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

Designates "Highly Confidential" Information. All Such Information Should Be Treated Confidentially Pursuant To 4 CSR 240-2.135.

SURREBUTTAL TESTIMONY

OF

ALBERT R. BASS, JR.

Case No. ER-2016-0285

- Q: Please state your name and business address.
 A: My name is Albert R. Bass, Jr. 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 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	I	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

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

1

2

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 and the weather normalized KCP&L MO by jurisdictional retail average use per customer 4th Qtr. 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 by 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.

	Customers	Average Use
2015	1.1%	-0.7%
2016		

Table 1 - KCP&L MO

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⁸ 9 Table 1 shows that KCP&L MO has seen greater than 1% customer growth the last two years while weather normalized average use has 10 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 in 2015 and 2016¹. These savings 14 normalized kWh sales by approximately 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 sales². The 18 19 national savings reported in 2014 was equal to 0.7% of sales. The savings produced by

¹ The estimation of MEEIA savings is derived through the calculation of monthly kWh sales results, based on savings from customer participation in MEEIA programs.

² 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 electricutilities.

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



Funded by Utility Customers.



6

4

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

7 Yes. OPC is a member of the Demand Side Advisory Group (DSMAG) which reviews A: 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 Itron³. Beginning with 7 the "Great Recession" in 2008, sales for KCP&L and other utilities have deviated from 8 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



14

³ 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 conditioners have become even more efficient in the last 5 years⁴. To put that in 13 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.

⁴ "The U.S. Appliance Standards Program, John Cymbalsky, Department of Energy, Presented at the Annual Energy Forecasting Meeting, 2015.

1 Q: Does the Company believe customer usage continues to be impacted by the 2 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.
- 12





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

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

- 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) \$\$ 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.

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

 $(\underline{12})$ pages, having been prepared in written form for introduction into evidence in the abovecaptioned docket.

I have knowledge of the matters set forth therein. I hereby swear and affirm that 3. 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.

Albert R. Bass, Jr.

Subscribed and sworn before me this 27^{th} day of January 2017.

Micoi A. Le 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