

MEMORANDUM

TO: Missouri Public Service Commission Case File
Case No. EO-2017-0268, Ameren Missouri Renewable Energy Standard Compliance
Report for Calendar Year 2016

FROM: Claire M. Eubanks, P.E., Engineering Analysis Unit

/s/ Daniel I. Beck 5/26/17 /s/ Robert S. Berlin 5/26/17
Engineering Analysis Unit / Date Staff Counsel's Office / Date

SUBJECT: Staff Report and Conclusion on Ameren Missouri's 2016 Renewable Energy Standard
Compliance Report

DATE: May 26, 2017

SUMMARY

The Staff has reviewed the Union Electric Company, d/b/a Ameren Missouri ("Ameren Missouri" or "Company") 2016 RES Compliance Report. Staff has utilized the North American Renewables Registry ("NAR") to independently verify the retirement of the RECs by the Company. Ameren Missouri has retired sufficient RECs to satisfy the 2016 RES requirements and Staff has not identified any deficiencies in Ameren Missouri's 2016 RES reporting.

Staff will note that 4 CSR 240-20.100(8)(A)1. J. (IV) allows the Company to report either estimated or measured generation for customer-generated S-RECs; the Company reports estimated generation for all customer-generators regardless of whether the generation is metered. Staff would prefer the Company report measured generation when available, this allows Staff to review the aggregated S-RECs at the time of the filing rather than issue additional data requests to obtain the data.

OVERVIEW

On April 13, 2017, Ameren Missouri filed its Renewable Energy Standard (RES) Compliance Report (Compliance Report) for calendar year 2016 (Case No. EO-2016-0268), in accordance with 4 CSR 240-20.100(8), Electric Utility Renewable Energy Standard Requirements, Annual RES Compliance

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Report and RES Compliance Plan. This rule states, in part, “Each electric utility shall file an RES compliance report no later than April 15 to report on the status of both its compliance with the RES and its compliance plan as described in this section for the most recently completed calendar year.” Subparagraphs 4 CSR 240-20.100(8)(A)1. A. through P. provide the minimum requirements for the Compliance Report. Subsection 4 CSR 240-20.100(8)(D) requires that Staff examine the Company’s Compliance Report and file a report within forty-five (45) days of the filing.

Staff utilized the NAR to independently verify the retirement of the RECs and S-RECs by the Company.

DISCUSSION

Staff reviewed the Company’s Compliance Report and its Amended Compliance Report in accordance with the established requirements to verify the Compliance Report contains the information required. The results of this review are detailed below, with appropriate rule subparagraphs A. through P. identified and quoted.

A. “Total retail electric sales for the utility, as defined by this rule:”

The Company provided the total retail electric sales for 2016 expressed as total megawatt-hours (MWh) sold to Ameren Missouri consumers consistent with the amount listed within the 2016 FERC Form 1 submitted in EFIS on April 15, 2017, of 32,872,258 MWh¹.

B. “Total jurisdictional revenue from the total retail electric sales to Missouri customers as measured at the customers’ meters;”

The Company provided the total retail electric sales for 2016 expressed as annual operating revenues (dollars) from Ameren Missouri consumers. This amount (\$2,977,384,044²) is consistent with the 2016 FERC Form 1 filed with the Commission on April 15, 2017.

¹ Page 301 of 2015 FERC form 1, Line 10.

² Page 300 of 2015 FERC form 1, Line 10 - Total Sales to Ultimate Consumers and Line 9 – Gross Receipts Tax Removal.

C. “Total retail electric sales supplied by renewable energy resources, as defined by section 393.1025(5), RSMo, including the sources of the energy;”

The Company utilized four (4) company-owned renewable energy generating facilities during 2016: the Keokuk Hydroelectric Generation Station (“Keokuk”), the Maryland Heights Renewable Energy Center (“MHREC”); the O’Fallon Renewable Energy Center (“OREC”), and the General Office Building (“GOB”). The Company also acquired energy through a power purchase agreement (“PPA”) with Pioneer Prairie II Wind Farm (“Pioneer Prairie”). The total amount of energy generated in 2016 for the above listed renewable energy facilities was ** _____ **.

