Exhibit No.:

Issue: Fuel Adjustment Clause

Witness: Alan J. Box
Sponsoring Party: MoPSC Staff

Type of Exhibit: Surrebuttal Testimony Case Nos.: ER-2018-0145 and

ER-2018-0146

Date Testimony Prepared: September 4, 2018

### MISSOURI PUBLIC SERVICE COMMISSION

# COMMISSION STAFF DIVISION ENGINEERING ANALYSIS DEPARTMENT

### **SURREBUTTAL TESTIMONY**

**OF** 

**ALAN J. BAX** 

# KANSAS CITY POWER & LIGHT COMPANY CASE NO. ER-2018-0145

**AND** 

KCP&L GREATER MISSOURI OPERATIONS COMPANY CASE NO. ER-2018-0146

Jefferson City, Missouri November 2017

1		SURREBUTTAL TESTIMONY						
2		OF						
3		ALAN J. BAX						
4 5	KANSAS CITY POWER & LIGHT COMPANY CASE NO. ER-2018-0145							
6	AND							
7 8	KCP&L GREATER MISSOURI OPERATIONS CASE NO. ER-2018-0146							
9	Q.	Please state your name and business address.						
10	A.	My name is Alan J. Bax and my business address is Missouri Public Service						
11	Commission, P.O. Box 360, Jefferson City, MO 65102.							
12	Q.	What is your position at the Commission?						
13	A.	I am a Utility Engineering Specialist III in the Engineering Analysis						
14	Department, Commission Staff Division.							
15	Q.	Are you the same Alan J. Bax that contributed to Staff's Cost of Service						
16	Report ("COS Report") filed June 19, 2018, and Class Cost of Service Report ("CCOS							
17	Report") filed on July 6, 2018?							
18	A.	Yes, I am.						
19	Q.	What is the purpose of your surrebuttal testimony?						
20	A.	My surrebuttal testimony responds to the rebuttal testimony filed August 7,						
21	2018, by Tim M. Rush regarding certain proposed changes to the KCPL and GMO Fue							
22	Adjustment Clause ("FAC") tariffs as a result of the completion of a recent Loss Study.							
23	Q.	Please summarize the rebuttal testimony of Tim M. Rush regarding these						
24	specific proposed FAC tariff changes in conjunction with the recently completed Loss Study.							

A. First, on page 5, lines 16-18, Mr. Rush indicates his anticipation that Staff
"will conclude that the Loss Study presented by the Company will be acceptable and
should be implemented." Second, on lines 20-21, Mr. Rush proposes that the GMO FAC
tariff differentiate the losses for GMO between Transmission and Substation Losses. As
illustrated in his "Loss Study Table" on page 6, Mr. Rush is proposing to add two voltage
adjustment factors (pertaining to GMO customers receiving service at either the Transmission
or the Substation level) to GMO's FAC tariff, which currently only includes Primary and
Secondary voltage level adjustments. In addition, this "Loss Study Table" also reflects Mr.
Rush's proposed revised voltage adjustment factors resulting from the analysis contained in
the Loss Study for both the KCPL and GMO FAC tariffs.

- Q. Does Mr. Rush also propose four voltage level adjustments be applied in KCPL's FAC Tariff?
- A. Yes, however, as compared to GMO's system, Mr. Rush states, "We currently don't have metering available to measure the distinction between Transmission and Substation for KCP&L". Consequently, Mr. Rush asserts that KCPL is not able to make this determination. Thus, Mr. Rush's proposed FAC tariff for KCPL reflects a Substation level voltage adjustment that is equal to his proposed Transmission level voltage adjustment.
- Q. Do you believe that there should be a differentiation between a Substation level voltage adjustment and a Transmission level voltage adjustment reflected in both respective FAC tariffs?
- A. Yes. Without information to more appropriately account for losses between the Substation and Transmission levels, I am proposing that the difference illustrated in the Loss Study for the GMO system between the Substation and Transmission voltage levels, and

- noted in Mr. Rush's rebuttal testimony in his proposed "Loss Study Table", be similarly applied on the KCPL system as well.
  - Q. Does Staff intend to recommend accepting and implementing the results of the Loss Study as recommended by Mr. Rush to develop voltage adjustment factors?
  - A. Yes, with the proposed change noted above for the corresponding substation level voltage adjustment on the KCPL system. The Loss Study includes information to add Transmission and Substation voltage level adjustments to the GMO FAC tariff, which is appropriate as it more correctly reflects the costs associated with a customer taking service at either the Substation or Transmission Level. While the resulting voltage adjustment factors for GMO listed in Mr. Rush's "Loss Study Table" appear to be lower than a range of loss values that Staff has historically calculated for GMO's system, the resulting voltage adjustment factors shown for KCPL are compatible with a historical range of loss factors calculated by Staff on KCPL's system. The voltage adjustment factors illustrate the expected increasing magnitude of losses that are experienced as energy is transformed from a higher voltage level to a lower secondary level. Therefore, Staff will accept the analysis contained in the Loss Study overall and incorporate the results of this Loss Study into its proposed respective KCPL and GMO FAC tariffs.
  - Q. What are your recommended voltage adjustment factors that you are proposing based on your analysis of the Loss Study?
  - A. My calculated voltage adjustment factors, based on my evaluation of the Loss Study and incorporating the adjustment explained above to the substation voltage level factor for KCPL, are as follows for KCPL and GMO respectively:

# Surrebuttal Testimony of Alan J. Bax

1		KCPL:	:			
2			Transmission	1.0129		
3			Substation	1.0162		
4			Primary	1.0383		
5			Secondary	1.0592		
6		GMO:				
7			Transmission	1.0100		
8			Substation	1.0133		
9			Primary	1.0268		
10			Secondary	1.0426		
11	These	voltage adjustn	nent factors wil	l be utilized by Staff witnesses Catherine F. Lucia		
12	and Brooke Mastrogiannis <sup>1</sup> for their corresponding calculations of Fuel Adjustment Rates					
13	("FARs") in conjunction with their respective evaluations of the KCPL and GMO FAC tariffs					
14	respectively.					
15	Q.	Does this conc	clude your surre	ebuttal testimony?		
16	A.	Yes. <sup>1</sup>				

<sup>&</sup>lt;sup>1</sup> Ms. Mastrogiannis previously provided testimony as Brook Richter, and has since changed her name from her maiden name, Richter, to her new married name, Mastrogiannis.

#### BEFORE THE PUBLIC SERVICE COMMISSION

#### OF THE STATE OF MISSOURI

In the Matter of Kansas City Light Company's Request for The Implement a General Rate Electric Service	or Authority	) ) )	Case No. ER-2018-0145							
In the Matter of KCP&L Green Missouri Operations Compartor Authority to Implement a Rate Increase for Electric Se	ny's Request a General	) ) )	Case No. ER-2018-0146							
AFFIDAVIT OF ALAN J. BAX										
STATE OF MISSOURI	) ) ss. )									

COMES NOW ALAN J. BAX and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Surrebuttal Testimony* and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 304 day of August 2018.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: December 12, 2020
Commission Number: 12412070

Notary Public