

MEMORANDUM

TO: Missouri Public Service Commission Case File
File No. EO-2023-0358, The 2022 RES Compliance Report and 2023 RES
Compliance Plan of The Empire District Electric Company, d/b/a Liberty

FROM: Cedric E. Cunigan, PE, Senior Professional Engineer
Engineering Analysis Dept., Industry Analysis Division

/s/ Cedric E. Cunigan, P.E. / 08/17/2023
Engineering Analysis Dept. / Date

/s/ Nicole Mers / 08/17/2023
Staff Counsel's Office / Date

SUBJECT: Staff Report and Conclusion on The Empire District Electric Company's
2022 Renewable Energy Standard Compliance Report

DATE: August 17, 2023

SUMMARY

Staff has reviewed The Empire District Electric Company, d/b/a Liberty's ("Liberty" or "Company") 2022 RES Compliance Report. Based on its review, Staff has identified several deficiencies.

- The Renewable Energy Credits ("REC") generated by owned facilities and the associated value is lacking information for all owned facilities in Section D.
- Reported RECs sold information differs between the report and Attachment 3.

Further discussion of these items is included in the sections below. Staff recommends that Liberty supplement its filing with the updates to the sections below:

- Section D.
 - Staff recommends that the Commission order Liberty to provide an explanation of how the REC values were calculated. For RECs/Solar Renewable Energy Credits ("S-RECs") that were sold or transferred Liberty should provide information on those sales and transfers including the vintage years and certificate serial numbers of the RECs transferred.

- Section E.
 - Staff recommends that the Company refile the HC version of Attachment 2 without redactions (i.e. it appears Liberty filed the public redacted version as the HC version).
 - Staff recommends the Commission order Liberty to provide justification for the numbers it provided in Table 3, and correct the report and attachments as necessary.
 - Staff recommends the Commission order Liberty to provide the vintage year and serial numbers of RECs for each trade made in the 2022 calendar year.

- Section G.
 - Staff recommends the Company provide a corrected version of Attachment 5 with all RECs carried forward included.

- Section I.
 - Staff recommends the Company provide Green-e certificates as done in previous years, or an attestation for purchased energy 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.

- Section P.
 - Staff recommends the Commission order Liberty to provide a corrected report and/or Attachment 8 with justification for the costs included/excluded.

OVERVIEW

On April 14, 2023, Liberty filed its Compliance Report for calendar year 2022 (File No. EO-2023-0358), in accordance with 20 CSR 4240-20.100(8), Electric Utility Renewable Energy Standard (“RES”) Requirements, Annual RES Compliance 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 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. Liberty submitted a Revised Report and Plan on May 24, 2023. Liberty again submitted a revised Report and Plan on August 4, 2023. The Commission granted Staff an extension of time to submit its recommendation and comments on Liberty's RES Compliance Report and Plan until August 17, 2023. Staff provided a list of inconsistencies to Liberty via email on June 21, 2023.¹ Staff also met with the Company and OPC to discuss issues on July 14, 2023. Some inconsistencies remained in the 3rd revised filing.

Staff completed its review and utilized the North American Renewables Registry ("NAR") to independently verify the retirement of the RECs and S-RECs by the Company.

DISCUSSION

Staff reviewed the Company's 3rd Revised Compliance Report in accordance with the established requirements to verify it 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 2022 expressed as total megawatt-hours ("MWh") sold to Missouri customers 4,376,596 MWh, which is consistent with the total sales to ultimate customers Missouri Jurisdictional Annual Report filed with the Commission on May 5, 2023.²

¹ See Attachment A.

² Liberty's 2022 FERC form 1 page 301, line 10, column d.

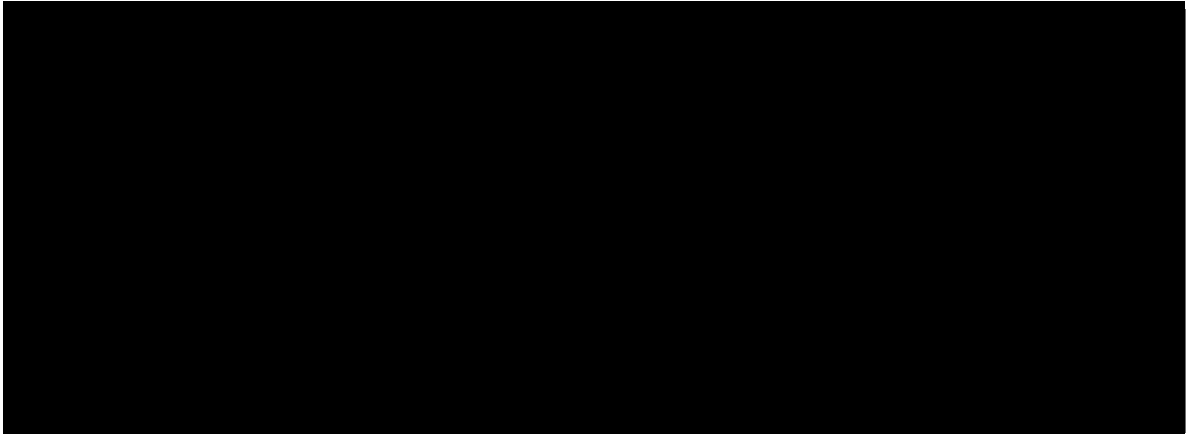
B. “Total jurisdictional revenue from the total retail electric sales to Missouri customers as measured at the customers’ meters;”