D. “The number of RECs and S-RECs created by electrical energy produced by renewable energy resources owned by the electric utility. For the electrical energy produced by these utility-owned renewable energy resources, the value of the energy created. For the RECs and S-RECs, a calculated REC or S-REC value for each source and each category of REC;”

The Company reported the following information on Pages 7 and 8 of its Compliance Report:

Facility	Number of RECs	Compliance Equivalency for In-State³	Value of Energy	Value of RECs (\$/REC)
Keokuk	899,846	n/a	\$14,456,144	Not assigned
GOB	91	113.75	Not assigned	Not assigned
MHREC	58,481	73,101	** _____ **	Not assigned
OREC	7,488	9,360	\$227,363	Not assigned

³ Renewable resources located in Missouri, qualifies for the one and twenty-five hundredths (1.25) credit multiplier allowed by statute and regulation; 393.1030.1., RSMo; 4 CSR 240-20.100(3)(G).

The Company reported that the Company-owned Keokuk facility generated 899,846 MWhs in 2016 and the value of the energy was \$14,456,144. The value is based on the locational marginal pricing (LMP) through Midcontinent Independent System Operator (MISO).

The GOB produced 91 MWh in calendar year 2016. The full output of this facility is consumed on site at the Company's headquarters building, therefore no values for the energy or S-RECs have been assigned.

The MHREC produced 58,481 MWhs during calendar year 2016. The Company reported the value of generation produced by the MHREC as ** _____ **, which is based on the heat rate of the generators and the contract purchase price of methane. Staff will note that the value of generation reported for the MHREC is ** ____ ** than in previous years. Staff has requested an explanation of differences between the 2017 reported value and previous values in Data Request No. 0001.1, which is due back on May 30, 2017.

Ameren Missouri's utility-scale solar facility, OREC, became operational in 2014 and Division of Energy certified it as a resource in April 2015. OREC produced 7,488 MWhs during calendar year 2016 and the value of the energy was \$227,363. The value is based on the LMP through MISO.

The Company does not assign a value to RECs created by renewable generation assets that have been fully placed into rate base. Ameren Missouri treats the RECs as a government

incentive.⁴ Staff believes there is a value to the RECs and S-RECs created by the Company's owned generation though that value is not transparent.

E. "The number of RECs acquired, sold, transferred, or retired by the utility during the calendar year;"

The Company provided the following information regarding the number of RECs acquired and retired during the calendar year:

	Number of RECs (Compliance Equivalency)	Number of S-RECs (Compliance Equivalency)
Acquired	** ____ ** (n/a)	61,863 (77,328)
Retired	1,595,997 (1,610,741)	26,298 (32,873)

The Company did not report any RECs sales or transfers in 2016.

Non-Solar Renewable Energy Credits:

The Company acquired ** ____ ** 2016 vintage RECs through a PPA with Pioneer Prairie.

Staff verified that the Company retired 865,131 Keokuk RECs (2014-2015 Vintage), 671,892 Pioneer Prairie RECs (2013-2014 Vintage), and 73,717.5 MHREC RECs⁵ (2014 Vintage) to meet the non-solar requirement of 1,610,741 RECs⁶. These RECs were

⁴ Response to Staff Data Request No. 0004.

⁵ 59,974 RECs with a compliance equivalency of 73,717.5 RECs; Ameren Missouri retired an extra 0.5 customer-generated S-REC which counts toward the non-solar requirement.

