

PUBLIC VERSION

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

DIRECT TESTIMONY OF

JAMES M. FLUCKE

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

**IN THE MATTER OF THE APPLICATION OF
KANSAS CITY POWER & LIGHT COMPANY
FOR APPROVAL OF ITS 2018 ACTUAL COST ADJUSTMENT (“ACA”)**

DOCKET NO. 19-KCPE-____-ACA

1 **Q: Please state your name and business address.**

2 A: My name is James M. Flucke. My business address is 1200 Main, Kansas City, Missouri
3 64105-2122.

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, Analytics.

7 **Q: What are your responsibilities?**

8 A: My primary responsibilities are to supervise the analysts that provide energy market risk
9 management and develop the Company’s Energy Cost Adjustment (“ECA”) projections.

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

2 A: In 1993, I was awarded the degree of Bachelor of Science in Electrical Engineering by
3 the University of Illinois Urbana-Champaign. The University of Missouri – Kansas City
4 awarded me the Master of Business Administration degree in 1999. In addition to those
5 academic credentials, I am a licensed Professional Engineer with the State of Missouri.

6 In 2000, after working for seven years with Burns & McDonnell Engineering, I
7 joined Aquila as a financial analyst. At Aquila, I performed various roles on both the
8 non-regulated and regulated sides of the business including financial analysis, asset
9 management and resource planning. In 2008, I joined KCP&L with the purchase of
10 Aquila and was promoted in 2017 to Manager, Analytics after managing KCP&L's
11 Transmission Congestion Rights portfolio since the inception of the Southwest Power
12 Pool's Integrated Marketplace.

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

16 A: I have previously testified before the KCC in the 2017 Actual Cost Adjustment case.

17 **Q: On what subjects will you be testifying?**

18 A: I will address four topics:

- 19 ▪ A summary of the information provided in KCP&L's quarterly ECA submittals
20 made on December 20, 2017, March 16, 2018, June 20, 2018, and September 20,
21 2018, in Docket No. 08-KCPE-677-CPL, KCP&L's ECA tariff compliance
22 docket;
- 23 ▪ A comparison of KCP&L's projected 2018 ECA to its actual 2018 ECA;

- 1 ▪ KCP&L’s fuel procurement planning and practices: and
- 2 ▪ A summary of the cost effects on one part of the Southwest Power Pool (“SPP”)
- 3 Integrated Market (“IM”), namely the impact on consumer power prices due to
- 4 the combined balancing authority of the IM.

5 **I. Information Provided in Quarterly ECA Submittals**

6 **Q: What is the purpose of this portion of your testimony?**

7 A: In this section of my testimony, I will briefly describe the information KCP&L submits

8 when it files its ECA factors with the Commission.

9 **Q: What information does KCP&L submit when it files its ECA factors each quarter?**

10 A: KCP&L’s ECA tariff (also known as Schedule 2 or Schedule ECA) identifies several

11 items that go into the calculation of the ECA factors including fuel and purchased power

12 costs, transmission costs and related fees, emission allowance costs and off-system sales

13 margins (“OSSM”). Starting in December 2007, on or before the 20th day of the last

14 month of each quarter, KCP&L submits to the Commission a report containing projected

15 monthly ECA factors on a dollars per kWh basis for each remaining month of the

16 effective ECA year. KCP&L also submits a report that shows by account the total costs,

17 revenues, and kWh used to calculate the dollars per kWh factors. Starting with the

18 March 2008 report, the Company also compares the original ECA revenue projections

19 and the then-current ECA year-end projections on a total revenue basis.

20 **Q: Have there been any changes to how KCP&L projects those ECA factors?**

21 A: No, not this year. However, in Docket No. 15-KCPE-116-RTS, the Commission

22 approved implementation of a Transmission Delivery Charge (“TDC”) Rider for KCP&L

23 which took effect beginning October 1, 2015. The TDC was designed to collect retail

1 transmission costs and fees from KCP&L's Kansas customers; therefore, beginning with
2 the October 2015 projected monthly ECA factor, all retail transmission costs and fees
3 were excluded from our calculation of the projected monthly ECA factors.

