Exhibit No.:	
Issues:	*Class Cost of Service* *Rate Design*
Witness:	*Sarah L. Kliethermes*
Sponsoring Party:	*MoPSC Staff*
Type of Exhibit:	*Rebuttal Testimony*
Case No.:	*ER-2016-0285*
Date Testimony Prepared:	*January 6, 2017*

MISSOURI PUBLIC SERVICE COMMISSION

COMMISSION STAFF DIVISION

OPERATIONAL ANALYSIS DEPARTMENT

REBUTTAL TESTIMONY

OF

SARAH L. KLIETHERMES

KANSAS CITY POWER & LIGHT COMPANY

CASE NO. ER-2016-0285

Jefferson City, Missouri
January 2017

REBUTTAL TESTIMONY

OF

SARAH L. KLIETHERMES

KANSAS CITY POWER & LIGHT COMPANY

CASE NO. ER-2016-0156

Q. Are you the same Sarah L. Kliethermes that contributed to Staff's Report on Class Cost of Service and Rate Design ("CCOS Report"), and Staff's Report on Commission Raised Issues?

A. Yes.

Q. What is the purpose of your rebuttal testimony?

A. I respond to the production-related allocators used by Missouri Industrial Energy Consumer's ("MIEC") witness Maurice Brubaker, DoE's witness Michael R. Schmidt, and KCPL's witness Marisol Miller as it relates to interclass shifts in revenue responsibility recommended by those parties. I also respond to MIEC's tail block rate design request.

Q. Do you agree with Mr. Brubaker that a kWh is not a kWh, as he testifies on page 9 of his direct testimony?

A. Yes. I agree with Mr. Brubaker that the cost of producing a kWh of energy will vary depending on which plant is producing that energy, and which plants are operating to produce energy at a given time. However, unlike Mr. Brubaker, I take this reality into account in developing allocators for Staff's Class Cost of Service Study ("CCoS"). Unlike the other submitted CCoS studies, Staff's energy–related allocations are based on an assignment of time-differentiated pricing.

Q. Is a kW a kW?

A. No. As I discussed and demonstrated in the CCOS Report, base capacity is quite expensive to install and operate, while peaking capacity is relatively cheap to install and operate. The cost of intermediate capacity is somewhere between those two.

Q. Did Mr. Brubaker address the relative capacity costs of different unit types in his study?

A. No. While Mr. Brubaker did weight his capacity allocation by load factor, he effectively treats the capacity cost of a nuclear plant as equal to the capacity cost of a simple cycle gas plant. As discussed and demonstrated in the CCOS Report, these types of units have very different installed capacity costs. Of the studies filed in this case by all parties, only Staff's detailed Base-Intermediate-Peak ("BIP") study recognizes this disparity in capacity cost.

Q. Do you agree with Mr. Brubaker's assertion at page 2 of his direct testimony that "[t]here are two generally accepted methods for allocating generation and transmission fixed costs that would apply to KCPL. These are the coincident peak methodology and the average and excess ("A&E") methodology."?

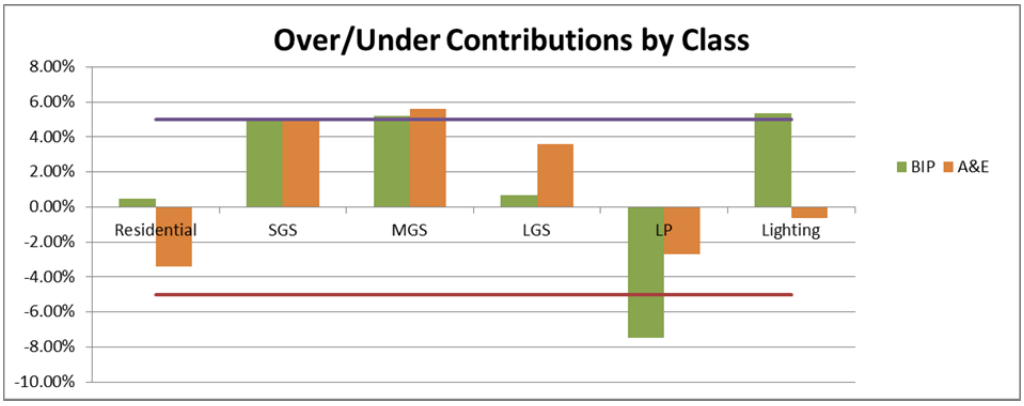
A. No, I do not. Mr. Brubaker's statement ignores this Commission's recent acceptance of production allocators that recognize that a kW is not a kW and a kWh is not a kWh when it comes to capacity and energy costs associated with different types of production plant. Specifically, the Commission explicitly relied on Staff's detailed BIP allocation study in The Empire District Electric Company's 2014 rate case, Case No. ER-2014-0351, stating "[o]f the four CCOS studies submitted by the parties, Staff's most reasonably recognizes the

relationship between the cost of the plant required to serve various levels of demand and energy requirements and the cost of producing energy."[1]

