

REVISED

**KANSAS CITY POWER & LIGHT
COMPANY**

**2017 ANNUAL RENEWABLE ENERGY
STANDARD COMPLIANCE REPORT**

April 13, 2018



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SECTION 1: INTRODUCTION

Kansas City Power & Light Company (“KCP&L-MO”), a Missouri Corporation, has filed its 2017 Annual Renewable Energy Standard Compliance Report in compliance with the Missouri Public Service Commission’s (“Commission”) Electric Utility Renewable Energy Standard Requirements [4 CSR 240-20.100] (“Rule”) that became effective September 30, 2010. Section (8) of the rule requires that each public utility file with the Commission a Renewable Energy Standard (RES) Compliance Report by April 15 of each year.

Specifically, Section 8 (A) of the rule requires the following information for the most recently completed calendar year.

- A. Total retail electric sales for the utility, as defined by the Rule;
- B. Total jurisdictional revenue from the total retail electric sales to Missouri customers as measured at the customers’ meters;
- C. Total retail electric sales supplied by renewable energy resources, as defined by section 393.1025(5), RSMo, including the source of the energy;
- D. The number of RECs (Renewable Energy Credits) and S-RECs (Solar Renewable Energy Credits) 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;
- E. The number of RECs acquired, sold, transferred, or retired by the utility during the calendar year;
- F. The source of all RECs acquired during the calendar year;

- G. The identification, by source and serial number, of any RECs that have been carried forward to a future calendar year;
- 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 electric utility;
- 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, city, state, and owner
 - 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;
 - III. The renewable energy technology utilized at the facility;
 - IV. The dates and amounts of all payments from the electric utility to the owner of the facility; and
 - V. All meter readings used for calculation of the payments referenced in part (IV) of this paragraph;
- J. For acquisition of electrical energy and/or RECs from a customer generator:
 - I. Zip Code
 - II. Name of aggregated subaccount in which RECs are being tracked ;
 - III. Interconnection Date
 - IV. Annual estimated or measured generation; and
 - V. The start and end date of any estimated or measured RECs being acquired.
- K. The total number of customers that applied and received a solar rebate in accordance with section (4) of the Rule;

- L. The total number of customers that were denied a solar rebate and the reason(s) for denial;
- 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;
- N. An affidavit documenting the electric utility's compliance with the RES Compliance Plan as described in this section during the calendar year.
- O. If compliance was not achieved, an explanation why the electric utility failed to meet the RES; and
- P. A calculation of its actual calendar year retail rate impact.

This 2017 Report represents KCP&L's renewable compliance efforts to achieve the requirements of 4 CSR 240-20.100.

SECTION 2: RES COMPLIANCE REPORT

Rule (8) (A) 1: The annual RES compliance report shall provide the following information for the most recently completed calendar year, as defined by the Rule.

2.1 RULE (8) (A) 1 A:

Total retail electric sales for the utility, as defined by the Rule;

KCP&L-MO 2017 (MWh)
8,289,429

2.2 RULE (8) (A) 1 B:

Total jurisdictional revenue from the total retail electric sales to Missouri customers as measured at the customers' meter;

KCP&L-MO 2017 Retail Electric Sales
\$1,002,352,829

2.3 RULE (8) (A) 1 C:

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

Wind generation reported for KCP&L-MO is based on commercial operation date and our energy allocation methodology.

Table 1: KCP&L-MO jurisdictional renewable energy

Facility	2017 (MWh)
Spearville 1 Wind	86,224
Spearville 2 Wind	90,958
Solar Aggregate 1*	189
Spearville 3 Wind	231,962
Cimarron II Wind	312,961
Slate Creek Wind	350,583
Waverly Wind	478,804
Osborn Wind	251,717
Rock Creek Wind	in process of being registered in NAR
Solar Rebates	23,774

*Solar Aggregate 1 represents KCP&L-MO's Smart Grid owned solar generation.

2.4 RULE (8) (A) 1 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 MWh figures presented below for Spearville generation are based on KCP&L's energy allocation methodology.

Table 2: KCP&L-MO owned renewable electrical energy

KCP&L-MO			
Facility	Number created by electrical energy produced by renewable energy resources owned by the utility 2017 (MWh)	Value of Energy Created	Calculated value for each source and each category of REC
Spearville 1	86,224	\$851,035	\$0
Spearville 2	90,958	\$897,756	\$0
Solar Aggregate 1	189.6	\$4,430	\$0

The RECs created from Spearville 1, 2, and Solar Aggregate 1 are reflected on the accounting records at zero value since they are an additional benefit from generation that is already in the existing rate structure.

2.5 RULE (8) (A) 1 E:

The number of RECs acquired, sold, transferred, or retired by the utility during the calendar year;

KCP&L-MO utilizes the North American Renewable Registry ("NARR") as recommended by Missouri Public Service Commission Staff and approved by the Commission for tracking of all RECs.

Table 3: KCP&L-MO REC activity

KCP&L-MO		
	2017 RECs	2017 S-RECs
Acquired	1,803,209	23,963
Sold	0	0
Transferred	0	0
Retired	406,182	6,632

Missouri Equivalent RECs and S-RECs retired are 406,182 and 8,290, respectively.

2.6 RULE (8) (A) 1 F:

The source of all RECs acquired during the calendar year;

Please refer to Attachment A of this document for a list of sources for RECs acquired during the calendar year 2017. Net metered accounts for 2017 are included in Attachment B.