The Company provided the total retail electric sales for 2022 expressed as annual operating revenues (dollars) from Missouri consumers at \$575,869,436, which is consistent with total sales to ultimate customers of the Missouri Jurisdictional Annual Report, filed with the Commission on May 5, 2023.³

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 seven (7) renewable energy generating facilities defined by Section 393.1025(5), RSMo during 2020: the Company-owned Ozark Beach Hydroelectric Project (“Ozark Beach”), North Fork Ridge Windfarm (“North Fork”), Kings Point Windfarm (“Kings Point”), Neosho Ridge Windfarm (“Neosho Ridge”), Prosperity Solar; and purchase power agreements (“PPA”) with Elk River Windfarm, LLC, Kansas (“Elk River”), and Cloud County Wind Farm, LLC, Kansas (“Meridian Way”). The Company provided the following information regarding electric sales supplied by renewable energy.

³ Liberty’s 2022 FERC form 1 page 301, line 10, column b.



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:

Facility	REC/SREC Produced	2022 Average LMP (\$/MWh)	REC / SREC Value (\$/Credit)
Ozark Beach	56,592	\$74.18	\$2.25
North Fork Ridge Wind	528,740	\$23.56	\$2.25
Kings Point Wind	509,505	\$24.56	\$2.25
Neosho Ridge Wind	504,331	\$19.30	\$2.25
Customer Generated Solar	55,031	N/A	\$2.50*
Prosperity Solar (Community Solar)	3,199.84	N/A	\$2.50*

Staff notes that only 51,041 RECs from Solar Aggregations generated in the 2022 calendar year are recorded in NAR. Staff recommends the Commission order Liberty

to provide the source and serial number for all of the customer generated RECs they are including in the 2022 value in this table. Staff is unclear how Liberty calculated the REC/S-REC value listed in the table above. Staff calculated the following REC values using the weighted average of calendar year sales provided in Attachment 3 of the report.

*** [REDACTED]
[REDACTED]
[REDACTED] ***

Staff recommends that the Commission order Liberty to provide an explanation of how the REC values were calculated. For RECs/S-RECs that were sold or transferred, Liberty should provide information on those sales and transfers including the vintage years and certificate serial numbers of the RECs transferred.

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, retired, and sold during the calendar year. The information in the narrative provided by the Company does not appear to match that provided in the attachments or found on NAR. Staff believes the numbers below are correct:

	Number of RECs (Compliance Equivalency)	Number of S-RECs (Compliance Equivalency)
Acquired	*** [REDACTED] ***	51,041
	*** [REDACTED] ***	(63,801.25)
Retired	564,186	44,198
	(601,242.25)	(55,247.5)
Sold	*** [REDACTED] ***	N/A
	*** [REDACTED] ***	
Transferred	N/A	1,253
		(1,566.25)

Acquired RECs/S-RECs:

Attachment 2 in the 3rd revised report does not display meter readings or payment amounts in the HC or public versions. Staff used previous versions of Attachment 2 to calculate numbers of RECs acquired, but there is not one complete version of the filing in this docket. Staff recommends that the Company refile the HC version of Attachment 2 without redactions.

According to NAR, the Company acquired 51,041 S-RECs (63,801.25 S-RECs including compliance equivalency) from its customers as a condition of receiving a solar rebate in 2022. The Company reported 55,031 in Table 3. Staff is unsure of where this number came from. Staff recommends the Commission order Liberty to provide justification for the numbers it provided, and correct the report and attachments as necessary.