Q. For purposes of evaluating the reasonableness of other party's study results, Staff has performed an A&E study using the A&E allocator for production capacity accounts and the sales at generation allocator for the production energy accounts. This is in contrast to Staff's recommended production capacity allocator based on dollar-weighted capacity costs determined using the BIP method, and recommended production energy allocators using dollar-weighted fuel costs.

Q. How do the results of Staff's A&E study compare to Staff's recommended BIP study results?

A. The results of the A&E study indicate no interclass shifts are necessary within the reasonable accuracy of the study, as opposed to the minimal interclass shifts indicated by the BIP study, which Staff continues to recommend. The results are provided below:

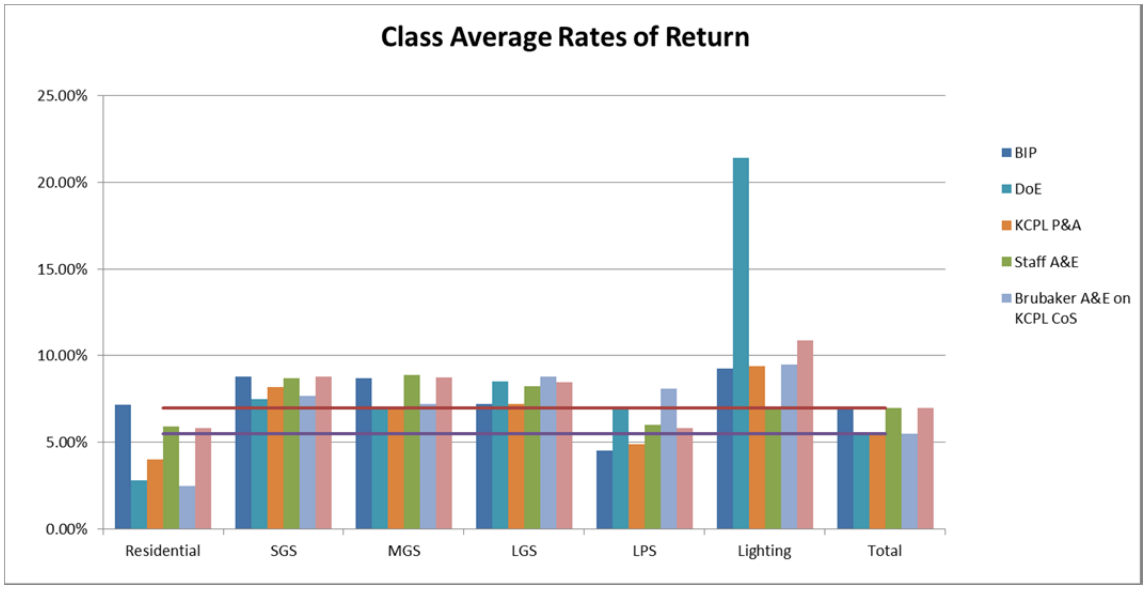


[1] Report and Order in Case No. ER-2014-0351, page 15. See also Order Clarifying Report and Order, at page 2, stating "The Commission will grant the Motion and clarify that based on Staff's CCOSS, which the Commission found in its Report and Order to most reasonably recognize the relationship between the cost to serve and the cost of producing energy, no decrease on a revenue neutral basis shall occur for the SC-P rate class." See also Report and Order in Union Electric Company d/b/a Ameren Missouri, Case No. ER-2014-0258, at page 39, because the results of the A&E and BIP studies are similar, the Commission does not need to decide which particular study is most appropriate;" and in Case No. ER-2012-0175, the Commission stated that it relied on the non-detailed BIP study performed by Mr. Paul Normand, on behalf of Kansas City Power & Light.

