

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

In the Matter of the 2020 RES)
Compliance Report and 2021) **Case No. EO-2021-0344**
RES Compliance Plan of The)
Empire District Electric Company)
d/b/a/ Liberty)

STAFF REPORT

COMES NOW the Staff of the Missouri Public Service Commission, by and through counsel, and for its *Report* in this matter hereby states:

1. The Empire District Electric Company d/b/a Liberty (Liberty) filed its *2020 Renewable Energy Standard (RES) Compliance Report* and its *2021 Annual Renewable Energy Standard (RES) Compliance Plan* on April 15, 2021. The filings were made in accordance with the requirements of 20 CSR 4240-20.100(8). Staff found certain discrepancies in Liberty’s initial filing, which Liberty rectified in a supplemental filing. Staff conducted a review of the filings and now makes its *Report*.

2. 20 CSR 4240-20.100(8) requires in part that, “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.” It also sets out the reporting requirements and gives Staff 45 days to file a report in response to the filing.

3. Staff reviewed Liberty’s filed 2020 RES Compliance Report. Staff’s *Memorandum* regarding the 2020 RES Compliance Report, attached here as Appendix A, outlines the specific details of Staff’s investigation and findings. Staff found that Liberty complied with all requirements of 20 CSR 4240-20.100(8)(A).

4. Staff also reviewed Liberty's *2021 Annual Renewable Energy Standard Compliance Plan*. Staff's *Memorandum* regarding the *2021 Annual Renewable Energy Standard Compliance Plan*, attached here as Appendix B, outlines the specific details of Staff's investigation and findings. Staff did not find any deficiencies in the plan, but wants to make clear that it has not made a ratemaking determination whether the Plan is the least cost, prudent method in complying with the RES. Staff recommends that the Commission be clear in any Order it may issue in this case that it is not making any ratemaking determination.

WHEREFORE, Staff prays that the Commission will accept this *Report*; includes in any Order it may issue in this case that it is not making any ratemaking determinations; and grant such other and further relief as the Commission considers just in the circumstances.

/s/ Whitney Payne

Whitney Payne

Senior Counsel

Missouri Bar No. 64078

Attorney for the Staff of the

Missouri Public Service Commission

P. O. Box 360

Jefferson City, MO 65102

(573) 751-8706 (Telephone)

(573) 751-9285 (Fax)

whitney.payne@psc.mo.gov

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing was served by electronic mail, or First Class United States Postal Mail, postage prepaid, on this 4th day of June, 2021, to all counsel of record.

/s/ Whitney Payne

MEMORANDUM

TO: Missouri Public Service Commission Case File
Case No. EO-2021-0344, The Empire District Electric Company's
2020 Renewable Energy Standard Compliance Report
and 2021 Renewable Energy Standard Compliance Plan

FROM: Cedric E. Cunigan, Associate Engineer, Engineering Analysis

/s/ Claire M. Eubanks, PE / 06-04-2021
Engineering Analysis / Date

/s/ Whitney Payne / 06-04-2021
Staff Counsel's Office / Date

SUBJECT: Staff Report and Conclusion on The Empire District Electric Company's
2020 Renewable Energy Standard Compliance Report

DATE: June 4, 2021

SUMMARY

Staff has reviewed The Empire District Electric Company ("Liberty" or "Company") 2020 RES Compliance Report. Based on its review, Staff has not identified any deficiencies.

OVERVIEW

On April 15, 2021, Liberty filed its Compliance Report for calendar year 2020 (Case No. EO-2020-0344), 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.

Staff completed its review and utilized the North American Renewables Registry ("NAR") to independently verify the retirement of the renewable energy credits ("RECs") and solar renewable energy credits ("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 2020 expressed as total megawatt-hours (MWh) sold to Missouri customers (3,975,902 MWh), which is consistent with the total sales to ultimate customers Missouri Jurisdictional Annual Report filed with the Commission on May 17, 2020.

