

**EXHIBIT**

316

**Exhibit No.:** Hedging Expenses  
**Issue(s):** Riley/Direct  
**Witness/Type of Exhibit:** Public Counsel  
**Sponsoring Party:** ER-2016-0285  
**Case No.:**

**FILED<sup>2</sup>**

FEB 21 2017

**DIRECT TESTIMONY**

**OF**

**Missouri Public  
Service Commission**

**JOHN S. RILEY**

Submitted on Behalf of the Office of the Public Counsel

**KANSAS CITY POWER & LIGHT COMPANY**

CASE NO. ER-2016-0285

November 30, 2016

OPC Exhibit No. 316  
Date 2.9.17 Reporter UB  
File No. ER-2016-0285

**BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI**

In the Matter of Kansas City Power & Light Company's Request for Authority to Implement A General Rate Increase for Electric Service )  
)  
)  
)

Case No. BR-2016-0285

**AFFIDAVIT OF JOHN S. RILEY**

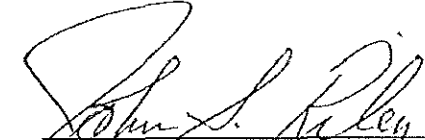
**STATE OF MISSOURI** )

) ss

**COLE COUNTY OF COLE** )

John S. Riley, of lawful age and being first duly sworn, deposes and states:

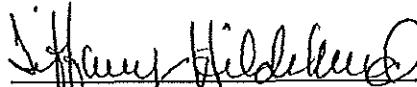
1. My name is John S. Riley. I am a Public Utility Accountant III for the Office of the Public Counsel.
2. Attached hereto and made a part hereof for all purposes is my direct testimony.
3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.

  
John S. Riley, C.P.A.  
Public Utility Accountant III

Subscribed and sworn to me this 30<sup>th</sup> day of November 2016.



TIFFANY HILDEBRAND  
My Commission Expires  
August 9, 2019  
Cole County  
Commission #15637121

  
Tiffany Hildebrand  
Notary Public

My Commission expires August, 2019.

Direct Testimony  
Of  
John S. Riley  
Kansas City Power & Light Company  
Case No. ER-2016-0285

1     **I. INTRODUCTION**

2     **Q. Please state your name and business address.**

3     A. John S. Riley, PO Box 2230, Jefferson City, Missouri 65102

4     **Q. By whom are you employed and in what capacity?**

5     A. I am employed by the Missouri Office of the Public Counsel (“OPC”) as a Public Utility  
6     Accountant.

7     **Q. Please describe your educational background.**

8     A. I earned a B.S. in Business Administration with a major in Accounting from Missouri State  
9     University.

10    **Q. Please describe your professional work experience.**

11    A. I was employed by the OPC from 1987 to 1990 as a Public Utility Accountant. In this  
12    capacity I participated in rate cases and other regulatory proceedings before the Public  
13    Service Commission (“Commission”). From 1994 to 2000 I was employed as an auditor  
14    with the Missouri Department of Revenue. I was employed as an Accounting Specialist  
15    with the Office of the State Court Administrator until 2013. In 2013, I accepted a position  
16    as the Court Administrator for the 19<sup>th</sup> Judicial Circuit until April of this year when I joined  
17    the OPC.

18    **Q. Are you a Certified Public Accountant (“CPA”) licensed in the State of Missouri?**

19    A. Yes. I am also a member of the Institute of Internal Auditors (“IIA”)

1 Q. Have you previously filed testimony before the Missouri Public Service Commission  
2 (“Commission” or “PSC”)?

3 A. Yes I have.

4 Q. What is the purpose of your direct testimony?

5 A. In this testimony I provide support for OPC’s adjustment to KCPL’s test year natural gas  
6 hedging costs. I will also provide support for OPC’s position that, given the recent changes  
7 in KCPL’s regulatory environment, primarily the development of the Southwest Power  
8 Pool’s (“SPP”) Integrated Marketplace in 2014, it is imprudent for KCPL to continue what it  
9 refers to as cross-hedging.

10 Q. Please explain the term “hedging”?

11 A. Hedging is a form of insurance and, like common forms of insurance, a premium is paid to  
12 an insurer willing to accept the risk that the insured is not willing to take. In the event of an  
13 auto accident or a fire, or significant increases in costs as in utility hedging, the insured is  
14 covered from absorbing catastrophic cost increases.

15 For a utility, there can be several forms of hedging. Utilities sometimes engage in physical  
16 hedges, such as entering into long-term coal or natural gas purchase contracts to hedge  
17 against future price increases. Utilities, will also engage in financial hedges such as  
18 purchasing natural gas futures contracts in a commodity exchange market.

