Exhibit No.:

Issues: RES Retail Rate Impact

Witness: Claire M. Eubanks

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

File No.: ET-2014-0071

Date Testimony Prepared: September 24, 2013

MISSOURI PUBLIC SERVICE COMMISSION REGULATORY REVIEW DIVISION

REBUTTAL TESTIMONY

OF

CLAIRE M. EUBANKS

KANSAS CITY POWER AND LIGHT COMPANY

CASE NO. ET-2014-0071

Jefferson City, Missouri September 2013

** Denotes Highly Confidential Information **



BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Kansas City Po Light Company's Application Authorization to Suspend Paym Certain Solar Rebate Tariffs	for) Case No. ET 2014 0071
AFFIDAVIT	OF CLAIRE M. EUBANKS
STATE OF MISSOURI)) ss COUNTY OF COLE)	
the preparation of the following consisting of 12 pages of Rebut the answers in the following Reb	al age, on her oath states: that she has participated in Rebuttal Testimony in question and answer form tal Testimony to be presented in the above case, that buttal Testimony were given by her; that she has in such answers; and that such matters are true to the
	Claire M. Eubanks
Subscribed and sworn to before me	this 24th day of September, 2013.
SUSAN L. SUNDERMEYER Notary Public - Notary Seal State of Missouri Commissioned for Callaway County My Commission Expires: October 03, 2014 Commission Number: 10942086	Musan Munderneyer Notary Public

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REBUTTAL TESTIMONY

OF

CLAIRE M. EUBANKS

KANSAS CITY POWER AND LIGHT COMPANY

CASE NO. ET-2014-0071

- Q. What are your name and business address?
- A. Claire M. Eubanks, P.O. Box 360, Jefferson City, Missouri, 65102.
- Q. By whom are you employed and in what capacity?
- A. I am employed by the Missouri Public Service Commission ("Commission") as a Utility Regulatory Engineer I in the Engineering Analysis Section, Energy Infrastructure Reliability Unit of the Tariff, Safety, Economic and Engineering Analysis Department in the Regulatory Review Division.
 - Q. What are your educational and work backgrounds?
- A. I received my Bachelor of Science degree in Environmental Engineering from the University of Missouri Rolla "UMR", now referred to as Missouri University of Science and Technology, in May 2006. I am a licensed professional engineer in the states of Missouri and Arkansas. Immediately after graduating from UMR, I began my career with Aquaterra Environmental Solutions, Inc. ("Aquaterra"), now SCS Aquaterra, an engineering consulting firm based in Overland Park, Kansas. During my time with Aquaterra, I worked on various engineering projects related to the design, construction oversight, and environmental compliance of solid waste landfills. I began my employment with the Commission in November 2012.
 - Q. Are you a member of any professional organizations?

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Electric utilities are to complete the RRI calculation during the RES planning A. process to ensure the costs of the renewable resources the utility proposes to acquire will not cause the utility to exceed the RRI limit. If the calculation shows that the utility will exceed the limit, then the utility is to adjust downward the proportion of its renewable resources sufficiently to bring the RRI down to the RRI limit.

Q. Please explain the RRI calculation.

A. The RRI calculation compares a non-renewable portfolio to a RES-compliant portfolio. The RES-compliant portfolio adds to the existing generation sufficient renewable resources for the utility to comply with the applicable renewable energy portfolio requirements specified in Rule 4 CSR 240-20.100(2)(C) and §393.1030.1, RSMo.; but if additional resources are needed to meet the utility's projected ten-(10-) year needs, those resources may be non-renewable. Additionally, the RES-compliant portfolio excludes renewable resources owned or under contract prior to the effective date of the rule. The nonrenewable portfolio includes the utility's existing non-renewable generation resources plus a mix of additional least-cost non-renewable resources to meet the utility's projected ten (10) year needs. An electric utility exceeds the one percent (1%) RRI limit when the revenue requirements for the RES-compliant portfolio, averaged over the succeeding ten-(10-) year period, is greater than the revenue requirements for the non-renewable portfolio, by more than one percent (1%). When that limit is exceeded, the utility is to adjust downward the proportion of renewable resources in the RES-compliant portfolio until the limit is met.

- Q. Please briefly describe KCP&L's approach to calculating the RRI.
- KCP&L determined the revenue requirement for the non-renewable portfolio A. by beginning with the preferred resource plan from its 2012 Chapter 22 Electric Utility

¹ Section 393.1030.2(1); Rule 4 CSR 240-20.100(5)(B).