	Current Revenue *plus Allocated Other Revenue*	Revenue Change to Equalize Class Rates of Return	Start % over/under contribution	% Change to Class Revenue to Exactly Match Cost of Service	Start RoR	System Average Increase + Energy Efficiency
Residential	$ 356,937,321	$11,425,513	-3.38%	-3.38%	5.92%	$ (43,473)
Small General Service	$ 55,528,137	-$2,467,058	5.06%	5.06%	8.68%	$ (12,651)
Medium General Service	$ 133,617,277	-$6,419,483	5.60%	5.60%	8.87%	$ 20,650
Large General Service	$ 215,178,276	-$6,591,056	3.54%	3.54%	8.23%	$ 63,658
Large Power	$ 166,325,540	$4,005,731	-2.67%	-2.67%	6.02%	$ (10,325)
Lighting	$ 11,443,465	$46,348	-0.44%	-0.44%	6.87%	$ (17,860)

Q. Do any of the studies filed by the parties indicate that any class is subsidized in this case?

A. No. All of the filed studies indicate that each class is providing a positive rate of return over the allocated and assigned expenses of each class as studied by that party. The Rate of Return results for each party's study is provided below:



	Residential	SGS	MGS	LGS	LPS	Lighting	Total
Staff BIP	7.2%	8.8%	8.7%	7.2%	4.5%	9.3%	7.0%
DoE	2.8%	7.5%	6.9%	8.5%	7.0%	21.4%	5.5%
KCPL P&A	4.0%	8.2%	7.0%	7.2%	4.9%	9.4%	5.5%
Staff A&E	5.9%	8.7%	8.9%	8.2%	6.0%	6.9%	7.0%
Brubaker A&E on KCPL CoS	2.5%	7.7%	7.2%	8.8%	8.1%	9.5%	5.5%

Q. Why is the system average total RoR 7% on Staff's studies and 5.5% on all other studies?

A. Staff's CCoS study is based on Staff's cost of service study, while the other CCoS studies are based on KCPL's cost of service study. KCPL's revenue requirement calculation includes a higher level of expense and a lower level of revenue than Staff's revenue requirement calculation. Because KCPL-based studies assume a higher level of expense, each class has less net income as calculated for that class's rate of return on its studies.

Q. Did parties other than Staff conduct a CCoS that is consistent with that party's recommended revenue requirement?

A. KCPL's CCoS was conducted based on KCPL's Cost of Service calculation. DOE's witness Schmidt appears to have used KCPL's CCoS calculation, but DOE has not filed a proposed revenue requirement. MIEC's witness Brubaker appears to have used KCPL's CCoS calculation; however MIEC witness James Dauphinais states at page 2-3 of his Revenue Requirement rebuttal that he recommends the Commission deny certain KCPL revenue requirement positions. The net impact of those changes would decrease KCPL's transmission expense net of transmission revenues by approximately $9.6 million.[2]

Q. What is the significance of a decrease of $9.6 million to KCPL's revenue requirement, as recommended by MIEC?

A. Referring to Mr. Brubaker's Schedule MEB-COS-5, flowing each class's allocated share of the revenue requirement reduction through Mr. Brubaker's tables would

[2] See Dauphinais revenue requirement rebuttal, page 12, and Ron Klote Direct, Schedule RAK, adjustments R-80 (decreases transmission revenues by $0.9 million), R-82 (increases transmission revenues by $0.9 million), CS-45, (increases transmission expense by $10.8 million), and CS-86, (decreases transmission expense by $1.2 million).

change the results presented in columns 3-9. The reduction to expense would increase each class's net income. Adjusting the net allocated income of each class upward by that class's allocated share of the $9.6 million would increase each class's calculated "Earned ROR," and increase each class's calculated "Income @ Current ROR", columns 4 and 6, respectively, on Mr. Brubaker's Schedule MEB-COS-5.

Q. Would the results be equal among classes?

A. No. I have recreated a version of Mr. Brubaker's Schedule MEB-COS-5 that is adjusted to reflect the approximate value of this increase of each class's allocated net operating income (column 3).

MIEC CCoS ADJUSTED FOR DAUPHINIAS'S TRANSMISSION ADJUSTMENTS

Rate Class	Current Revenues	Current Rate Base	Net Operating Income	Earned ROR	Indexed ROR	Income @ Current ROR	Difference in Income	Revenue Increase	Percentage Increase
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Residential	$ 392,875	$ 1,169,758	$ 32,229	2.755%	47	$ 69,250	$ 37,021	$ 54,912	14.0%
Small General Service	67,892	152,734	$ 12,187	7.979%	135	$ 9,042	(3,145)	$ (5,726)	-8.4%
Medium General Service	157,204	360,035	$ 27,290	7.580%	128	$ 21,314	(5,976)	$ (11,031)	-7.0%
Large General Service	251,431	496,466	$ 46,023	9.270%	157	$ 29,391	(16,632)	$ (28,512)	-11.3%
Large Power Service	205,584	371,325	$ 32,250	8.685%	147	$ 21,982	(10,268)	$ (17,523)	-8.5%
Total Lighting	13,102	25,956	$ 2,536	9.771%	165	$ 1,537	(1,000)	$ (1,721)	-13.1%
Total	$ 1,088,089	$ 2,576,273	$ 152,515	5.920%	100	$ 152,515	$ 0	$ -	0.0%