19 With financial hedges (such as the purchase of natural gas futures contracts on the NYMEX  
20 commodity exchange), financial gains or losses are recognized in each purchase transaction.  
21 The hedging gains or losses are then, in theory, applied to the price of the natural gas  
22 purchased as fuel for utility operations.

1 This type of financial hedging transactions should result in financial gains in rising fuel  
2 price markets. This hedging gain is applied to the higher priced fuel to offset, or hedge,  
3 against the higher prices. Likewise, in this type of hedge, losses are often incurred in a  
4 falling natural gas price market. These losses are then added to the price of natural gas  
5 purchased by the utility as fuel to generate power. Just as a premium is paid on an insurance  
6 policy, the incurrence of hedging losses do increase costs of purchased fuel, sometimes  
7 significantly, but the hedged price of natural gas also provides a form of insurance against a  
8 significant rise (a spike) in natural gas prices.

9 **Q. What is “cross-hedging”?**

10 **A.** Cross-hedging is a strategy where a position taken in one commodity is offset with an equal  
11 position in a different commodity with similar price movements. Generally, with electric  
12 utilities, NYMEX natural gas futures contracts (derivatives) are purchased to offset the price  
13 paid for purchased power. These types of contracts are also purchased to offset the price  
14 received for power sales. The price of natural gas tends to move in tandem with power  
15 prices so the contracts are a good proxy for power sales. KCPL does not normally purchase  
16 power. It has excess capacity and, in most instances, sells power into the market so it  
17 purchases natural gas derivatives to offset the price it receives for the power it sells.

18 **Q. What is OPC’s position regarding KCPL’s cross-hedging?**

19 **A.** OPC is generally opposed to any natural gas and purchased power hedging in the non-  
20 volatile and low-cost natural gas market that has been in place for several years. In addition,  
21 KCPL has not shown that its hedging practices provide benefits to its ratepayers that exceed  
22 the cost of its hedging, including: hedging costs, personnel costs, software costs and all other  
23 costs to KCPL associated with natural gas and purchased power hedging.

24 **Q. Does the Commission currently allow KCPL to include hedging and cross-hedging**  
25 **costs in the company’s cost of service and in their FAC calculations?**

1 A. Yes, in case ER-2014-0370 the Commission allowed KCPL to include hedging and cross-  
2 hedging results in its FAC calculations. It should be pointed out that KCPL was not  
3 engaged in cross-hedging at the time of that order.<sup>1</sup>

4 Q. Did OPC oppose the inclusion of hedging and cross-hedging costs in KCPL Greater  
5 Missouri Operations Company's ("GMO") last rate case, Case No. ER-2016-0156?

6 A. Yes it did. OPC opposed the inclusion in the FAC tariff as well as GMO's base fuel costs.  
7 GMO and KCPL have different objectives in their hedging practices but the natural gas  
8 price environment and the SPP IM have the same fundamentals for both companies.

9 Q. OPC's position is that KCPL's current hedging and cross-hedging practices are  
10 imprudent. Is there a standard by which transactions are judged to be imprudent?

11 A. Yes. While I am not an attorney, my understanding is that the Western District Court of  
12 Appeals confirmed the Commission's standard of prudence in *State ex rel. Associated*  
13 *Natural Gas Co. v. Public Service Com'n of State of Mo.*,

14 To quote:

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

22  
23 In the same case, the PSC noted that this test of prudence should  
24 not be based upon hindsight, but upon a reasonableness standard:  
25 [T]he company's conduct should be judged by asking whether the  
26 conduct was reasonable at the time, under all the circumstances,  
27 considering that the company had to solve its problem  
28 prospectively rather than in reliance on hindsight. In effect, our

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<sup>1</sup> ER-2014-0370, Report and Order, p.37

1 responsibility is to determine how reasonable people would have  
2 performed the tasks that confronted the company. 954 S.W.2d 520,  
3 528-29 (Mo. App. W.D., 1997) (citations omitted).  
4  
5

6 **Q. Is this the standard that you applied in developing your opinion on the prudence of**  
7 **KCPL's hedging practices?**

8 **A. Yes, it is.**

9 **Q. Describe the current market for natural gas prices.**

10 **A. Natural gas prices had been declining since the polar vortex in February of 2014. Only**  
11 **recently has the spot price at the Henry Hub<sup>2</sup> terminal leveled out to just under \$3.00 per**  
12 **MMBtu. A recent table of monthly settlement prices listed on the EIA website is displayed**  
13 **below.**

**Henry Hub Natural Gas Spot Price (Dollars per Million Btu)**

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2014	4.71	6.00	4.90	4.66	4.58	4.59	4.05	3.91	3.92	3.78	4.12	3.48
2015	2.99	2.87	2.83	2.61	2.85	2.78	2.84	2.77	2.66	2.34	2.09	1.93
2016	2.28	1.99	1.73	1.92	1.92	2.59	2.82	2.82	2.99	2.98		

15  
16 This price stability and lack of volatility is a product of a persistent overabundance of  
17 natural gas in storage.<sup>3</sup> Because of this record storage and the absence of any external events  
18 impacting production, the country has enjoyed an ample supply of natural gas, which has  
19 served to keep natural gas prices low and stable.

