Exhibit No.:

Issue(s): KCPL REC Witness: Kory J. Boustead Sponsoring Party: MoPSC Staff Type of Exhibit: Rebuttal Testimony Case No.: EO-2019-0067

Date Testimony Prepared: June 6, 2019

### MISSOURI PUBLIC SERVICE COMMISSION **COMMISSION STAFF DIVISION**

REBUTTAL TESTIMONY

**OF** 

KORY J. BOUSTEAD

KANSAS CITY POWER & LIGHT COMPANY

**CASE NO. EO-2019-0067** 

Jefferson City, Missouri June 2019

1		REBUTTAL TESTIMONY
2		OF
3		KORY J. BOUSTEAD
4		KANSAS CITY POWER & LIGHT COMPANY
5		CASE NO. EO-2019-0067
6		(consolidated with EO-2019-0068 and ER-2019-0199)
7	Q.	Please state your name and business address.
8	A.	My name is Kory J. Boustead and my business address is Missouri Public
9	Service Comr	nission, P.O. Box 360, Jefferson City, Missouri, 65102.
10	Q.	By whom are you employed and in what capacity?
11	A.	I am employed by the Missouri Public Service Commission ("Commission")
12	as a Rate &	Tariff Examiner II in the Energy Resources Department, Commission Staff
13	Division. A	copy of my credentials and previous case participation before the Commission is
14	attached as So	chedule KJB-r1.
15	Q.	Are you the same Kory J. Boustead that supported the Renewable Energy
16	Credit ("REC	2") Revenues section in Staff's Second Prudence Review Report, File No.
17	EO-2019-006	8?1
18	A.	Yes. A copy of that report is attached as Confidential Schedule KJB-r2.
19	Q.	What is the purpose of your testimony?
20	A.	The purpose of my rebuttal testimony is to further support, and respond to
21	testimony reg	arding, Staff's recommended disallowance in Staff's Second Prudence Review
22	Report of \$35	50,351 due to Kansas City Power & Light Company's ("KCPL") imprudence in
		d on March 21, 2019, the Commission consolidated Case Nos. EO-2019-0067, EO-2019-0068, 99, and designated Case No. EO-2019-0067 as the lead case.

its management of its RECs during the FAC Prudence Review Period, which is discussed in Confidential Schedule KJB-r2. More specifically, I will address the Direct Testimony of KCPL witness Jeff Martin. My testimony will: (1) demonstrate that there was and is a meaningful revenue opportunity for KCPL customers if KCPL would have sold RECs not needed to satisfy the Missouri Renewable Standard ("RES"); (2) explain the difference between KCPL's view of having renewable energy in its portfolio benefiting larger customers and Staff's view of how the customers actually can claim renewable energy credit through their utility provider; (3) explain Staff's REC-based disallowance; and (4) explain how KCPL is in violation of its Rider FAC tariff.

- Q. Please provide some background for your testimony.
- A. In Staff's Second Prudence Review of Costs Related to the Fuel Adjustment Clause for KCPL ("Prudence Report") in Case No. EO-2019-0068<sup>2</sup>, Staff recommended an Ordered Adjustment ("OA") in the amount of \$350,351, which is equal to 722,628 expired RECs times \$0.48483 per REC. The 722,628 expired RECs are held in an active North American Renewables Registry ("NAR") subaccount which KCPL created to hold RECs which are expired for Missouri RES compliance. Mr. Martin, in his Direct Testimony, explained KCPL's concerns with Staff's Prudence Report, expressing concern that Staff's proposed adjustment related to RECs was unreasonable.
- Q. Does Staff agree with Mr. Martin's claim that Staff's proposed adjustment is unreasonable?

<sup>2</sup> Case No. EO-2019-0068 was consolidated with Case No. EO-2019-0067 and Case No. ER-2019-0199, with Case No. EO-2019-0067 designated as the lead case.

1	A. No. Staff claims that KCPL is in violation of its Rider FAC tariff <sup>8</sup> by not		
2	attempting to sell unused RECs that are not needed to meet the RES and including those		
3	revenues in the FAC rider. KCPL's Rider FAC provides specific language and treatment of		
4	such revenues:		
5	R = Renewable Energy Credit Revenue:		
6	Revenues reflected in FERC account 509000 from		
7	the sale of Renewable Energy Credits that are not		
8	needed to meet the Renewable Energy Standards.		
9	In short, customers are to receive the benefit of revenues from the sale of un-needed RECs		
10	through KCPL's FAC.		
11	Q. Mr. Martin also claims the decision to not pursue the sale of RECs is		
12	immaterial. Do you agree?		
13	A. No. Although Staff's disallowance is \$350,351 for this review period, there is a		
14	potential for larger disallowances in the future. KCPL will be generating ** **		
15	from renewable resources, yet its projected need for RECs in 2021 is 1,216,924 RECs. <sup>4,5</sup>		
16	Starting in 2021, the Company will be producing RECs in excess of what they need to meet		
17	RES compliance, resulting in the potential for approximately ** ** RECs to expire		
18	annually. Further, the market value for RECs does change over time.		
19	Q. Do other Missouri utilities sell expired RECs?		
20	A. Yes. <sup>6</sup>		
	<sup>3</sup> Kansas City Power and Light Company P.S.C. Mo. No. 7, Second Revised Sheet No. 50.14.		
	4 Staff Report on Kansas City Power & Light Company's 2019 Annual Renewable Energy Standard		

Compliance Plan, page 3.

<sup>5</sup> A REC represents 1 MWh of generation from a renewable resource.

<sup>6</sup> Liberty Utilities Empire District Electric Company 2018 Annual Renewable Energy Standard Compliance Report, page 9.

- Q. What can you tell me about KCPL's REC management?
  - A. KCPL is subject to the RES and therefore retires RECs to demonstrate its compliance with the standard. KCPL retains ownership of all RECs generated by its purchased power agreements ("PPAs") and owned resources. Of that pool of RECs, KCPL retires just enough RECs annually to meet the minimum RES requirements and all excess RECs are held for another year's RES compliance obligation. Eventually, those RECs are no longer eligible for Missouri RES compliance. In general, KCPL Missouri retires its oldest RECs first. During the applicable FAC Prudence Review Period KCPL failed to take any action to sell 722,628 RECs which were not needed to satisfy its RES requirement and simply allowed those RECs to expire.
  - Q. What does Mr. Martin state as KCPL's reasoning behind the company's decision to not attempt to sell RECs?
  - A. Mr. Martin states "The revenue opportunity presented by the potential sale of REC's, net of associated costs, is very limited and outweighed by the fact that our customers are interested in renewable energy and in renewable energy being a key component of their energy usage."
  - Q. Did Mr. Martin provide any evidence that the revenue opportunity was very limited for the sale of RECs during the review period?
    - A. No.
  - Q. Did Staff provide evidence that there was a market for the sale of RECs during the review period?

<sup>&</sup>lt;sup>7</sup> Direct Testimony of Jeff Martin, page 4, lines 3-5.

## Rebuttal Testimony of Kory J. Boustead

A. Yes, in Staff's Prudence Report, Staff recommended an Ordered Adjustment
("OA") in the amount of \$350,351, which is equal to 722,628 RECs not properly retired times
\$0.48483 per REC. The \$0.48483 price per REC was Staff's estimated market (not KCPL-
specific) price for RECs during the relevant FAC Prudence Review Period, based on the best
information available to Staff at the time. However, KCPL recently filed its 2019 Annual
Renewable Energy Standard Compliance Plan (Case No. EO-2019-0317), and in its work
papers for that case KCPL provided an assumed value of ** , **8 which
further shows the reasonableness of the \$0.48483 price used by Staff for purposes of
calculating the recommended disallowance.
Q. Does Staff find that the evidence and examples provided by Mr. Martin
substantiate his claim that customers directly benefit by not selling KCPL's excess RECs that
are not needed to comply with the RES?
A. No, Staff does not. While the information provided by Mr. Martin claims a
number of KCPL's large customers have corporate goals to reduce their carbon footprint
which may improve their corporate image and therefore provide those customers some value,
Mr. Martin does not address and demonstrate the value for the remaining KCPL customers.
In fact, just because large corporate customers announce their goals does not mean they will
receive the renewable energy credit needed to claim the reduction nor does it relate to why
KCPL has made it a practice to allow RECs to expire without attempting to gain monetary
value the RECs could generate. Further, KCPL has specifically designed a program, through
8 **
**

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

its Renewable Energy Rider, to provide non-residential customers an option to meet their renewable goals. The Renewable Energy Rider allows either transfer of RECs to customers or retirement of RECs on their behalf.<sup>9</sup>

- Q. Do the examples provided of larger customers' intended goals to use renewable energy resources from their electric supplier mean those customers can claim renewable energy credits to help make their goal to reduce the company carbon footprint?
- A. They do not. Mr. Martin states in his testimony, "A number of our larger customers have announced corporate goals to reduce their carbon footprint by making greater use of renewable energy resources for the power that they consume" and "customer surveys undertaken on behalf of KCPL show more broadly that our customers value KCPL's ability to demonstrate that a key component of the power KCPL sells to retail customers is provided from renewable energy resources." This implies that the customers are able to claim credit for lowering their carbon footprint through renewable energy use within KCPL's energy portfolio. As Mr. Martin himself explains, it is not appropriate to double count RECs<sup>12</sup>.
- Q. Mr. Martin asserts that KCPL's action is consistent with and supportive of the ability to prevent double-counting that is included in the Corporate Renewable Energy Buyers' Principles. Do you agree?
- A. No. In part, the Corporate Renewable Energy Buyers' Principles states: "In order to claim the benefits of our renewable energy purchases to satisfy our public goals and reduce our carbon footprint, current US rules require that we retain ownership of the RECs or that they are retired on our behalf. What is most critical to us is that we have the

<sup>&</sup>lt;sup>9</sup> Kansas City Power and Light Company, PSC MO No 7, Second Revised Sheet No. 40D.

<sup>&</sup>lt;sup>10</sup> Direct Testimony of Jeff Martin, page 5, lines 5-7.

<sup>&</sup>lt;sup>11</sup> Direct Testimony of Jeff Martin, page 5, lines 7-10.

<sup>&</sup>lt;sup>12</sup> Direct Testimony of Jeff Martin, page 10, line 9.

ability to add more renewable energy to the system and claim the consumption of the relevant renewable energy and GHG emission benefits while preventing another energy user from claiming consumption of the same renewable energy."

- Q. Do KCPL's actions create concerns regarding double counting of renewable attributes?
- A. Yes. To be clear, KCPL is not retiring excess RECs generated by its wind purchase power agreements ("PPAs") on behalf of corporate customers or anyone. KCPL is simply holding excess RECs in its NAR subaccount.<sup>13</sup> The proper method for ensuring renewable attributes are not double-counted is to track RECs and eventually retire the RECs either for voluntary or compliance purposes.
  - Q. What does it mean to retire RECs?
- A. The Commission rule on the Renewable Energy Standard requires retirement of RECs to demonstrate compliance with the RES and requires that all RECs are tracked through the Commission-approved tracking system. The North American Renewables Registry (NAR) is the Commission-approved tracking system. NAR defines retirement as follows:

Retire, Retirement of Certificates, or Retirement: An action taken to remove a Certificate from circulation within the NAR system. Retirement may be initiated only by the Account Holder for Certificates in his/her own Accounts. Retirement is effectuated by transferring Certificates into a Retirement Sub-account or a Retirement Group Subaccount.

Q. Has KCPL taken any action to remove the expired RECs from circulation in the NAR system?

<sup>&</sup>lt;sup>13</sup> Response to Staff Data Request No. 0073 in EO-2019-0067.