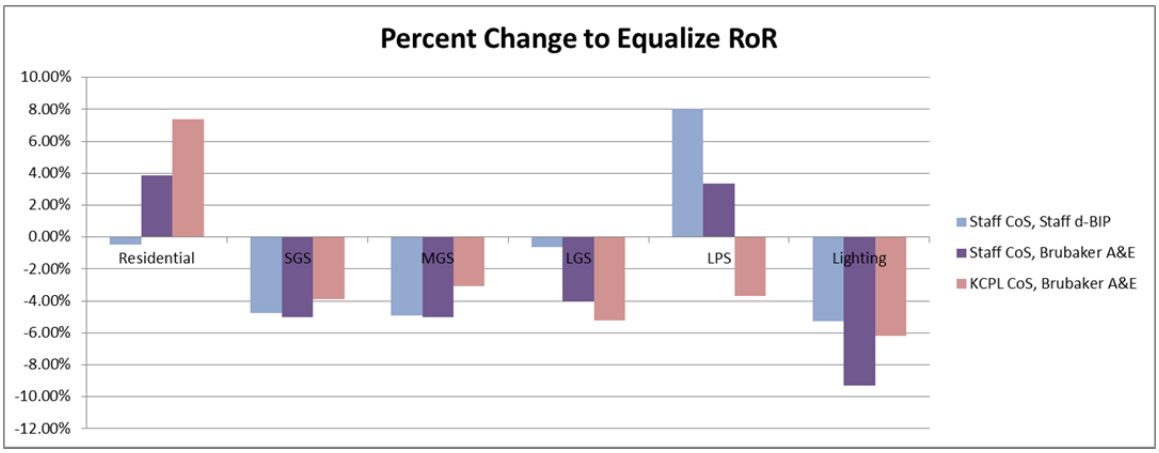
Q. Do these adjusted results presume that the Commission adopts KCPL's position on every issue except the four transmission issues discussed by Mr. Dauphinais?

A. Yes, these results presume the Commission adopts KCPL's position on all other issues.

Q. Have you reviewed the results of all proposed production capacity allocators in this case as applied to Staff's calculated revenue requirement and non-production allocators?

A. Yes. Based on this review, I have determined that the overall revenue requirement studied and the composition of that revenue requirement (between net expense versus rate of return) is as big or bigger a driver of differences in CCoS results than is the

selection of the production capacity and energy allocators.[3] For example, applying Brubaker's production capacity and production energy allocators to Staff's CCoS results in a swing from approximately 3.5% over-contributing under KCPL's revenue requirement to approximately 3.5% under-contributing using Staff's revenue requirement:

