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Witness:	Robin Kliethermes
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Case No.:	ER-2014-0370
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MISSOURI PUBLIC SERVICE COMMISSION

REGULATORY REVIEW DIVISION

REBUTTAL TESTIMONY

OF

ROBIN KLIETHERMES

KANSAS CITY POWER & LIGHT COMPANY

CASE NO. ER-2014-0370

Jefferson City, Missouri
May 2015

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	))))	File No. ER-2014-0370

AFFIDAVIT OF ROBIN KLIETHERMES

STATE OF MISSOURI)
) **ss**
COUNTY OF COLE)

Robin Kliethermes, of lawful age, on her oath states: that she has participated in the preparation of the following Rebuttal Testimony in question and answer form, consisting of 12 pages of Rebuttal Testimony to be presented in the above case, that the answers in the following Rebuttal Testimony were given by her; that she has knowledge of the matters set forth in such answers; and that such matters are true to the best of her knowledge and belief.

Robin Kliethermes

Subscribed and sworn to before me this 5th day of May, 2015.

Notary Public

LAURA DISTLER
Notary Public - Notary Seal
STATE OF MISSOURI
Commissioned for Cole County
My Commission Expires: June 21, 2015
Commission Number: 11203914

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Q. Please state your name and business address.

A. Robin Kliethermes, 200 Madison Street, Jefferson City, MO 65102.

Q. By whom are you employed and in what capacity?

A. I am employed by the Missouri Public Service Commission ("Commission") as a Regulatory Economist II.

Q. Are you the same Robin Kliethermes who has previously filed testimony in Staff's Revenue Requirement Cost of Service Report ("COS Report") and Staff's Rate Design and Class Cost of Service Report ("CCOS Report") in this case?

A. Yes.

Q. What is the purpose of your rebuttal testimony?

A. The purpose of my rebuttal testimony is to respond to KCPL's requested residential customer charge of $25.00, which represents an increase of $16.00 per month for a residential general use customer. Additionally, I respond to MIEC witness Mr. Brubaker regarding his proposal to not increase the tail block rate of the Large Power Service (LPS) and Large General Service (LGS) rate schedules. Lastly, I explain an additional adjustment from direct that Staff made regarding certain LPS customers who switched into the LGS class during the test year and update period.

Q. What is your recommended rate design proposal in this case including the Residential Customer charge?

A. In general, Staff recommends that the allocation of any rate increase for KCPL be accomplished with a four-step process. This includes no revenue-neutral adjustments for any class; a 5% adjustment of the first energy block of the frozen winter all-electric rate schedules for the SGS, MGS, and LGS rate classes; and that each rate component of each class is increased by an equal percentage basis after the other adjustments.

Regarding the residential customer charge, Staff recommends the Commission consider the off-setting policy objectives of encouraging and rewarding energy conservation and sending accurate price signals. Given cost justification, Staff recommends that the residential customer charge increase by the same percentage that all other residential service class rate elements increase as a reasonable compromise of these objectives.[1]

Response to KCPL Regarding Residential Customer Charge

Q. What is KCPL's recommendation for the residential customer charge?

A. KCPL witness Mr. Tim M. Rush's recommendation is to increase the residential customer charge from $9.00 for a residential general use customer to $25.00.

Q. Does Staff agree with this recommendation?

A. No. Although, Staff's CCOS study indicates a residential customer charge cost-of-service of approximately $16.49, Staff recommends the increase to the customer charge be limited due to rate shock and conservation policy guidance provided by the Commission in Ameren Missouri's general electric rate case filed in early 2012, Case No. ER-2012-0166.

[1] Based on Staff's direct CCOS Report the increase to the residential class is approximately 11.44%, resulting in an increase to the customer charge of approximately $1.00. Staff's CCOS indicated a residential customer charge cost of service of approximately $16.49.

Q. How does the magnitude of KCPL's requested customer charge relate to the magnitude of KCPL's overall rate increase request?

A. The revenue KCPL requests to collect through the residential customer charge in this case is approximately $72.5 million annually compared to approximately $26.1[2] million that KCPL currently collects through its residential customer charge. This is an increase of $46.4 million annually, from the increase in the customer charge only. To put this into perspective KCPL's overall requested increase in rates is approximately 120.9 million[3], with the residential class being responsible for approximately 37% of the increase or approximately $44.9 million. Therefore, KCPL has requested a decrease in certain volumetric rates in order to accommodate the increase in the residential customer charge.[4]

Q. Does Staff support a decrease to current volumetric rates in this case?

A. No.

Q. Did Mr. Rush acknowledge recent guidance from this Commission regarding conservation policy as it relates to the residential customer charge?