1 A. No. In response to Staff Data Request No. 0073, KCPL states: 2 KCP&L has not retired the 722,628 RECs that are 3 in question. They are still in the KCPL MO Expired 4 (for state comp) sub-account in NAR. 5 Q. Mr. Martin claims that had KCPL sold the RECs in question, KCPL could not 6 claim to have generated 24.77% of its retail sales from renewable energy. What does the 7 24.77% number represent? 8 A. The 24.77% represents the KCPL Missouri retail sales (MWh) over the 9 prudence review period divided by generation from renewable resources (MWh) over the 10 prudence review period. The generation from renewable resources (MWh) is equal to the 11 number of RECs KCPL Missouri generated over the same time period. RECs are assigned a 12 vintage based on the month and year of generation. Therefore, Mr. Martin used January 2017 13 through December 2017 vintage RECs, and January 2018 through June 2018 vintage RECs to 14 calculate the generation from renewable resources. 14 15 Mr. Martin asserts that had KCPL sold the excess RECs KCPL would only be Q. 16 able to demonstrate that it generated 19% of the energy sold to retail customers through 17 renewable energy resources. What does the 19% number represent? 18 A. Mr. Martin simply subtracted the expired RECs from Staff's workpapers 19 from the January 2017 through June 2018 renewable generation. However, Mr. Martin 20 failed to point out that Staff's disallowance is based on RECs which were generated in 21 2013 and 2014. The 2013 and 2014 vintage RECs have nothing to do with KCPL's 2018 22 renewable generation.

<sup>&</sup>lt;sup>14</sup> Staff will note that the values Mr. Martin used for the RECs from Rock Creek wind farm attributable to KCPL Missouri during the time period are inconsistent with the NAR tracking system.

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

- Q. What can you tell me about the 2017 and 2018 vintage RECs Mr. Martin used in his calculation?
- A. All of the 2017 and 2018 vintage RECs have been carried forward to future compliance years. None of the 2017 or 2018 vintage RECs have been retired for the Missouri RES or any other purpose.
- Q. Does Mr. Martin claim Staff's adjustment is overstated by not recognizing transfer fees and a Fuel Adjustment Clause ("FAC") 5% sharing percentage holdback contained in its FAC Rider Tariff?
  - A. Yes.
  - Q. Does Staff agree with Mr. Martin's conclusions?
- A. No. Staff's proposed disallowance is deemed by Staff to be net of any transfer or broker fees so no further adjustment is needed. Staff does not believe the 5% FAC sharing percentage as proposed by Mr. Martin is accurate because KCPL's 5% sharing percentage is based upon under-over collection method and by simply multiplying Staff's proposed adjustment by 5% could lead to an inaccurate adjustment amount. Mr. Martin did not provide any workpapers addressing these adjustments to Staff's proposed adjustment.
  - Q. Does this conclude your Rebuttal Testimony?
  - A. Yes it does.

\_

<sup>&</sup>lt;sup>15</sup> Kansas City Power and Light Company 2018 Annual Renewable Energy Standard Report, Case No. EO-2019-0315, Attachment C.

#### BEFORE THE PUBLIC SERVICE COMMISSION

#### **OF THE STATE OF MISSOURI**

the Matter of the Eighth Prudence Review of Costs Subject to the Commission-Approved Fuel Adjustment Clause of KCP&L Greater Missouri Operations Company	) Case No. EO-2019-0067 )
AFFIDAVIT OF I	KORY J. BOUSTEAD
STATE OF MISSOURI )  COUNTY OF COLE )	
	and on her oath declares that she is of sound mind going <i>Rebuttal Testimony</i> ; and that the same is true and belief.

#### **JURAT**

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 \_\_\_\_\_\_ day of June 2019.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missourf
Commissioned for Cole County
My Commission Expires: December 12, 2020
Commission Number: 12412070

Further the Affiant sayeth not.

Notary Public

#### Kory J. Boustead

#### **Education and Employment Background**

I am a Rate & Tariff Examiner in the Energy Resources Department, Commission Staff Division of the Missouri Public Service Commission (Commission). I have been employed at the Missouri Public Service Commission as Rate & Tariff Examiner since July 2012.

In December 2008, I earned a Bachelor of Science degree in Business Administration with an emphasis in Marketing from Columbia College. I went on to earn a Master of Business Administration, in Business Administration and Management from William Woods University in 2001.

Prior to joining the Commission, beginning in 2002, I was employed with Ameren Missouri as a Customer Service Representative in the Jefferson City Call Center. In this role, I was responsible for answering customer inquiries and requests through the call center including establishment of new and transfer accounts. I effectively managed customer complaints, resolving billing issues, and handling trouble calls. I was responsible for establishing payment agreements, advising customers regarding collection procedures and responsible for maintaining personal telephone statistics and call volume in excess of company average. Prior to my employment with Ameren Missouri I worked for Sprint Telephone in customer service, KRCG-TV in advertising and was the retail store manager for Alamosa PCS (a Sprint PCS affiliate) in Jefferson City.

#### List of Previous Testimony Filed Kory J. Boustead

Date Filed	Issue	Case Number	Case Name	
05/30/2014	Direct - Staff Report - Low Income Weatherization Programs, Energy Efficiency, Service Line Extension	GR-2014-0086	Summit Natural Gas of Missouri, Inc.  Liberty Utilities  Summit Natural Gas of Missouri, Inc.  Liberty Utilities  Summit Natural Gas of Missouri, Inc.	
06/06/2014	Direct - Staff Report - Low Income Weatherization Programs, Energy Efficiency, Main Line Extension	GR-2014-0152		
07/11/2014	Rebuttal - Energy Efficiency, Low Income Weatherization Program	GR-2014-0086		
07/30/2014	Rebuttal - Low Income Weatherization Programs, Energy Efficiency, Main Line Extension	GR-2014-0152		
08/08/2014	Surrebuttal - Low Income Weatherization Program	GR-2014-0086		
12/05/2014	Direct - Staff Report - Low Income Keeping Current Pilot Program	ER-2014-0258	Ameren Missouri	
02/06/15	Surrebuttal – Low Income Keeping Current Pilot Program	ER-2014-0258	Ameren Missouri	
04/03/2015	Direct - Staff Report - Economic Relief Pilot Program, Low Income Weatherization Program	ER-2014-0370	Kansas City Power & Light Company	

#### cont'd Kory J. Boustead

Date Filed	Issue	Case Number	Case Name	
03/25/2016	Direct - Staff Report - Low Income Programs, Low Income Weatherization Program	ER-2016-0023	The Empire District Electric Company	
05/12/2016	Rebuttal - Low Income Weatherization Program	ER-2016-0023	The Empire District Electric Company	
07/15/2016	Direct- Staff Report – Income-Eligible Weatherization, Economic Relief Pilot Program	ER-2016-0156	KCP&L Greater Missouri Operations Company	
09/02/2016	Surrebuttal – Income- Eligible Weatherization, Economic Relief Pilot Program	ER-2016-0156	KCP&L Greater Missouri Operations Company	
11/30/2016	Direct – Staff Report – Income-Eligible Weatherization, Economic Relief Pilot Program	ER-2016-0258	Kansas City Power & Light Company	
12/09/2016	Direct – Staff Report – Low Income Keeping Current Pilot Program, Low Income Weatherization Assistance Program	ER-2016-0179	Ameren Missouri	
01/20/2017	Rebuttal – Low Income Weatherization Program	ER-2016-0179	Ameren Missouri	
02/28/2018	Staff Report - Emission Allowances and Interest	EO-2018-0067	Staff's Sixth Fuel Adjustment Clause Prudence Review Report – Ameren Missouri	
03/16/2018	Direct – Staff Report – Tariff Organization	GR-2018-0013	Liberty Utilities	

#### cont'd Kory J. Boustead

Date Filed	Issue	Case Number	Case Name	
06/19/2018	Direct – Staff Report – Income Eligible Weatherization	ER-2018-0245	Kansas City Power & Light Company	
04/30/2018	Direct – Staff Report – Interest	EO-2018-0155	First Prudence Review for Cycle 2 of Costs Related to the Demand-Side Programs for the Electric Operations of Union Electric Company, d/b/a Ameren Missouri	
06/19/2018	<b>Direct – Staff Report –</b> Income Eligible Weatherization	ER-2018-0246	KCP&L Greater Missouri Operations Company	
08/30/2018	Rebuttal – Low-Income Programs and Tariff design	EO-2018-0122	Ameren Missouri's 3 <sup>rd</sup> Filing to Implement Regulatory Changes in Furtherance of Energy Efficiency as Allowed by MEEIA	
09/05/2018	Staff Report – Interest, Renewable Energy Credit Revenue and Plant Outages	EO-2018-0244	In the Matter of the Seventh Prudence Review of Costs Subject to the Commission Approved Fuel Adjustment Clause of The Empire District Electric Company	
09/17/2018	Surrebuttal – Low-Income Programs and Tariff design	EO-2018-0122	Ameren Missouri's 3 <sup>rd</sup> Filing to Implement Regulatory Changes in Furtherance of Energy Efficiency as Allowed by MEEIA	
02/28/2019	Staff Report – Renewable Energy Credits	EO-2019-0067	In the Matter of the Eighth Prudence Review of Costs Subject to the Commission- Approved Fuel Adjustment Clause of KCP&L Greater Missouri Operations Company	
02/28/2019	Staff Report – Renewable Energy Credits	EO-2019-0068	In the Matter of the Second Prudence Review of Costs Subject to the Commission- Approved Fuel Adjustment Clause of Kansas City Power and Light Company	

# MISSOURI PUBLIC SERVICE COMMISSION STAFF REPORT

# SECOND PRUDENCE REVIEW OF COSTS RELATED TO THE FUEL ADJUSTMENT CLAUSE FOR THE ELECTRIC OPERATIONS OF KANSAS CITY POWER & LIGHT COMPANY

**CASE NO. EO-2019-0068** 

**January 1, 2017 through June 30, 2018** 

Jefferson City, Missouri February 28, 2019

1		TABLE OF CONTENTS OF	
2		STAFF REPORT	
3 4 5 6 7		SECOND PRUDENCE REVIEW OF COSTS RELATED TO THE FUEL ADJUSTMENT CLAUSE FOR THE ELECTRIC OPERATIONS OF KANSAS CITY POWER & LIGHT COMPANY	
8		CASE NO. EO-2019-0068	
9	I.	EXECUTIVE SUMMARY	1
10	II.	INTRODUCTION	2
11	A.	GENERAL DESCRIPTION OF KCPL'S FAC	2
12	В.	PRUDENCE STANDARD	4
13 14	III.	FUEL COSTS, PURCHASED POWER COSTS, TRANSMISSION COSTS, NET EMISSION COSTS	4
15	A.	UTILIZATION OF GENERATION CAPACITY	6
16	В.	HEAT RATES	10
17	C.	PLANT OUTAGES	11
18	D.	NATURAL GAS COSTS	13
19	E.	COAL AND RAIL TRANSPORTATION COSTS	16
20	F.	FUEL OIL COSTS	17
21	G.	TRANSMISSION COSTS	18
22	Н.	NUCLEAR FUEL	20
23	I.	SO <sub>2</sub> EMISSION ALLOWANCES	21
24	J.	OFF-SYSTEM SALES REVENUE	22
25	K.	RENEWABLE ENERGY CREDIT REVENUES	24
26	L.	CIMARRON 2 WIND FARM PURCHASED POWER AGREEMENT	26
27	M.	SLATE CREEK WIND PROJECT PURCHASED POWER AGREEMENT	27
28	N.	OSBORN WIND ENERGY PURCHASED POWER AGREEMENT	28
29	O.	SPEARVILLE 3 WIND ENERGY FACILITY PURCHASED POWER AGREEMENT	30

4	IV.	INTEREST	3 <i>€</i>
3	R.	PURCHASED POWER COSTS	33
2	Q.	ROCK CREEK WIND PROJECT PURCHASED POWER AGREEMENT	32
l	P.	WAVERLY WIND FARM PURCHASED POWER AGREEMENT	31

1 2 3 4 5
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26

# SECOND PRUDENCE REVIEW OF COSTS RELATED TO THE FUEL ADJUSTMENT CLAUSE FOR THE ELECTRIC OPERATIONS OF KANSAS CITY POWER & LIGHT COMPANY

CASE NO. EO-2019-0068

#### I. EXECUTIVE SUMMARY

The Missouri Public Service Commission ("Commission") first authorized a Fuel Adjustment Clause ("FAC") for Kansas City Power & Light Company ("KCPL") in Case No. ER-2014-0370. Since then, the Commission has approved continuation of KCPL's FAC with modifications in its *Report and Order* in the Company's most recent general rate cases: Case Nos. ER-2016-0285 and ER-2018-0145.

