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Issues: Solar Rebates
Witness: Daniel I. Beck
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MISSOURI PUBLIC SERVICE COMMISSION

REGULATORY REVIEW DIVISION

SURREBUTTAL TESTIMONY

OF

DANIEL I. BECK

KCP&L GREATER MISSOURI OPERATIONS COMPANY

CASE NO. ET-2014-0059

Jefferson City, Missouri
September 2013

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	))))	Case No. ET-2014-0059

AFFIDAVIT OF DANIEL I. BECK

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

Daniel I. Beck, of lawful age, on his oath states: that he has participated in the preparation of the following Surrebuttal Testimony in question and answer form, consisting of 11 pages of Surrebuttal Testimony to be presented in the above case, that the answers in the following Surrebuttal Testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true to the best of his knowledge and belief.

Daniel I. Beck

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

Notary Public

SURREBUTTAL TESTIMONY

OF

DANIEL I. BECK

KCP&L GREATER MISSOURI OPERATIONS COMPANY

CASE NO. ET-2014-0059

Q. Please state your name and business address.

A. Daniel I. Beck and my business address is Missouri Public Service Commission, 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 the Manager of Engineering Analysis, which is in the Tariff, Safety, Economic and Engineering Analysis Department in the Regulatory Review Division. My credentials are attached as Schedule 1 to this testimony.

Q. What is the purpose of your surrebuttal testimony?

A. The purpose of this testimony is to respond to the rebuttal testimony of Brightergy witness Adam Blake and the rebuttal testimony of The Missouri Solar Energy Industries Association ("MOSEIA") witness Ezra D. Hausman, Ph.D. on various issues raised in their testimonies regarding the suspension of solar rebates by KCP&L Greater Missouri Operations Company ("GMO" or "Company").

Q. Please summarize your testimony.

A. The Staff ("Staff") of the Missouri Public Service Commission ("Commission") recommends that the Commission authorize GMO to suspend solar rebate payments, as requested by GMO. Staff's position was given in the Rebuttal Testimonies of

Staff witnesses Claire M. Eubanks and Mark L. Oligschlaeger. Brightergy witness Blake and MOSEIA witness Hausman have raised issues in rebuttal testimony that my Testimony and Staff witness Mark L. Oligschlaeger's Surrebuttal Testimony address.

Q. In his Rebuttal Testimony, on page 4, Brightergy witness Adam Blake states that "many solar customers would be harmed by the suspension of solar rebates upon only sixty days' notice" . Is 60 days' notice consistent with Missouri Statutes?

A. Yes. House Bill 142 ("HB 142") was signed by Governor Jay Nixon on July 3, 2013, and became effective on August 28, 2013. This bill included changes to RSMo 393.1030.3 that include the following: "The commission shall rule on the suspension filing within sixty days of the date it is filed."

Q. Does the statute allow the Commission to extend the sixty day notice if a party might be harmed?

A. No.

Q. Is there anyone that might be harmed if the Commission does not rule on the suspension filing within sixty days?

A. Yes. Assuming the maximum average retail rate increase is reached and the payments continue, GMO's ratepayers could be harmed if these costs are then passed on to them in future rate proceedings. GMO's Annual FERC Form 1 Filing shows that GMO had 313,345 customers at the end of calendar year 2012.

Q. Would the additional payments result in significant costs to GMO's 313,345 customers?

A. Yes. Although there is no way to determine the exact amount of payments that would be made if the rebate payments are not suspended, Schedule TMR-1 of Company

witness Tim Rush's Direct Testimony estimates that the payments for November would be $5,486,023 and for December would be $5,447,304. If you assume that an equal amount will be paid out for each day in November, then each day would result in an additional $182,867. By subtracting the daily average for November 1 and 2, the total additional payments through the end of the year would be $10,567,593. Each GMO customer would then be responsible for an additional $33.73 ($10,567,593 / 313,345 customers = $33.73 per customer) or an additional 57 cents per day ($33.73 / 59 days = 57 cents per customer per day). This would be in addition to the $29,470,579 that GMO estimated will be paid out during calendar year 2013 through November 2. Although there has been no prudency determination on the payments prior to November 2, these payments could result in an average cost of $94.05 ($29,470,579 / 313,345 customers = $94.05 per customer) for each customer. In addition, ratepayers could potentially be required to pay carrying charges until these payments are fully collected in rates. Finally, ratepayers are also potentially liable for rebate payments that were made in 2010, 2011, and 2012. The table below shows the rebate payments that were paid in previous years:

