

## **MEMORANDUM**

**TO:** Missouri Public Service Commission  
Official Case File, Case No. EO-2024-0231  
Ameren Missouri's Filing of the Renewable Energy Standard Compliance  
Plan for 2024-2026

**FROM:** Claire M. Eubanks, PE, Engineer Manager

/s/ Claire M. Eubanks, PE / 05-30-2024  
Engineering Analysis Dept. / Date

**SUBJECT:** Staff Report and Conclusion on Ameren Missouri's 2023 Renewable Energy  
Standard Compliance Report

**DATE:** May 30, 2024

## **SUMMARY**

Staff reviewed the Union Electric Company, d/b/a Ameren Missouri ("Company" or "Ameren Missouri") *2023 Renewable Energy Standard Compliance Report* ("RES Report"). Staff utilized the North American Renewables Registry ("NAR") to independently verify the retirement of the renewable energy credits ("RECs") by the Company. Ameren Missouri has retired sufficient RECs to satisfy the 2023 RES requirements. Commission Rule 20 CSR 4240-20.100(3)(J) allows for up to 10% of required RECs to be retired between January 1 and April 15 of the following year. Ameren Missouri previously requested a variance and was granted a waiver of this subsection of the rule for the 2023 RES requirements in Case No. EE-2024-0037.

As discussed in more detail below, Ameren Missouri has several errors in its RES Report. The RES Report is intended to provide the public information regarding renewable energy standard compliance. Ameren Missouri and the Commission posts the public version of the reports on its websites as required by rule. Therefore, Staff recommends that the Commission direct Ameren Missouri to correct the following in its 2023 RES Report:

- Correct (or provide support for) its reported Missouri jurisdictional revenue.
- Correct the value of energy reported for High Prairie Renewable Energy Center and Atchison Renewable Energy Center.

- Correct the tables on page 9 to include fractional RECs showing the impact of the 1.25 credit for in-state resources.
- Correct the 2023 RES requirements listed on page 8.

## **OVERVIEW**

On April 15, 2024, Ameren Missouri filed its RES Report for calendar year 2023 in accordance with 20 CSR 4240-20.100(8), Electric Utility Renewable Energy Standard Requirements, Annual RES Compliance Report and RES Compliance Plan. This rule states, in part, “Each electric utility shall file a 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 20 CSR 4240-20.100(8)(A)1. A. through P. provide the minimum requirements for the Compliance Report. Subsection 20 CSR 4240-20.100(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 NAR to independently verify the retirement of the RECs and S-RECs<sup>1</sup> by the Company.

## **DISCUSSION**

Staff reviewed the Company’s Compliance Report to verify it contains the information required under 20 CSR 4240-20.100(8). 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 2023 expressed as total megawatt-hours (“MWh”) sold to Ameren Missouri consumers consistent with the amount of 30,302,136 MWh listed within the 2023 Missouri Basis FERC Form 1, submitted in EFIS<sup>2</sup> on April 15, 2024.

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<sup>1</sup> Solar Renewable Energy Credits (S-REC).

<sup>2</sup> Electronic Filing and Information System (“EFIS”).

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

The Company provided the total sales to ultimate customers for 2023 expressed as annual operating revenues (dollars) from Ameren Missouri consumers as \$3,239,647,959 in the RES report. However, Ameren Missouri reported \$3,082,618,763 as its Missouri jurisdictional revenue in its Annual Report filed April 8, 2024 (BMAR-2024-1223).

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

The Company utilized thirteen (13) company-owned renewable energy generating facilities during 2023 for RES compliance:

- Keokuk Hydroelectric Generating Station (“Keokuk”),
- Maryland Heights Renewable Energy Center (“Maryland Heights REC”),
- O’Fallon Renewable Energy Center (“O’Fallon REC”),
- BJC Solar facility (“BJC Solar Facility”),
- Ameren Missouri headquarters office building (“AMO Headquarters Solar”),
- High Prairie Renewable Energy Center (“High Prairie REC”),
- Atchison County Renewable Energy Center (“Atchison REC”),
- South St. Louis Renewable Energy Center (“South St. Louis REC”),
- Cape Girardeau Renewable Energy Center (“Cape Girardeau REC”),
- House Springs Renewable Energy Center (“House Springs REC”),
- Fee Fee Renewable Energy Center (“Fee Fee REC”),
- North Metro Renewable Energy Center (“North Metro REC”), and
- Delmar Renewable Energy Center (“Delmar REC”).