<sup>2</sup> The settlement prices at the Henry Hub are used as benchmarks for the entire North American gas market

<sup>3</sup> EIA Natural Gas Weekly update "Most regions in the Lower 48 states top record storage levels. Working gas stocks in the Midwest, Mountain, and South Central regions exceeded their previous five-year highs of 1,126 Bcf, 230 Bcf, and 1,363 Bcf, respectively."

1 Q. KCPL is a member of the Southwest Power Pool (“SPP”). Could you provide an  
2 overview of the SPP.

3 A. A good summary of the history of the SPP can be found on the Federal Energy Regulatory  
4 Commission’s (“FERC”) website: The FERC’s summary of the SPP is below:

5 Founded as an 11-member tight power pool in 1941, Southwest  
6 Power Pool (SPP) achieved RTO status in 2004, ensuring reliable  
7 power supplies, adequate transmission infrastructure, and  
8 competitive wholesale electricity prices for its members. Based in  
9 Little Rock, Ark., SPP manages transmission in fourteen states:  
10 Arkansas, Iowa, Kansas, Louisiana, Minnesota, Missouri, Montana,  
11 Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota,  
12 Texas and Wyoming. Its membership is comprised of investor-  
13 owned utilities, municipal systems, generation and transmission  
14 cooperatives, state authorities, independent power producers, power  
15 marketers and independent transmission companies.

16  
17 In 2007, SPP began operating its real-time Energy Imbalance  
18 Service (EIS) market. In the same year, SPP became a FERC-  
19 approved Regional Entity. The SPP Regional Entity serves as the  
20 reliability coordinator for the NERC region, overseeing compliance  
21 with reliability standards.

22  
23 In March 2014, SPP implemented its Integrated Marketplace that  
24 includes a day-ahead energy market, a real-time energy market, and  
25 an operating reserve market. SPP’s Integrated Marketplace also  
26 includes a market for Transmission Congestion Rights. The SPP  
27 Integrated Marketplace co-optimizes the deployment of energy and  
28 operating reserves to dispatch resources on a least-cost basis.

29  
30 In 2015, SPP expanded its footprint incorporating the  
31 Western Area Power Administration – Upper Great Plains (WAPA-  
32 UGP) region, the Basin Electric Power Cooperative, and the  
33 Heartlands Consumer Power District. The expansion nearly doubled  
34 SPP’s service territory by square miles, adding more the 5,000 MW  
35 of peak demand and over 7,000 MW of generating capacity. WAPA-  
36 UGP is the first federal power marketing administration to join an  
37 RTO.



1 To bring that summary into focus, the SPP Integrated Market (“IM”) provides an efficient  
2 market for all members of the SPP to satisfy native load and to buy (purchase power) or sell  
3 (Off System Sales) electricity.

4 **Q. Explain OPC’s position that KCPL’s current hedging practices for natural gas are**  
5 **inappropriate and not necessary.**

6 A. As noted earlier, the natural gas market currently lacks the price volatility that would justify  
7 the incurrence of hedging costs to protect against adverse natural gas price movements.

8 **Q. Has the Commission provided a guideline on what constitutes price volatility?**

9 A. Yes, the Commission has stated: “[M]arkets in which prices are volatile tend to go up and  
10 down in an unpredictable manner.”<sup>4</sup>

11 As I explained earlier, the natural gas market has been very stable and the price per MMBtu  
12 (Million Btu) is low, historically speaking. KCPL uses natural gas contracts as its hedging  
13 mechanism for both its purchase of natural gas as a fuel and to offset price movements in the  
14 off-system sales market.

15 As KCPL witness Mr. Edward Blunk explained in his direct testimony in this case:  
16 “KCP&L uses natural gas derivatives to mitigate adverse upward price volatility in natural  
17 gas and adverse downward price volatility in power.”<sup>5</sup>

18 **Q. Explain OPC’s position that KCPL’s current hedging practices for purchased power,**  
19 **KCPL’s cross-hedging practices, are inappropriate and not necessary.**

20 A. The off-system sales market within the SPP IM lacks the volatility that would justify  
21 hedging to protect against downward price spikes in the Company’s excess capacity (power)  
22 sales.