Resource Planning ("IRP") triennial compliance and removed resources it determined to be directly attributable to RES compliance. KCP&L took 1% of the averaged non-renewable revenue requirements from 2013 through 2022 to determine the amount available under the RRI limit for 2013. KCP&L's approach assumes no greater than 1% will be spent on RES compliance costs in any year.

- Q. Please briefly summarize Staff's overall concern with KCP&L's approach to calculating the RRI.
- A. By limiting RES spending in any given year to 1% KCP&L is not completing an important step in the RRI calculation, and that is to include an amount of renewable resources sufficient to achieve the RES portfolio requirements. Under this approach KCP&L will not be able to meet all of the RES requirements by the dates specified or to achieve the highest level of compliance with the RES requirements possible over the 10-year planning period.
- Q. Staff noted three ways in which KCP&L's calculation of the RRI in File No. EO-2013-0505 is deficient, did it not?
 - A. Yes.
 - Q. Are those deficiencies applicable to KCP&L's calculation in the present case?
 - A. Yes.
 - Q. In what ways is KCP&L's calculation deficient?
- A. KCP&L's calculation is deficient in the following ways: (1) it does not average the annual revenue requirements of its RES-compliant portfolio over the succeeding ten (10) years, (2) the inclusion of renewable resources in its determination of the non-renewable portfolio, and (3) its determination of the RES-compliant portfolio.

RES-COMPLIANT PORTFOLIO REVENUE REQUIREMENT DEFICIENCY

- Q. Why is KCP&L's RES-compliant portfolio revenue requirement used to make its RRI calculation deficient?
- A. The Commission's rules require that the annual revenue requirements over the ten-(10-) year planning period of *both* the non-renewable portfolio and the RES-compliant portfolio be averaged over the succeeding ten-(10-) year period when calculating the RRI. For the 2013 RRI calculation the annual revenue requirements from 2013 to 2022 would be averaged. Instead of averaging the annual revenue requirements for both portfolios, KCP&L only averaged the annual revenue requirements for its non-renewable portfolio and it used an annual revenue requirement for its RES-compliant portfolio; since this does not comply with the Commission's rules, Staff views KCP&L's RRI calculation to be deficient.
- Q. What is the purpose of averaging the RES-compliant revenue requirements over the succeeding ten (10) year period when calculating the retail rate impact?
- A. The purpose of the averaging is to smooth out spikes in compliance costs in any given year caused by the addition of renewable resources. This will allow a utility to plan for greater than a one percent increase in rates due to RES compliance costs in any given year provided that the ten-(10-) year average is less than or equal to one percent.
- Q. Why is it important that the revenue requirements of both the non-renewable portfolio and the RES-compliant portfolio be averaged over the succeeding ten-(10-) year period?
- A. Not averaging the RES-compliant revenue requirements does not address the impacts of spikes in costs due to the addition of renewable resources in any given year. The reason for this is that the total revenue requirements when renewables are excluded increases at a fairly steady rate while the revenue requirements for the RES-compliant portfolio is

expected to have spikes in revenue requirement in years when renewable energy resources are added.

- Q. Does averaging the non-renewable revenue requirements and not the RES-compliant revenue requirements change the RRI limit?
- A. Yes. It increases the cap over the 10-year planning period by approximately 14%. Staff has calculated the RRI limit to be ** _____ ** over the 10-year planning period while under KCP&L's interpretation the RRI limit is ** _____ ** over the same 10-year period.

NON-RENEWABLE PORTFOLIO DEFICIENCY

- Q. Why is the non-renewable portfolio KCP&L used to make its RRI calculation deficient?
- A. KCP&L included its existing renewable resources it believes are not directly attributable to RES-compliance in its non-renewable portfolio.
- Q. What does the RES rule state about what the non-renewable portfolio should consist of?
- A. The non-renewable portfolio is a hypothetical portfolio of solely non-renewable resources.² The non-renewable portfolio should consist of all of the utility's existing non-renewable resources, but not its existing renewable resources as defined in Rule 4 CSR 240-20.100(1)(K). If by excluding existing renewable resources the utility determines it will not meet its generation needs over the succeeding ten-(10-) year planning period, then additional non-renewable resources are added to the non-renewable portfolio. The non-renewable portfolio revenue requirement would also include the expected value of greenhouse gas emissions compliance costs.