A. No. In Case No. ER-2012-0166, the Commission found that there were strong public policy considerations in favor of not increasing the customer charges, particularly, that a lower customer charge enables customers to see greater impact from conservation efforts and therefore encourages customers to engage in conservation efforts. In that case, the Commission rejected a proposed increase to the residential customer charge, noting that increasing the customer charge would send exactly the wrong message to customers and would discourage efforts to conserve electricity.

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[2] Staff calculated 2,902,284 annual customers who are charged a $9 residential customer charge. (2,902,284 *$25 = $72,557,100 and 2,902,284* $9 = $26,120,556).
[3] Page 12, line 19, of Darren Ives direct testimony.
[4] Using Staff's direct-filed revenue requirement increase and rate design the residential class would receive an increase of approximately $32.4 million.

Q. Setting aside the conservation policy issue, is Staff concerned with the magnitude of the increase to the residential customer charge requested by KCPL?

A. Yes. KCPL requests essentially a 178% increase to the residential customer charge, amounting to an increase of approximately $192 per year per customer.[5] This increase is substantially above the system average increase in this or prior KCPL electric rate cases.

Q. Does Mr. Rush calculate a larger cost basis for the residential customer charge to justify a customer charge of $25?

A. No, he does not.

Q. How does Mr. Rush calculate the residential customer charge?

A. In Mr. Rush's CCOS workpapers he calculates the customer component[6] to be approximately $13.16[7] a month per customer; however, Mr. Rush adds what is referred to as the demand distribution secondary component and the demand distribution transformation component in order to calculate a residential customer charge of $22.67, which is below KCPL's requested customer charge of $25.[8]

Q. How does Staff understand the demand components that Mr. Rush added to the calculation of the residential customer charge?

A. Staff understands that KCPL's CCOS study divided FERC distribution accounts 364 through 368 between primary and secondary demand and then allocated those

[5] This is just the increase to the customer resulting from the increase in the customer charge, under the Company's proposal there was still a slight decrease to the winter energy charge.
[6] The cost categories included in KCPL's calculation of the customer is the same cost categories that Staff includes in its calculation of the residential customer charge.
[7] At each class' current rate of return.
[8] Mr. Rush justifies a $25 customer charge by setting all of the rate classes to earning an equal rate of return.

costs to each customer class using that class' non-coincident peak (NCP)[9] at the respective voltage level, and then added all secondary distribution demand cost to the calculation of the customer charge.

Q. Is it appropriate to include secondary distribution demand cost for FERC accounts 364 and 368?[10]

A. No, as described in Staff's direct CCOS Report, only costs in FERC distribution accounts 369 and 370[11] as well as cost relating to customer service should be collected through the customer charge. This does not include FERC distribution plant accounts 364 through 368 as KCPL proposes.

Q. Regardless of the appropriateness of the FERC distribution accounts listed in the preceding question, did KCPL provide the level of load research data needed to even calculate each class' NCP at secondary or primary voltage?

A. No. KCPL provided hourly load research data for each class category[12] as a whole and did not distinguish between voltage levels. For example, the LPS class serves customers at secondary, primary, substation and transmission voltages, but KCPL only provided hourly load research data for the class as whole and did not separate the hourly usage by voltage level. Similarly, there was no distinction made for the LGS, MGS and SGS classes who serve customers at secondary and primary voltage levels. Therefore, only NCP's and CP's at the meter level were able to be calculated for distribution allocations. Essentially,

[9] A class' NCP is that class' peak regardless of when the system peaks, where as a class' coincident peak (CP) is that class' peak at the time of the system peak.
[10] These accounts include the costs of poles, overhead conductors and devices, underground conduit, underground conductors and devices, and line transformers.
[11] These accounts include cost for service drops and meters.
[12] KCPL's has six main class categories: Residential (Res), Small General Service (SGS), Large General Service (LGS), Medium General Service (MGS), Large Power Service (LPS) and Lighting. However, within each class category there are several individual rate schedules or sub classes reflecting a change in rates for voltage level and space heating.

this would mean all costs for distribution accounts 364 – 368 would be allocated to each class based on one single allocator that makes no distinction between voltage levels.