4 II. Projected 2018 ECA Versus Actual 2018 ECA

5 **Q: What is the purpose of this portion of your testimony?**

6 A: In this section of my testimony, I will give a high-level comparison of projected 2018
7 ECA to actual 2018 ECA. I will also give high-level explanations of why actual values
8 varied from projected values. KCP&L witness Ms. Elizabeth Herrington provides
9 additional detail on the variances.

10 **Q: How does the actual ECA revenue requirement for 2018 compare to the projected**
11 **ECA revenue requirement?**

12 A: The actual ECA revenue requirement for 2018 of \$141.5 million is about six percent
13 more than the projection submitted in December 2017. The actual revenue requirement
14 was two and a half percent more than the projection in March 2018, two percent more
15 than the projection in June 2018, and slightly less than the projection in September 2018.

16 **Q: How did the projected ECA revenue requirement change over the course of the**
17 **year?**

18 A: When the Company made its ECA submission in December 2017 with its projected
19 values for 2018, it estimated the Net Kansas Allocation of net energy costs for 2018 to be
20 \$133.8 million. The March update reflected a roughly three percent increase to
21 \$138.1 million. In June, the revenue requirement estimate increased less than one percent
22 to \$138.5 million. Then in September, the projected revenue requirement increased a
23 little less than three percent to \$142.1 million. These key values for each of the quarterly

1 submissions are the Estimated Net Kansas Allocation presented in Schedule JMF-1.

2 **Q: What were the main reasons why the actual revenue requirement varied from the**
3 **projections submitted to the Commission in December 2017, March, June and**
4 **September 2018?**

5 A: The key driver for the variance in the Company's projected filings were changes in
6 purchased power expenses. Higher market power prices and greater amounts of
7 purchases led to higher purchased power expenses compared to the estimated expenses in
8 the projections. The purchased power expenses increased from a December 2017
9 projected value of ** [REDACTED] ** to a 2018 actual value of ** [REDACTED] **.

10 **III. KCP&L's Fuel Procurement Practices**

11 **Q: What is the purpose of this portion of your testimony?**

12 A: In this section of my testimony, I will provide a brief summary of KCP&L's fuel
13 procurement practices.

14 **Q: Please describe how KCP&L buys coal.**

15 A: KCP&L has been following a strategy of laddering into a portfolio of forward contracts
16 for Powder River Basin ("PRB") coal. That portfolio consists of forward contracts with
17 staggered terms so that a portion of the portfolio will rollover each year. When burn
18 projections increase, or actual burns prove to be higher than anticipated, supplemental
19 purchases of coal are made on the spot market.

20 **Q: What did that ladder portfolio look like for 2017?**

21 A: At the beginning of 2018, KCP&L had contractual commitments for about
22 ** [REDACTED] ** percent of its expected coal requirements for 2018. It also had commitments for
23 about ** [REDACTED] ** percent for 2019 and about ** [REDACTED] ** percent for 2020.

1 **Q: Does KCP&L update its fuel procurement and planning process to adjust for**
2 **changes in the marketplace?**

3 A: Yes. KCP&L routinely reviews fuel market conditions and market drivers. We monitor
4 market data, industry publications and consultant reports in an effort to avoid high prices
5 and to take advantage of lower prices.

6 **Q: How does KCP&L use natural gas?**

7 A: KCP&L uses natural gas for multiple purposes. First, KCP&L uses natural gas as the
8 ignition fuel and a supplemental fuel for maintaining flame stability in Hawthorn Unit 5.
9 Second, KCP&L uses natural gas-fueled combustion turbines. It also uses natural gas to
10 fuel its combined-cycle plant. Finally, KCP&L uses natural gas to increase the peaking
11 capacity of Hawthorn Unit 9 by direct combustion in its heat recovery steam generator.
12 Though the incremental thermal efficiency of direct combustion is lower than that of the
13 base combined-cycle plant, the incremental cost can be lower than the market price for
14 power and the additional electrical output can be valuable during peak load periods.

15 **Q: Please describe how KCP&L buys natural gas.**

16 A: When natural gas is required the Company solicits multiple offers, compares those offers
17 to its view of the market, if an offer is significantly higher than the Company's view of
18 the market it may challenge the offer, and finally selects the lowest offer.

