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Issues: RES Retail Rate Impact

Witness: Claire Eubanks
Sponsoring Party: MO PSC Staff

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Case No.: ET-2014-0059

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MISSOURI PUBLIC SERVICE COMMISSION REGULATORY REVIEW DIVISION

REBUTTAL TESTIMONY

OF

CLAIRE EUBANKS

KCP&L GREATER MISSOURI OPERATIONS COMPANY

CASE NO. ET-2014-0059

Jefferson City, Missouri September 2013

** Denotes Highly Confidential Information **



BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of KCP&L Greater Missouri) Operations Company's Application For) Authorization To Suspend Payment of) Certain Solar Rebates)
AFFIDAVIT OF CLAIRE EUBANKS
STATE OF MISSOURI)) ss COUNTY OF COLE)
Claire Eubanks, 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 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.
Claire Eubanks Claire Eubanks Subscribed and sworn to before me thisday of September, 2013.
LAURA BLOCH Notary Public - Notary Seal State of Missouri Commissioned for Cole County y Commission Expires: June 21, 2015 Commission Number: 11203914 LAURA BLOCH Notary Public

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REBUTTAL TESTIMONY

OF

CLAIRE M. EUBANKS

KCP&L GREATER MISSOURI OPERATIONS COMPANY

FILE NO. ET-2014-0059

- 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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A. Electric utilities are to complete the RRI calculation during the RES planning 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.

The RRI calculation compares a non-renewable portfolio to a RES-compliant A. 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 GMO's approach to calculating the RRI.

GMO determined the revenue requirement for the non-renewable portfolio by A. beginning with the preferred resource plan from its 2012 Chapter 22 Electric Utility Resource

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

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

- Please briefly summarize Staff's overall concern with GMO's approach to Q. calculating the RRI.
- A. By limiting RES spending in any given year to 1% GMO 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 GMO 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 ten-(10-) year planning period.
- Q. Staff noted three ways in which GMO's calculation of the RRI in File No. EO-2013-0505 is deficient, did it not?
 - A. Yes.
 - Are those deficiencies applicable to GMO's calculation in the present case? Q.
 - A. Yes
 - In what ways is GMO's calculation deficient? Q.
- GMO's calculation is deficient in the following ways: (1) it does not average A. 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 GMO'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, GMO 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 GMO'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 ten-(10-) year planning period by approximately 24%. Staff has calculated the RRI limit to be ** _____ ** over the ten-(10-) year planning period while under GMO's interpretation the RRI limit is ** ____ ** over the same ten-(10-) year period.

NON-RENEWABLE PORTFOLIO DEFICIENCY

- Q. Why is the non-renewable portfolio GMO used to make its RRI calculation deficient?
- A. GMO 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.

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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 GMO's case, removing the Ensign Wind purchase power agreement ("PPA") increased the non-renewable revenue requirement in 2013 by approximately **

RES-COMPLIANT PORTFOLIO DEFICIENCY

- Q. Why is GMO's RES-compliant portfolio used to calculate its RRI deficient?
- A. In its calculation of the RRI, GMO 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 4CSR 240-20.100(5)(B) states that "these renewable energy resource additions will utilize the most recent electric utility resource planning analysis." In GMO'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 GMO's preferred resource plan?
- A. GMO's preferred resource plan filed in File No. EO-2013-0538 includes the following wind additions: 150 MW in 2019, 100 MW in 2021, and 100 MW in 2025. It also includes the following solar additions: 10 MW in 2018, 6 MW in 2021, and 3 MW in 2023.
- Q. What renewable energy resource additions are included in GMO's RRI calculation?
- A. The calculation performed by GMO assumes that solar rebates are paid in every year until 2019 when wind additions are then added in every year from 2019 through 2022.
- Q. Does the estimated cost of the renewable energy resources included in the 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 GMO do to address the preferred plan exceeding the RRI limit?
- A. GMO 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.

³ GMO RES Model Company Alternative Workpapers HC

⁴ GMO RES Model Staff Alternative Workpapers HC

requirement. Under Staff's approach, GMO would retire more RECs for RES compliance over the ten-(10-) year planning period.

- Q. What is the total amount available to spend on solar rebates over the ten-(10-) year planning period under GMO's interpretation in comparison to Staff's?
- A. Over the ten-(10-) year planning period GMO's interpretation will allow for the payment of ** _____ ** in solar rebates. GMO provided calculations correcting the alleged deficiencies noted by Staff, which resulted in ** ____ ** for solar rebates over the ten-(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 ** ____ **.
- Q. What would occur under GMO approach if solar rebates were not planned to be made?
- A. GMO's method assumes that wind will not be added until the year GMO utilizes all of its banked RECs and that at most GMO would spend the equivalent of 1% RRI per year. Under these assumptions if GMO were to plan to spend nothing on solar rebates GMO would not increase the level of non-solar renewable resource additions over the ten-(10-) year planning period. In other words there is a fundamental flaw in GMO's method which results in fewer RECs being available for retirement to comply with the RES requirements.
- 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. GMO's assumed cost of purchasing S-RECs for 2013 is ** ____ **5 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 GMO spent on solar rebates this year?
 - A. Through August 20, 2013, GMO has paid ** _____ ** in solar rebates.
- Q. Will GMO 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, GMO 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 GMO. House Bill 142 became effective August 28, 2013.
- Q. Will the RECs GMO receives from its customers on and after August 28, 2013 meet the RES requirements?
- A. The RECs GMO receives from its customers will assist in meeting the solar portion of RES requirements, but GMO will not be able to achieve the highest level of RES compliance possible under the RRI limit throughout the planning period.
- Q. Do the overpayments made to US Solar referenced in the direct testimony of GMO witness Tim M. Rush significantly impact whether GMO has exceeded the RRI?

⁵ GMO RES Model Company Alternative Workpapers HC

⁶ Response to Staff Data Request 3

Rebuttal Testimony of Claire M. Eubanks

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A. Staff is still reviewing the information provided by GMO on the investigations of US Solar that have been completed to date. Due to the magnitude in which GMO has exceeded the RRI, it appears as though the overpayments to US Solar will not have a significant impact on the determination as to whether GMO has exceeded the RRI calculation limit in 2013. Staff may file additional testimony on this issue if it is warranted.

- Q. Does this conclude your rebuttal testimony?
- A. Yes.