² EX-2010-0169, Final Order Rule 4 CSR 240-20.100, Page 21.

- Q. How does excluding existing renewable resources affect the calculation of the RRI in comparison to leaving them in?
- A. If excluding existing renewable resources results in a utility being unable to meet its needs over the succeeding ten-(10-) year period, then additional non-renewable resources must be added. This may cause the annual retail rate limit to be higher than it would be if those existing renewable resources are included in the portfolio. Additionally, those existing renewable resources may be fully depreciated; if so, it would also increase the revenue requirement of the non-renewable portfolio. In KCP&L's case, removing existing renewable resources decreased the non-renewable revenue requirement in 2013 by approximately ** _____ **.

RES-COMPLIANT PORTFOLIO DEFICIENCY

- Q. Why is KCP&L's RES-compliant portfolio used to calculate its RRI deficient?
- A. In its calculation of the RRI, KCP&L did not include renewable resources sufficient to meet the RES requirements.
- Q. According to the RES rule, how should the RES-compliant portfolio be determined?
- A. The RES-compliant portfolio consists of a utility's existing resources and renewable resources sufficient to meet the RES requirements. A utility should remove pre-existing renewable resources from the portfolio and add additional non-renewable resources as needed. The utility should also decrease the RES-compliant portfolio revenue requirement by the avoided cost of fuel not purchased. The renewable resource additions will use the most recent electric resource planning analysis.
- Q. Is the RES-compliant portfolio tied to the most recent electric resource planning analysis?

- A. Yes. Rule 4 CSR 240-20.100(5)(B) states that "these renewable energy resource additions will utilize the most recent electric utility resource planning analysis." In KCP&L's most recent resource planning analysis its preferred resource plan has sufficient renewable resources to meet the RES requirements.
- Q. What renewable energy resource additions are included in the KCP&L's preferred resource plan?
- A. KCP&L's current preferred resource plan filed in File No. EO-2013-0537 includes the following wind additions: 50 MW in 2016, 150 MW in 2020, and 200 MW in 2024. It also includes the following solar additions: 11 MW in 2018 and 6 MW in 2021. KCP&L's preferred resource plan from 2012 included the following wind additions: 100 MW in 2016, 200 MW in 2020, and 100 MW in 2023. It included the following solar additions: 11 MW in 2018, 6 MW in 2021, and 3 MW in 2023.
- Q. What renewable energy resource additions are included in KCP&L's RRI calculation?
- A. The calculation performed by KCP&L assumes that solar rebates are paid in every year through the 10-year planning period with no other renewable energy resource additions.
- Q. Does the estimated cost of the renewable energy resources included in the 2012 preferred resource plan cause the RRI limit to be exceeded?
 - A. Yes, it does under Staff's view of the correct application of the RRI limit.
- Q. In terms of the RES rule, what should KCP&L do to address the preferred plan exceeding the RRI limit?

- A. KCP&L should adjust downward the proportion of renewable resources over the planning period to be under the RRI limit. In making the adjustment the RES solar energy portfolio requirement (2% of the overall RES portfolio requirements) should be maintained.
- Q. Staff has calculated the retail rate impact limit over the 10-year planning period to be ** _____ **; does that mean that under Staff's interpretation of the RRI limit KCP&L can spend ** ____ ** in solar rebates in 2013?
- A. No it does not. The ** _____ ** is for the entire ten-(10-) year period. Future planned additions, such as the wind and solar generating additions discussed previously, will reduce the amount available for solar rebates in the current year.
- Q. If KCP&L adjusts the planned renewable resource additions to reduce the RRI limit to 1% consistent with Staff's calculation, would there be a portion of the **_____ ** available for solar rebates?
- A. Yes. KCP&L provided calculations to Staff correcting the alleged deficiencies noted in Staff's Memo filed in File No. EO-2013-0504 on July 12, 2014. The calculations assume that if future renewable additions over the 10-year period from 2013-2022 are limited to 100 MW of wind addition in 2016 and 174 MW in 2020, KCP&L could provide **_____ ** in solar rebates in 2013. In 2014 and 2015, KCP&L could not provide solar rebates. Note that the wind additions KCP&L assumed under their calculation of Staff's interpretation are based on the 2012 resource planning analysis and not the current preferred plan.
- Q. If KCP&L adjusts the RRI calculation to be consistent with the current 2013 preferred resource plan would there be a portion of the **_____ ** available for solar rebates?