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 2023 for the above listed renewable energy facilities, including Pioneer Prairie, was

\*\* [REDACTED] \*\*.

**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 page 7 of its Compliance Report:

<b>Resource</b>	<b>RECs</b>	<b>MO Equivalent RECs</b>	<b>Value of Energy</b>
AMO Headquarters Solar	85	106.25	\$1,721
O'Fallon REC	5,253	6,566.25	\$106,373
BJC Solar Facility	1,403	1,753.75	\$28,411
Cape Girardeau REC	1,791	2,238.75	\$36,268
South St. Louis REC	301	376.25	\$6,095
Fee Fee REC	436	545.00	\$8,829
North Metro REC	213	266.25	\$4,313
Delmar REC	168	210.00	\$3,402
House Springs REC	115	143.75	\$2,329
High Prairie REC <sup>3</sup>	882,927	1,103,658.75	\$20,714,572
Atchison REC <sup>4</sup>	873,667	1,092,083.75	\$11,828,439
Keokuk Hydro-electric	834,991	834,991.00	NA
Maryland Heights REC	59,525	74,406.25	\$1,205,381

The Company has stated in previous filings that RECs created by Keokuk do not have value due to the restrictive nature of utilizing hydroelectric to meet renewable portfolio standards in other states, and the fact that Keokuk’s costs are already part of the existing rate structure. As shown above, the Company did not calculate the value of its RECs. 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. Values for High Prairie REC and Atchison REC represent actual market energy settlements for 2023. The values for the remaining facilities were calculated by multiplying the MWhs generated by the average 2023 Day ahead LMP<sup>5</sup> energy price (\$/MWh) at the Missouri generation node.<sup>6</sup>

<sup>3</sup> Ameren Missouri corrected in response to Staff Data Request No. 0006.

<sup>4</sup> Ameren Missouri corrected in response to Staff Data Request No. 0006.

<sup>5</sup> Locational Marginal Price (LMP)

<sup>6</sup> MOGEN is the aggregate hub node of Missouri generation nodes used in the Midcontinent Independent System Operator LMP historical reports

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

The Company provided the number of RECs acquired in 2023 with compliance equivalency included. The table below provides the actual 2023 RECs acquired:

Source	Pioneer Prairie II	Customer Solar <sup>7</sup>	3 <sup>rd</sup> Party Non-Solar Purchase
RECs/ S-RECs	** [REDACTED] **	125,863 (157,328.75)	702,798 (666,674.25)

The Company provided information regarding the number of RECs/S-RECs retired for 2023 compliance. The Company reported rounded values affected by the 1.25 MO multiplier which resulted in errors in its Report. Staff verified the actual numbers below in NAR:<sup>8</sup>

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[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]			[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]				[REDACTED]	[REDACTED]
[REDACTED]				[REDACTED]	[REDACTED]
[REDACTED]				[REDACTED]	[REDACTED]
[REDACTED]				[REDACTED]	[REDACTED]
[REDACTED]			[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
				[REDACTED]	[REDACTED]

\*\*

<sup>7</sup> The number in parenthesis represents the final value for compliance after the 1.25 credit for in state generation is applied.

<sup>8</sup> Facilities denoted with \* qualified for the 1.25 multiplier for MO generation facilities. A portion of the 3<sup>rd</sup> party non-solar purchase qualified.

<b>Solar Resource</b>	<b>2021 Vintage</b>	<b>2022 Vintage</b>	<b>2023 Vintage</b>	<b>Total</b>
Customer Solar			78,701.75	78,702.75
Ameren HQ Solar			106.25	106.25
O'Fallon REC			6,566.25	6,566.25
BJC Solar Facility			1,753.75	1,753.75
South St. Louis REC			376.25	376.25
Cape Girardeau REC			2,238.75	2,238.75
Fee Fee REC			545.00	545.00
North Metro REC			266.25	266.25
Delmar REC			210.00	210.00
House Springs REC			143.75	143.75
Purchased RECs				n/a
Total (with MO Eq.)				90,908.00

Staff verified through NAR that the Company retired a total of 3,823,548 RECs (4,545,320.75 MO equivalency), with at least 2% from solar sources. Ameren retired 251,743.75 (MO equivalent) S-RECs for the 2023 requirements.