Commission Rule 4 CSR 240-20.090(11)<sup>1</sup> and Missouri Revised Statute Section 386.266.5(4) require that the Commission's Staff ("Staff") conduct prudence reviews of an electric utility's FAC no less frequently than every 18 months. In this prudence review, Staff analyzed items affecting KCPL's fuel costs; purchased power costs; net emission allowance costs; transmission costs; off-system sales revenues; and renewable energy credit revenues for the fourth, fifth and sixth accumulation periods of KCPL's FAC ("prudence review period"). The fourth accumulation period started January 1, 2017 and ended June 30, 2017. The sixth accumulation period started July 1, 2017 and ended December 31, 2017. The sixth accumulation period started January 1, 2018 and ended June 30, 2018. Thus, the 18-month prudence review period is from January 1, 2017 through June 30, 2018 ("Review Period"). This is Staff's second Prudence Review Report for KCPL's FAC.

In evaluating prudence, Staff reviews whether a reasonable person making the same decision would find both the information the decision-maker relied on and the process the decision-maker employed to be reasonable based on the circumstances at the time the decision was made, *i.e.*, without the benefit of hindsight. The decision actually made is disregarded; instead, the review evaluates the reasonableness of the information the decision-maker relied on and the decision-making process the decision-maker employed. If either the information relied upon or the decision-making process employed was imprudent, then Staff examines

27

28

29

30

<sup>&</sup>lt;sup>1</sup> Effective January 30, 2019.

whether the imprudent decision caused any harm to ratepayers. Only if an imprudent decision resulted in harm to ratepayers, will Staff recommend a refund.

Staff analyzed a variety of items in examining whether KCPL was imprudent when it incurred the fuel and purchased power costs associated with its FAC. Based on its review, Staff found evidence of imprudence by KCPL when KCPL failed to take any action that would have allowed it to generate revenue from the sale of 722,628 renewable energy credits ("RECs") that were not needed to satisfy its RES compliance and simply allowed them to expire during the Review Period. Staff recommends the Commission order an Ordered Adjustment ("OA") in the amount of \$350,351.

Staff Expert/Witness: Dana E. Eaves

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

#### II. INTRODUCTION

#### A. General Description of KCPL's FAC

Table 1 identifies KCPL's Commission-approved FAC tariff sheets which were applicable for service provided by KCPL to its customers during the period January 1, 2017 through June 30, 2018:

<u>Table 1</u>

#### KCPL's Commission-approved FAC Tariff Sheets

#### January 1, 2017 through June 30, 2018

January 1, 2017 through June 7, 2017	June 8, 2017 through June 30, 2018	
Fourth Revised Sheet No. 50	Second revised Sheet No. 50.11	
Third Revised Sheet No. 50.1	Second revised Sheet No. 50.12	
Second Revised Sheet No. 50.2	Second revised Sheet No. 50.13	
Second Revised Sheet No. 50.3	Second revised Sheet No. 50.14	
Second Revised Sheet No. 50.4	Second revised Sheet No. 50.15	
Second Revised Sheet No. 50.5	Second revised Sheet No. 50.16	
Second Revised Sheet No. 50.6	Second revised Sheet No. 50.17	
Second Revised Sheet No. 50.7	Second revised Sheet No. 50.18	
Second Revised Sheet No. 50.8	Second revised Sheet No. 50.19	
Second Revised Sheet No. 50.9		

For each accumulation period ("AP"), KCPL's Commission-approved FAC allows KCPL to recover from (if the actual net energy costs exceed) or refund to (if the actual net energy costs are less than) its ratepayers ninety-five percent (95%) of its Missouri jurisdictional<sup>3</sup> actual net energy costs ("ANEC")<sup>4</sup> less net base energy cost ("B")<sup>5</sup> which is identified as (ANEC - B)\*J in KCPL's FAC.6 KCPL accumulates variable fuel costs, purchased power costs, transmission costs and net emissions costs minus off-system sales revenues and renewable energy credit revenues during six-month accumulation periods. Each six-month accumulation period is followed by a twelve-month recovery period ("RP") <sup>7</sup> when 95% of the (ANEC – B)\*J amount (including the monthly application of interest)<sup>8</sup> is recovered from or returned to ratepayers through an increase or decrease in the FAC Fuel Adjustment Rates ("FAR") during the twelve-month RP. Because the FAR rarely, if ever, will exactly match the required offset, KCPL's FAC is designed to true-up the difference between the revenues billed and the revenues authorized (including the monthly application of interest) for collection during recovery periods. Any disallowance the Commission orders as a result of a prudence review shall include interest at the Company's short-term interest rate and will be accounted for as an item of cost<sup>9</sup> in a future filing to adjust the FAR.

<sup>&</sup>lt;sup>2</sup> Accumulation periods are: June through November and December through May.

<sup>&</sup>lt;sup>3</sup> Missouri jurisdictional factor J is defined on KCPL Second Revised Sheet No. 50.18 as Missouri Retail Energy Ratio = (MO Retail kWh sales + MO Losses) / (MO Retail kWh Sales + MO Losses + KS Retail kWh Sales + KS Losses + Sales for Resale, Municipals kWh Sales [including border customers] + Sales for Resale, Municipals Losses), where MO Losses = 6.32%; KS Losses =7.52%; Sales for Resale, Municipals Losses = 6.84%.

<sup>&</sup>lt;sup>4</sup> "Actual Net Energy Costs" are equal to fuel costs (FC) plus net emission costs (E) plus purchased power costs (PP) plus transmission costs (TC) minus off-system sales revenue (OSSR) and renewable energy credit revenue (R) as defined on KCPL's Commission-approved FAC.

<sup>&</sup>lt;sup>5</sup> Net base energy costs (B) is defined on KCPL Second Revised Sheet No. 50.18 as net base energy costs ordered by the Commission in the last general rate case consistent with the costs and revenues included in the calculation of the FPA. Net base energy costs will be calculated as shown below S<sub>AP</sub> x Base Factor ("BF").

<sup>&</sup>lt;sup>6</sup> For the fourth, fifth and sixth accumulation periods, the (ANEC - B)\*J amounts are included on line 5 of KCPL 2nd Revised Sheet No. 50.20, 3rd Revised Sheet No. 50.20, 4th Revised Sheet No. 50.20, respectively.

<sup>&</sup>lt;sup>7</sup> Recovery periods are: October through September and April through March.

<sup>&</sup>lt;sup>8</sup> See Section IV. Interest, of this Prudence Review Report.

<sup>&</sup>lt;sup>9</sup> See PRUDENCE REVIEW on KCPL's Second Revised Sheet No. 50.19.

#### **B.** Prudence Standard

In State ex rel. Associated Natural Gas Co. v. Public Service Com'n of State of Mo., the Western District Court of Appeals stated the Commission defined its prudence standard as follows:

[A] utility's costs are presumed to be prudently incurred.... However, the presumption does not survive "a showing of inefficiency or improvidence... [W]here some other participant in the proceeding creates a serious doubt as to the prudence of expenditure, then the applicant has the burden of dispelling these doubts and proving the questioned expenditure to have been prudent.

In the same case, the PSC noted that this test of prudence should not be based upon hindsight, but upon a reasonableness standard: [T]he company's conduct should be judged by asking whether the conduct was reasonable at the time, under all the circumstances, considering that the company had to solve its problem prospectively rather than in reliance on hindsight. In effect, our responsibility is to determine how reasonable people would have performed the tasks that confronted the company.<sup>10</sup>

In reversing the Commission in that case, the Court did not criticize the Commission's definition of prudence, but held, in part, that to disallow a utility's recovery of costs from its ratepayers based on imprudence the Commission must determine the detrimental impact of that imprudence on the utility's ratepayers.<sup>11</sup> This is the prudence standard Staff has followed in this review. Staff reviewed for imprudence the areas identified and discussed below for KCPL's fourth, fifth, and sixth six-month accumulation periods.

Staff Expert/Witness: Dana E. Eaves

## III. FUEL COSTS, PURCHASED POWER COSTS, TRANSMISSION COSTS, NET EMISSION COSTS

KCPL's FAC includes four major components of costs: fuel costs, purchased power costs, net emission costs and transmission costs. It also includes two components of revenues: off-system sales revenues and renewable energy credit revenues. Table 2 is a breakdown of KCPL's fuel costs, purchased power costs, net emission costs, transmission costs, off-system sales revenues, and renewable energy credit revenues for the period of January 1, 2017, through June 30, 2018:

<sup>&</sup>lt;sup>10</sup> 954 S.W.2d 520, 528-29 (Mo. App. W.D., 1997) (citations omitted).

<sup>&</sup>lt;sup>11</sup> Id. at 529-30.

\*\*

	T	_
<u> </u>	<del>                                     </del>	 
<u> </u>		 
<u> </u>		 
<u> </u>		
**		

3

Staff Experts/Witnesses: Dana E. Eaves, Brooke Mastrogiannis, Lisa Wildhaber, Cynthia M. Tandy, Kory J. Boustead

4 5

#### A. Utilization of Generation Capacity

#### 1. Description

The purpose of this section is to provide an overview of KCPL's available supply-side and demand response resources and review the process by which generating units are selected to satisfy native load requirements during the Review Period. KCPL's generating units consists of a mixture of coal, nuclear, natural gas, diesel, and wind as indicated in Table 3. Table 4 provides a list of KCPL's long-term Power Purchase Agreements ("PPA"). Table 5 contains a capacity summary for KCPL's current fleet.

**Table 3**<sup>12</sup> - **Confidential** 

\*\*

1

2

3

4

5

6

7

8

9

10

11

				<del>                                     </del>	
				<del>                                     </del>	
<u> </u>			<del>                                     </del>	-	
<del>  </del>		<del></del>	<del>                                     </del>	<del>                                     </del>	
<del> </del>			<del>                                       </del>	<del></del>	
<del></del>	<del></del>		<del>                                       </del>	+	
<u> </u>			<del> </del>		
T					
<del> </del>	<del></del>	-			
<del></del>			<del>                                     </del>		
<del> </del>			<del>                                       </del>		
				=	
<u> </u>					

Case No. EO-2019-0067 Schedule KJB-r2 Page 9 of 46

<sup>&</sup>lt;sup>12</sup> KCPL response to Data Request No. 0013.

**									
							-	_	
-								 	
**			<u>1</u>	<u> Table 4 – C</u>	onfiden	<u>tial</u>			
	_	_						_	
								 -	
								 _	
								 _	
								_	

\*:

**Table 5 – Confidential** 

 _

\*\*

3

4

5

67

8

9

10

11

12

13

14

15

16

17

#### 2. Summary of Cost Implications

During the period from January 1, 2017 through June 30, 2018, KCPL utilized two separate demand response programs. The MPOWER Rider tariff sheets were frozen on April 1, 2016<sup>13</sup>. Once the MPOWER Rider was frozen, no new customers could apply and be accepted into the MPOWER Rider. It was replaced with a similar demand response program, Demand Response Incentive ("DRI"), for KCPL's MEEIA Cycle 2.<sup>14</sup> The aggregate curtailable load from the DRI program as of November 30, 2016 was equal to 10,075 kW. The Company continues to add customers to the DRI program to fulfill MW target for MEEIA Cycle 2. For DRI, the curtailment target and anticipated load reduction is 15 MW for MEEIA Cycle 2.

