MEMORANDUM

 TO: Missouri Public Service Commission Case File Case No. EO-2020-0323, The Empire District Electric Company's 2019 Renewable Energy Standard Compliance Report and 2020 RES Plan
FROM: Cedric E. Cunigan, Utility Engineering Specialist III, Engineering Analysis
/s/ Claire M. Eubanks, P.E. / 6-12-2020 Engineering Analysis / Date
SUBJECT: Staff Report and Conclusion on The Empire District Electric's 2019 Renewable Energy Standard Compliance Report

DATE: June 12, 2020

SUMMARY

Staff has reviewed The Empire District Electric Company ("Empire" or "Company") 2019 RES Compliance Report. Based on its review, Staff has not identified any deficiencies.

OVERVIEW

On April 15, 2020, Empire filed its Compliance Report for calendar year 2019 (Case No. EO-2020-0323), in accordance with 20 CSR 4240-20.100(8), Electric Utility Renewable Energy Standard ("RES") Requirements, Annual RES Compliance Report and RES Compliance Plan. On June 8, 2020, Empire filed a Supplemental Compliance Report for calendar year 2019.¹ Rule 20 CSR 4240-20.100(8) 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

¹ The Supplemental 2019 Compliance Report did not include the attachments which were previously filed on April 15, 2020.

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 2019 expressed as total megawatt-hours ("MWh") sold to Missouri customers (4,210,798 MWh), which is consistent with the Missouri Jurisdictional Annual Report filed with the Commission on May 14, 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 2019 expressed as annual operating revenues (dollars) from Missouri consumers, at \$482,470,623², which is consistent with the Missouri Jurisdictional Annual Report filed with the Commission on May 14, 2020.

² The RES Report had a typo listing \$482,470,624 instead of the 482,470,623 from the 2019 Annual Report.

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 2019: 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"). 2019 total retail electric sales supplied by renewable energy resources is approximately 637,583 MWh. The Company provided the total retail electric sales³ supplied to Missouri customers by Elk River, Meridian Way, and Ozark Beach, approximately 341,935 MWh, 252,529 MWh, and 43,121 MWh respectively, on Page 6 of the Compliance 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 48,626 RECs (60,782 equivalent) generated by Ozark Beach in 2019 in its Supplemental RES Report. Staff confirmed through NAR that 48,626 (60,782.5 equivalent) RECs were generated. The Company states that there is little value for the RECs produced by Ozark Beach as they do not qualify for other states' Renewable Portfolio Standards. The Company reported the value of energy to

³ Assumes 88.82% allocation to Missouri customers.

be ** _____ ** based on the locational marginal pricing through the Southwest Power Pool.

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 | ** ** | 34,042 (42,552.5) |
| Retired | 379,578 (391,734) | 23,482 (29,352) |
| Sold | ** ** | n/a |

Non-Solar Renewable Energy Credits:

Based on Attachments 1, 4, and 5 to the 2019 Annual RES Compliance Report, the Company provides the energy acquired through PPA and attributed to MO. **

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

Staff verified the Company retired 48,626 RECs (60,782.5 RECs including compliance equivalency, 2019 Vintage) from Ozark Beach and 330,952 RECs from Elk River (2018 and 2019 Vintage) for calendar year 2019 compliance. The Company was required to retire a total of 421,080 RECs for compliance, with at

least 8,422 being S-RECs.⁴ The Company retired 23,482 S-RECs (29,352.5 MO compliance equivalency) to meet the 8,422 solar requirement with the excess S-RECs being used to meet the total compliance requirement of 421,080 RECs. The total number of RECs retired exceeded the total compliance requirement by 7 RECs.

Solar Renewable Energy Credits:

The Company acquired 34,042 S-RECs (42,552.5 S-RECs including compliance equivalency) from its customers as a condition of receiving a solar rebate. The Company calculated the value to be \$58.35/S-REC taking rebate costs of \$19,864,358 divided by 34,042 RECs received.

Staff verified that the Company retired 23,482 customer-generator S-RECs (29,352 MO equivalency, 2018 vintage) to meet the solar requirement of 8,422 S-RECs,⁵ the remaining were applied to the non-solar requirement.

All RECs and S-RECs retired for 2019 compliance were registered and retired in the electronic tracking system⁶ utilized for compliance purposes. In accordance with statute and regulation, a qualified facility produced these RECs and they were banked and utilized appropriately.⁷

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

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

⁴ Pursuant to 20 CSR 4240-20.100(1)(R)2., the amount of RECs necessary is determined by calculating ten percent (10%) of the Company's total retail sales, less the solar requirement.

 $^{^{5}}$ Pursuant to 20 CSR 4240-20.100(1)(R)5.B., the amount of S-RECs necessary is determined by calculating two-tenths percent (0.2%) of the Company's total retail sales.

⁶ North American Renewables Registry: <u>http://missourirecs.com/</u>.

⁷ 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).

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 and Meridian Way, and S-RECs acquired from customer-generators and through a third party broker (2015 Vintage). The 2015 vintage S-RECs identified as carried-forward are considered expired for RES Compliance.⁸

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. **

** REC revenues factor into Empire's Fuel Adjustment Clause in effect during the 2019 calendar year under P.S.C. Mo. No. 5, Sec. 4, 3rd Revised Sheet No. 17b. 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.

⁸ 20 CSR 4240-20.100(3)(B).

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 2019 Annual RES Compliance Report.

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

The type of technology was provided on page 10 of the 2019 Annual RES Compliance Report.

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

Empire provided the dates and amounts of the payments to Elk River and Meridian Way as Attachment 1 to the 2019 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 2019 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 2019 was 641.

A total of 2,587 customers have interconnected to the Company's system as of December 31, 2019.

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

The Company stated customers were initially denied rebates for failure to comply with requirements of the rebate, but that no applications were ultimately denied the solar rebate.⁹

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 \$3,612,947 on solar rebates in 2019.

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 has achieved compliance with the 2019 RES Requirements.

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

The Company provided a list of expenses related to 2019 compliance which included solar rebate payments, NAR costs, RRI modeling costs, and a portion of the Elk River PPA. Staff does not think that the Elk River PPA needs to be included in this list, since the contract has been in place since 2004, roughly 6 years before the RES rules went into effect. The RRI for this year is below 1%.

⁹ Response to MO PSC Staff Data Request No. 0001.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the 2019 RES Compliance) Report and 2020 RES Compliance Plan of The) Empire District Electric Company)

Case No. EO-2020-0323

AFFIDAVIT OF CEDRIC E. CUNIGAN

STATE OF MISSOURI)) ss. COUNTY OF COLE)

COME 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* in memorandum form; and that the same is true and correct according to his best knowledge and belief, under penalty of perjury.

Further the Affiants sayeth not.

/s/ Cedric E. Cunigan CEDRIC E. CUNIGAN