⁶ Pursuant to 4 CSR 240-20.100(1)(R)2., the amount of RECs necessary is determined by calculating five percent (5%) of the Company's total retail sales, less the solar requirement.

registered and retired in the electronic tracking system⁷ utilized for compliance purposes. In accordance with statute and regulation, a qualified facility produced these RECs and they were banked and utilized appropriately.⁸

Solar Renewable Energy Credits:

The Company acquired approximately 61,863 S-RECs from its customers through Standard Offer Contracts and as a condition of receiving a solar rebate.⁹ The customer-generated S-RECs qualify for the in-state credit multiplier.

The solar requirement for 2016 is 32,872 S-RECs¹⁰. The Company retired 9,260 OREC S-RECs¹¹ (2015 Vintage) and 23,612.5 customer-generator S-RECs¹² (2014-2015 Vintage).

F. “The source of all RECs acquired during the calendar year;”

The Company acquired RECs from Pioneer Prairie and its customer-generators during 2016.

G. “The identification, by source and serial number, or some other identifier sufficient to establish the vintage and source of the REC, of any RECs that have been carried forward to a future calendar year;”

⁷ North American Renewables Registry: <http://narecs.com/>.

⁸ Qualified facility per 393.1025.(5), RSMo and 4 CSR 240-20.100(1)(N); Banked RECs per 393.1030.2., RSMo and 4 CSR 240-20.100(1)(M).

⁹ Note page 9 of the Report mentions 61,890 S-RECs were obtained through the Standard Offer Contract; however, response to Staff Data Request No. 0003 clarifies the number of S-RECs obtained from customer-generators for 2016 is 61,863. Staff will also note here that the number represents all S-RECs acquired from customer-generators in 2016 (Standard Offer Contracts and Solar Rebates).

¹⁰ Pursuant to 4 CSR 240-20.100(1)(R)5.B., the amount of S-RECs necessary is determined by calculating one-tenth percent (0.1%) of the Company’s total retail sales. The number of RECs and S-RECs required is down from the previous year because the reported Company total retail sales are down.

¹¹ 7,408 S-RECs with a compliance equivalency of 9,260 S-RECs.

¹² 18,890 S-RECs with a compliance equivalency of 23,612.5 S-RECs.

The Company provided a listing of RECs carried forward for future year(s) as Exhibit 1 of the Compliance Report. Exhibit 1 includes the serial numbers for RECs generated by Keokuk, MHREC, OREC, Pioneer Prairie, and aggregated S-RECs.¹³

H. “An explanation of how any gains or losses from sale or purchase of RECs for the calendar year have been accounted for in any rate adjustment mechanism that was in effect for the utility;”

The Company did not incur any gains or losses associated with REC purchases or sales. No RECs were sold and all RECs purchased will be utilized for future compliance purposes.

I. “For acquisition of electrical energy and/or RECs from a renewable energy resource that is not owned by the electric utility, the following information for each resource that has a rated capacity of ten (10) kW or greater:

“(I) Facility name, location (city, state), and owner;”

The Company provided the necessary information for Pioneer Prairie.

“(II) That the energy was derived from an eligible renewable energy technology and that the renewable attributes of the energy have not been used to meet the requirements of any other local or state mandate;”

The Company provided an affidavit for Pioneer Prairie as Exhibit 2 of the Compliance Report which indicates it was derived from an eligible technology and that the renewable attributes have not been used for other purposes.

¹³ Aggregated S-RECs include customer generated S-RECs and the GOB.

“(III) The renewable energy technology utilized at the facility;”

The affidavit for Pioneer Prairie includes the technology type used.

“(IV) The dates and amounts of all payments from the electric utility to the owner of the facility;”

The dates and amounts for the payments to Pioneer Prairie were provided in Exhibit 3 of the Compliance Report.

“(V) All meter readings used for the calculation of the payments referenced in part (IV) of this paragraph;”

The required meter readings for Pioneer Prairie were provided in Exhibit 3 of the Compliance Report.