RECs/S-RECs Sold:

In Attachment 3 to the Compliance Report, the Company also provided the quantity of RECs sold *** [REDACTED]

[REDACTED] *** The attachment does not identify the vintage of the RECs or serial numbers in each of the sales. Therefore, Staff is unable to verify the total number of RECs generated and sold in the calendar year. Staff recommends the Commission order Liberty to provide the vintage year and serial numbers of RECs for each trade made in the 2022 calendar year.

RECs/S-RECs Retired:

Staff verified through NAR the Company retired 564,186 RECs (601,242.25 RECs including compliance equivalency) and 44,198 S-RECs (55,247.5 S-RECs including compliance equivalency). The RECs retired by generation facility are below:

Source of RECs	Quantity	MO Equivalent
Ozark Beach 2022	56589	70736.25
North Fork Ridge 2022	63061	78826.25
Meridian Way 2022	121758	121758
Meridian Way 2021	14717	14717
Elk River 2022	233979	233979
Kings Point 2022	28575	35718.75
Elk River 2021	45507	45507
Total RECS	564186	601242.25
S-RECS		
Customer Gen 2021	44198	55247.5
Combined Total	608384	656489.75

The Company was required to retire a total of 656,489 RECs for compliance, with at least 13,130 being S-RECs.⁴ The Company retired 44,198 S-RECS (55,247.5 MO compliance equivalency) to meet the 7,952 solar requirement with the excess S-RECs being used to meet the general requirement of 643,360 RECs. The total number of RECs retired, 656,489.75 MO compliance equivalency, exceeded the total compliance requirement by 0.75 RECs counting MO compliance equivalency.

All RECs and S-RECs retired for 2022 compliance were registered and retired in the electronic tracking system⁵ utilized for compliance purposes. In accordance with statute and regulation, a qualified facility produced these RECS and they were banked and utilized appropriately.⁶

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

See discussion in the preceding subparagraph E. of this report.

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, by source and serial number, being carried forward for future year(s), as Attachment 5 of the Compliance Report. The list includes RECs from Elk River, Kings Point, Meridian Way, Neosho Ridge, and

⁴ Pursuant to 20 CSR 4240-20.100(1)(R)2., the amount of RECs necessary is determined by calculating fifteen percent (15%) of the Company’s total retail sales, less the solar requirement.

⁵ North American Renewables Registry: <http://missouri-recs.com/>.

⁶ Qualified facility 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).

North Fork Ridge. The attachment does not include 51,041 customer generated S-RECs generated in 2022 that would be carried forward to the following year. Staff recommends the Company provide a corrected version of Attachment 5 with all RECs carried forward included.

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 sold RECs produced by its wind PPAs and company owned wind generation. *** [REDACTED] ***

REC revenues factor into Liberty’s Fuel Adjustment Clause in effect during the 2022 calendar year under P.S.C. Mo. No. 6, Sec. 4, Original Sheet Nos. 17e and 17n. Both Elk River and Meridian Way PPAs were entered into before the Renewable Energy Standard existed, therefore, Staff does not consider these wind PPAs to be RES compliance costs, which are restricted from being recovered in a fuel adjustment clause.

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 name, address, and owner for Elk River and Meridian Way on page 8 of the Annual RES Compliance Report.

“(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;”

Green-e certificates for Elk River and Meridian Way were provided in previous years. This year an email was provided stating that the generation information would not be available until June 1, 2023. As this date has passed, Staff recommends the Company provide the certificates as done in previous years or some other attestation.

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

The type of technology was provided on page 8 of the 2022 Annual RES Compliance Report.

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

Liberty provided the dates and amounts of the payments to Elk River and Meridian Way in a previous version of Attachment 2 to the 2022 Annual RES Compliance Report. As noted earlier the 3rd revised filing has left this information redacted and should be resubmitted in the HC version.

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

The meter readings used to calculate the payments to *** [REDACTED] [REDACTED] *** were provided in a previous version of Attachment 2 to the 2022 Annual RES

Compliance Report, however the numbers included loss production. As noted earlier, the 3rd revised filing has left this information redacted and should be resubmitted in the HC version.

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

“(I) Location (zip code);”

The Company provided the zip codes of its customer-generators in Attachment 7.

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

The Company provided the name of the aggregated subaccounts in Attachment 7.

“(III) Interconnection date”

The Company provided the operational date for customer-generator systems in Attachment 7.

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

The Company provided the estimated generation from customer-generator systems in Attachment 7.

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

The Company provided the start and end date of estimated RECs being acquired in Attachment 7.

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

The number of customers that applied for and received a solar rebate in 2022 was 697.

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

The Company stated that no applications were ultimately denied the solar rebate.

M. “The amount of funds 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 stated it spent \$2,158,333.70 on solar rebates in 2022.

