MEMORANDUM

- TO: Missouri Public Service Commission Case File Case No. EO-2017-0267, The Empire District Electric Company's Submission of its RES Compliance Report and Plan
- FROM: Cedric Cunigan, Engineering Analysis

/s/ Dan Beck5/24/17/s/ Bob Berlin5/24/17Engineering Analysis / DateStaff Counsel's Office / Date

- SUBJECT: Staff Report and Conclusion on The Empire District Electric's 2016 Renewable Energy Standard Compliance Report
- DATE: May 24, 2017

CONCLUSION

Staff has reviewed The Empire District Electric Company ("Empire" or "Company") 2016 RES Compliance Report. Based on its review, Staff has not identified any deficiencies.

OVERVIEW

On April 12, 2017, Empire filed its Compliance Report for calendar year 2016 (Case No. EO-2017-0267), in accordance with 4 CSR 240-20.100(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 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 4 CSR 240-20.100(8)(A)1. A. through P. provide the minimum requirements for the Compliance Report. Subsection 4 CSR 240-20.100(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 (NARR) to independently verify the retirement of the RECs and S-RECs by the Company.

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DISCUSSION

Staff reviewed the Company's Compliance Report in accordance with the established rules 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 2016 expressed as total megawatt-hours (MWh) sold to Missouri customers (4,072,975 MWh), which is consistent with the Missouri jurisdictional 2016 FERC Form 1 filed with the Commission on May 12, 2017.¹

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 2016, expressed as annual operating revenues (dollars) from Missouri consumers, at \$459,892,807, which is consistent with the Missouri jurisdictional 2016 FERC Form 1 filed with the Commission on May 12, 2017.

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 two renewable energy generating facilities as defined by 393.1025(5), RSMo during 2016: the Company-owned Ozark Beach Hydroelectric Project ("Ozark Beach") and a purchase power agreement ("PPA") with Elk River. 2016 total retail electric sales supplied by renewable energy resources is approximately 744,273 MWh. The total amount of energy generated at Ozark Beach

¹ Page 301 of 2016 FERC form 1, Line 10 (Missouri Jurisdictional)

during 2016 was 55,378 MWhs. The Company provided the total retail electric sales² supplied to Missouri customers by Elk River and Meridian Way, approximately 424,227.50 MWh and 264,667.77 MWh respectively, in Attachment 5 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 the following information:

Facility	Number of	Compliance	Value of Energy	Value of
	RECs	Equivalency for In-State ³		RECs (\$/REC)
Ozark Beach	55,378	69,222	** **	n/a

The Company-owned Ozark Beach facility generated 55,378 MWh in 2016. With the credit multiplier, the total compliance REC credit for the facility is 69,222.

The Company states that there is little value for the RECs produced by Ozark Beach as they do not qualify for other states Renewable Standards. The Company reported the value of energy to be ** ______ ** based on the locational marginal pricing though the Southwest Power Pool.

² Assumes a 83.561% allocation to Missouri customers

³ Renewable resources located in Missouri, qualifies for the one and twenty-five hundredths (1.25) credit multiplier allowed by statute and regulation; 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 and retired during the calendar year:

	Number of RECs	Number of S-RECs
	(Compliance Equivalency)	(Compliance Equivalency)
Acquired	824,422	11,086
	(n/a)	(13,857)
Retired	185,565	3,261
	(199,576)	(4,076)
Sold	** **	n/a
	(n/a)	

Non-Solar Renewable Energy Credits:

**

Based on Attachments 1 and 4 to the 2016 Annual RES Compliance Report, the Company provides the energy acquired through PPA. **

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

Staff verified the Company retired 56,046 RECs (70,057 RECs including compliance equivalency, 2015 and 2016 Vintage) from Ozark Beach and 129,519 RECs from Elk

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River (2015 and 2016 Vintage) for calendar year 2016 compliance to meet the nonsolar requirement of 199,576.⁴

Solar Renewable Energy Credits:

The Company acquired 11,086 S-RECs (13,857 S-RECs including compliance equivalency) from its customers as a condition of receiving a solar rebate.

Staff verified that the Company retired 3,261 customer-generator S-RECs (2015 and 2016 vintage) to meet the solar requirement of 4,076 S-RECs⁵.

All RECs and S-RECs retired for 2016 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 comments in Section 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

⁴ Pursuant to 4 CSR 240-20.100(1)(R)2., the amount of RECs necessary is determined by calculating five percent (5%) of the Company's total retail sales, less the solar requirement.

⁵ Pursuant to 4 CSR 240-20.100(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.

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

⁷ Qualified facility per 393.1025.(5), RSMo and 4 CSR 240-20.100(1)(N); Banked RECs per 393.1030.2., RSMo and 4 CSR 240-20.100(1)(M).

includes RECs from Ozark Beach, Elk River, and S-RECs acquired from customer-generators and through a third party broker (2015-2016 vintage).

As noted in Section E, the Company does not currently track RECs for Meridian Way Windfarm in the commission-approved tracking system. The Company explained in previous case that it does not intend to use Meridian Way RECs during the planning period. Staff is comfortable with Meridian Way RECs not being tracked in the commission approved tracking system at this time.

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 2016 calendar year under P.S.C. Mo. No. 5, Sec. 4, 2nd Revised Sheet No. 17b. Both Elk River and Meridian Way PPAs were entered into before the Renewable Energy Standard, 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;"

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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 2016 Annual RES Compliance Report.

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

The type of technology was provided on page 10 of the 2016 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 2016 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 2016 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 location of its customer-generators in 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 Company received and paid 663 solar rebates in 2016.

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 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 \$8,034,812 on solar rebates in 2016.

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 the appropriate number of RECS to comply with the RES requirements for calendar year 2016.

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

The Company included its retail rate impact calculation including a calculation of its actual calendar year retail rate impact in Attachment 9 of the Compliance Report.

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of The Empire District Electric Company's Submission of Its RES Compliance Report and Plan

File No. EO-2017-0267

<u>AFFIDAVIT</u>

State of Missouri)) ss. County of Cole)

COMES NOW Cedric Cunigan and on his oath declares that he is of sound mind and lawful age; that he contributed to the attached *Staff Memorandum*; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

Cedric Cunigan

<u>JURAT</u>

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 24^{+1} day of May, 2017.

JESSICA LUEBBERT Notary Public - Notary Seal State of Missouri Commissioned for Cole County My Commission Expires: February 19, 2019 Commission Number: 15633434