2010 $182,273

2011 $1,351,670

2012 $8,303,022

Given the significant costs that have been reported by the Company for solar rebates, GMO's 313,345 ratepayers could be harmed if the payments are not suspended.

Q. In the answer you just gave, you estimated that the average daily payment in November is $182,867, but the total of the payments that were made in calendar year 2010 was $182,273. Explain?

A. The numbers reflect the values reported by the Company. The fact that the payments for each day in November 2013 are estimated to be greater than the payments for all of calendar year 2010 is a good illustration of how quickly this program has grown and how important it is to make a determination in this case.

Q. Should Brightergy witness Blake be surprised by the 60 day requirement?

A. No. On page 5 of his testimony, witness Blake states "During the 2012-13 legislative session, Brightergy and the solar industry worked with the electric utilities located in Missouri, including GMO, to draft for consideration by the Missouri Legislature, the recently enacted House Bill 142." It is not logical to claim that sixty days' notice is unreasonable when his statement indicates that Brightergy was part of the drafting process for HB 142, which includes the 60 day requirement.

Q. On page 6 of Brightergy witness Blake's testimony he states, "Brightergy and the solar industry were completely blindsided when GMO filed its initial request that the MPSC suspend GMO's solar rebate tariff." However, Company witness Tim M. Rush's Direct Testimony discusses a meeting between the Company and the solar industry on June 20, 2013 where the solar industry was informed of GMO's belief that it had exceeded the one percent (1%) retail rate impact limit and the initial filing was subsequently made by GMO on July 5, 2013. What is your recollection of these events?

A. From my investigation in this matter, it is my understanding that GMO announced to the solar industry in June 2013 its intention to file to suspend solar rebates. If the Commission suspends solar rebate payments as proposed by GMO, the solar industry will have received at least 120 days' notice, compared to the 60 days' notice Brightergy is now opposing.

I would also note that GMO's solar rebate tariffs, which have been in place since early 2010, gave the Company the right to stop paying solar rebates when the Company determined that it had exceeded the one-percent retail rate impact limit. These tariffs are on Sheets R-62.19 and R-62.20.

Q. Brightergy witness Blake discusses the Staff's Report on Company's RES Compliance Plan, filed in MPSC File No. EO-2012-0348. What are your comments about that discussion?

A. While GMO's likelihood of reaching the one percent (1%) retail rate impact limit was not discussed in the KCPL Report, Staff did discuss GMO's likelihood of reaching the one percent (1%) retail rate impact limit in the GMO case, File No. EO-2012-0349. Staff had no reason to discuss GMO's status with respect to the one percent (1%) retail rate impact limit in the KCPL case.

Q. Did the Staff Report in File No. EO-2012-0349 address the projected rate impacts on GMO for 2013?

A. Yes. The following statement is a direct quote from Staff's Report for GMO that was filed on May 31, 2012:

> "Dependent on the expenditures associated with S-REC purchases and solar rebates for calendar year 2013 and 2014, the one percent (1%) rate impact limit could be reached. The Company will monitor the amount of solar rebates closely. The Company provided the basis for its determination and summarized the projected rate impact as 0.99% for calendar year 2012 and 1.18% based on a three year average (2012-2014)."

GMO's 2012 Plan and the Staff's Report regarding that Plan, both filed in EO-2012-0349, clearly notified the solar industry of the possibility that GMO might exceed the 1% rate impact limit in 2013 over a year before the currently proposed November 3, 2013 suspension date.