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 included the affidavit as Attachment 8 of the Compliance Report.

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

An acceptable number of RECs was retired during the calendar year. However, there are still inconsistencies in the report and attachments as noted earlier in this report.

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

The Company stated that the total compliance cost for the year was \$2,163,203 and the total Missouri revenue was \$575,869,436, which resulted in a calendar year retail rate impact (“RRI”) of 0.3%. Staff has previously asked for a breakdown of all costs included in the calendar year retail rate number. *** [REDACTED]

[REDACTED]⁷ [REDACTED]

[REDACTED] *** While not a large difference, the reports should list the correct numbers and match the supporting attachments. Staff recommends the Commission order Liberty to provide a corrected report and/or Attachment 8 with justification for the costs included/excluded.

Staff has determined that Liberty retired an appropriate number of RECs to meet RES requirements for the 2022 compliance year. Liberty should make corrections to the report sections noted above and provide a supplemental filing.

⁷ *** [REDACTED]
[REDACTED]
[REDACTED] ***

Cunigan, Cedric

From: Mers, Nicole
Sent: Wednesday, June 21, 2023 2:17 PM
To: Diana Carter; gregory.jarman@libertyutilities.com
Cc: Eubanks, Claire; Cunigan, Cedric; Martin, Anna; Mantle, Lena
Subject: EO-2023-0358 Res Compliance Report and Plan

Categories: Electric

Hi Diana and Gregory,

I believe Staff has been in contact with some of your folks about some questions/discrepancies in the Res Report and Plan. Listed below is what we've compiled so far. Since we're on our second extension and refiling, do you think it makes sense to send the proposed refiled Report and Plan to Staff and OPC before filing it in EFIS? That way if there's anything else we can hopefully address it all in the second updated filing. Thanks,

Liberty RES report issues

1. Generation reported (section C, attachment 1, annual report) is less than RECs created for the 2022 calendar year (section D) for Ozark Beach, North Fork Ridge, Kings Point, and Neosho Ridge
2. RECS acquired in Section E should just be unowned generation sources. For Meridian Way, attachment 2 shows more generation than listed in section E. Loss production needs to be removed from generation and an explanation provided.
3. RECs sold/transferred. The company needs to provide sale documentation for RECs. Trade number and NAR serial numbers for each trade with purchase price.
4. RECs retired in section E,F (narrative and table 4) does not match total number of RECs from NAR or attachment 4 (608,384 RECs, 656,489.75 mo eq from NAR). Update narrative and chart with correct numbers. Include MO equivalent RECs when applicable.
5. Section G references table 3 when it should be table 4. RECs carried forward do not match NAR as of June. Sales and new generation could be the cause for most accounts as they match attachment 5. I would note the date for information on attachment 5. Please explain the discrepancy of 65,386 MWh generation for EDE Solar Aggregates in table 4 and the 44,198 listed earlier in table 3 and the lack of any aggregate RECs in attachment 5. (65,386 appears to include newly registered agg accounts that wouldn't have generated all year)
6. Section P lists a large compliance cost for 2022 of \$26,322,564.51 and does not calculate the RRI using that number. Please Identify all costs by line item that go into the 2022 compliance cost and calculate the calendar year RRI.
 - a. Also value does not match Plan section F for compliance costs. Plan says \$34,539, while report lists \$48,096.61. Please identify correct cost and correct sections as needed.

Plan issues

1. Table 1 needs to be updated with DR 009 information
2. Section C table 3 should have RECs not MWhs for the unit in the right 2 columns
3. Awaiting DR Response on inclusion of Asbury costs in modeling assumptions. Potential recalculation
4. Same discrepancy as 6.a. in report.

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

In the Matter of 2022 RES Compliance)
Report and 2023 RES Compliance Plan of)
The Empire District Electric Company d/b/a)
Liberty)
File No. EO-2023-0358

AFFIDAVIT OF CEDRIC E. CUNIGAN, PE

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW CEDRIC E. CUNIGAN, PE, and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *2022 Renewable Energy Standard Compliance Report, in Memorandum form*; and that the same is true and correct according to his best knowledge and belief.

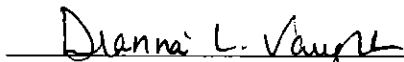
Further the Affiant sayeth not.



CEDRIC E. CUNIGAN, 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 16th day of August, 2023.



Notary Public

DIANNA L. VAUGHT Notary Public - Notary Seal State of Missouri Commissioned for Cole County My Commission Expires: July 18, 2027 Commission Number: 15207377