19 **Q: Has the implementation of Southwest Power Pool's ("SPP") Integrated Market**
20 **("IM") changed how KCP&L buys natural gas?**

21 A: Yes. Prior to the implementation of the IM, KCP&L typically purchased gas before the
22 day of delivery based on published daily gas prices for gas to be delivered the next day.
23 With SPP dispatching units in the IM, the Company's natural gas units are typically not

1 dispatched until after the next day gas market has stopped trading. Consequently, the
2 Company now purchases most of its natural gas requirements on an intra-day basis.

3 **Q: Has this change in natural gas purchase strategy affected the prices KCP&L pays**
4 **for natural gas purchases relative to the market?**

5 A: Yes. We generally pay a small premium for intra-day gas.

6 **Q: How does KCP&L use fuel oil?**

7 A: KCP&L uses fuel oil primarily for two purposes. It is used as a peaking fuel at the
8 Northeast station and it is used for start-up and flame management at Iatan, La Cygne,
9 and Montrose. Montrose can also use oil duct burners to preheat certain air flows. Like
10 natural gas, fuel oil usage for a given day or hour is typically unpredictable.

11 **Q: How does KCP&L's use of fuel oil affect how it purchases fuel oil?**

12 A: Somewhat like natural gas, fuel oil is also purchased on an as-required basis. Unlike
13 natural gas, KCP&L has fuel oil storage. Therefore, the requirement is more to replenish
14 the station's inventory or stock up in anticipation of an event. For example, the Company
15 may add to inventory in anticipation of winter weather that might make it difficult for oil
16 to be delivered to a station.

17 **Q: Please describe how KCP&L buys nuclear fuel.**

18 A: Wolf Creek Nuclear Operating Corporation ("Wolf Creek") purchases uranium and has it
19 processed for use as fuel in its reactor. This process involves conversion of uranium
20 concentrates to uranium hexafluoride, enrichment of uranium hexafluoride and
21 fabrication of nuclear fuel assemblies. The owners of Wolf Creek have on hand or under
22 contract all of the uranium, uranium enrichment and conversion services needed to

1 operate Wolf Creek through March 2027. The owners also have under contract all of the
2 uranium fabrication required to operate Wolf Creek through September 2025.¹

3 **IV. Cost Benefit of SPP IM Consolidated Balancing Authority**

4 **Q: What is the purpose of this portion of your testimony?**

5 A: In this section of my testimony, in compliance with the Staff's Report and
6 Recommendation filed January 31, 2017 in Docket No. 16-KCPE-388-ACA, I will
7 provide a brief summary of KCP&L's proposed analysis of the benefit of the SPP IM
8 Consolidated Balancing Authority ("CBA") for KCP&L customers.

9 **Q: Please describe the CBA.**

10 A: Prior to the SPP IM, each market participant provided a daily schedule of its own load
11 and generation. Therefore, each schedule primarily matched local load to local
12 generation. This could lead to some lower priced generation being passed over on certain
13 hours due to lack of local demand, while at the same time a different market participant's
14 demand might have to be served by slightly higher priced generation local to its service
15 territory. The CBA takes the responsibility of each market participant to balance load
16 and gives it to the SPP for the entire market. In this way, lower cost generation is
17 matched to demand more reliably. The net effect of the CBA reduces total system costs
18 of all market participants.

19 **Q: Is the value derived from the CBA the only benefit from participation in the SPP**
20 **IM.**

21 A: A full cost-benefit analysis is beyond the scope of the Company resources to produce. In
22 response to a KCC Staff data request in 2015, discussions were held to devise a method
23 that attempts to capture a sense of the benefit the SPP IM has provided.

¹ This information was made public with the filing of the Company's filing of its Annual Report Form 10-K.

Q: Describe the proposed analysis.

A: What was proposed to meet Staff's data request was to focus on the single market benefit associated with the CBA in the SPP IM structure. This study will not be able to quantify many other benefits of the SPP IM such as increased transmission construction, improved settlements, wind generation improvements, etc. However, this study will look at the resulting Locational Marginal Pricing ("LMP") for KCP&L native load improvement as a proxy for the cost/benefit to serve native load by transitioning to SPP IM.

Q: Describe how the analysis will be conducted.

