. Additionally, kWh customer usage and the Company's
17		earnings are not perfectly correlated. Total revenue is derived from the price charged per
18		customer, kWh usage, and customer charge. There are several different rate tariffs for
19		different customer and within those tariffs, there are different rate structures for summer
20		and winter seasons; the application of these rate components may result in total revenue
21		and total kWh customer usage growing at similar or dis-similar rates for any given time
22		period. Given both of these points, GPE earnings and revenue should not be used as a

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primary source of evidence when deriving a conclusion on the future trend in customer usage.

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3 Second, the Company quarterly results employed by Mr. Marke in his argument 4 include weather. Historically, weather is highly irregular over a short-term period (e.g. a 5 single test year), but much less variable over a long-term (e.g. 30 years). The short-term 6 variability may have a positive or negative impact on energy consumption. For this 7 reason, kWh sales used in rate base making are weather normalized. The variability in the 8 weather is removed to see a clearer picture of the true growth trend. Additionally, while 9 Mr. Marke cites two articles on climate change in order to contend that the warm weather 10 cited in GPE earnings may continue, those references primarily discuss changes that may 11 occur over the course of a "few decades" or by the end of the century, but not in the 12 immediate future.

13 Third, while Mr. Marke's statement that GPE's 12-months ending September 30, 14 2016 growth is 0.3% based on its third quarter 2016 earnings presentation. Fourth quarter 15 weather normalized results ending December 31, 2016 shows KCP&L MO jurisdictional 16 kWh retail sales by and the weather normalized KCP&L MO jurisdictional retail average use per customer 4<sup>th</sup> Otr. results ending December 31, 2016 17 18 of The weather normalized KCP&L MO retail kWh shows a 19 sales 12-months ending December 31, 2016 shows KCP&L MO jurisdictional kWh retail 20 sales bv and the weather normalized KCP&L MO 21 jurisdictional retail average use per customer 12-month ending December 31, 2016 shows 22 . This is a very different picture than what Mr. Marke would a of 23 lead you to believe by using GPE third quarter 2016 earnings.

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Fourth, Mr. Marke states "I am much less inclined to agree the Company's energy efficiency efforts have significantly impacted KCP&L's recent historical trend." Mr. Marke does not believe there is a significant impact on customer usage from the Company energy efficiency programs and appears to disagree that federal standards have a significant impact on customer usage. If neither of these impact customer usage, there would need to be an alternative explanation for the decline in Company's use per customer.

т	able 1 - KCP&L M	0
·	Customers	Average Use
2015	1.1%	-0.7%
2016		

<sup>8</sup> Table 1 shows that KCP&L MO has seen greater than 1% customer growth the 9 10 last two years while weather normalized average use has Over the past 11 several years the Department of Energy has aggressively implemented federal standards 12 that impact the appliances consumers use on a daily basis. In addition, the Company has 13 implemented its own energy efficiency programs, which have reduced KCP&L's weather 14 normalized kWh sales by approximately in 2015 and 2016<sup>1</sup>. These savings 15 are in line with energy efficiency programs sponsored by other utilities throughout the 16 United States. Figure 1 shows nearly a third of company-sponsored energy efficiency 17 programs in the United States are achieving savings of near 1% or more per year and another third of the states are saving between 0.25% and 0.75% of retail sales<sup>2</sup>. The 18 19 national savings reported in 2014 was equal to 0.7% of sales. The savings produced by

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<sup>&</sup>lt;sup>1</sup> The estimation of MEEIA savings is derived through the calculation of monthly kWh sales results, based on savings from customer participation in MEEIA programs.

<sup>&</sup>lt;sup>2</sup> Quadrennial Energy Review "Transforming the Nation's Electricity System: The Second Installment of The QER, January 2017, Pg. 2-29.

the Company's programs are within the range most commonly realized by other electric
 utilities.

3 Figure 1: Percent Electricity Savings in 2014 from Energy Efficiency Programs

Number of States

# Funded by Utility Customers.

### 5

6

4

#### Q: Has OPC supported the Company's MEEIA programs?

7 A: Yes. OPC is a member of the Demand Side Advisory Group (DSMAG) which reviews 8 the performance of the Company's MEEIA programs. As a member, OPC received and 9 reviewed the Evaluation, Measurement and Verification (EM&V) of the Company's 10 MEEIA programs which verified a total energy savings of 189.0 MWh for Cycle 1. OPC 11 has also signed the Non -Unanimous Stipulation and Agreement dated November 23, 12 2015 supporting the Company's MEEIA Cycle 2 energy efficiency programs which is 13 targeting 198.1 MWh of savings over the three year period April 2016 through March 14 2019.

### 15 Q: Does the Company agree there is uncertainty in future electricity sales growth?

16 A: Yes. However, this does not mean a reasonable estimate should be discarded.

- 1 Q: Do other electric utilities expect growth in customer usage to return to previous
  2 rates?
- 3 No. The majority of electric utility forecasters in the United States expect customer usage A: 4 growth to remain at rates lower than those seen prior to 2008. Figure 3 shows historical 5 electricity kWh sales from 1974 through 2015 with forecast kWh sales based on the 6 survey projections as well as consensus near-term projections of 62 electric utilities belonging to the Energy Forecasting Group (EFG) sponsored by Itron<sup>3</sup>. Beginning with 7 8 the "Great Recession" in 2008, sales for KCP&L and other utilities have deviated from 9 the long-term trend line. Since 2008, kWH sales have been flat in spite of some economic 10 recovery. With this continued deviation in trend, utilities are no longer expecting to 11 return to the previous long-term trend.