Ameren Missouri reported its total RES requirement as 4,545,321 (yet only retired 4,545,320.75 Missouri equivalent RECs). Generally, Staff prefers the utility round up to whole increments in calculating its RES requirements to ensure it meets its compliance obligation and because RECs are in whole increments (i.e. only the Missouri compliance equivalency causes fractional RECs to be reported). The RES requirements are calculated by multiplying 15% to a utility's retail electric sales ( $30,302,136 \text{ MWh} * 15\% = 4,545,320.4$ ) and the solar requirement is calculated by multiplying 0.3% to a utility's retail electric sales ( $30,302,136 \text{ MWh} * 0.3\% = 90,906.4$ ). Thus, Staff concludes Ameren has retired sufficient RECs. Staff recommends the Commission direct Ameren Missouri to correct page 8 of its report to reflect a RES requirement of 4,545,320.5 and a solar requirement of 90,906.5.

The RECs were registered and retired in the electronic tracking system<sup>9</sup> utilized for compliance purposes. In accordance with statute and regulation, a certified renewable energy resource produced these RECs and they were banked and utilized appropriately.<sup>10</sup>

Ameren Missouri stated that there were no RECs sold during the calendar year.

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

The Company acquired RECs from Pioneer Prairie, third party REC purchases, and its customer-generators during 2023. See Sections D, E, and I of the report for the amounts. See Section I for more discussion of the third party REC purchases.

**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;”**

The Company provided a listing of RECs carried forward for future year(s) as Exhibit 1 of the Compliance Report.

**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;”**

Ameren Missouri states that there were no sales of RECs and all purchased RECs were used to meet 2023 compliance requirements or banked for future compliance requirements.

**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 \*\* [REDACTED] \*\*. \*\* Facility owner was not provided for all third party REC purchases, however Ameren did supply counterparty

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<sup>9</sup> North American Renewables Registry: <http://narecs.com/>.

<sup>10</sup> Renewable Energy Resource per Section 393.1025(5), RSMo and 20 CSR 4240-20.100(1)(N); Banked RECs per Section 393.1030.2., RSMo and 20 CSR 4240-20.100(1)(M).

name, trade date, quantity, vintage year, type of generation, and a deal number. Ameren has not requested a variance of this rule for this reporting year. However, purchased RECs generally originated from sources owned or contracted for by other regulated utilities. One exception are RECs purchased from White Cloud Wind Project. NAR lists the owner as White Cloud Wind Project, LLC. A variance would serve no practical purpose for this reporting year.

Staff is able to verify that the total number of RECs retired from third party sources in NAR matches the total amount listed in the compliance report. Ameren also provided invoices for individual sales with the REC quantities transferred by asset and vintage year for each sale.

**“(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 \*\* [REDACTED] \*\* 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.

No affidavit was provided for the third party REC purchases; however, the third party REC purchases were tracked through the Commission designated renewable energy tracking system. Staff confirmed that the RECs purchased from third parties were on MDNR-DE’s<sup>11</sup> list of certified renewable energy generation facilities. Many of Ameren Missouri’s purchased RECs originated from other Missouri regulated utilities though some of the purchases were made through a third party.

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

Ameren Missouri provided the type of generation for third party purchases and PPAs, all sources being wind. Staff was able to confirm through MDNR-DE and NAR, the technology for individual facilities.

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<sup>11</sup> Missouri Department of Natural Resources – Division of Energy (“MDNR-DE”).



**“(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 \*\* [REDACTED] \*\* were provided in Exhibit 3 of the Compliance Report. Dates and amounts of payments were reported for third party REC purchases in Table 5 of the Report.

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

The RECs generated on a monthly basis were provided for \*\* [REDACTED] \*\* in Exhibit 3 of the Compliance Report along with an affidavit from the owner of the facility in Exhibit 2 of the Compliance Report.

The purpose of this subparagraph is to demonstrate the validity of RECs and/or S-RECs obtained from sources that are not owned by the electric utility. Generation of renewable energy at company-owned resources is typically monitored by revenue quality meters and/or reported through an independent system operator. Resources in which this subparagraph applies to are not necessarily monitored by the utility that seeks to retire the associated RECs for compliance purposes. This subparagraph compensates for the lack of utility ownership/control of the renewable energy resource. In the past, Staff has recommended a variance based on the availability of a reasonable substitute to the meter readings, such as invoices. In this instance, invoices would not have been paid by Ameren Missouri on a monthly basis. Ameren did provide details regarding the purchases including the quantity of RECs purchased by asset and vintage.