- A. Yes. The current 2013 preferred plan has 100 MW less of wind additions in comparison to the 2012 preferred plan, this reduction in planned wind additions would allow for the Company to pay out additional solar rebates over the 10-year planning period above the ** _____ ** for 2013.
- Q. What is the total wind capacity added in the 10-year planning period under KCP&L's interpretation in comparison to Staff's?
- A. Under KCP&L's interpretation KCP&L would not add wind over the 10-year planning period while under Staff's interpretation KCP&L would add 274³ MW of wind. Note the 274 MW of wind additions would be used for compliance with the renewable standards for both Missouri and Kansas. The loss of 274 MW of wind under KCP&L's calculation would result in approximately 600,612 fewer RECs produced per year for Missouri RES compliance which is greater than the projected 2014 5% RES requirement. Under Staff's approach, KCP&L would retire more RECs for RES compliance over the 10-year planning period.
- Q. What is the total amount available to spend on solar rebates over the 10-year planning period under KCP&L's interpretation in comparison to Staff's?
- A. Over the 10-year planning period KCP&L's interpretation will allow for the payment of ** _____ ** in solar rebates. KCP&L provided calculations correcting the alleged deficiencies noted by Staff, which resulted in ** ____ ** for solar rebates over the 10-year planning period under Staff's interpretation of the correct application of the RRI limit. Staff believes there are other scenarios possible under Staff's interpretation that would not exceed the retail rate impact calculation and allow for a greater level of solar rebates than ** ____ **.

 $^{^3}$ KCP&L RES Model Staff Alternative Workpapers HC $\,$

- Q. What would occur under KCP&L's approach if solar rebates were not planned to be made?
- A. KCP&L's method assumes that wind will not be added until the year KCP&L utilizes all of its banked RECs and that at most KCP&L would spend the equivalent of 1% RRI per year. Under these assumptions if KCP&L were to plan to spend nothing on solar rebates, KCP&L would not increase the level of non-solar renewable resource additions over the 10-year planning period. In other words there is a fundamental flaw in KCP&L's method which results in fewer RECs being available for retirement to comply with the RES requirements in comparison to Staff's method over the 10-year planning period.
- Q. Does Staff have an opinion on how the proportion of solar to non-solar renewable resources should be determined under the constraints of the RRI limits?
- A. Staff views this as a policy decision on how to balance solar rebate payments to the least-cost plan to comply with the RES requirements.
- Q. Are solar rebates the least cost method of meeting the solar portion of the RES requirements?
- A. No. KCP&L's assumed cost of purchasing S-RECs for 2013 is ** ____ ** ** per S-REC. The estimated cost of S-RECs from a customer system is \$152.40 per S-REC. Accordingly, payment of solar rebates is currently not the least-cost approach of meeting the minimum solar RES requirements.
 - Q. How much has KCP&L spent on solar rebates this year?
- A. Through August 22, 2013, KCP&L has paid ** _____ ** in solar rebates.

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⁴ KCPL RES Model Company Alternative Workpapers HC

⁵ Response to Staff Data Request 4

- Q. Will KCP&L receive renewable energy credits (RECs) for the solar rebates paid out through August 27, 2013?
- A. No. Although customer generated RECs are eligible to count toward the RES requirements, KCP&L does not have a standard offer contract in place to purchase those RECs. One provision of House Bill 142 conditions a customer's receiving a solar rebate on the customer's transfer of the RECs associated with the solar installation to KCP&L. House Bill 142 became effective August 28, 2013.
- Q. Will the RECs KCP&L receives from its customers on and after August 28, 2013 associated with solar rebate payments meet the RES requirements?
- A. The RECs KCP&L receives from its customers will assist in meeting the solar portion of RES requirements, but KCP&L will not be able to achieve the highest level of RES compliance possible under the RRI limit throughout the planning period by heavy reliance on these RECs in exclusion of other alternative RES compliance strategies.
- Q. Do the overpayments made to US Solar referenced in the direct testimony of KCP&L witness Tim M. Rush significantly impact whether KCP&L has exceeded the RRI?
- A. No. As stated in the direct testimony of Tim M. Rush, US Solar has made one installation in KCP&L's service territory. The maximum solar rebate payment allowed under the RES Rule is \$50,000, which would be the maximum overpayment possible for that one installation.
 - Q. Does this conclude your rebuttal testimony?
 - A. Yes.