2.7 RULE (8) (A) 1 G:

The identification, by source and serial number, of any RECs that have been carried forward to a future calendar year;

Please refer to Attachment C of this document for a list of RECs carried forward to a future calendar year by source and serial number.

2.8 RULE (8) (A) 1 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 electric utility;

There were no sales or purchases of RECs outside of those bundled with purchased power or from qualified customer generator's operational solar electric systems as a condition of receiving solar rebates.

2.9 RULE (8) (A) 1 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;

Please refer to Attachment A for a resource list which includes facility, city, state, and owner, and renewable technology used. Attachment D provides the payments to the facility owners. Attachment E provides copies of the invoices from the facility owners.

Affidavits from Cimarron II and Waverly Wind are included as Attachments F and G, respectively. Spearville 3, Slate Creek Wind, and Osborn Wind designated KCP&L as the NARR Generator Owner's Designation of Responsible Party which represents that the generator owner has not granted similar authority or permission to any other person for use in North American Renewables Registry or any similar registry or tracking system.

The only S-RECs acquired in 2017 were from qualified customer-generator's operational solar electric systems as a condition of receiving solar rebates.

2.10 RULE (8) (A) 1 J:

For acquisition of electrical energy and/or RECs from a customer generator;

Please refer to Attachment B for a resource list which includes zip code, name of aggregated subaccount in which RECs are being tracked in, interconnection date, annual estimated or measured generation, and the start and end date of any estimated or measured RECs being acquired.

S-RECs acquired in 2017 were from qualified customer generator's operational solar electric systems as a condition of receiving solar rebate.

2.11 RULE (8) (A) 1 K:

The total number of customers that applied and received a solar rebate in accordance with section (4) of the Rule;

KCP&L-MO 2017	
Applied & Received	115

2.12 RULE (8) (A) 1 L:

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

KCP&L-MO 2017	
Denied	72
Reason	Funding commitments reached the specific level set in ET-2014-0071.

2.13 RULE (8) (A) 1 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;

KCP&L-MO 2017	
Solar Rebates	\$801,348

2.14 RULE (8) (A) 1 N:

An affidavit documenting the electric utility's compliance with the RES compliance plan as described in this section during the calendar year;

See affidavit included with document.

2.15 RULE (8) (A) 1 O:

Kansas City Power & Light has successfully met the Renewable Energy Standard.

2.16 RULE (8) (A) 1 P:

Looking at a 10-year average, the RES Retail Rate Impact for 2017 was (0.048)%. As outlined in KCP&L-MO's 2018 Renewable Energy Standard Compliance Plan, filed April 13, 2018, KCP&L-MO asserts that the RES Retail Rate Impact calculation does not present an accurate or complete picture of the investments that KCP&L-MO has made in renewable energy and that the rate impact of RES spending is at or above 1%. For 2017, KCP&L-MO's Retail Revenues is \$1,002,352,829; the total RES compliance cost for 2017 is \$1,419,851. Then by dividing the total RES compliance cost by KCP&L-MO 2017 Retail Revenues, the retail rate impact for the 2017 can be calculated:

$$= \$ 1,419,851 / \$1,002,352,829 = 0.142\%.$$

Kansas City Power & Light Company
2017 Annual Renewable Energy Standard Compliance Report
Attachment A: Non-Customer Generator Resource List

Facility Name	Commenced Operation Date (Interconnection Date)	Location	Owner	Technology
Rock Creek Wind Energy	11/08/2017	Tarkio, MO	Rock Creek Wind Project, LLC / Enel Green Power, NA	Wind
Osborn Wind Energy	12/15/2016	Osborn, MO	Osborn Wind Energy, LLC / NextEra Energy	Wind
Spearville 3	10/1/2012	Spearville, KS	Spearville 3, LLC / EDF Renewable Energy	Wind
Cimarron Windpower II	5/12/2012	Cimarron, KS	Duke Energy Generations Services, Inc. / Free StateWindpower, LLC	Wind
Slate Creek Wind Project	12/30/2015	Geuda Springs, KS	Slate Creek Wind Project, LLC / EDF Renewable Energy	Wind
Waverly Wind Farm	11/17/2015	Waverly, KS	Waverly Wind Farm / EDP Renewables North America LLC	Wind
Spearville 1	10/1/2006	Spearville, KS	Kansas City Power & Light Company	Wind
Spearville 2	12/21/2010	Spearville, KS	Kansas City Power & Light Company	Wind
Blue Hills Community Center	5/30/2013	Kansas City, MO	Kansas City Power & Light Company	Solar
Crosstown Substation	4/01/2014	Kansas City, MO	Kansas City Power & Light Company	Solar
KCMO Swope Parkway	6/09/2014	Kansas City, MO	Kansas City Power & Light Company	Solar
KCP&L Midtown/Smart Grid	10/10/2012	Kansas City, MO	Kansas City Power & Light Company	Solar
Midwest Research Institute	5/14/2013	Kansas City, MO	Kansas City Power & Light Company	Solar
Paseo High School Solar	4/19/2012	Kansas City, MO	Kansas City Power & Light Company	Solar
UMKC Flarsheim Hall	7/18/2013	Kansas City, MO	Kansas City Power & Light Company	Solar
UMKC Student Union	7/18/2013	Kansas City, MO	Kansas City Power & Light Company	Solar