In SPP's Integrated Marketplace ("IM"), the vast majority of generation dispatch decisions are made by SPP via established market requirements and processes. SPP market rules currently must offer requirements both for the Day Ahead Market ("DA") and the Real Time Balancing Market ("RT"). With respect to the DA, there is a Day Ahead Must Offer

<sup>&</sup>lt;sup>13</sup> P.S.C. MO. No. 7, Eighth Revised Sheet No. 21 Cancelled December 6, 2018.

<sup>&</sup>lt;sup>14</sup> KCPL's Missouri Energy Efficiency Investment Act Application, File No. ER-2015-0240.

requirement which essentially states that Market Participants ("MP") must offer enough
generation to cover that MP's next day projected peak load, ancillary service obligations and
any firm sales the MP has made. In addition, the SPP Market Monitoring Unit monitors for
Physical Withholding of generation, which further incentivizes MPs to offer much of their
available generation in the DA, even if they have already met their Must Offer requirement.
With respect to the RT, SPP requires that all physically available generation be offered to the
market. In accordance with SPP rules and requirements, KCPL submits generation offers in
the DA and RT. Once these offers have been submitted, the SPP market co-optimization
processes take over from there. SPP market applications consider inputs such as system-wide
requirements, generator operating parameters, offers from all MPs, and transmission system
topology to arrive at the most cost effective and reliable generation solution possible. Some of
these applications include the Security Constrained Unit Commitment ("SCUC") and Security
Constrained Economic Dispatch ("SCED") tools. Once the least cost viable solution is arrived
at, SPP issues operating instructions to MPs. Under the SPP market construct, MPs are given
the flexibility to let the SPP market decide entirely on its own when to commit a given unit or
to self-commit the generator. A common example of the latter is if a unit needs to be online
for required testing on a given day. Even if a generator is self-committed, this simply
establishes that the unit will be online. SPP will still dispatch the unit via the SCED tool
within its dispatchable range as established through the market submissions process. 15

#### 3. Conclusion

Staff did not observe any evidence of imprudent utilization of generation resources during the time period examined in this prudence review.

#### 4. Documents Reviewed

a. KCPL's responses to Staff Data Request Nos. 0001, 0002, 0010, 0011, 0012, 0013, 0015, 0016, 0017, 0018, 0020, 0021, 0022, 0041, 0043, 0044, 0047.1, 0052, 0052.1, 0053, 0053.1, 0059, and 0060.

Staff Experts/Witnesses: Dana E. Eaves and Lisa Wildhaber

<sup>&</sup>lt;sup>15</sup> KCPL response to Data Request No. 0012.

#### B. Heat Rates

#### 1. Description

Heat rates of generating units are an indicator of each unit's performance. A heat rate is a calculation of total volume of fuel burned for electric generation multiplied by the average heat content of that volume of fuel for a given time period divided by the total net generation of electricity in kilowatt hours (kWh) for that same time period.

#### 2. Summary of Cost Implications

Heat rates are inversely related to the operating efficiency of the generating unit. Increasing heat rates of specific units over time may indicate that a specific unit's efficiency is declining. Heat rates can vary greatly depending on operating conditions including but not limited to load, hours of operation, shut downs and startups, unit outages, derates, and weather conditions. Therefore, a good indication of unit performance for frequently used units is an analysis of the trend of heat rates over time. A permanent increase in monthly heat rates is commonly the result of a decrease in a generating unit's operating efficiency. This typically occurs when additional emissions reduction equipment is added to the exhaust of the generating unit. Continued utilization of units with sustained elevated heat rates could result in KCPL incurring higher fuel costs per unit of electricity generated than it would otherwise have incurred. If KCPL was imprudent in response to the ongoing trend of a unit's heat rate, ratepayer harm could result from an increase in the fuel costs that are collected through KCPL's FAC charges.

**		16	
	<b>**</b> 17		

#### 3. Conclusion

In reviewing the monthly heat rates of the KCPL's generating units, Staff found no indication that KCPL acted imprudently during the Review Period.

<sup>&</sup>lt;sup>16</sup> The Montrose generator units were retired in 2018.

<sup>&</sup>lt;sup>17</sup> Response to Data Request No. 0058.

	1	
	2	
	3	
	5	
	6	
	7	
	8	
	9	
1	0	
1	1	
1	2	
1	3	
1	4	
1	5	
	6	
	7	
	8	
l	9	
	0	
	1	
2		
2		
	4	
2	5	

27

28

29

#### 4. Documents Reviewed

- a. KCPL's responses to Staff Data Request Nos. 0002, 0019, and 0058; and
- b. Monthly Outage data in the Monthly Reports submitted by KCPL in compliance with Rule 4 CSR 240-3.190.

Staff Experts/Witnesses: Brooke Mastrogiannis and Jordan Hull

#### C. Plant Outages

#### 1. Description

Generating stations' outages generally can be classified as scheduled outages, forced outages, or partial outages ("derating"). Scheduled outages consist of either a planned outage or a maintenance outage. A planned outage is one that is scheduled well in advance, with a predetermined duration and occurring only once or twice a year. Outages are planned and scheduled over one year in advance. The exact start date depends on freezing temperatures and natural gas availability. Turbine and boiler overhauls, inspections, testing, and nuclear refueling are typical planned outages. A maintenance outage is one that can be deferred beyond the end of the next weekend but must be taken before the next planned outage. A forced outage is an outage that cannot be deferred beyond the next weekend and a partial outage or derating is a condition that exists that requires the unit to be limited to an energy output below maximum capacity.

Outages taken at any of the generating units have an impact on how much KCPL will pay for fuel and purchased power. Any planned outage during peak load demand times or a period of high replacement energy prices has the potential result of KCPL paying more for fuel and purchased power costs than it would have paid if the outage were planned during forecasted low load times. Periodic planned outages are required to maintain each generating unit in peak operating condition to minimize forced or maintenance outages that could occur during peak load demand or periods of high replacement energy prices, typically June through August and January through February.

Staff examined the planned outages and their timing for imprudence. An example of an imprudent outage would be scheduling a planned outage of a large base loaded unit during a time of peak load or a period of high replacement energy prices.

1	KCPL has little or no control over the timing of unscheduled maintenance or forced
2	outages of the generating stations it owns and operates when such outages are the result of
3	unforeseen events. The Company has no control over the timing of planned outages for
4	generating stations it does not operate. These types of outages are not included as a part of
5	this prudence review.
6	**
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	

1	
2	
3	
4	**18
5	2. Summary of Cost Implications
6	An imprudent planned outage could result in increased cost of purchased power
7	by KCPL from the SPP IM as well as a decrease in off-system sales revenues through
8	the SPP IM.
9	3. Conclusion
10	Staff did not find any evidence of imprudent planned outages by KCPL during the
11	Review Period.
12	4. Documents Reviewed
13	a. KCPL responses to Staff Data Request Nos. 0001, 0004, 0005, 0006; and 0052.
14	Staff Experts/Witnesses: Brooke Mastrogiannis and Jordan Hull
15	D. Natural Gas Costs
15 16	D. Natural Gas Costs  1. Description
16	1. Description
16 17	1. Description  For the Review Period, \$** ** or ** \( \frac{1}{2} \) ** of KCPL's total fuel costs,
16 17 18	1. Description  For the Review Period, \$** ** or ** = ** % of KCPL's total fuel costs, purchased power costs, transmission costs, and net emission costs was associated with the
16 17 18 19	1. Description  For the Review Period, \$** ** or ** = ** % of KCPL's total fuel costs, purchased power costs, transmission costs, and net emission costs was associated with the natural gas used in generating electricity. The cost of natural gas includes various
16 17 18 19 20	1. Description  For the Review Period, \$** ** or ** = ** % of KCPL's total fuel costs, purchased power costs, transmission costs, and net emission costs was associated with the natural gas used in generating electricity. The cost of natural gas includes various miscellaneous charges such as firm transportation service charges and other fuel handling
16 17 18 19 20 21	1. Description  For the Review Period, \$** ** or ** = ** % of KCPL's total fuel costs, purchased power costs, transmission costs, and net emission costs was associated with the natural gas used in generating electricity. The cost of natural gas includes various miscellaneous charges such as firm transportation service charges and other fuel handling expenses. During the Review Period, KCPL's natural gas price averaged \$** **
16 17 18 19 20 21 22	1. Description  For the Review Period, \$** ** or ** \( \frac{1}{2} \) ** % of KCPL's total fuel costs, purchased power costs, transmission costs, and net emission costs was associated with the natural gas used in generating electricity. The cost of natural gas includes various miscellaneous charges such as firm transportation service charges and other fuel handling expenses. During the Review Period, KCPL's natural gas price averaged \$** ** per MMBtu, based on 2,401,711 MMBtu of actual natural gas burned and costs of
16 17 18 19 20 21 22 23	1. Description  For the Review Period, \$** ** or ** = ** % of KCPL's total fuel costs, purchased power costs, transmission costs, and net emission costs was associated with the natural gas used in generating electricity. The cost of natural gas includes various miscellaneous charges such as firm transportation service charges and other fuel handling expenses. During the Review Period, KCPL's natural gas price averaged \$** ** per MMBtu, based on 2,401,711 MMBtu of actual natural gas burned and costs of \$** **. Staff reviewed the contract terms and a sampling of invoices for gas
16 17 18 19 20 21 22 23 24	1. Description  For the Review Period, \$** ** or ** = ** % of KCPL's total fuel costs, purchased power costs, transmission costs, and net emission costs was associated with the natural gas used in generating electricity. The cost of natural gas includes various miscellaneous charges such as firm transportation service charges and other fuel handling expenses. During the Review Period, KCPL's natural gas price averaged \$** ** per MMBtu, based on 2,401,711 MMBtu of actual natural gas burned and costs of \$** **. Staff reviewed the contract terms and a sampling of invoices for gas purchased. KCPL receives natural gas services from 37 gas supply companies and 5 natural
16 17 18 19 20 21 22 23 24	1. Description  For the Review Period, \$** ** or ** = ** % of KCPL's total fuel costs, purchased power costs, transmission costs, and net emission costs was associated with the natural gas used in generating electricity. The cost of natural gas includes various miscellaneous charges such as firm transportation service charges and other fuel handling expenses. During the Review Period, KCPL's natural gas price averaged \$** ** per MMBtu, based on 2,401,711 MMBtu of actual natural gas burned and costs of \$** **. Staff reviewed the contract terms and a sampling of invoices for gas purchased. KCPL receives natural gas services from 37 gas supply companies and 5 natural
16 17 18 19 20 21 22 23 24	1. Description  For the Review Period, \$** ** or ** = ** % of KCPL's total fuel costs, purchased power costs, transmission costs, and net emission costs was associated with the natural gas used in generating electricity. The cost of natural gas includes various miscellaneous charges such as firm transportation service charges and other fuel handling expenses. During the Review Period, KCPL's natural gas price averaged \$** ** per MMBtu, based on 2,401,711 MMBtu of actual natural gas burned and costs of \$** **. Staff reviewed the contract terms and a sampling of invoices for gas purchased. KCPL receives natural gas services from 37 gas supply companies and 5 natural

 $<sup>^{\</sup>rm 18}$  Response to Data Request No. 0052.

