

## **MEMORANDUM**

**TO:** Missouri Public Service Commission Case File  
Case No. EO-2018-0285, The Empire District Electric Company's Submission of  
its RES Compliance Report and Plan

**FROM:** Cedric E. Cunigan, Engineering Analysis

/s/ Daniel I. Beck, PE / 5-29-2018      /s/ Robert S. Berlin / 5-29-2018  
Engineering Analysis / Date      Staff Counsel's Office / Date

**SUBJECT:** Staff Report on The Empire District Electric's 2017 Renewable Energy Standard  
Compliance Report

**DATE:** May 29, 2018

### **SUMMARY**

Staff has reviewed The Empire District Electric Company ("Empire" or "Company")  
2017 RES Compliance Report. Based on its review, Staff has not identified any deficiencies.

### **OVERVIEW**

On April 11, 2018, Empire filed its Compliance Report for calendar year 2017  
(Case No. EO-2018-0285), 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 (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 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 2017 expressed as total megawatt-hours (MWh) sold to Missouri customers (3,976,153 MWh), which is consistent with the Missouri Jurisdictional Annual Report filed with the Commission on May 10, 2018.

**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 2017, expressed as annual operating revenues (dollars) from Missouri consumers, at \$466,785,495, which is consistent with the Missouri Jurisdictional Annual Report filed with the Commission on May 10, 2018.

**C. "Total retail electric sales supplied by renewable energy resources, as defined by section 393.1025(5), RSMo, including the source of the energy;"**

The Company utilized 3 renewable energy generating facilities defined by 393.1025(5), RSMo during 2017: the Company-owned Ozark Beach Hydroelectric Project ("Ozark Beach"), a purchase power agreement ("PPA") with Elk River Windfarm, LLC, and a PPA with Cloud County Wind Farm, LLC. 2017 total retail electric sales supplied by renewable energy resources is approximately

701,933 MWh. The Company provided the total retail electric sales<sup>1</sup> supplied to Missouri customers by Elk River, Meridian Way, and Ozark Beach<sup>2</sup>, approximately 392,631 MWh, 280,794 MWh, and 28,508 MWh,<sup>3</sup> respectively.

**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 <sup>4</sup>	Value of Energy	Value of RECs (\$/REC)
Ozark Beach	33,928	42,410	** C **	n/a

The Company-owned Ozark Beach facility generated 33,928 MWh in 2017. With the credit multiplier, the total compliance REC credit for the facility is 42,410.

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. Staff believes there is a value to the RECs created by the Company’s owned generation though that value is not transparent. The Company reported the value of energy to be \*\* C\*\* based on the locational marginal pricing though the Southwest Power Pool.

<sup>1</sup> Assumes a 84.025% allocation to Missouri customers.

<sup>2</sup> Attachment 5 includes the sales supplied to Missouri customers from Elk River and Meridian Way.

<sup>3</sup> Value represents the generation from Ozark Beach (Page 8 of the Compliance Report) multiplied by the allocation factor.

<sup>4</sup> 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)(

**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:

	<b>Number of RECs (Compliance Equivalency)</b>	<b>Number of S-RECs (Compliance Equivalency)</b>
Acquired	707,353 (715,835)	16,590.68 (20,738.35)
Retired	179,037 (189,026)	7,826 (9,783)
Sold	** C** ** C**	n/a

Non-Solar Renewable Energy Credits:

Based on Attachments 1, 4, and 5 to the 2017 Annual RES Compliance Report, the Company provides the energy acquired through PPA and attributed to MO. The Company acquired 467,279 and 334,179 MWh from Elk River and Meridian Way respectively. The percentage attributed to MO is 84.025% for each wind farm, leaving 392,631 RECs (2017 Vintage) and 280,793 RECs (2017 Vintage) from Elk River and Meridian Way, respectively. Ozark Beach’s reported generation allowed for 33,928 RECs (42,410 MO equivalent) in 2017.

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HC \*\*.

Staff verified the Company retired 39,957 RECs (49,946 RECs including compliance equivalency, 2016 and 2017 Vintage) from Ozark Beach and 139,080 RECs from Elk River (2017 Vintage) for calendar year 2017 compliance. The Company was required to retire a total of 198,808 RECs for compliance, with at least 3,976 being S-RECs.<sup>5</sup> Staff verified that the Company retired 198,809 RECs and S-RECs, with the solar carve out percentage exceeding what was require for 2017.

Solar Renewable Energy Credits:

The Company acquired 16,590.68 S-RECs (20,738.35 S-RECs including compliance equivalency) from its customers as a condition of receiving a solar rebate.

Staff verified that the Company retired 7,826 customer-generator S-RECs (9,783 equivalency, 2016 vintage) to meet the solar requirement of 3,976 S-RECs<sup>6</sup> and the remaining non-solar requirement.

All RECs and S-RECs retired for 2017 compliance were registered and retired in the electronic tracking system<sup>7</sup> utilized for compliance purposes. In accordance with statute and regulation, a qualified facility produced these RECS and they were banked and utilized appropriately.<sup>8</sup>

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

See comments in Section E. of this report.

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<sup>5</sup> 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.

<sup>6</sup> 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.

<sup>7</sup> North American Renewables Registry: <http://missourirecs.com/>.

<sup>8</sup> 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).

- 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 S-RECs acquired from customer-generators and through a third party broker (2015 and 2017 vintage).

The Company stated that Meridian Way is currently in the process of being added to the registry, pending NAR review. The Company also stated 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;”**

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<sup>HC\*\*</sup> REC revenues factor into Empire’s Fuel Adjustment Clause in effect during the 2017 calendar year under P.S.C. Mo. No. 5, Sec. 4, 2<sup>nd</sup> 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, except for systems owned by customer-generators, 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 pages 10 and 11 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 2017 Annual RES Compliance Report.

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

The type of technology was provided on pages 10 and 11 of the 2017 Annual RES Compliance Report.

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

Empire provided the dates and amounts of the payments to Elk River and Meridian Way as Attachment 1 to the 2017 Annual RES Compliance Report.

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

The meter readings used to calculate the payments to Elk River and Meridian Way were provided in Attachment 1 to the 2017 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 number of customers that applied for and received a solar rebate in 2017 was 336. A total of 1,236 customers have connected to the company’s system as of December, 31, 2017.

**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 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 \$1,708,378 on solar rebates in 2017.

**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; and”**

The Company retired more S-RECs than required, but the total number of RECs retired for 2017 was appropriate.

**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.