**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.”**

Ameren Missouri provided the required information in its 2023 RES Compliance Report, Exhibit 6. Ameren Missouri did note that projects interconnected in 2023 were not included in Exhibit 6 because those resources have not yet been certified by MDNR-DE.

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

The Company paid 1,438 solar rebates during calendar year 2023.

**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.

**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 \$3,422,056.67 in solar rebates for calendar year 2023. Final payments were made in 2024 for a total of \$4,542,707.17.

The Company stated that all funding has been paid for the Solar Rebate Tariff associated with 393.1030, RSMo.<sup>12</sup> The program associated with 393.1670, RSMo is still active. The company provided Solar Rebate Tariffs in Exhibit 4 of the Compliance Report and the Solar Renewable Energy Credit Purchase Tariff in Exhibit 5. Ameren noted that the Solar Rebate Energy Credit Purchase Tariff was removed from Ameren’s Tariff book on April 1, 2022.<sup>13</sup>

**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 in Exhibit 7 of the Compliance Report.

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<sup>12</sup> MO P.S.C. Schedule No. 6 Sheets 88.9 through 88.13.

<sup>13</sup> MO P.S.C. Schedule No. 6 Sheets 89 through 89.4 is now the Community Solar Program, which became effective on March 16, 2022 through Commission order in Case No. ER-2021-0240.

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

Ameren Missouri has retired enough RECs to achieve compliance with the 2023 RES requirements; however, the number of RECs retired between January 1 and April 15 exceeded the 10% allowed by 20 CSR 4240-20.100(3)(J).<sup>14</sup> Ameren Missouri requested and was granted a variance in EE-2023-0409.

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

The Company provided a calculation of its actual calendar year retail rate impact<sup>15</sup> in its 2023 RES Compliance Report. Ameren Missouri calculates its actual calendar year retail rate impact by dividing its RES Compliance cost by an adjusted revenue requirement resulting in a 1.94% actual calendar year retail rate impact for 2023. In contrast, the other regulated utilities utilize Missouri jurisdictional revenue.

Ameren Missouri is not including the cost of its Neighborhood solar program as a RES compliance cost. However, it is Staff’s understanding that this program was intended to comply with 393.1665, RSMo., which required Ameren Missouri to invest no less than \$14 million by December 31, 2023 in utility-owned solar.

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<sup>14</sup> 20 CSR 4240-20.100(3)(J) For compliance purposes, electric utilities shall retire RECs in sufficient quantities to meet the RES portfolio requirements of this rule. The RECs shall be retired during the calendar year for which compliance is sought. Electric utilities may retire RECs from January 1 through April 15 of the following year, following the calendar year for which compliance is being sought and designate those retired RECs as counting towards the requirements of that previous calendar year. Any RECs retired in this manner shall be specifically annotated in the registry designated in accordance with subsection (F) of this section and the annual compliance report filed in accordance with section (7) of this rule. RECs retired from January 1 through April 15 of the following year, to be counted towards compliance for the previous calendar year in accordance with this subsection shall not exceed ten percent (10%) of the total RECs necessary to be retired for compliance for that calendar year.

<sup>15</sup> Total RES Compliance Cost divided by the Adjusted Revenue Requirement. Adjusted Revenue Requirement is the Revenue Requirement less the fixed costs associated with existing renewable resources.

**BEFORE THE PUBLIC SERVICE COMMISSION**  
**OF THE STATE OF MISSOURI**

In the Matter of Union Electric Company	)	
d/b/a Ameren Missouri's Filing of its	)	Case No. EO-2024-0231
Renewable Energy Standard Compliance	)	
Plan for 2024-2026	)	
	)	

**AFFIDAVIT OF CLAIRE M. EUBANKS, PE**

STATE OF MISSOURI	)	
	)	ss.
COUNTY OF COLE	)	

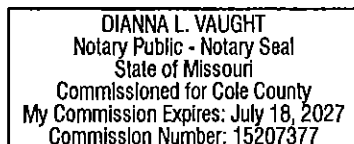
COMES NOW CLAIRE M. EUBANKS, PE and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing *Staff Report on Ameren Missouri's 2023 Renewal Energy Standard Compliance Report*; and that the same is true and correct according to her best knowledge and belief.

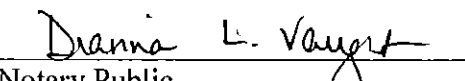
Further the Affiant sayeth not.

  
CLAIRE M. EUBANKS, PE

**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 30th day of May 2024.



  
Notary Public