**Table 6 - Confidential** 3

> Case No. EO-2019-0067 Schedule KJB-r2 Page 17 of 46

1	Table 7 lists the Gas Transportation Contracts in effect for the Review Period:
2	<u> Table 7 – Confidential</u>
3	**
1	**
4	
5	Table 8 identifies KCPL's intermediate and peaking generating units that burn natural gas:
6	<u> Table 8 – Confidential</u>
7	**
8	**
9	2. Summary of Cost Implications
10	If KCPL was imprudent in its purchasing decisions relating to natural gas, rate payer
11	harm could result from increased FAC charges.
12	3. Conclusion
13	Staff found no indication KCPL's purchases of natural gas were imprudent during the
14	Review Period.

1	4. Documents Reviewed
2 3	a. KCPL's responses to Staff Data Request Nos. 0001, 0002, 0013, 0025, 0032, 0047, 0047.1, 0061; and
4	b. KCPL's General Ledger, AP4, AP5 and AP6 FAR Filings, and monthly reports.
5	Staff Expert/Witness: Lisa Wildhaber
6	E. Coal and Rail Transportation Costs
7	1. Description
8	For the Review Period, \$** ** or **** % of KCPL's total fuel costs,
9	purchased power costs, transmission costs, and net emission allowance costs was associated
10	with the coal used in generating electricity. The cost of coal includes various miscellaneous
11	charges such as rail and other ground transportation service charges, and other fuel handling
12	expenses. Staff reviewed the contract terms of 6 short and long-term coal purchase contracts,
13	as well as a sampling of invoices for coal purchased and delivered. The counterparties for the
14	contracts are identified in Table 9:
15	Table 9 - Confidential
16	**
	<del></del>
17	**
18	The contracts provide coal delivery to KCPL's Hawthorn 5, Iatan 1 and 2, LaCygne 1 and 2,
19	and Montrose 2 and 3. The price of coal can either be a fixed price for the entire contract, a
20	fixed price for each year of the contract, a base price plus an escalation as calculated per the
21	contract, a price determined by the Master Purchase & Sales Agreement, or a price which is

22 index-based.

#### 2 If KCPL was imprudent in its decisions relating to purchasing and transporting coal, 3 rate payer harm could result from an increase in FAC charges. 4 3. Conclusion 5 Staff found no indication that KCPL's purchases and transportation of coal or its coal-6 related contracts were imprudent during the Review Period. 7 **Documents Reviewed** a. KCPL's fixed coal contract terms in place for the delivery of coal to each of its 8 9 generating units; 10 b. KCPL's responses to Staff Data Request Nos. 0001, 0002, 0013, 0022, 0032, 0033, 0047, 0047.1, 0061; and 11 12 c. KCPL's General Ledger, AP4, AP5 and AP6 FAR Filings, and monthly reports. 13 Staff Expert/Witness: Lisa Wildhaber 14 F. **Fuel Oil Costs** 15 1. **Description** For the Review Period, \*\* \_\_\_\_\_ \*\* or $** \equiv **$ % of KCPL's total fuel costs, 16 17 purchased power costs, transmission costs, and net emission allowance costs was associated 18 with the fuel oil used in generating electricity. The cost of fuel oil includes various 19 miscellaneous charges, such as rail and/or ground transportation service charges and other 20 miscellaneous fuel handling expenses. Staff reviewed the contract terms of KCPL's 2 oil 21 contracts that were in place during the Review Period, as well as a sampling of invoices for 22 fuel oil purchased. The contracts provide a primary delivery location and agreement on the 23 price. The price is based on the market price at the time KCPL purchases the fuel oil. The 24 counterparties for the fuel oil contracts are identified in Table 10: 25 Table 10 - Confidential \*\* 26 27 The fuel oil contracts provide delivery of fuel oil to various generating units. 28

**Summary of Cost Implications** 

2.

1	2. Summary of Cost Implications
2	If KCPL imprudently purchased fuel oil, rate payer harm could result from increased
3	FAC charges.
4	3. Conclusion
5	Staff found no indication KCPL's costs associated with its fuel oil contracts in place
6	were imprudent during the Review Period.
7	4. Documents Reviewed
8 9	a. KCPL's responses to Staff Data Request Nos. 0001, 0002, 0013, 0027, 0032, 0047, 0047.1, 0061; and
10	b. KCPL's General Ledger, AP4, AP5 and AP6 FAR Filings and monthly reports.
11	Staff Expert/Witness: Lisa Wildhaber
12	G. Transmission Costs
13	1. Description
14	For the Review Period, \$** ** or ** = ** % of KCPL's total fuel cost,
15	purchased power costs, transmission costs and net emission costs was associated with
16	transmission costs. There were two tariff sheets that were in effect during this Review Period.
17	KCPL's FAC Second Revised Sheet No. 50.3 (Applicable to Service Provided September 29,
18	2015 through June 7, 2017), effective July 27, 2017, defines the "TC" component as:
19	Transmission Costs:
20 21 22	The following costs reflected in FERC Account Number 565:
23 24 25 26 27 28 29	Subaccount 565000: non-SPP transmission used to serve off system sales or to make purchases for load and 7.3% of the SPP transmission service costs which includes the schedules listed below as well as any adjustments to the charges in the schedules below:
28 29 30 31 32 33 34	Schedule 7 – Long Term Firm and Short Term Point to Point Transmission Service Schedule 8 – Non Firm Point to Point Transmission Service Schedule 9 – Network Integration Transmission Service Schedule 10 – Wholesale Distribution Service Schedule 11 – Base Plan Zonal Charge and Region Wide Charge

1 2 3 4 5 6 7 8	Subaccount 565020: the allocation of the allowed costs in the 565000 account attributed to native load;  Subaccount 565027: the allocation of the allowed costs in the 565000 account attributed to transmission demand charges;  Subaccount 565030: the allocation of the allowed costs in account 565000 attributed to off-system sales.
9	KCPL's FAC Second Revised Sheet No. 50.14 (Applicable to Service Provided June 8, 2017
10	through December 6, 2018), defines the "TC" component as:
11	Transmission Costs:
12 13 14	The following costs reflected in FERC Account Number 565:
15 16 17 18 19	Subaccount 565000: non-SPP transmission used to serve off system sales or to make purchases for load and 20.91% of the SPP transmission service costs which includes the schedules listed below as well as any adjustments to the charges in the schedules below:
20 21 22 23 24 25 26	Schedule 7 – Long Term Firm and Short Term Point to Point Transmission Service Schedule 8 – Non Firm Point to Point Transmission Service Schedule 9 – Network Integration Transmission Service Schedule 10 – Wholesale Distribution Service Schedule 11 – Base Plan Zonal Charge and Region Wide Charge
27 28	Subaccount 565020: the allocation of the allowed costs in the 565000 account attributed to native load;
29 30 31 32	Subaccount 565027: the allocation of the allowed costs in the 565000 account attributed to transmission demand charges;
33 34	Subaccount 565030: the allocation of the allowed costs in account 565000 attributed to off-system sales.
35	For calculating TC, KCPL implemented a process whereby total transmission expenses were
36	tabulated and then costs not allowed in the FAC were removed. Staff reviewed the
37	transmission costs over the Review Period to verify only 7.3% of the SPP transmission
38	service costs are included (from the beginning of the Review Period through June 7, 2017)

service costs are included (from the beginning of the Review Period through June 7, 2017)

and only 20.91% of the SPP transmission service costs are included (from June 8, 2017

39

1	through the end of the Review Period). KCPL's transmission costs during the Review Period
2	are \$** **.
3	2. Summary of Cost Implications
4	If KCPL imprudently included transmission costs in the FAC, rate payer harm could
5	result from increased FAC charges.
6	3. Conclusion
7	Staff found no indication that KCPL's transmission costs were imprudent during the
8	Review Period.
9	4. Documents Reviewed
10	a. KCPL's General Ledger;
11	b. KCPL's responses to Staff Data Request Nos. 0002, 0047, 0047.1, and 0051; and
12	c. AP4, AP5 and AP6 FAR and other supporting work papers.
13	Staff Expert/Witness: Brooke Mastrogiannis
14	H. Nuclear Fuel
15	1. Description
16	For the Review Period \$** ** or ** ** % of KCPL's fuel costs,
17	purchased power costs, transmission costs, and net emission allowance costs is
18	associated with nuclear fuel used in the generation of electricity at the Wolf Creek Nuclear
19	Operating Corporation's generating unit. KCPL owns 47% of Wolf Creek Nuclear
20	Operating Corporation.
21	2. Summary of Cost Implications
22	If KCPL was imprudent in its purchasing decisions relating to nuclear fuel, rate payer
23	harm could result from increased FAC charges.
24	3. Conclusion
25	Staff found no indication that KCPL nuclear fuel costs were imprudent during the
26	Review Period.

1	4. Documents Reviewed
2 3	a. KCPL's responses to Staff Data Request Nos. 0001, 0002, 0013, 0047, 0047.1; and
4	b. KCPL's General Ledger, AP4, AP5 and AP6 FAR filings, and monthly reports.
5	Staff Expert/Witness: Lisa Wildhaber
	I CO Englandor Allermana
6	I. SO <sub>2</sub> Emission Allowances
7	1. Description
8	The Cross-State Air Pollution Rule ("CSAPR") is a ruling by the United States
9	Environmental Protection Agency ("EPA") that requires a number of states, including
10	Missouri, to reduce power plant emissions that contribute to ozone and/or fine particle
11	pollution in other states. The CSAPR replaced EPA's 2005 Clean Air Interstate Rule
12	("CAIR"), following the direction of a 2008 court decision that required EPA to issue a
13	replacement regulation. CSAPR implementation began on January 1, 2015.
14	The CSAPR requires Missouri to reduce its annual emissions of sulfur dioxide (SO <sub>2</sub> )
15	and nitrous oxides (NO <sub>x</sub> ) to help downwind states attain the 24-hour National Ambient Air
16	Quality Standards ("NAAQS"). The CSAPR also requires Missouri to reduce ozone season
17	emissions of NO <sub>x</sub> to help downwind states attain the 8-hour NAAQS.
18	On September 7, 2016, the EPA revised the CSAPR ozone season NO <sub>X</sub> program by
19	finalizing an update to CSAPR for the 2008 ozone NAAQS, known as the CSAPR Update.
20	The CSAPR Update ozone season NO <sub>X</sub> program largely replaced the original CSAPR ozone
21	season NO <sub>X</sub> program on May 1, 2017. The CSAPR Update will further reduce summertime
22	NO <sub>x</sub> emissions from power plants in the eastern U.S.
23	The requirements of CSAPR were in effect for the entire Review Period from
24	January 1, 2017 through June 30, 2018. The requirements for the CSAPR Update, effective
25	May 1, 2017, were effective in this Review Period. The CSAPR Update was effective for
26	Missouri, which reduced the summertime NOx emissions.
27	The primary mechanism of CSAPR is a cap-and-trade program that allows a
28	major source of NO <sub>X</sub> and/or SO <sub>2</sub> to trade excess allowances when its emissions of a
29	specific pollutant fall below its cap for that pollutant. Originally, the EPA issued a model
30	cap-and-trade program for power plants, which could have been used by states as the
	Case No. EO-2019-0067