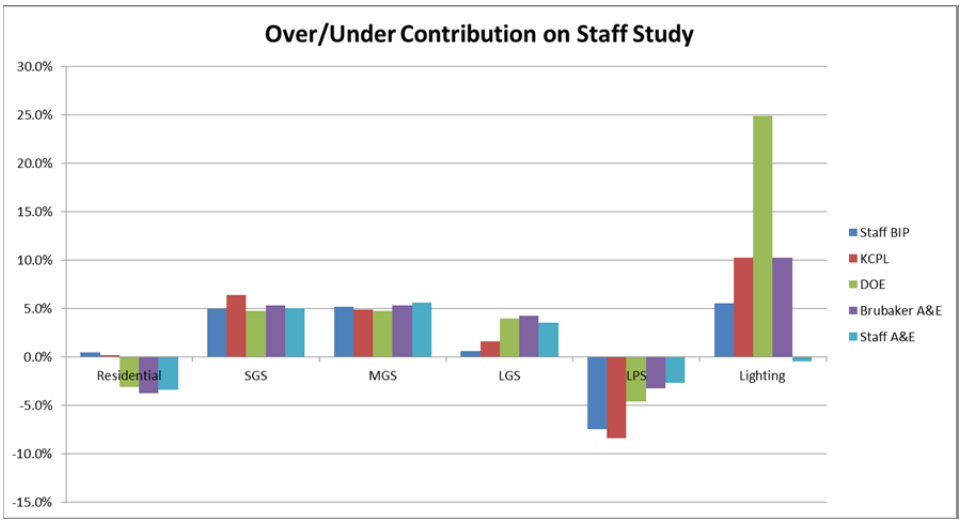


% Change to Equalize RoR	Residential	SGS	MGS	LGS	LPS	Lighting
Staff CoS, Staff BIP	-0.5%	-4.8%	-4.9%	-0.6%	8.0%	-5.2%
Staff CoS, KCPL P&A	-0.2%	-6.0%	-4.7%	-1.6%	9.2%	-9.3%
Staff CoS, DOE	3.2%	-4.6%	-4.6%	-3.8%	4.8%	-19.9%
Staff CoS, Brubaker A&E	3.8%	-5.0%	-5.0%	-4.1%	3.4%	-9.3%
Staff CoS, Staff A&E	3.5%	-4.8%	-5.3%	-3.4%	2.7%	0.4%
KCPL CoS, KCPL P&A	20.0%	-2.3%	3.4%	2.3%	14.2%	-6.8%
KCPL CoS, DOE	29.4%	1.3%	3.7%	-4.0%	2.3%	-35.7%
KCPL CoS, Brubaker A&E	7.4%	-3.9%	-3.1%	-5.2%	-3.7%	-6.2%

Q. Have you reviewed the level of over/under contribution that results from substitution of each party's production capacity and energy allocators to Staff's CCoS?

[3] Parties have taken differing positions on certain transmission allocators and other minor differences in allocator selection exist between studies. For purposes of isolating the impact of the production capacity and energy allocators, I have used Staff's direct-filed allocators for all accounts other than production capacity and energy. This does not indicate Staff supports the reasonableness of the alternative allocators used by other parties, particularly regarding transmission.

A. Yes. The level of over/under contribution is typically Staff's basis for determining whether or not any interclass shifts are reasonable in a given case. The results for each party's recommended allocator are provided below:



Over/Under Contribution on Staff Study	Residential	SGS	MGS	LGS	LPS	Lighting
Staff BIP	0.5%	5.0%	5.2%	0.6%	-7.4%	5.5%
KCPL	0.2%	6.4%	4.9%	1.6%	-8.4%	10.3%
DOE	-3.1%	4.8%	4.8%	4.0%	-4.6%	24.9%
Brubaker A&E	-3.7%	5.3%	5.3%	4.2%	-3.3%	10.3%
Staff A&E	-3.4%	5.1%	5.6%	3.5%	-2.7%	-0.4%

Q. What do these results indicate?

A. Using any of the production allocators other than Staff's, Residential is within a range of reasonableness, such that no shift in revenue requirement is appropriate. All of the allocators also support that LGS, in isolation, is within a range of reasonableness and no adjustment is necessary. However, as discussed in Staff's direct CCoS report, it is necessary to study the General Service classes as a group. The studies generally agree that the General Service classes, as a group, appear to be overcontributing by slightly over 5%. All studies agree that the LPS class is undercontributing, although only Staff's BIP and KCPL's P&A

studies indicate that the LPS's undercontribution exceeds the +/- 5% band of reasonableness. All studies, except Staff's A&E, indicate the Lighting class is overcontributing by an amount that would warrant a shift in the Lighting class's revenue responsibility.

Q. Does Staff agree with Mr. Brubaker's tail-block rate design proposal to not apply any increase to the third block, and apply only 75% of the increase to the second block?

A. No. Mr. Brubaker's proposal would result, on average, in KCPL paying more for a kWh of energy through the SPP market than what it receives to sell that kWh at retail.

Q. Do you agree with Mr. Brubaker's characterization of the tail-block energy charges as "off-peak" energy charges, as he states at page 30 of his testimony?

A. No. Different customers will have different load patterns. There is nothing to suggest that additional load that is billed out under the tail block occurs at "off peak" times, as opposed to daytime or evening times. This would vary by customer.

Q. Do you agree with Mr. Brubaker's application of his analysis of KCPL's variable costs as the appropriate metric for the floor of these charges?

A. No. The more reasonable metric is the cost of market energy at generation for each class, provided in the Staff CCoS Report, plus an allowance for ancillary services and other related RTO costs. This metric supports an equal percentage increase to all rate components, should an overall increase be ordered in this case.

Q. Does this conclude your rebuttal testimony?

A. Yes.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

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 SARAH L. KLIETHERMES

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW SARAH L. KLIETHERMES and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing Rebuttal Testimony; and that the same is true and correct according to her best knowledge and belief.

Further the Affiant sayeth not.

Sarah L. Kliet
SARAH L. KLIETHERMES

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 5th day of January, 2017.

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

D Suzie Mankin
Notary Public