Q. If load research data was not available to calculate each subclass' individual peaks, how did KCPL's CCOS study allocate costs to individual subclasses?

A. KCPL made the assumption that all the individual rate schedules or subclasses that make up a class category have the same relationship between average and peak demand. This method does not take into consideration the actual peaks of the individual rate schedules and the different usage characteristics that may exist between subclasses in a class category, but instead assumes that each subclass has the same load factor.

Q. Is it reasonable to assume that the subclasses of a class category will have the same load factor?

A. If the relationship between the subclasses has been studied, it is not unreasonable to use this method in the absence of better data. However, as is the case with KCPL, where the subclasses exist based on an assumption that those subclasses have different usage characteristics, it is necessary to account for those relationships in a CCOS study from time to time to determine if those relationships have changed.

Q. Are these assumptions that each subclass has the same load factor in a given month and that each subclass uses the same proportion of energy to demand in a given month consistent with the assumption that customers with electric space heating have a better load factor than non-space heating customers, and that these customers tend to consume a greater portion of their energy in off-peak hours, when energy tends to be cheaper?

A. No. KCPL's assumptions used in developing class peaks directly contradict these assumptions. That is why KCPL's subclass information is not helpful to determine the

cost of service for customers with electric space heating as opposed to comparable customers who do not use electric space heating.

Q. If it is less expensive to serve customers with electric space heating than comparable customers who do not have electric space heating, does Staff object to providing those customers with a lower rate to reflect that reduced cost of service?

A. Staff does not object to charging an appropriately lower rate to customers who use –on average - less expensive energy or who use energy in a manner that is less costly to serve as a whole. However, given the manner that KCPL develops class load data, Staff is unable to determine how much less the energy to serve customers with electric space heating than comparable customers who do not have electric space heating.

Q. Does Staff agree that it is less expensive to serve customers with electric space heating than comparable customers who do not have electric space heating?

A. Staff expects that it is less expensive to serve customers with electric space heating than comparable customers who do not have electric space heating. One would expect these customers to not only have a better load factor than non-space heating customers, but for these customers to consume a greater portion of their energy in off-peak hours, when energy tends to be cheaper.

Q. What information is needed to determine the cost of service for customers with electric space heating as opposed to comparable customers who do not use electric space heating?

A. Staff needs hourly data that accurately reflects the different usage characteristics of customers with and without electric space heating in each customer class

and at each voltage in order to determine a reasonable cost basis for any reduced rate offered to electric space heating subclasses.

Q. Would Staff also need the same hourly load data mentioned above to perform a class cost-of-service study that accurately reflects costs for customers served at different voltage levels?

A. Yes, in order for Staff to develop demand allocators, such as allocators that allocate transmission, substation, primary and secondary distribution costs to customers, Staff would need load data that is appropriately differentiated for customers served at different voltage levels.

Response to MR. Brubaker regarding LP and LGS rate design

Q. Do you agree with Mr. Brubaker's explanation of how an "hours-of-use" rate design functions?

A. In general, yes, but I have a few clarifications to his explanation.

Q. Does a customer with an "hours-of-use" rate design know in exactly what hours of the day their monthly usage that gets billed in the first, second or third block occurred?

A. No, a customer's monthly usage is proportioned to the hours of use rate blocks based on the customer's load factor or kWh per kW demand relationship for that month.[13]

Q. Are there assumptions that can be made, regarding when that usage may have occurred?

A. Although I agree that certain assumptions can be made such as the first rate block, usually the first 180 hours of use, typically accounts for usage that occurred during the day, it is important to clarify that unless the customer is billed based upon their on-peak or

[13] As explained by Mr. Brubaker on page 30, line 2 – 9.

off-peak usage there is little possibility to know in exactly what hours a customer's usage occurred. For example, if a customer's monthly usage all falls into the first rate block of 180 hours of use, then their around the clock usage is also all in the first block even their night-time usage. Although the majority of this customer's usage would be during the day their minimal night time and weekend usage would also be included in the first rate block. Given this example the customer would have a monthly load factor that is equal to or less than 25%.[14]

Q. For purposes of examining marginal energy costs, did Staff make some assumptions?

A. Yes. Staff examined hourly marginal energy costs using a hypothetical example, similar to Mr. Brubaker, where an industrial producer has 1 to 3 operating shifts.