1	primary control mechanism under CAIR. This model, with modifications, had continued
2	under CSAPR.
3	For the Review Period ending June 30, 2018, KCPL's total net emission allowance
4	cost was \$** **.
5	2. Summary of Cost Implications
6	If KCPL imprudently used, purchased or banked its NO <sub>X</sub> and SO <sub>2</sub> emission
7	allowances, ratepayer harm could result from an increase in KCPL's FAC charges.
8	3. Conclusion
9	Staff found no indication that KCPL was imprudent in its purchases, banking, or usage
10	of CSAPR NO <sub>X</sub> and SO <sub>2</sub> allowances.
11	4. Documents Reviewed
12	a. Company responses to Staff's Data Request Nos. 0035, 0037, 0038 and 0041; and
13 14	b. Staff Reports: GL for 2 <sup>nd</sup> Prudency Review and KCPL Monthly Reports Combined.
15	Staff Expert/Witness: Cynthia M. Tandy
16	J. Off-System Sales Revenue
16 17	J. Off-System Sales Revenue  1. Description
17	1. Description
17 18	1. Description Off-system sales revenues ("OSSR") is a component of KCPL's FAC. There were
17 18 19	1. Description Off-system sales revenues ("OSSR") is a component of KCPL's FAC. There were two tariff sheets that were in effect during this Review Period. Second Revised Sheet No. 50.3
17 18 19 20	1. Description Off-system sales revenues ("OSSR") is a component of KCPL's FAC. There were two tariff sheets that were in effect during this Review Period. Second Revised Sheet No. 50.3 (Applicable to Service Provided September 29, 2015 through June 7, 2017), effective July 27,
17 18 19 20 21	1. Description Off-system sales revenues ("OSSR") is a component of KCPL's FAC. There were two tariff sheets that were in effect during this Review Period. Second Revised Sheet No. 50.3 (Applicable to Service Provided September 29, 2015 through June 7, 2017), effective July 27, 2017, and Second Revised Sheet No. 50.14 (Applicable to Service Provided June 8, 2017).
17 18 19 20 21 22	1. Description Off-system sales revenues ("OSSR") is a component of KCPL's FAC. There were two tariff sheets that were in effect during this Review Period. Second Revised Sheet No. 50.3 (Applicable to Service Provided September 29, 2015 through June 7, 2017), effective July 27, 2017, and Second Revised Sheet No. 50.14 (Applicable to Service Provided June 8, 2017 through December 6, 2018), defines the OSSR component as:

1 related fees where the virtual energy transaction is a hedge in 2 support of physical operations related to a generating resource 3 or load, generation/export charges, ancillary services including 4 non-performance and distribution payments and SPP uplift revenues or credits. Off-system sales revenues from full and 5 6 partial requirements sales to municipalities that are served 7 through bilateral contracts in excess of one year shall be 8 excluded from OSSR component; Subaccount 447012: capacity 9 charges for capacity sales one year or less in duration; 10 Subaccount 447030: the allocation of the includable sales in 11 account 447020 not attributed to retail sales. 12 Staff reviewed the off-system sales quantities and revenues over the Review Period, and 13 KCPL's off-system sales revenue amount is \$\*\* **Summary of Cost Implications** 14 15 KCPL's revenues from off-system sales are an offset against total fuel costs, purchased power costs, transmission costs and net emission allowance costs. This is because 16 17 KCPL's ratepayers pay for the resources used to generate any energy that KCPL sells.<sup>19</sup> 18 If KCPL did not make available its generating units in the SPP for off-system sales to be 19 made, ratepayers could be harmed by such imprudence as a result of an increase in KCPL's FAC charges.<sup>20</sup> 20 21 Conclusion 3. 22 Staff found no indication that KCPL imprudently withheld availability of its 23 generating units in the SPP for off-system sales to be made. 24 4. **Documents Reviewed** 25 a. KCPL's responses to Staff Data Request Nos. 0002, 0047, 0047.1, and 0051; 26 b. KCPL's filings in this case and FAC tariff sheets; and 27 c. KCPL's monthly reports and AP4, AP5 and AP6 FAR filing worksheets. 28 Staff Expert/Witness: Brooke Mastrogiannis

<sup>19</sup> Serving those ratepayers (native load) is a higher priority than making an off-system sale.

<sup>&</sup>lt;sup>20</sup> Beginning March 1, 2014 the SPP implemented the Integrated Marketplace that changed GMO's practice of making off-system sales. See the Utilization of Generation Capacity section above.

### 1

### 2

# 34567

## 6789

### 10 11 12

### 131415

17 18

16

19 20

21 22

23

### K. Renewable Energy Credit Revenues

### 1. Description

The Missouri Renewable Energy Standard ("RES")<sup>21</sup> and requires all investor-owned electric utilities in Missouri to provide at least two percent (2%) of their retail electricity sales using renewable energy resources in each calendar year 2011 through 2013, and to increase that percentage over time to at least fifteen percent (15%) by 2021.<sup>22</sup> Commission rule 4 CSR 240-20.100 Electric Utility Renewable Energy Standard Requirements, which first became effective September 30, 2010, contains the definitions, structure, operations, and procedures for implementing the RES.

The RES rule creates two categories of energy-generating resources: non-renewable energy resources (including purchased power from non-renewable energy sources) and renewable energy resources (including purchased power from renewable energy sources).<sup>23</sup> Renewable energy resources produce electrical energy and include wind sources, solar sources, thermal sources, hydroelectric sources, photovoltaic cells and panels, fuel cells using hydrogen produced by one (1) of the above named electrical energy sources, and other sources of energy that become available after August 28, 2007, and are certified as renewable by the Missouri Department of Economic Development -- Division of Energy ("Division of Energy"). Once an energy resource is certified, it begins producing RECs, with one (1) REC representing one (1) megawatt-hour of electricity that has been generated from the renewable energy resource. These credits can be sold and/or traded in the market place bundled with or without the energy that generated the REC.<sup>24</sup> The cost of a REC (as a RES compliance cost) cannot be recovered through the FAC as an off-set to fuel costs.

<sup>&</sup>lt;sup>21</sup> Section 393.1020 RSMo. Supp. 2013 and Section 393.1030.1(1), RSMo. Supp. 2013.

<sup>&</sup>lt;sup>22</sup> However, the annual level of required renewable energy resources may be constrained due to 4 CSR 240-20.100(5)(A) Retail Rate Impact. (A) The retail rate impact, as calculated in subsection (5)(B), may not exceed one percent (1%) for prudent costs of renewable energy resources directly attributable to RES compliance. The retail rate impact shall be calculated on an incremental basis for each planning year that includes the addition of renewable generation directly attributable to RES compliance through procurement or development of renewable energy resources, averaged over the succeeding ten (10)-year period, and shall exclude renewable energy resources owned or under contract prior to the effective date of this rule.

<sup>&</sup>lt;sup>23</sup> 4 CSR 240-20.100(5)(B).

<sup>&</sup>lt;sup>24</sup> 4 CSR 240-20.100(6)(B)(5)(J).

<sup>&</sup>lt;sup>25</sup> 4 CSR 240-20.100(6)(A)(16).

During the Review Period, the RES rule required KCPL to annually serve 10% of its retail load using renewable energy resources. Also, during the Review Period, KCPL did not sell or purchase solar RECs outside of those bundled with purchased power from qualified customer generator's operational solar electric systems as a condition of receiving solar rebates. KCPL received non-solar RECs bundled with renewable energy from KCPL's Spearville 1 and Spearville 2 wind facilities, and contractually through purchased power agreements with five renewable energy providers (Cimarron 2, Spearville 3, Slate Creek, Waverly, and Osborn Wind). Some of the RECs created by generation at Spearville 1, Spearville 2, Spearville 3, and Cimarron 2 were used for 2016 and 2017 RES compliance.

In Staff Data Request No. 0044, Staff requested "the dollar amount of Renewable Energy Credit revenues" for the period January 1, 2017 through June 30, 2018, KCP&L responded, "KCPL did not sell any RECs during the review period of January 1, 2017 through June 30, 2018...." Staff reviewed KCPL's responses and determined that 722,628 REC's were allowed to expire during the Review Period without any evidence that KCPL attempted to sell any of the 722,628 RECs prior to their expiring.

### 2. Summary of Cost Implications

If the Commission found that KCPL was imprudent in its management of RECs, by including the cost of purchasing RECs when calculating its FAC charges, or not selling RECs when it had the opportunity to do so, ratepayer harm could result from increased costs or decreased revenues being included in the calculation of its FAC charges.

### 3. Conclusion

With regards to FAC prudency, Staff did find evidence of imprudence by KCPL's management of its RECs during the Review Period. Staff could not find that KCPL took any action that would have allowed it to generate revenue from 722,628 RECs that were not needed to satisfy its RES compliance and were simply allowed to expire during the Review Period. Staff recommends the Commission issue an Ordered Adjustment ("OA") in the amount of \$350,351 which is equal to 722,628 RECs times Staff's estimated average sales price of \$0.48483 per REC during the 18-month Review Period.

<sup>&</sup>lt;sup>26</sup> KCPL 2016 Annual Renewable Energy Standard Compliance Report and KCPL 2017 Annual Renewable Energy Standard Compliance Report [Corrected].

1	4. Documents Reviewed
2	a. Staff Data Request Nos. 0044, 0044.1 and 0044.2;
3	b. Staff Data Requests, in Case ER-2018-0145, Nos. 0400 and 0400.1;
4	c. KCPL 2016 and 2017 Annual Renewable Energy Standard Compliance Reports;
5	d. Staff Report in Case EO-2017-0269; and
6	e. Staff Work Sheet KCPL RECs_1-8-19 Expired Download and Sorted.
7	Staff Experts/Witnesses: Dana E. Eaves and Kory J. Boustead
8	L. Cimarron 2 Wind Farm Purchased Power Agreement
9	1. Description
10	KCPL has a long-term (20-year) PPA with CPV Cimarron II Renewable Energy
11	Company, LLC for energy and RECs generated by the Cimarron 2 Wind Farm located in
12	Kansas. The contract is based on ** ** MW of capacity that KCPL began receiving on
13	June 1, 2012 at a fixed price of \$** ** per MWh. The contract is a "take-or pay"
14	contract (i.e., KCPL has to receive and pay for the energy whether it needs the energy or not),
15	which is a standard feature of many wind PPAs. The contract is for the energy and
16	RECs generated by the wind farm. In its response to Staff Data Request No. 0044 KCPL
17	stated, "KCPL did not sell any RECs during the Review Period of January 1, 2017 through
18	June 30, 2018". Total costs of electricity under the Cimarron 2 PPA was \$** **
19	with revenue associated with sales of \$** ** which resulted in a net loss of
20	\$** ** for the Review Period.
21	2. Summary of Cost Implications
22	If KCPL imprudently included either the energy and/or REC costs in its FAC
23	calculations, ratepayer harm could result from an increase in FAC charges. Rule 4 CSR 240-
24	20.090(1)(B) and (C), and KCPL's FAC allow for purchased power costs and revenues in
25	FERC Account Number 555 to be recovered through the FAC. Staff found that the failure of
26	KCPL to sell a number of RECs and allowing them to expire, which created no revenue, was
27	imprudent and is addressed in Section K of this report.

### 3. Conclusions

Staff has identified that the Cimarron Wind Farm PPA is creating a significant amount of additional costs compared to the revenue received. Staff notes this is a long-term PPA and the performance of this contract should be viewed on a long-term basis and not just from the results during this Review Period. Staff is proposing an adjustment as addressed in Section K of this report related to KCPL's failure to sell RECs created by this wind facility. Staff recommends the Commission issue an Ordered Adjustment as previously determined in Section K of this report. Staff is not proposing an adjustment related to the financial performance of the energy portion of this contract.

### 4. Documents Reviewed

- a. Staff Data Request Nos. 0001, 0002, 0021, 0045, 0047, 0047.1, 0059 and 0060;
- b. KCPL 2017 Annual Renewable Energy Standard Compliance Plan;
- c. KCPL 2018 Annual Renewable Energy Standard Compliance Plan;
- d. Staff Report in Case No. EO-2017-0271; and
- e. Staff Report in Case No. EO-2018-0290.