Q. On pages 7 and 8 of Brightergy witness Blake's rebuttal testimony, he describes how Staff includes both capital and energy costs in its calculation to meet future portfolio requirements, then states his opinion that purchasing RECs is the least cost method to comply with 4 CSR 240-20.100(5)(B). Does Staff agree with his conclusion that purchasing RECs should be the method to meet future resource needs to comply with 4 CSR 240-20.100(5)(B)?

A. No. 4 CSR 240-20.100(5)(B) clearly states that "renewable resources" need to be added to meet the portfolio standards for the 10-year plan period. 4 CSR 240-20.100(1)(K) defines "renewable resources" while 4 CSR 240-20.100(1)(J) defines "RECs." These two definitions clearly state that RECs are not a renewable resource and, therefore, RECs do not meet the requirements of 4 CSR 240-20.100(5)(B).

Q. If RECs cannot be used to meet the planning requirements of 4 CSR 240-20.100(5)(B), can RECs be used to meet the current year's portfolio requirements?

A. Yes, RECs can be used to meet the current year's portfolio requirements. The rule makes this distinction in several ways, but one of the most obvious distinctions is that 4 CSR 240-20.100(7) is titled, "Annual RES Compliance Report and RES Compliance Plan." 4 CSR 240-20.100(7)(A) goes on to lay out the requirements of the Annual RES Compliance Report while 4 CSR 240-20.100(7)(B) lays out the requirements for the RES Compliance Plan. These are two distinct sets of requirements that are required to be filed on the same day.

Q. Are the solar rebates that Brightergy witness Blake recommends be continued without interruption the least-cost method of complying with the portfolio requirements?

A. No. Staff witness Claire M. Eubanks in her rebuttal testimony at page 11 shows the cost of solar rebates at $2.00 per Watt. When converted to dollars per MWh using PVWatts default assumptions for the Kansas City area the result is $152.40 per S-REC (solar REC). Even if this price is discounted by the 1.25 factor to reflect the credit for in-state generation, the cost would still be $121.92 ($152.40 * 1.25 = $121.92) per S-REC. Based on my review of various highly confidential filings by the Missouri electric utilities, this is at least 10 times the cost of S-RECs currently being sold from states such as Florida and California.

Q. Is this the only reason that acquiring S-RECs by paying out solar rebates is not a cost effective way to meet the portfolio requirements?

A. No. If you assume that GMO's retail sales for 2012 is approximately the same as the retail sales it will have in 2021, the first year that the portfolio requirement reaches the maximum value, then 19,667 S-RECs would be required, assuming the S-RECs are from Missouri-based solar facilities. (8,194,746 MWh * 15% * 2% / 1.25 = 19,667) To achieve 19,667 S-RECs annually by means of S-RECs acquired from solar systems for which GMO pays rebates, $29,972,508 in solar rebates would have to paid out based on a rebate level of $2.00 per Watt. (19,667 S-RECs * $152.40 * 10 years = $29,972,508) The expenditure of nearly $30 million to meet only 2% of the portfolio requirements for the year 2021 would significantly limit the funds available to procure the remaining 98% of RECs required in 2021.

Q. On page 9 of the rebuttal testimony of Brightergy witness Blake he states, "Limiting the amount of solar rebate funds available to customer-generators each year as GMO proposes is simply not workable in the current environment." Does Staff agree?

A. No. Although Staff disagrees with the calculations of GMO, the basic concept that solar rebate funds can be limited is based firmly on the statutes, rules, and tariffs that are in place for solar rebates. HB 142 included provisions that further defined a utility's ability to suspend solar rebates and therefore strengthened the statutes regarding limiting solar rebates.

As for the specific calculations of the retail rate limit that have been offered in this case, although Staff and the Company have very different calculations, both conclude that that the retail rate limit has been exceeded.

Q. Is there a reason other than the statutes, rules and tariffs that supports the suspension of the solar rebates in the current environment?

