Exhibit No.:

Issues: Voltage Level Adjustments

Witness: Alan J. Bax ing Party: MO PSC Staff

Sponsoring Party: MO PSC Staff
Type of Exhibit: Rebuttal Testimony

Case No.: ER-2014-0370

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MISSOURI PUBLIC SERVICE COMMISSION REGULATORY REVIEW DIVISION

REBUTTAL TESTIMONY

OF

ALAN J. BAX

KANSAS CITY POWER & LIGHT COMPANY

CASE NO. ER-2014-0370

Jefferson City, Missouri May 2015

StaffExhibit No. 204
Date 6 15.15 Reporter AT
File No. ER. 2014. 0370

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Kansas C Light Company's Request for Implement a General Rate Electric Service	r Authority to)	File No. ER-2014-0370
. A	AFFIDAVIT OF ALAN J.	BAX
STATE OF MISSOURI)) ss)	
preparation of the following of 3 pages of Rebuttal T in the following Rebuttal Te	Rebuttal Testimony in quest restimony to be presented in estimony were given by his	that he has participated in the stion and answer form, consisting the above case, that the answers m; that he has knowledge of the tters are true to the best of his
		Man Josak Alan J. Bax
Subscribed and sworn to befo	ore me this the day of Ma	ay, 2015.
LAURA DISTLER Notary Public - Notary Seal STATE OF MISSOURI Commissioned for Cole County My Commission Expires: June 21, 201: Commission Number: 11203914	5	Motary Public

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REBUTTAL TESTIMONY

OF

ALAN J. BAX

KANSAS CITY POWER & LIGHT COMPANY

CASE NO. ER-2014-0370

- Q. Please state your name and business address.
- A. My name is Alan J. Bax and my business address is Missouri Public Service Commission, P.O. Box 360, Jefferson City, MO 65102.
 - Q. What is your position at the Commission?
- A. I am a Utility Engineering Specialist III in the Engineering Analysis Unit of the Regulatory Review Division.
- Q. Are you the same Alan J. Bax that contributed to Staff's Revenue Requirement Cost of Service Report ("COS Report") filed on April 3, 2015?
 - A. Yes, I am.
 - Q. What is the purpose of your rebuttal testimony?
- A. My rebuttal testimony responds to a recommendation made in the direct testimony on Class Cost of Service/Rate Design ("CCOS") of Missouri Industrial Energy Consumers ("MIEC") and Midwest Energy Consumers' Group ("MECG") witness Maurice Brubaker. On Page 3, lines 27-29, Mr. Brubaker proposes that "if the Commission approves a Fuel Adjustment Charge ("FAC"), the voltage level distinctions (for purposes of recognizing losses) should be secondary, primary, substation and transmission." In addition, on Page 35, lines 17-20, Mr. Brubaker recommends that "Should the Commission determine to allow KCPL to have an FAC, either in this case or in a future case, KCPL should be required to

track and charge customers according to the four separate voltage levels at which delivery takes place, and not the two levels it has proposed in this case."

- Q. What two voltage level adjustments were proposed by KCPL in its request for a FAC?
- A. KCPL proposed secondary and primary voltage level adjustments in its FAC tariff proposal.
- Q. What was Staff's recommendation in its COS Report regarding voltage level adjustments?
- A. In the event that the Commission decides to allow KCPL to have a FAC, Staff recommended secondary and primary voltage level adjustments, which is consistent with other existing FACs approved by the Commission.
- Q. Does Staff agree with Mr. Brubaker's analysis regarding the additional voltage level adjustments?
- A. No, Staff cannot agree at this time. Staff typically utilizes data from a loss study in its determination of voltage level factors that are reflected in the corresponding FAC tariffs. As identified in Staff's COS Report, Staff utilized Table B-02, included in Appendix B of KCPL's Loss Study, R075-14-Revision 1, in its calculation of the secondary and primary voltage level factors for this case. However, as demonstrated in Schedule AJB-1 attached to this rebuttal testimony, Table B-02 does not contain applicable data for losses experienced at the substation level, which is one of the voltage level distinctions recommended by MIEC and MECG witness Mr. Brubaker.
 - Q. Did Mr. Brubaker's analysis use KCPL's Loss Study, R075-14-Revision 1?
 - A. No, it did not.

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Q. Do the Commission's FAC rules require an electric utility to conduct a loss study for the purpose of calculating voltage level factors to be reflected in its FAC?

Yes. 4 CSR 240-20.090(9) provides that an electric utility must conduct a loss A. study to be used in a general rate proceeding for this very purpose.

- Q. Does Staff have additional concerns with Mr. Brubaker's recommendation?
- Yes. KCPL's Loss Study, R075-14-Revision 1 included an analysis of data A. collected in calendar year 2013. Mr. Brubaker's analysis considered data from the test year in this case (twelve months ending March 2014) in recommending four proposed voltage level factors.
- Q. Does Staff support Mr. Brubaker's recommendation to include two additional voltage level factors in this case?
- No. As noted above, KCPL's Loss Study does not contain all of the data A. which would be necessary to calculate the additional voltage level factors, and Mr. Brubaker's analysis, which does not use KCPL's Loss Study, is based on data from a different time period than the KCPL Loss Study. However, Staff recommends that the Commission order KCPL to include the information necessary to allow the parties to consider and evaluate what voltage level factors should be incorporated into the design of the FAC tariff (i.e., applicable data for losses experienced at the substation level) in its line loss study for its next general rate case.
 - Q. Does this conclude your rebuttal testimony?
 - A. Yes.

·	Table B-02										
KCPL- MISSOURI ENERGY LOSS MULTIPLIERS											
SERVICE LEVEL	Total System		Secondary Service		Primary Service		Substation Service		Transmission Service		
	kWh	Multiplier	kWh	Cumulative Multiplier	kWh	Cumulative Multiplier	kWh	Cumulative Multiplier	kWh	Cumulative Multiplier	
Secondary		1.024411						}			
Sales Losses + Diversion Input to Primary	4,130,000,658 100,816,510 4,230,817,168		4,130,000,658 100,816,510 4,230,817,168	1							
Primary		1.025166	4,230,817,168								
Primary Losses 215	215,254,794		106,472,509 4,337,289,677	1.050191		1.025166					
			4,337,289,677		4,431,381,257						
Transmission		1.033429		ļ							
Fransmission Sales Losses System Input	325,885,489 177,672,697 9,272,229,120		84,733,979 4,422,023,656	1	86,572,167 4,517,953,424	1			325,885,489 6,366,551 332,252,040		
Losses + Diversion	493,744,001	,	292,022,998		195,354,452		<u> </u>		6,366,551		

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