Staff Expert/Witness: Lisa Wildhaber

### M. Slate Creek Wind Project Purchased Power Agreement

### 1. Description

KCPL has a long-term (20-year) PPA with Slate Creek Wind Project, LLC for energy and RECs generated by the Slate Creek Wind Project beginning in November 2015. The contract is also a "take-or pay" contract for renewable wind energy and RECs (i.e., KCPL has to receive and pay for the energy whether it needs the energy or not), and is based on a fixed energy price of \$\*\* \_\_\_\_ \*\* per MWh and a capacity of \*\* \_\_\_ \*\* MW. In its response to Staff Data Request No. 0044 KCPL stated, "KCPL did not sell any RECs during the review period January 1, 2017 through June 30, 2018". Costs of electricity under the Slate Creek Wind Project PPA was \$\*\* \_\_\_\_ \*\* with revenue associated with sales of \$\*\* which resulted in a net loss of \$\*\*

1	2. Summary of Cost Implications
2	If KCPL imprudently included either the energy and/or REC costs in its FAC
3	calculations, ratepayer harm could result from an increase in FAC charges. Rule 4 CSR 240-
4	20.090(1)(B) and (C), and KCPL's FAC allow for purchased power costs and revenues in
5	FERC Account Number 555 to be recovered through the FAC. Staff found that the failure of
6	KCPL to sell a number of RECs and allowing them to expire, which created no revenue, was
7	imprudent and is addressed in Section K of this report.
8	3. Conclusions
9	Staff has identified that the Slate Creek Wind Project PPA is creating a significant
10	amount of additional costs compared to the revenue received. Staff notes this is a long-term
11	PPA and the performance of this contract should be viewed on a long-term basis and not just
12	from the results during this Review Period. Staff is proposing an adjustment as addressed in
13	Section K of this report related to KCPL's failure to sell RECs created by this wind facility.
14	Staff recommends the Commission issue an Ordered Adjustment as previously determined in
15	Section K of this report. Staff is not proposing an adjustment related to the financial
16	performance of the energy portion of this contract.
17	4. Documents Reviewed
18	a. Staff Data Request Nos. 0001, 0002, 0021, 0045, 0047, 0047.1, 0059 and 0060;
19	b. KCPL 2017 Annual Renewable Energy Standard Compliance Plan;
20	c. KCPL 2018 Annual Renewable Energy Standard Compliance Plan;
21	d. Staff Report in Case No. EO-2017-00271; and
22	e. Staff Report in Case No. EO-2018-00290.
23	Staff Expert/Witness: Lisa Wildhaber
24	N. Osborn Wind Energy Purchased Power Agreement
25	1. Description
26	KCPL has a long-term (20-year) PPA with NextEra Energy Resources for energy and
27	RECs generated by the Osborn Wind Energy Center located in Missouri. The contract is
28	based on a fixed price of \$** ** per MWh and ** ** MW of capacity that KCPL
29	began receiving in December 2016. In its response to Staff Data Request No. 0044 KCPL

stated, "KCPL did not sell any RECs during the review period of January 1, 2017 through June 30, 2018". The contract is a "take-or pay" contract (i.e., KCPL has to receive and pay for the energy whether it needs the energy or not), which is a standard feature of many wind PPAs. The contract is for the energy and RECs generated by the wind farm. Costs of electricity under the Osborn Wind Energy PPA was \$\*\* \*\* with revenue \*\* which resulted in a net loss of \$\*\* associated with sales of \$\*\* for the Review Period. 2. **Summary of Cost Implications** If KCPL imprudently included either the energy and/or REC costs in its FAC calculations, ratepayer harm could result from an increase in FAC charges. Rule 4 CSR 240-20.090(1)(B) and (C), and KCPL's FAC allow for purchased power costs and revenues in FERC Account Number 555 to be recovered through the FAC. Staff found that the failure of KCPL to sell a number of RECs and allowing them to expire, which created no revenue, was imprudent and is addressed in Section K of this report. 3. **Conclusions** Staff has identified that the Osborn Wind Energy PPA is creating a significant amount of additional costs compared to the revenue received. Staff notes this is a long-term PPA and the performance of this contract should be viewed on a long-term basis and not just from the results during this Review Period. Staff is proposing an adjustment as addressed in Section K of this report related to KCPL's failure to sell RECs created by this wind facility. Staff recommends the Commission issue an Ordered Adjustment as previously determined in Section K of this report. Staff is not proposing an adjustment related to the financial performance of the energy portion of this contract. 4. **Documents Reviewed** a. Staff Data Request Nos. 0001, 0002, 0021, 0045, 0047, 0047.1, 0059 and 0060; b. KCPL 2017 Annual Renewable Energy Standard Compliance Plan; c. KCPL 2018 Annual Renewable Energy Standard Compliance Plan; d. Staff Report in Case No. EO-2017-0271; and

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

e. Staff Report in Case No. EO-2018-0290.

Staff Expert/Witness: Lisa Wildhaber

### O. Spearville 3 Wind Energy Facility Purchased Power Agreement

### 1. Description

KCPL has a long-term (20-year) PPA with Spearville 3, LLC for energy and RECs generated by the Spearville 3 Wind Energy Facility located in Kansas. The contract is based on a fixed price of \$\*\* \_\_\_\_ \*\* per MWh and \*\* \_\_\_ \*\* MW of capacity that KCPL began receiving in October, 2012. The contract is a "take-or pay" contract (i.e., KCPL has to receive and pay for the energy whether it needs the energy or not), which is a standard feature of many wind PPAs. The contract is for the energy and RECs generated by the wind farm. In its response to Staff Data Request No. 0044 KCPL stated, "KCPL did not sell any RECs during the review period of January 1, 2017 through June 30, 2018". Costs of electricity under the Spearville 3 PPA was \$\*\* \_\_\_\_ \*\* with revenue associated with sales of \$\*\* \_\_\_\_ \*\* which resulted in a net loss of \$\*\* \_\_\_\_ \*\* for the Review Period.

### 2. Summary of Cost Implications

If KCPL imprudently included either the energy and/or REC costs in its FAC calculations, ratepayer harm could result from an increase in FAC charges. Rule 4 CSR 240-20.090(1)(B) and (C), and KCPL's FAC allow for purchased power costs and revenues in FERC Account Number 555 to be recovered through the FAC. Staff found that the failure of KCPL to sell a number of RECs and allowing them to expire, which created no revenue, was imprudent and is addressed in Section K of this report.

### 3. Conclusions

Staff has identified that the Spearville 3 Wind Energy PPA is creating a significant amount of additional costs compared to the revenue received. Staff notes this is a long-term PPA and the performance of this contract should be viewed on a long-term basis and not just from the results during this Review Period. Staff is proposing an adjustment as addressed in Section K of this report related to KCPL's failure to sell RECs created by this wind facility. Staff recommends the Commission issue an Ordered Adjustment as previously determined in Section K of this report. Staff is not proposing an adjustment related to the financial performance of the energy portion of this contract.

1	4. Documents Reviewed
2	a. Staff Data Request Nos. 0001, 0002, 0021, 0045, 0047, 0047.1, 0059 and 0060;
3	b. KCPL 2017 Annual Renewable Energy Standard Compliance Plan;
4	c. KCPL 2018 Annual Renewable Energy Standard Compliance Plan;
5	d. Staff Report in Case No. EO-2017-0271; and
6	e. Staff Report in Case No. EO-2018-0290.
7	Staff Expert/Witness: Lisa Wildhaber
8	P. Waverly Wind Farm Purchased Power Agreement
9	1. Description
10	KCPL has a long-term (20-year) PPA with Waverly Wind Farm, LLC for energy and
11	RECs generated by the Waverly Wind Farm beginning in November 2015. The contract is
12	also a "take-or pay" contract for renewable wind energy and RECs (i.e., KCPL has to receive
13	and pay for the energy whether it needs the energy or not), and is based on a fixed energy
14	price of \$** ** per MWh and a capacity of ** ** MW. In its response to Staff
15	Data Request No. 0044 KCPL stated, "KCPL did not sell any RECs during the review period
16	of January 1, 2017 through June 30, 2018". Costs of electricity under the Waverly Wind Farm
17	PPA was \$** ** with revenue associated with sales of \$** ** which
18	resulted in a net loss of \$** ** for the Review Period.
19	2. Summary of Cost Implications
20	If KCPL imprudently included either the energy and/or REC costs in its FAC
21	calculations, ratepayer harm could result from an increase in FAC charges. Rule 4 CSR 240-
22	20.090(1)(B) and (C), and KCPL's FAC allow for purchased power costs and revenues in
23	FERC Account Number 555 to be recovered through the FAC. Staff found that the failure of
24	KCPL to sell a number of RECs and allowing them to expire, which created no revenue, was
25	imprudent and is addressed in Section K of this report.
26	3. Conclusions
27	Staff has identified that the Waverly Wind Farm PPA is creating a significant amount
28	of additional costs compared to the revenue received. Staff notes this is a long-term PPA and
29	the performance of this contract should be viewed on a long-term basis and not just from the

1	results during this Review Period. Staff is proposing an adjustment as addressed in Section K
2	of this report related to KCPL's failure to sell RECs created by this wind facility. Staff
3	recommends the Commission issue an Ordered Adjustment as previously determined in
4	Section K of this report. Staff is not proposing an adjustment related to the financial
5	performance of the energy portion of this contract.
6	4. Documents Reviewed
7	a. Staff Data Request Nos. 0001, 0002, 0021, 0045, 0047, 0047.1, 0059 and 0060;
8	b. KCPL 2017 Annual Renewable Energy Standard Compliance Plan;
9	c. KCPL 2018 Annual Renewable Energy Standard Compliance Plan;
10	d. Staff Report in Case No. EO-2017-0271; and
11	e. Staff Report in Case No. EO-2018-0290.
12	Staff Expert/Witness: Lisa Wildhaber
13	Q. Rock Creek Wind Project Purchased Power Agreement
14	1. Description
15	KCPL has a long-term (20-year) PPA with Rock Creek Wind Project, LLC for energy
16	and RECs generated by the Rock Creek Wind Farm located in Missouri. The contract is also a
17	"take-or pay" contract for renewable wind energy and RECs (i.e., KCPL has to receive and
18	pay for the energy whether it needs the energy or not), and is based on a fixed energy price of
19	\$** ** per MWh and a capacity of ** ** MW, beginning August 2017. In its
20	response to Staff Data Request No. 0044 KCPL stated, "KCPL did not sell any RECs during
21	the review period of January 1, 2017 through June 30, 2018". Costs of electricity under the
22	Rock Creek Wind Project was \$** ** with revenue associated with sales of
23	\$** ** which resulted in a net loss of \$** ** for the Review Period.
24	2. Summary of Cost Implications
25	If KCPL imprudently included either the energy and/or REC costs in its FAC
26	calculations, ratepayer harm could result from an increase in FAC charges. Rule 4 CSR 240-
27	20.090(1)(B) and (C), and KCPL's FAC allow for purchased power costs and revenues in

FERC Account Number 555 to be recovered through the FAC. Staff found that the failure of

28

1	KCPL to sell a number of RECs and allowing them to expire, which created no revenue, was
2	imprudent and is addressed in Section K of this report.
3	3. Conclusions
4	Staff has identified that the Rock Creek Wind Project PPA is creating a significant
5	amount of additional costs compared to the revenue received. Staff notes this is a long-term
6	PPA and the performance of this contract should be viewed on a long-term basis and not just
7	from the results during this Review Period. Staff is proposing an adjustment as addressed in
8	Section K of this report related to KCPL's failure to sell RECs created by this wind facility.
9	Staff recommends the Commission issue an Ordered Adjustment as previously determined in
10	Section K of this report. Staff is not proposing an adjustment related to the financial
11	performance of the energy portion of this contract.
12	4. Documents Reviewed
13	a. Staff Data Request Nos. 0001, 0002, 0021, 0045, 0047, 0047.1, 0059 and 0060;
14	b. KCPL 2017 Annual Renewable Energy Standard Compliance Plan;
15	c. KCPL 2018 Annual Renewable Energy Standard Compliance Plan;
16	d. Staff Report in Case No. EO-2017-0271; and
17	e. Staff Report in Case No. EO-2018-0290.
18	Staff Expert/Witness: Lisa Wildhaber
10	R. Purchased Power Costs
19	R. Purchased Power Costs
20	1. Description
21	KCPL's FAC Second Revised Sheet No. 50.2, applicable to service provided
22	September 29, 2015 through June 7, 2017, and Second Revised Sheet No. 50.13, applicable to
23	service provided June 8, 2017 through December 6, 2018, defines the Purchased Power Costs
24	("PP") components, which are purchases of power through the SPP IM and not electric
25	generated by the company.
26	Staff has determined that KCPL's total purchased power expense for the prudence
27	Review Period is \$** **, as shown previously in Table 2. More detail for the
28	cost of Purchased Power is shown in Table 11.

