

**THE EMPIRE DISTRICT ELECTRIC COMPANY  
("LIBERTY")**

**2023**

**ANNUAL RENEWABLE ENERGY STANDARD  
COMPLIANCE REPORT**

**Prepared in Compliance with 20 CSR 4240-20.100**

**\*Indicates Confidential\***



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# 2023 ANNUAL RENEWABLE ENERGY STANDARD

## COMPLIANCE REPORT

### INTRODUCTION

Pursuant to the Missouri Public Service Commission's (Commission) renewable energy standards (RES) rule, 20 CSR 4240-20.100(8), The Empire District Electric Company ("Liberty" or "Company"), a Kansas corporation, is filing the Annual Renewable Energy Standard Compliance Report (RES Report). The rule became effective in September 2010, and pursuant to the rule Liberty must file the RES Compliance Report on or before April 15 each year.

Liberty began to develop its wind renewable energy portfolio on December 10, 2004, when it entered into a 20-year contract with Elk River Windfarm, LLC (owned by Avangrid Renewables, LLC) to purchase all of the energy generated at the 150-megawatt Elk River Windfarm located in Butler County, Kansas. On June 19, 2007, Liberty enhanced its renewable energy portfolio when it entered into a 20-year purchased power agreement with Cloud County Wind Farm, LLC. EDP Renewables North America, LLC is an indirect parent company of Cloud County Wind Farm, LLC. Pursuant to the terms of the agreement, Liberty purchases all of the output from the 105-megawatt Phase 1 Meridian Way Wind Farm located in Cloud County, Kansas. In addition, the Ozark Beach Hydroelectric Project, owned by EDE, has produced renewable hydropower for many years.

Effective May 16, 2015, Liberty began offering rebates for Missouri customers for qualifying solar installations in accordance with the Missouri RES and Liberty's Solar Rebate Rider approved by the Commission, which continued in 2023.

At the end of 2020, construction of the North Fork Ridge Wind project was completed. This 149 MW facility is located in Missouri and started operation in December of 2020. In addition, the 300MW Neosho Ridge Wind project (located in Kansas), and the 149MW Kings Point Wind project (located in Missouri) reached commercial operation in 2021. These Commission approved resources were added to fulfill the Customer Savings Plan. Liberty also completed the addition of the 2.2MW Prosperity Solar Farm in 2021, however this facility is not utilized for RES compliance.

The following sections provide information required to indicate compliance with the rule.

### **SECTION (8) (A) 1 A, B: TOTAL MISSOURI RETAIL ELECTRIC SALES AND REVENUE**

The following table represents the number of megawatt-hours (MWh) of electricity delivered in 2023 by Liberty to its Missouri retail customers, as reflected in the monthly billing statements. In addition, a column is provided capturing the revenue from total retail electric sales to Missouri customers:

**Table 1: Missouri 2023 Total Retail Sales**

Year	MWh	Revenue
2023	4,157,204	\$570,928,299

Data Source: Customers Kilowatt Hours Revenue Report

**SECTION (8) (A) 1 C: TOTAL RETAIL ELECTRIC SALES SUPPLIED BY RENEWABLE ENERGY RESOURCES**

The table indicates the renewable generation sources used during 2023 and the MWhs that were supplied. (See ATTACHMENT 1)

**SECTION (8) (A) 1 D: CURRENT NUMBER AND VALUE OF RECS CREATED BY LIBERTY OWNED FACILITIES**

Table 3: 2023 REC/SREC Produced and Locational Marginal Pricing (LMP)  
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Facility	REC/SREC Produced	*2023 Average LMP (\$/MWh)*	*REC / SREC Value (\$/Credit)*
Ozark Beach	53,829		
North Fork Ridge Wind	500,599		
Kings Point Wind	528,755		
Neosho Ridge Wind	1,083,440		
Customer Generated Solar	51,041		
Prosperity Solar (Community Solar)	4,032		

\*Market average for 2023 voluntary, non-Green-e SRECs

\*\*Values calculated by taking dollar amount sold divided by number of REC's sold in Attachment 3

**SECTION (8) (A) 1 E, F: SOURCE AND NUMBER OF RECS ACQUIRED, SOLD, TRANSFERRED, RETIRED**

**RECS ACQUIRED:** For RECs acquired, see ATTACHMENT 2.

**RECS SOLD/TRANSFERRED:** For RECs sold/transferred, see ATTACHMENT 3. RECs were sold and transferred in the North American Renewables Registry(NARR).

