

MEMORANDUM

TO: Missouri Public Service Commission Case File
Case No. EO-2022-0282, The Empire District Electric Company's 2021
Renewable Energy Standard Compliance Report and 2022 Renewable Energy
Standard Compliance Plan

FROM: Cedric E. Cunigan, PE, Engineering Analysis

/s/ Cedric E. Cunigan, P.E. 06/01/2022 /s/ Don Cospers 06/01/2022
Engineering Analysis / Date Staff Counsel's Office / Date

SUBJECT: Staff Report and Conclusion on The Empire District Electric Company's
2021 Renewable Energy Standard Compliance Report

DATE: June 1, 2022

SUMMARY

Staff has reviewed The Empire District Electric Company ("Liberty" or "Company")
2021 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 Section E of the report and Attachment 3.
- The calendar year retail rate impact calculation reported in Section P does not include all resources used for compliance in the year.

Further discussion of these items is included in the sections below. Staff recommends the Commission Order Liberty to supplement their filing with updates for these sections.

OVERVIEW

On April 15, 2021, Liberty filed its Compliance Report for calendar year 2021 (Case No. EO-2022-0282), in accordance with 20 CSR 4240-20.100(8), Electric Utility Renewable Energy

**** Denotes Confidential Information ****

APPENDIX A

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.

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 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 2021 expressed as total megawatt-hours (MWh) sold to Missouri customers (4,185,550 MWh¹), which is generally consistent with the total sales to ultimate customers Missouri Jurisdictional Annual Report filed with the Commission on May 19, 2022.

¹ Reported number from Liberty’s 2021 FERC form 1 page 301, line 10, column d is 4,185,549 MWh. The 1 MWh difference is a rounding error.

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 2021 expressed as annual operating revenues (dollars) from Missouri consumers at \$474,937,560, which is consistent with total sales to ultimate customers of the Missouri Jurisdictional Annual Report, filed with the Commission on May 9, 2022.

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 three (6) 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 Ridge”), Kings Point Windfarm (“Kings Point”), Neosho Ridge Windfarm (“Neosho Ridge”); 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.

Facility	Generation (MWh)	Percentage	Energy Supplied to MO Retail Customers (MWH)
Elk River	300,512	88.90%	267,155
Meridian Way	178,947	88.90%	159,084
Ozark Beach	50,542	88.90%	44,931
North Fork Ridge	498,279	88.90%	442,970
Kings Point	407,657	88.90%	362,407
Neosho Ridge	888,337	88.90%	789,732
TOTAL			2,066,228

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	Number of RECs	Compliance Equivalency for In-State ²	Value of Energy \$/MWh	Value of RECs (\$/REC)
Ozark Beach	50,542	63,177.5	** [REDACTED] **	N/A
North Fork Ridge	7,335		** [REDACTED] **	
Kings Point	62,265		20.69	

Information was not included for all owned resources and was limited to those resources that generated RECs retired for 2021 compliance. Also, a value for RECs needs to be determined and for all facilities.

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:

² Renewable resources located in Missouri, qualify for the one and twenty-five hundredths (1.25) credit multiplier allowed by statute and regulation; Section 393.1030.1., RSMo; 4 CSR 240-20.100(3)(G)

	Number of RECs (Compliance Equivalency)	Number of S-RECs (Compliance Equivalency)
Acquired	** [REDACTED] **	44,198
	** [REDACTED] **	(55,247.5)
Retired	542,454	40,636
	(577,121)	(50,795)
Sold	** [REDACTED] ** ** [REDACTED] **	N/A
Transferred	N/A	1,253

Non-Solar Renewable Energy Credits:

Based on Attachments 1, 4, and 5 to the 2020 Annual RES Compliance Report, the Company provides the energy acquired through PPAs, the number of RECs sold, and RECs attributed to MO, respectively. ** [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] **

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

[REDACTED]

[REDACTED]

[REDACTED] **

Staff verified the Company retired 542,454 RECs (577,121 RECs including compliance equivalency) and 40,636 SRECs (50,795 SRECs including compliance equivalency). The totals for generation facilities are below.

Source of RECs	Quantity	MO Equivalent
Ozark Beach	69,068.00	86,335.00
Meridian Way	75,600.00	75,600.00
Elk river	328,186.00	328,186.00
Kings Point	62,265.00	77,831.25
North Fork	7,335.00	9,168.75
Total RECs	542,454.00	577,121.00
SRECs		
Customer Gen	40,636.00	50,795.00
Combined Total	583,090.00	627,916.00

The Company was required to retire a total of 627,832.5 RECs for compliance, with at least 12,557 being S-RECs.³ The Company retired 40,636 SRECS (50,795 MO compliance equivalency) to meet the 7,952 solar requirement with the excess SRECS being used to meet the general requirement of 627,832.5 RECs. The total number of RECs retired, 627,916 MO compliance equivalency, exceeded the total compliance requirement by 83.5 RECs counting MO compliance equivalency.

³ 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.

Solar Renewable Energy Credits:

The Company acquired 44,198 S-RECs (55,247.5 S-RECs including compliance equivalency) from its customers as a condition of receiving a solar rebate.

All RECs and S-RECs retired for 2021 compliance were registered and retired in the electronic tracking system⁴ utilized for compliance purposes. In accordance with statute and regulation, a qualified facility produced these RECS and they were banked and utilized appropriately.⁵

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, North Fork Ridge, and S-RECs acquired from customer-generators.

⁴ North American Renewables Registry: <http://missourirecs.com/>.

⁵ 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).

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. ** [REDACTED]
[REDACTED] ** REC revenues factor into Liberty’s Fuel Adjustment Clause in effect during the 2021 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 9 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 as Attachment 6 to the 2021 Annual RES Compliance Report.

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

The type of technology was provided on page 9 of the 2021 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 as Attachment 2 to the 2021 Annual RES Compliance Report.

“(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 Elk River and Meridian Way were provided in Attachment 2 to the 2021 Annual RES Compliance Report.

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 2021 was 304.

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 \$1,112,174 on solar rebates in 2021.

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.”

The Company retired 83.5 more compliance equivalent RECs than were required and used a larger portion of S-RECs than were necessary to achieve compliance. An acceptable number of RECs was retired during the calendar year.

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

The company provided the 10 year RRI calculations as attachment 9 to the report. 2021 RRI was calculated to be 0.24%. Staff questions the calculation of this amount as no costs associated with Kings Point or North Fork Ridge were included in this annual calculation, though the facilities accounted for 87,000 RECs combined. Liberty should recalculate this amount.

Staff has determined that Liberty retired an appropriate number of RECs to meet RES requirements for the 2021 compliance year. Liberty should make corrections to the report sections noted above and provide a supplemental filing.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

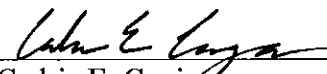
In the Matter of the 2021 RES Compliance)
Report and 2022 RES Compliance Plan of The) File No. EO-2022-0282
Empire District Electric Company d/b/a Liberty)

AFFIDAVIT OF CEDRIC E. CUNIGAN, PE

STATE OF MISSOURI)
) ss
COUNTY OF COLE)

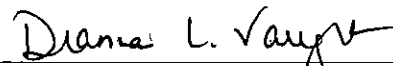
COMES NOW, Cedric E. Cunigan, PE, and on his oath declares that he is of sound mind and lawful age; that he contributed to the attached *Staff Report on Liberty's 2021 RES Compliance Report, in Memorandum form*; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.



Cedric E. Cunigan

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 31st day of May, 2022.



Notary Public