<u>Table 11 – Confidential</u>

\*\*



KCPL had six long-term purchase power agreements in effect at the start of the review period: Cimarron 2, Slate Creek, Spearville 3, Waverly, Osborn and The Central Nebraska Public Power and Irrigation District ("CNPPID"). Staff reviewed the terms and conditions of each long-term purchase power agreement and it appears that each party complied with the contract during the Review Period. Members of the Missouri Public Service Commission Staff review the prudency of long-term purchased power contracts during a general rate case as part of its determination of what generation plants and purchased power contracts should be input into Staff's fuel model. If a determination of imprudence is made by Staff in the general rate case, Staff determines the appropriate resource (e.g. generation plant and/or purchased power contract) to be used in the fuel model. Therefore, the prudency of entering into long-term purchased power contracts is taken "as given" in this FAC prudence review issue.

### Cimarron 2, Slate Creek, Osborn, Spearville 3, Waverly, and Rock Creek

KCPL had long-term purchased power contracts with six wind farms during the Review Period. A further description of these contracts can be found in Sections L, M, N, O, P, and Q.

### **CNPPID Hydro Power Purchase Agreement**

KCPL has a long-term (10-year) purchase power agreement with CNPPID ending December 31, 2023, for energy generated by several hydroelectric facilities (Jeffery Hydro 1, Jeffery Hydro 2, Johnson Hydro 11, Johnson Hydro 12, and Johnson Hydro 21) located in Nebraska. The contract is based on a fixed energy price of \$\*\* \_\_\_\_ \*\* per MWh and \*\* \_\_\_ \*\* MW of capacity and is a "take-or pay" contract. CNPPID is not a Division of Energy certified renewable energy resource. Costs of electricity under the CNPPID purchase power agreement are \$\*\* \_\_\_\_ \*\* for January 1, 2017 through June 30, 2018.

### **Non-firm Short Term Energy**

KCPL purchases hourly energy in SPP's Integrated Market ("IM"). Since implementing the IM, SPP has controlled the economic dispatch of KCPL's generation. During times that KCPL's load exceeds KCPL's generation, KCPL becomes a net purchaser in the SPP market. These SPP market purchases are from other electric suppliers to help meet KCPL's load during times of forced or planned plant outages and during times when the market price is below the marginal cost of providing that energy from KCPL's generating units. Under the SPP IM, KCPL's generation is offered to the SPP Integrated Marketplace and energy needed for native load requirements is purchased from the SPP market. "Spot purchases and sales are made based upon SPP market and operating conditions for the entire SPP footprint." Costs for the IM purchases are included as "Non-Firm Short Term Energy" in Table 2 and Table 5. Further discussion of KCPL's participation in these markets can be found in Section III.A. of this report.

### **Short Term Demand**

There were no capacity charges for capacity purchases less than 12 months in duration during the Review Period.

### 2. Summary of Cost Implication

If KCPL erred when it booked costs from purchased power contracts or if KCPL imprudently participated in the IM, ratepayer harm could result from an increase in costs collected through the FAC.

### 3. Conclusion

Staff found no indication of imprudence by KCPL related to its purchasing short term capacity, booking long-term purchased power contracts, or purchasing non-firm short term energy.

### 4. Documents Reviewed

- a. Staff Data Request Nos. 0001, 0002, 0010, 0021, 0045, 0047, 0047.1, 0059 and 0060;
- b. PPA Contracts; and
- c. Section III.A. of this report.

Staff Expert/Witness: Lisa Wildhaber

### IV. INTEREST

1

2

3

4

5

67

8

9

10 11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

### 1. Description

During each accumulation period, KCPL is required to calculate a monthly interest amount based on KCPL's short-term debt borrowing rate that is applied to the under-recovered or over-recovered fuel and purchased power costs. KCPL utilizes its Commercial Paper program as their primary source of short-term funding. KCPL issues commercial paper on virtually a daily basis through five independent dealers and interest rates are determined daily by the financial markets based upon market rates, KCPL's Commercial Paper rating, the amount of funds requested and the term. For the Review Period KCPL's average monthly interest rate was 0.22%. KCPL's interest amount applied to the under-recovered or over-recovered fuel and purchased power costs was \$1,987,715<sup>27</sup>. The interest amount is component "I" of KCPL's FAC.

<sup>&</sup>lt;sup>27</sup> This interest amount includes interest amounts during AP4, AP5 and AP6 plus adjustments to interest amounts for prior accumulation periods made during the Review Period. Following is the list of prior accumulation period adjustment with the resulting interest amounts: 1) AP4-There was an adjustment for unit train depreciation and property tax of (\$382,900) with (\$7,342) of interest removed from FAC and a second adjustment where SFR/Muni amount removed twice with interest of \$1,840 added back to the FAC from AP3; 2) AP5-A

1	2. Summary of Interest Implications
2	If KCPL imprudently calculated the monthly interest amounts or used short-term debt
3	borrowing rates that did not fairly represent the actual cost of KCPL's short-term debt,
4	ratepayers could be harmed by FAC charges that are too high.
5	3. Conclusion
6	Staff found no evidence that KCPL imprudently determined the monthly interest
7	rates and interest amounts for its under-recovered or over-recovered fuel and purchased
8	power costs.
9	4. Documents Reviewed
10	KCPL's monthly interest calculation work papers in support of the interest calculation
11	amount on the under-recovered or over-recovered balance.
12 13 14	<ul> <li>Data Request No. 0001-Files named: Q0001 CONF KCPL FAC section 7 Filing – 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> Accumulation Files (June 2017, December 2017, June 2018 respectively);</li> </ul>
15	b. Data Request No. 0046 Response-mpsc_20180926-f.2-answer0046.docx; and
16 17	c. Staff Work Papers: KCPL Section 7 Filing-4 <sup>th</sup> , 5 <sup>th</sup> and 6 <sup>th</sup> Accumulation (June 2017, December 2017, June 2018 respectively).
18	Staff Expert/Witness: Cynthia M. Tandy

transmission cost correction was make of (\$28,736) with (\$851) in interest from prior period that was removed; and 3) AP6-an adjustment from December 2017 on FAR monthly filing calculations of \$9,633 with \$22 adjustment in interest added back. Thus, the total interest only adjustments for the Review Period was (\$6,331) for a total interest amount of \$1,981,384.

In the Matter of the Second Prudence Review ) of Costs Subject to the Commission- ) Case No. EO-2019-0068 Approved Fuel Adjustment Clause of Kansas ) City Power and Light Company )
AFFIDAVIT OF KORY J. BOUSTEAD
STATE OF MISSOURI ) ) ss. COUNTY OF COLE )
COMES NOW KORY J. BOUSTEAD and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing Staff Report – Second Prudence Review; and that the same is true and correct according to her best knowledge and belief.  Further the Affiant sayeth not.  KORY J. BOUSTEAD
JURAT
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 284 day of
February 2019.
D. SUZIE MANKIN Notary Public - Notary Seal State of Missourd Commissioned for Cole County My Commission Expires: December 12, 2020 Commission Number: 12412070  D. SUZIE MANKIN Notary Public

In the Matter of the Second Prudence Review ) of Costs Subject to the Commission- ) Case No. EO-2019-0068 Approved Fuel Adjustment Clause of Kansas ) City Power and Light Company )		
AFFIDAVIT OF DANA E. EAVES		
STATE OF MISSOURI ) ) ss. COUNTY OF COLE )		
<b>COMES NOW DANA E. EAVES</b> and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing <i>Staff Report – Second Prudence Review</i> ; and that the same is true and correct according to his best knowledge and belief.		
Further the Affiant sayeth not.  DANA E. EAVES		
JURAT		
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 day of February 2019.		
D. SUZIE MANKIN Notary Public - Notary Seal State of Missouri Commissioned for Cole County My Commission Expires: December 12, 2020 Commission Number 12, 1241070		

In the Matter of the Second Prudence Review ) of Costs Subject to the Commission- ) Case No. EO-2019-0068 Approved Fuel Adjustment Clause of Kansas ) City Power and Light Company )			
AFFIDAVIT OF JORDAN HULL			
STATE OF MISSOURI ) ) ss. COUNTY OF COLE )			
COMES NOW JORDAN HULL and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing Staff Report – Second Prudence Review; and that the same is true and correct according to his best knowledge and belief.			
Further the Affiant sayeth not.  JORDAN HULL			
JURAT			
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 day of February 2019.			
D. SUZIE MANKIN Notary Public - Notary Seal State of Missourl Commissioned for Cole County My Commission Expires: December 12, 2020 Commission Number: 12412070 Notary Public			

In the Matter of the Second Prudence Review ) of Costs Subject to the Commission- ) Case No. EO-2019-0068 Approved Fuel Adjustment Clause of Kansas ) City Power and Light Company )			
AFFIDAVIT OF BROOKE MASTROGIANNIS			
STATE OF MISSOURI ) ) ss. COUNTY OF COLE )			
COMES NOW BROOKE MASTROGIANNIS and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing <i>Staff Report – Second Prudence Review</i> ; and that the same is true and correct according to her best knowledge and belief.			
Further the Affiant sayeth not.  BROOKE MASTROGIANNIS			
JURAT			
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 284 day of			
February 2019.			
D. SUZIE MANKIN Notary Public - Notary Seal State of Missouri Commissioned for Cole County My Commission Expires: December 12, 2020 Commission Number: 12412070			

of Costs Subject to the Commission- ) Case No. EO-2019-0068 Approved Fuel Adjustment Clause of Kansas ) City Power and Light Company )
AFFIDAVIT OF CYNTHIA M. TANDY
STATE OF MISSOURI ) ) ss. COUNTY OF COLE )
COMES NOW CYNTHIA M. TANDY and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing <i>Staff Report – Second Prudence Review</i> ; and that the same is true and correct according to her best knowledge and belief.
Further the Affiant sayeth not.  CYNTHIA M. TANDY
JURAT
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 28th day of
February 2019.
D. SUZIE MANKIN Notary Public - Notary Seal State of Missouri Commissioned for Cole County My Commission Expires: December 12, 2020 Commission Number: 12412070

### **OF THE STATE OF MISSOURI**

of Costs Subject to the Commission- ) Case No. EO-2019-0068

In the Matter of the Second Prudence Review )

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missourt
Commissioned for Cole County
My Commission Expires: December 12, 2020
Commission Number: 12412070

Approved Fuel Adjustment Clause of Kansas ) City Power and Light Company )				
AFFIDAVIT OF LISA WILDHABER				
STATE OF MISSOURI COUNTY OF COLE	)	SS.		
COMES NOW LISA WILDHABER and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing <i>Staff Report – Second Prudence Review</i> ; and that the same is true and correct according to her best knowledge and belief.				
Further the Affiant saye	th not.	LISA WILDHABER		
		JURAT		
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 day of				
February 2019.		er en		

Notary Public

Case No. EO-2019-0067 Schedule KJB-r2 Page 46 of 46