A. Yes. A key component of the Renewable Energy Standard has always been the consumer protection that is offered by the retail rate impact limit. If this key component of the Renewable Energy Standard is to be ignored, I believe that the public's trust would be undermined.

Q. On pages 10-13 of his rebuttal testimony Brightergy witness describes a Compromise Proposal. Does that proposal comply with the statutes, rules and tariffs that are currently in place?

A. No. This proposal would not provide consumers the protection offered by the retail rate impact limit and, therefore, does not comply with the statutes, rules and tariffs that are in effect. Although this discussion claims that this compromise would allow "the same amount of wind to be built, as proposed by GMO in its IRP" [Blake Rebuttal, page 12], Staff maintains that there is a limited amount of dollars available for renewable resources and if a significant amount is spent on solar rebates in the early years, there will be less funds available when the portfolio requirements ramp up as required by the statute.

Q. MOSEIA witness Erza D. Hausman Ph.D., on page 3, lines 21-23, of his rebuttal testimony states the following, "It is premature, overly conservative, and inappropriate to include unknown future cost of additional RES-related wind in calculating the RRI during the years before such resources are constructed or procured." What is Staff's response to this statement?

A. His claim that the RRI (Retail Rate Impact) should not include costs until a resource is constructed or procured demonstrates a lack of understanding that the Retail Rate Impact section of the Renewable Energy Standard Rules, 4 CSR 240-20.100(5), defines a planning process.

Q. Does MOSEIA witness Hausman further discuss this concept in his Rebuttal Testimony?

A. Yes. Starting at page 9, line 3 and continuing to page 10, line 17, MOSEIA witness Hausman discusses how he believes future wind projects should be treated. This description is not based on the Commission's Rules but is instead based what he terms as "the generally accepted principle that cost should be accounted for over a time period consistent with the duration of the associated benefits." While this statement generally describes one of the principles used in the process for setting rates in Missouri, it does not reflect the requirements of the Retail Rate Impact calculation required by the Rule nor does it reflect the reality that all of the solar rebates that have been paid out prior to August 28, 2013 did not provide the Company with either energy or S-RECs. It also does not recognize the fact that the retail rate impact calculation was exceeded prior to August 28, 2013. Instead of this resulting in direct benefits to the Company and GMO's ratepayers, the primary result will be that ratepayers will have to pay for prudently incurred solar rebates in future rates and that the

Company will be obligated to procure all of the net power generated from these facilities under the net metering statutes, rules and tariffs. Under the net metering requirements, the customer-generator will then be compensated for this generation at the full retail rate as defined by the tariff serving that customer, up to the level of their usage for any given month. This obligation to purchase the energy is not a benefit, it is an additional cost.

Q. How do you interpret the statement that "My point is merely that the people of Missouri should not be denied the benefits of these programs today because of cost projections for future resources that may well turn out to be over-stated?" on page 10, lines 11-13 of MOSEIA witness Hausman's Rebuttal Testimony?

A. I interpret this statement to be a recommendation that the Commission should ignore the results of the Retail Rate Impact calculations required by 4 CSR 240-20.100(5) and continue to pay the solar rebates. I come to this conclusion because I see no other way that "…the people of Missouri should not be denied the benefits of these programs today…" without ignoring the calculation required by 4 CSR 240-20.100(5). The idea of ignoring the results of the calculation required by 4 CSR 240-20.100(5) is further reinforced by the remainder of the statement "because of cost projections for future resources that may well turn out to be over-stated." Taken at face value, this second phrase would lead one to conclude that since all future plans will include estimates that could be over-stated (or under-stated), planning has no value.

Q. Has the Commission placed a priority on Electric Resource Planning?

A. Yes. The Commission's Electric Resource Planning Chapter, 4 CSR 240-22, first went into effect on May 6, 1993. I was one of the Staff member's that had input in the original drafting of this Chapter. In the twenty years that have passed since that Chapter went

into effect, I believe the Commission has repeatedly reaffirmed the value of Electric Resource Planning (often referred to as IRP). This Chapter was amended effective June 30, 2011, but those changes did not change the importance of the process.