**RECS RETIRED:** For RECs retired, see ATTACHMENT 4. Prosperity Community Solar Project retired 4,032 SRECs generated in 2023 on behalf of subscribing customers.

## **SECTION (8) (A) 1 G: IDENTIFICATION OF RECS CARRIED FORWARD**

**RECS CARRIED FORWARD:** For RECs carried forward, see ATTACHMENT 5. The information is accurate as of March 14, 2024.

## **SECTION (8) (A) 1 H: GAINS AND LOSSES FROM SALE OR PURCHASE**

The revenue from sale of excess REC's not needed for compliance with renewable energy standards, will be distributed back to retail customers through the appropriate tracker mechanisms for each jurisdiction. The revenue generated from REC's will be distributed back to customers for generation and REC creation after the associated investments are reflected in actual rates.

ATTACHMENTS 1 and 3 include the amount of wind generation allocated for Missouri retail customers by each wind farm and the REC report indicating sales of 2023 Kings Point Wind, Meridian Way, Neosho Ridge Wind, and North Fork Ridge Wind RECs. Any gains from sale or purchase were returned to the customers through the fuel adjustment.

## **SECTION (8) (A) 1 I: ACQUISITION OF RENEWABLE ENERGY**

Non-Solar renewable energy is purchased by Liberty from the following non-utility owned facilities:

Elk River Wind (Resource)  
Avangrid Renewables (Owner) 14980 SE 190th Rd.  
Latham, KS 67072

Meridian Way I (Cloud County) Wind (Resource)  
EDP Renewables North America LLC (Owner) 1409 Iron Road  
Concordia, KS 66901

All energy was derived from eligible renewable energy technology (wind, hydro and solar).

## **SECTION (8) (A) 1 J: ACQUISITION OF ELECTRICAL ENERGY AND/OR RECS FROM CUSTOMER GENERATORS**

See ATTACHMENT 7

## **SECTION (8) (A) 1 K: CUSTOMERS RECEIVING SOLAR REBATE**

For the calendar year 2023, the annual number of customers that applied and received a solar rebate in accordance with section (4) of the Rule was a total of 468 Missouri solar net metering customers.

## **SECTION (8) (A) 1 L: CUSTOMERS DENIED SOLAR REBATE**

Liberty makes every effort to award the solar rebate to every applicant. Applications have been delayed due to failure to comply or submit to the requirements of the rebate, but no applications have been denied.

## **SECTION (8) (A) 1 M: FUNDS EXPENDED BY LIBERTY FOR SOLAR REBATES**

Annual funds expended by Liberty for 2023 solar rebates totaled \$1,378,584. Since the beginning of the rebate program over \$26 million has been expended for solar rebates.

## **SECTION (8) (A) 1 N: ANNUAL COMPLIANCE WITH RES COMPLIANCE PLAN**

See Affidavit of Compliance with 2023 Compliance Plan, ATTACHMENT 8.

## **SECTION (8) (A) 1 O: NON-COMPLIANCE WITH RES COMPLIANCE PLAN**

Liberty has made every effort to comply and believes it has achieved compliance with the Missouri RES Compliance Plan for the 2023 compliance period.

## **SECTION (8) (A) 1 P: CALCULATION OF ACTUAL CALENDAR YEAR RETAIL RATE IMPACT**

Utilizing the financial information reported in the Company's 2023 annual report, the actual Retail Rate Impact ("RRI") for 2023 is 0.26%. This amount is calculated by using the total 2023 cost of compliance in the amount of \$1,470,799.14 divided by the total Missouri revenue of \$570,928,299. Liberty included the line with our owned renewable resources, at this point we do not believe we have any compliance cost directly associated with our owned renewable resources. For a break down of compliance cost please refer to Attachment 8.

Pursuant to Missouri statute and regulation the Planning Retail Rate Impact (RRI)

(ATTACHMENT 9) shall be calculated annually on an incremental basis for each planning year based on procurement or development of renewable energy resources averaged over the succeeding ten-year period.