Q. Given the marginal costs of energy, do you agree with Brubaker's recommendation?

A. No. As discussed by Staff witness Sarah Kliethermes, the middle block or the next 180 hours was actually found to have a slightly higher cost of energy than the first block.[15]. However, since the cost of energy will vary with the start and end times of an industrial producer's operating shifts, and different producers will operate different shifts and there is little possibility to know exactly when a customer's usage occurred, Staff recommended an equal percent increase to all blocks.

Q. If the marginal cost of energy in the middle block is the highest, why is Staff recommending an equal percent increase to each block instead of increasing the middle block to or above the level of the first block rate?

[14] 180 hours-of-use/720 hours in a 30 day month = 25%.
[15] A second operating shift will usually include some early evening peak hours.

A. Staff recommends retaining the existing relationship between the blocks through an equal percent increase to each block because the blocked rate structure is well-understood by customers. Staff also considered rate stability and customer impacts.

Q. On a fully-allocated cost of service basis, are the production-energy related costs the only costs that should be recovered through an energy charge?

A. No. The cost to serve a class includes costs that vary with the total energy usage in addition to the energy-related production costs. These costs include a portion of operation and maintenance costs and transmission costs.

Q. Given these concerns, what measures of cost are most appropriate to consider in developing these cost based rates?

A. Given that the hours-of-use rate design does not require that usage in any particular block occur at any particular time of day, it is most reasonable to design all energy charges to recover a level at or above the voltage-adjusted around-the-clock average cost of energy. Those values are $27.58/MWh at generation, $28.50/MWh at transmission, $29.22 at primary voltage, and $29.93/MWh at secondary voltage.[16]

Q. When were the tail block energy charges for the LGS and LPS rate classes last increased?

A. The tail block has remained the same without any increases for the LGS class since September 1, 2009, and for the LP class since January 1, 2008.[17]

Explanation of Staff's LGS Rate Switcher Adjustment

Q. Did Staff make an adjustment for rate switchers in Staff's direct cost of service report?

[16] Staff Witness Sarah Kliethermes' rebuttal testimony.
[17] While Staff has supported similar proposals by Mr. Brubaker in the past, this was prior to March of 2014, when SPP initiated the integrated energy market and KCPL started purchasing its energy from the market.

A. No.

Q. Why is Staff proposing to make a rate switcher adjustment now?

A. In Staff's direct cost of service report I state, "Staff is still reviewing whether the three customers who moved from the LPS class during the update period and into the LGS class should be handled through the growth adjustment as was currently done, or if the additional kWh should be added to the LGS class prior to any weather normalization or growth adjustment is performed."[18] Additionally, Staff also found that an additional four LPS customers had switched into the LGS[19] class during the test year. Therefore, for the test year ending March 2014, updated through December 2014, there were seven LPS customers that switched into the LGS class. Upon review of each customer's individual usage, Staff found that each customer that switched from the LPS class to the LGS class was larger than the average customer in the LGS class.[20]

Q. Did Staff make an adjustment in direct to the LGS class to reflect the change in the number of customers at the end of the update period ending December 2014?

A. Yes, however, Staff's growth adjustment calculates the additional usage that would have occurred if the number of customers taking service at the end of the year had been there throughout the year, based on average usage per customer. Since all seven of the customers that switched into the LGS class were above average customers and six of the seven did not switch into the class until late in the test period their usage was not properly captured in the LGS growth adjustment filed in direct.

Q. How does Staff calculate the rate switcher adjustment in this case?

[18] Page 72, line 20 – 23, of Staff's Cost of Service Report.
[19] Five customers switched into the LGSS class and two switched into the LGSP class.
[20] The average usage per customer for the LGSS class was 139,000 kWh per month, and the usage of the LP customers who switch into the LGSS class was ranged from approximately 380,000 kWh a month to approximately 1,000,000 kWh a month.

A. For each customer that switched from the LPS class to the LGS class, Staff removed that customer's weather normalized usage from the LPS class and added it to the LGS class. The difference in revenue and kWh resulted in the adjustment for rate switchers. Staff then recalculated the LGS growth adjustment to only reflect the change in additional usage that would have occurred if the number of customers taking service at the end of year, excluding the LPS customers that entered the class, had been there throughout the year.

Q. Does this conclude your testimony?

A. Yes.