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 2020 expressed as annual operating revenues (dollars) from Missouri consumers at \$453,846,321, which is consistent with total sales to ultimate customers of the Missouri Jurisdictional Annual Report, filed with the Commission on May 17, 2020.

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 (3) renewable energy generating facilities defined by Section 393.1025(5), RSMo during 2020: the Company-owned Ozark Beach Hydroelectric Project, Missouri ("Ozark Beach"), a purchase power agreement ("PPA") with Elk River Windfarm, LLC, Kansas ("Elk River"), and a PPA with Cloud County Wind Farm, LLC, Kansas ("Meridian Way"). 2020 total retail electric sales supplied by renewable energy resources is approximately 557,431 MWh. The Company provided the total retail electric sales¹ supplied to Missouri customers

¹ Assumes 88.5% allocation to Missouri customers.

by Elk River, Meridian Way, and Ozark Beach, approximately 309,266 MWh, 222,237 MWh, and 25,928 MWh respectively, on Page 6 of the Compliance Report. The North Fork Ridge, King’s Point, and Neosho wind farms have not received certification from the Department of Natural Resources, Division of Energy. As such, they are not included in this report.

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-State² | Value of Energy | Value of RECs (\$/REC) |
|-----------------|-----------------------|--|------------------------|-------------------------------|
| Ozark Beach | 29,297 | 36,621 | ** [REDACTED] ** | N/A |

The Company-owned Ozark Beach facility generated 29,297 MWh in 2020. With the credit multiplier (*see* footnote 2), the total compliance REC credit for the facility is 36,621.

The Company reported the value of energy to be ** [REDACTED] ** based on the locational marginal pricing through the Southwest Power Pool.

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).

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:

| | Number of RECs (Compliance Equivalency) | Number of S-RECs (Compliance Equivalency) |
|-------------|--|--|
| Acquired | ** [REDACTED] ** ** [REDACTED] ** | 40,636 (50,795) |
| Retired | 364,254 (366,947) | 24,271 (30,339) |
| Sold | ** [REDACTED] ** ** [REDACTED] ** | N/A |
| Transferred | 25,547 (N/A) | N/A |

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] ** Ozark Beach’s reported generation allowed for 29,297 RECs (36,621 MO equivalent) in 2020.

In Attachment 4 to the Compliance Report, the Company also provided the quantity of RECs sold ** [REDACTED] **.

Staff verified the Company retired 10,771 RECs (13,463 RECs including compliance equivalency, 2020 Vintage) from Ozark Beach, 353,483 RECs from Elk River (2019 and 2020 Vintage), and 34,042 customer generated RECs (42,552 RECs including compliance equivalency, 2019 Vintage) for calendar year 2020 compliance. The Company was required to retire a total of 397,590 for compliance, with at least 7,952 being S-RECs.³ The Company retired 34,042 S-RECs (42,552 MO compliance equivalency) to meet the 7,952 solar requirement with the excess S-RECs being used to meet the total compliance requirement of 397,590 RECs. The total number of RECs retired exceeded the total compliance requirement by 706 RECs (11,909 RECs compliance equivalency).

Solar Renewable Energy Credits:

The Company acquired 38,434 S-RECs (48,042.5 S-RECs including compliance equivalency) from its customers as a condition of receiving a solar rebate.

Staff verified that the Company retired 34,042 customer-generator S-RECs (42,559 MO equivalency, 2019 vintage) to meet the solar requirement of 7,952 S-RECs⁴ and the remaining non-solar requirement.

All RECs and S-RECs retired for 2020 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

³ Pursuant to 20 CSR 4240-20.100(1)(R)2., the amount of RECs necessary is determined by calculating five percent (10%) of the Company's total retail sales, less the solar requirement.

⁴ Pursuant to 20 CSR 4240-20.100(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.

⁵ North American Renewables Registry: <http://missourirecs.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).