J. “For acquisition of electrical energy and/or RECs from a customer-generator:”

“(I) Location (zip code);”

“(II) Name of aggregated subaccount in which RECs are being tracked in;”

“(III) Interconnection date”

“(IV) Annual estimated or measured generation; and”

“(V) The start and end date of any estimated or measured RECs being acquired;”

The Company provided the required information in its 2016 RES Compliance Report, Exhibit 6. Staff notes that Ameren Missouri provides estimated generation for its metered and non-metered customer-generated S-RECs. Therefore, the reported number of S-RECs in

Exhibit 6 does not necessarily correlate with the actual S-RECs acquired from its customer-generators.

Staff recommends the Company report this information as measured generation for systems which are metered and report as estimated for non-metered customers. This allows Staff to review the aggregated S-RECs at the time of filing rather than having to issue follow-up data requests to the Company and wait for data request responses. This improves efficiency for the Company and the Staff.

K. “The total number of customers that applied and received a solar rebate in accordance with section (4) of this rule;”

The Company paid 13 solar rebates during calendar year 2016. Staff notes that the Company has not yet paid solar rebates equaling the stipulated cap of \$91.9 million, which was expected to be completed during 2014. ** _____

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L. “The total number of customers that were denied a solar rebate and the reason(s) for denial;”

The company stated that no customers were denied a solar rebate. Please note that some customers who applied for a solar rebate may not have been offered one due to the spending limit stipulated in Case No. ET-2014-0085.

¹⁴ Response to Staff Data Request No. 0006.

M. “The amount expended by the electric utility for solar rebates, including the price and terms of future S-REC contracts associated with the facilities that qualified for the solar rebates;”

The Company paid \$196,395 in solar rebates for calendar year 2016.

The Company provided information regarding the Standard Offer Contract tariff that was in effect prior to House Bill 142 and included the funds paid to customers in 2015 for past Standard Offer Contracts. Additionally, the Company included the Solar Rebate Tariff in Exhibit 4 of the Compliance Report. However, Staff notes this exhibit is not the Company’s currently effective tariff which went into effect April 12, 2017.

N. “An affidavit documenting the electric utility’s compliance with the RES compliance plan as described in this section during the calendar year;”

The Company filed the Affidavit referenced in the compliance report as Exhibit 7.

O. “If compliance was not achieved, an explanation why the electric utility failed to meet the RES.”

Ameren Missouri has achieved compliance with the 2016 RES requirements.

P. “A calculation of its actual calendar year retail rate impact.”

The Company provided a calculation of its actual calendar year retail rate impact in its 2016 RES Compliance Report. Please note, in Staff’s memorandum regarding the Company’s RES Compliance Plan for 2017-2019, Staff recommends the Commission order Ameren Missouri to file an updated RRI calculation in this case concurrent with its 2017 IRP filing which is required to be filed not later than October 1, 2017.¹⁵

¹⁵ See, Order Granting Variance issued July 22, 2015, in File No. EE-2015-0316.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Renewable Energy)
Standard Compliance Report 2016 and)
Renewable Energy Standard Compliance Plan)
2017-2019)
Case No. EO-2017-0268

AFFIDAVIT OF CLAIRE M. EUBANKS

STATE OF MISSOURI)
)
COUNTY OF COLE) ss.

COMES NOW CLAIRE M. EUBANKS and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing *Staff Report and Conclusion on Ameren Missouri's 2016 Renewable Energy Standard Compliance Report* in Memorandum form; and that the same is true and correct according to her best knowledge and belief.

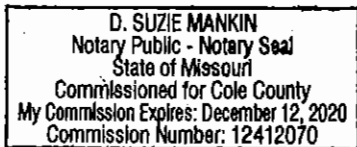
Further the Affiant sayeth not.

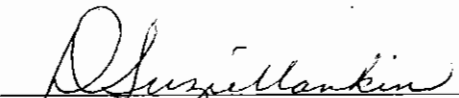


CLAIRE M. EUBANKS

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 26th day of May, 2017.





Notary Public