A: The analysis will attempt to compare and quantify the before and after effect of the SPP IM. KCP&L will perform two PROMOD based simulations for calendar year 2018:

Simulation 1: Assumes the SPP IM market with CBA for all of SPP for the entire year (the "after" effect).

Simulation 2: Assumes the SPP Energy Imbalance Service ("EIS"), the market in SPP prior to the SPP IM, for the full year assuming individual balancing authority by control area (the "before" effect).

To calculate the benefit, the KCP&L LMP in each simulation will be compared and the change in the cost to serve native load for KCP&L will be valued. The native load used in this calculation will be for both Missouri and Kansas customers.

Q: Has KCP&L included this analysis in its Application?

A: No. KCP&L was unable to replicate the analysis by the filing deadline of March 1, 2019. KCP&L will continue this work and will supplement its Application with the final results of the analysis that will provide an estimate of the benefit for KCP&L's customers on or before March 15, 2019. Based on discussions with KCC Staff on February 27, 2019,

1 Staff does not oppose KCP&L supplementing its Application with this information at a
2 later date.

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

4 A: Yes, it does.

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

In the Matter of the Application of Kansas)
City Power & Light Company for approval of)
2018 Actual Cost Adjustment ("ACA")) Docket No. 19-KCPE-____-ACA
)
)

AFFIDAVIT OF JAMES M. FLUCKE


STATE OF MISSOURI)
) ss
COUNTY OF JACKSON)

James M. Flucke, being first duly sworn on his oath, states:

1. My name is James M. Flucke. I work in Kansas City, Missouri, and I am employed by Kansas City Power & Light Company as Manager, Analytics.
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 ten (10) pages, having been prepared in written form for introduction into evidence in the above-captioned docket.
3. I have knowledge of the matters set forth therein. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded, including any attachments thereto, are true and accurate to the best of my knowledge, information and belief.


James M. Flucke

Subscribed and sworn before me this 1st day of March 2019.


Notary Public

My commission expires: 4/26/2021



KANSAS CITY POWER & LIGHT COMPANY
ENERGY COST ADJUSTMENT (SCHEDULE ECA)

SUMMARY TOTAL KCP&L VALUES

Projected January - December 2018

Actual January - December 2018

		December 20 2017	March 20 2018	June 20 2018	September 20 2018	March 1 2019 ACA filing			
ECA Year 2018									
Description	Account	Retail. SalesforResale, BPSnotinOSSM	OSSM (Wholesale Amount)	Retail. SalesforResale, BPSnotinOSSM	OSSM (Wholesale Amount)	Retail. SalesforResale, BPSnotinOSSM	OSSM (Wholesale Amount)	Retail. SalesforResale, BPSnotinOSSM	OSSM (Wholesale Amount)
Fuel									
Fuel - Steam Generation (Coal)	501								
Fuel - Nuclear Generation	518								
Fuel - Other Generation (Oil / Gas)	547								
Total Fuel									
Purchased Power									
Capacity	555								
Energy	555								
Total Purchased Power									
Emissions	509								
Transmission and Fees									
Transmission by Others	565								
SPP Transmission Base Plan Funding	565								
Transmission Fees									
SPP RTO Administrative Fees	561/575								
Other Fees									
FERC Assessment - MISO and SPP	928								
NERC Fees	561								
Total Transmission and Fees		\$ -		\$ -		\$ -		\$ -	
Bulk Power Sales Revenue									
Capacity	447								
Energy	447								
Miscellaneous Fixed Costs	447								
FERC Required Netting of Sales/Purchases	447								
Total Bulk Power Sales Revenue									
Cost for Non Asset Based Sales									
Net Value of ECA Accounts									
Estimated Kansas Allocation									
Estimated Net Kansas Allocation		\$ 133,831,146	\$ 138,090,846	\$ 138,532,226	\$ 142,130,136	\$ 141,533,927			
Projected ECA Revenue (excluding true-up)		\$ 133,834,883	\$ 134,577,892	\$ 133,858,681	\$ 134,018,497	\$ 134,638,325			
Estimated Over (Under) Collection		\$ 3,737	\$ (3,512,954)	\$ (4,673,545)	\$ (8,111,639)	\$ (6,895,602)			