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 3 of the Compliance Report. The list includes RECs from Elk River, Ozark Beach, and S-RECs acquired from customer-generators. Attachment 3 of the Compliance Report includes 2015 S-RECs which are no longer eligible for RES compliance and Meridian Way RECs that were recently sold in 2021.

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 2020 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 10 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 2020 Annual RES Compliance Report.

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

The type of technology was provided on page 10 of the 2020 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 1 to the 2020 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 1 to the 2020 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 2020 was 351.

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 \$1,145,488 on solar rebates in 2020.

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 705 more RECs (11,909 compliance equivalency) than were required and used a larger portion of S-RECs than were necessary to achieve compliance.

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

The company provided the 10 year Retail Rate Impact (RRI) calculations as Attachment 9 to the report. 2020 RRI was calculated to be 0.26%.

Staff has determined that Liberty met the RES requirements for the 2020 compliance year.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the 2020 RES Compliance)
Report and 2021 RES Compliance Plan of) Case No. EO-2021-0344
The Empire District Electric Company)
d/b/a Liberty)

AFFIDAVIT OF CEDRIC E. CUNIGAN

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW CEDRIC E. CUNIGAN and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Staff Report on Liberty's 2020 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

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 4th day of June 2021.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: April 04, 2025
Commission Number: 12412070



Notary Public

MEMORANDUM

TO: Missouri Public Service Commission Case File
Case No. EO-2021-0344, The Empire District Electric Company's
2020 Renewable Energy Standard Compliance Report
and 2021 Renewable Energy Standard Compliance Plan

FROM: Cedric E. Cunigan, Associate Engineer, Engineering Analysis

/s/ Claire M. Eubanks, PE / 06-04-2021 /s/ Whitney Payne / 06-04-2021
Engineering Analysis / Date Staff Counsel's Office / Date

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

DATE: June 4, 2021

SUMMARY

Staff has reviewed The Empire District Electric Company ("Liberty" or "Company") *2021 Annual Renewable Energy Standard Compliance Plan* ("Plan"). Based on its review, Staff has not identified any deficiencies.

OVERVIEW

On April 15, 2021, the Company filed its Plan for calendar years 2021 through 2023, in accordance with Rule 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 annual RES compliance plan with the commission. The plan shall be filed no later than April 15 of each year." Subparagraphs 20 CSR 4240-20.100(8)(B)1. A. through G. provide the minimum requirements for the plan. Subsection 20 CSR 4240-20.100(8)(D) requires that Staff examine the Plan and file a report within forty-five (45) days of the filing.

DISCUSSION

Staff reviewed the Company's Plan in accordance with the established requirements to verify the Plan contains the information required by the Rule. The results of this review are detailed below, with appropriate Rule subparagraphs A. through G. identified and quoted.

A. “A specific description of the electric utility’s planned action to comply with the RES;”

The Company described its planned actions for compliance with the RES. For non-solar compliance, the Company will utilize renewable energy credits (“RECs”) from a purchased power agreement (“PPA”) from Elk River wind farm located in Butler County, Kansas (“Elk River”). A PPA with Meridian Way Wind Farm located in Cloud County, Kansas and the Company owned Ozark Beach Hydroelectric facility located in Taney County, Missouri (“Ozark Beach”). Ozark Beach generation will qualify for the Missouri in-state one and twenty-five hundredths (1.25) credit.¹

For solar compliance, the Company will utilize solar renewable energy credits (“S-RECs”) from its customer-generators, which will qualify for the Missouri in-state one and twenty-five hundredths (1.25) credit. Customer generated S-RECs are expected to exceed the solar RES requirement through 2023. The Company will also evaluate the feasibility and economics of constructing and operating a utility-scale wind facility.