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<sup>4</sup> Report and Order, Ameren Missouri, ER-2007-0002, p.23 line 4,5

<sup>5</sup> Ed Blunk direct, p. 26, line 6,7

1 **Q. Please provide a summary of the SPP IM model.**

2 A. The SPP explains on its website that “the Integrated Marketplace coordinates next-day  
3 generation across the region to maximize cost-effectiveness, provide participants with  
4 greater access to reserve energy improve regional balancing of electricity supply and  
5 demand and facilitate the integration of renewable resources.”<sup>6</sup>

6 The SPP makes this possible by having all generating members sell their power generation  
7 into the market and then each member buys back what power it needs to satisfy its  
8 customer’s requirements (native load). If a company’s generation that is sold into the  
9 market is insufficient to meet its native load, then that utility will purchase additional power  
10 to make up the difference. KCPL generates more power than its native load requires so it  
11 sells excess capacity into the market. These are considered off-system sales.

12 **Q. How is there a lack of volatility in the SPP IM market?**

13 A. One of the main reasons that the RTO’s were created was to provide reliable, cost effective  
14 power to the distribution system. The SPP determines the least cost generation that will be  
15 sold into the market. The Integrated Market has hundreds of generating units providing  
16 power into the system. The IM system coordinates this generation to provide the least  
17 expensive power possible to its member utilities. Notably, the SPP has so many input  
18 options that it acts as a buffer to the possibility of a spike in power prices. In this way, it is a  
19 hedging mechanism in itself.

20 **Q. Do KCPL’s customers pay for the company’s membership in the SPP?**

21 A. Yes, they do. Because KCPL’s customers pay for KCPL’s membership in the SPP they  
22 should see some cost savings benefits as a result of this membership. The SPP IM provides  
23 a stable purchase power market. This stable purchase power market provides the benefit of

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<sup>6</sup> SPP.org, Integrated Marketplace

1 relative price stabilization and should allow KCPL's ratepayers to enjoy the benefit of not  
2 having to bear the hedging costs that may be necessary in a highly volatile purchased power  
3 price market.

4 **Q. What has been the relationship between market prices and off-system sales prices for**  
5 **the Company during the test year?**

6 **A.** A review of Mr. Edward Blunk's workpapers that support his direct testimony provides a  
7 monthly summary for both average market prices and average non-firm sales (off-system  
8 sales) figures. Information from Mr. Blunk's workpapers was used to create the table below.  
9 The information demonstrates that there is very little deviation between SPP market prices  
10 and what the company receives for off-system sales.

**Summary Statistics  
Monthly Summary**

<b>2015</b>	<b>ATC</b>	<b>Avg.</b>
<b>Month</b>	<b>Price</b>	<b>OSS</b>
	<b>(\$/MWh)</b>	<b>Sales</b>
Jan	19.04	18.82
Feb	18.02	17.93
Mar	16.99	16.83
Apr	17.17	17.08
May	17.86	17.82
Jun	17.89	17.36
Jul	20.04	19.12
Aug	19.58	18.47
Sep	19.02	18.92
Oct	18.13	18.14
Nov	18.69	18.63
Dec	20.31	20.22

1 **Q. You have argued that natural gas prices and power prices are relatively stable with**  
2 **little volatility. What is OPC's recommendation in regards to KCPL's hedging**  
3 **practices?**

4 **A. The OPC believes that KCPL's current policy of cross hedging for off-system sales is an**  
5 **imprudent practice and should be discontinued. Given the lack of volatility, the Company**  
6 **has little to gain by hedging for power prices and the financial transactions should be**  
7 **excluded from KCPL's FAC tariff and base fuel costs in its cost of service.**

8 **Q. Please describe OPC's adjustment to KCPL's test year per books level of hedging**  
9 **activity.**

10 **A. OPC's adjustment increases KCPL's fuel costs in account 547 by removing the test year**  
11 **hedging gain of \$1,523,720. OPC recommends the Commission find that the Company's**  
12 **practice of cross-hedging off-system sales is not reasonable in the current non-volatile SPP**  
13 **purchased power market and not allow KCPL's hedging gains or losses to be included in its**  
14 **cost of service in this rate case.**

15 **Q. Does this conclude your direct testimony?**

16 **A. Yes, it does.**

**John S. Riley, CPA**  
**Summary of Case Participation**

EMPIRE DISTRICT ELECTRIC COMPANY

CASE NO. ER-2016-0023

KCP&L GREATER MISSOURI OPERATIONS COMPANY

CASE NO. ER-2016-0156