Q. Does this conclude your surrebuttal testimony?

A. Yes, it does.

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I graduated with a Bachelor of Science Degree in Industrial Engineering from the University of Missouri at Columbia. Upon graduation, I was employed by the Navy Plant Representative Office in St. Louis, Missouri as an Industrial Engineer. I began my employment at the Commission in November, 1987, in the Research and Planning Department of the Utility Division (later renamed the Economic Analysis Department of the Policy and Planning Division) where my duties consisted of weather normalization, load forecasting, integrated resource planning, cost-of-service and rate design. In December, 1997, I was transferred to the Tariffs/Rate Design Section of the Commission's Gas Department where my duties include weather normalization, annualization, tariff review, cost-of-service and rate design. Since June 2001, I have been in the Engineering Analysis Section of the Energy Department, which was created by combining the Gas and Electric Departments. I became the Supervisor of the Engineering Analysis Section, Energy Department, Utility Operations Division in November 2005 and my current title is Manager of Engineering Analysis.

I am a Registered Professional Engineer in the State of Missouri. My registration number is E-26953.

List of Cases in which prepared testimony was presented by:
DANIEL I. BECK

Company Name	**Case No.**
Union Electric Company	EO-87-175
The Empire District Electric Company	EO-91-74
Missouri Public Service	ER-93-37
St. Joseph Power & Light Company	ER-93-41
The Empire District Electric Company	ER-94-174
Union Electric Company	EM-96-149
Laclede Gas Company	GR-96-193
Missouri Gas Energy	GR-96-285
Kansas City Power & Light Company	ET-97-113
Associated Natural Gas Company	GR-97-272
Union Electric Company	GR-97-393
Missouri Gas Energy	GR-98-140
Missouri Gas Energy	GT-98-237
Ozark Natural Gas Company, Inc.	GA-98-227
Laclede Gas Company	GR-98-374
St. Joseph Power & Light Company	GR-99-246
Laclede Gas Company	GR-99-315
Utilicorp United Inc. & St. Joseph Light & Power Co.	EM-2000-292
Union Electric Company d/b/a AmerenUE	GR-2000-512
Missouri Gas Energy	GR-2001-292
Laclede Gas Company	GR-2001-629
Union Electric Company d/b/a AmerenUE	GT-2002-70
Laclede Gas Company	GR-2001-629
Laclede Gas Company	GR-2002-356
Union Electric Company d/b/a AmerenUE	GR-2003-0517
Missouri Gas Energy	GR-2004-0209
Atmos Energy Corporation	GR-2006-0387
Missouri Gas Energy	GR-2006-0422
Union Electric Company d/b/a AmerenUE	GR-2007-0003
The Empire District Electric Company	EO-2007-0029/EE-2007-0030
Laclede Gas Company	GR-2007-0208
The Empire District Electric Company	EO-2008-0043
Missouri Gas Utility, Inc.	GR-2008-0060

The Empire District Electric Company	ER-2008-0093
Trigen Kansas City Energy Corporation	HR-2008-0300
Union Electric Company d/b/a AmerenUE	ER-2008-0318
Kansas City Power & Light Company	ER-2009-0089
KCP&L Greater Missouri Operations Company	ER-2009-0090
Missouri Gas Energy	GR-2009-0355
The Empire District Gas Company	GR-2009-0434
Union Electric Company d/b/a AmerenUE	ER-2010-0036
Laclede Gas Company	GR-2010-0171
Atmos Energy Corporation	GR-2010-0192
Kansas City Power & Light Company	ER-2010-0355
KCP&L Greater Missouri Operations Company	ER-2010-0356
Union Electric Company d/b/a Ameren Missouri	GR-2010-0363
Kansas City Power & Light Company	ER-2012-0174
KCP&L Greater Missouri Operations Company	ER-2012-0175
Chaney vs. Union Electric Company	EO-2011-0391
Veach vs. The Empire District Electric Company	EC-2012-0406
The Empire District Electric Company	ER-2012-0345