B. “A list of executed contracts to purchase RECs (whether or not bundled with energy), including type of renewable energy resource, expected amount of energy to be delivered, and contract duration and terms;”

The Company provided the following information regarding its executed contracts:

| | Type | Expected Energy Delivered (MWhs) | Contract Effective Date | Contract duration |
|---------------------|------|----------------------------------|-------------------------|-------------------|
| Elk River | Wind | 378,000 | 12/10/2004 | 20 years |
| Meridian Way | Wind | 292,000 | 6/19/2007 | 20 years |

¹ Section 393.1030.1., RSMo; 20 CSR 4240-20.100(3)(G).

The Company has 20-year PPAs for energy and RECs from Elk River and Meridian Way, effective December 10, 2004 and June 19, 2007, respectively. Liberty expects 378,000 MWhs of generation from Elk River and 292,000 MWhs from Meridian Way.

C. “The projected total retail electric sales for each year;”

The Company provided values for projected retail electric sales on page 7 of the Plan. The values appear to be reasonable estimates.

D. “Any differences, as a result of RES compliance, from the utility’s preferred resource plan as described in the most recent electric utility resource plan filed with the commission in accordance with 4 CSR 240-22, Electric Utility Resource Planning;”

The Plan is consistent with the information regarding non-solar renewable resources in Liberty’s preferred resource plan for the 2021 to 2023 period. Liberty has assumed the solar portion of the RES would be met by customer-generated S-RECs or S-REC purchases.

E. “A detailed analysis providing information necessary to verify that the RES compliance plan is the least cost, prudent methodology to achieve compliance with the RES;”

The Company provided information regarding its utilization of existing resources to comply with the non-solar portion of the RES for 2021 through 2023. The costs associated with these resources are already included in revenue requirements.

The Company has evaluated costs associated with the solar requirements and determined that S-RECs purchased through an industry broker would be the least cost option. However, the Company expects to utilize customer-generated S-RECs to meet the compliance requirements. Staff wants it to be clear that when it states it has not identified any deficiencies in Liberty’s report, Staff has not made a ratemaking determination whether the Plan is the least cost, prudent method in complying with the RES, and suggests

the Commission be clear in any Order it may issue in this case that it is not making any ratemaking determination.

- F. “A calculation of the RES retail rate impact limit calculated in accordance with section (5) of this rule. The calculation should be accompanied by workpapers including all the relevant inputs used to calculate the retail rate impact limits for the planning interval which is included in the RES compliance plan. The electric utility may designate all or part of those calculations as highly confidential, proprietary, or public as appropriate under the commission’s rules;”**

The Company provided an explanation of the calculation of the RES RRI as Attachment 3, stating which resources were removed and added to portfolio requirements of 20 CSR 4240.20.100(5)(B)1. and 2. The workpapers that were included show the result of these modifications. The calculations result in a retail impact less than 1 percent over the planning period, though the Company did note that the calculations were based on the total Company and not just the MO jurisdiction. Staff is not concerned with the Company using the total retail rate impact in this instance, because the data is from the most recent IRP filing. In addition, Missouri accounts for roughly 88% of Liberty’s costs, and the results leave a wide enough margin that approaching 1% should not be a concern.

- G. “Verification that the utility has met the requirements for not causing undue adverse air, water, or land use impacts pursuant to subsection 393.1030.4. RSMo, and the regulations of the division.”**

The Company states in its Plan that:

All generating facilities utilized by Liberty to meet the requirements of the Missouri RES have, to Liberty’s knowledge, received all necessary environmental and operational permits and are in compliance with any necessary federal, state and/or local requirements related to air, water and land use. All generating facilities have received Certification as a Renewable Energy Generation Facility by the Missouri Department of Natural Resources, Division of Energy.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the 2020 RES Compliance)
Report and 2021 RES Compliance Plan of) Case No. EO-2021-0344
The Empire District Electric Company)
d/b/a Liberty)

AFFIDAVIT OF CEDRIC E. CUNIGAN

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW CEDRIC E. CUNIGAN and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Staff Report on Liberty's 2021 Renewable Energy Standard Compliance Plan* 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

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 4th day of June 2021.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: April 04, 2025
Commission Number: 12412070



Notary Public