#### 12

Figure 3: EFG Survey of U.S. Electric Sales Growth



<sup>&</sup>lt;sup>3</sup> 2016 Forecasting Benchmark Survey, Itron, Inc., October 2016

# Q: Does the Company believe federal efficiency standards continue to impact customer usage?

3 A: Yes. The U.S. Appliance Standards Program now includes over sixty products which 4 cover 90% of residential energy use, 60% of commercial energy use, and 30% of 5 industrial energy use. The annual utility bill savings for consumers from the federal 6 standards program amounts to over \$58 billion per year or nearly a \$250 per household 7 per year savings on their bill. The U.S. Department of Energy (DOE) states "The 8 cumulative energy savings of standards promulgated to date will be about 70 quadrillion 9 British thermal units (quads) of energy through 2020, and will amount to nearly 128 10 quads through 2030 – more than 1 years' worth of US energy use". The impacts of 11 federal standards can be seen by looking at a typical air conditioner. A typical air 12 conditioner today uses about 50% less energy than a typical 1990 model and air 13 conditioners have become even more efficient in the last 5 years<sup>4</sup>. To put that in 14 perspective, the results from KCP&L 2016 appliance saturation survey shows 26% of 15 residential KCP&L customers have replaced their primary cooling unit in the last five 16 years and 31% of KCP&L commercial customers have implemented cooling and heating 17 efficiency measures in the past three years. This results in a decline in summer loads 18 today and in the future. The decline in average use is both a result of the federal standards 19 and company sponsored energy efficiency programs (such as the air conditioner rebate 20 program) and lead to the continued decline in average use per customer.

<sup>&</sup>lt;sup>4</sup> "The U.S. Appliance Standards Program, John Cymbalsky, Department of Energy, Presented at the Annual Energy Forecasting Meeting, 2015.

# Q: Does the Company believe customer usage continues to be impacted by the recession?

3 A: Yes. While there are likely many lingering effects from the recession in the electric utility
4 industry, two are clear (1) growth in households has shifted from single-family units to
5 multi-family units and (2) economic output is reduced.

- First, The Kansas City metro housing market has yet to fully recover from the recession
  and housing bust, resulting in fewer single-family housing units being built. To date, the
  housing market recovery has been driven primarily by multi-family units (Figure 2)
  which have a lower average electricity usage. An average multi-family unit uses 48% less
  electricity than a single-family unit. Even with customer growth above 1%, average use
  per customer continues to decline from smaller more efficient housing units.
- 40





<sup>&</sup>lt;sup>5</sup> U.S Census Bureau; Moody's Analytics. Housing Completions: Single-family and Multi-family (# of units, SAAR) for Kansas City, MO-KS

9	Q:	Does the Company agree with Mr. Marke conclusion on the adjustment the
8		U.S. electricity consumption growth has declined alongside GDP, but at a faster rate.
7		0.03% in C&I customers 2008-2016. Further, at a national level, the historical pace of
6		customers from 2000-2008, but has since experienced an annualized growth rate of
5		customers. KCP&L MO experienced an annualized growth rate of 0.80% in C&I
4		impact of this can be seen in the growth rate of commercial and industrial ("C&I")
3		quarter 2008. Dampened output results in stagnant commercial and industrial sales. The
2		in the past thirty years from 1986 to 2015 with thirteen of them occurring since fourth
1		Second, Kansas City Gross Metro Product (GMP) has been below 1% twenty five times

- 10 Company made for energy efficiency programs?
- 11 A: No. Please refer to the rebuttal and surrebuttal testimony of Tim Rush.
- 12 Q: Does that conclude your testimony?

13 A: Yes, it does.

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

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In the Matter of Kansas City Power & Light Company's Request for Authority to Implement A General Rate Increase for Electric Service

Case No. ER-2016-0285

#### **AFFIDAVIT OF ALBERT R. BASS, JR.**

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

Albert R. Bass, Jr., being first duly sworn on his oath, states:

My name is Albert R. Bass, Jr. I work in Kansas City, Missouri, and I am 1. employed by Kansas City Power & Light Company as Manager of Market Assessment.

2. Attached hereto and made a part hereof for all purposes is my Surrebuttal Testimony on behalf of Kansas City Power & Light Company consisting of twelve

(12) pages, having been prepared in written form for introduction into evidence in the abovecaptioned 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 thereto, are true and accurate to the best of my knowledge, information and belief.

12 Dary Albert R. Bass, Jr.

Subscribed and sworn before me this  $27^{+-}$  day of January 2017.

Notary Public

My commission expires: Feb. 4 2019

NICOLE A. WEHRY
Notary Public - Notary Seal
State of Missouri
Commissioned for Jackson County
My Commission Expires: February 04, 2019
Commission Number: 14391200