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

DIRECT TESTIMONY

OF

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

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. ER-2016-0285

AFFIDAVIT OF JOHN S. RILEY

STATE OF MISSOURI)
) **ss**
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 30th day of November 2016.

NOTARY PUBLIC NOTARY SEAL STATE OF MISSOURI

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

I. INTRODUCTION

Q. Please state your name and business address.

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

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

A. I am employed by the Missouri Office of the Public Counsel ("OPC") as a Public Utility Accountant.

Q. Please describe your educational background.

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

Q. Please describe your professional work experience.

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

Q. Are you a Certified Public Accountant ("CPA") licensed in the State of Missouri?

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

Q. Have you previously filed testimony before the Missouri Public Service Commission ("Commission" or "PSC")?

A. Yes I have.

Q. What is the purpose of your direct testimony?

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

Q. Please explain the term "hedging"?

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

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

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

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

Q. What is "cross-hedging"?

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

Q. What is OPC's position regarding KCPL's cross-hedging?

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

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

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

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

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

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

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

To quote:

> [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

[1] ER-2014-0370,Report and Order, p.37

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

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

A. Yes, it is.

Q. Describe the current market for natural gas prices.

A. Natural gas prices had been declining since the polar vortex in February of 2014. Only recently has the spot price at the Henry Hub[2] terminal leveled out to just under $3.00 per MMBtu. A recent table of monthly settlement prices listed on the EIA website is displayed 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		

This price stability and lack of volatility is a product of a persistent overabundance of natural gas in storage.[3] Because of this record storage and the absence of any external events impacting production, the country has enjoyed an ample supply of natural gas, which has served to keep natural gas prices low and stable.

[2] The settlement prices at the Henry Hub are used as benchmarks for the entire North American gas market
[3] 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."

Q. KCPL is a member of the Southwest Power Pool ("SPP"). Could you provide an overview of the SPP.

A. A good summary of the history of the SPP can be found on the Federal Energy Regulatory Commission's ("FERC") website: The FERC's summary of the SPP is below:

> Founded as an 11-member tight power pool in 1941, Southwest Power Pool (SPP) achieved RTO status in 2004, ensuring reliable power supplies, adequate transmission infrastructure, and competitive wholesale electricity prices for its members. Based in Little Rock, Ark., SPP manages transmission in fourteen states: Arkansas, Iowa, Kansas, Louisiana, Minnesota, Missouri, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas and Wyoming. Its membership is comprised of investor-owned utilities, municipal systems, generation and transmission cooperatives, state authorities, independent power producers, power marketers and independent transmission companies.
>
> In 2007, SPP began operating its real-time Energy Imbalance Service (EIS) market. In the same year, SPP became a FERC-approved Regional Entity. The SPP Regional Entity serves as the reliability coordinator for the NERC region, overseeing compliance with reliability standards.
>
> In March 2014, SPP implemented its Integrated Marketplace that includes a day-ahead energy market, a real-time energy market, and an operating reserve market. SPP's Integrated Marketplace also includes a market for Transmission Congestion Rights. The SPP Integrated Marketplace co-optimizes the deployment of energy and operating reserves to dispatch resources on a least-cost basis.
>
> In 2015, SPP expanded its footprint incorporating the Western Area Power Administration – Upper Great Plains (WAPA-UGP) region, the Basin Electric Power Cooperative, and the Heartlands Consumer Power District. The expansion nearly doubled SPP's service territory by square miles, adding more the 5,000 MW of peak demand and over 7,000 MW of generating capacity. WAPA-UGP is the first federal power marketing administration to join an RTO.

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

Q. Explain OPC's position that KCPL's current hedging practices for natural gas are inappropriate and not necessary.

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

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

A. Yes, the Commission has stated: "[M]arkets in which prices are volatile tend to go up and down in an unpredictable manner."[4]

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

As KCPL witness Mr. Edward Blunk explained in his direct testimony in this case: "KCP&L uses natural gas derivatives to mitigate adverse upward price volatility in natural gas and adverse downward price volatility in power."[5]

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

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

[4] Report and Order, Ameren Missouri, ER-2007-0002, p.23 line 4,5
[5] Ed Blunk direct, p. 26, line 6,7

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

A. The SPP explains on its website that "the Integrated Marketplace coordinates next-day generation across the region to maximize cost-effectiveness, provide participants with greater access to reserve energy improve regional balancing of electricity supply and demand and facilitate the integration of renewable resources."[6]

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

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

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

Q. Do KCPL's customers pay for the company's membership in the SPP?

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

[6] SPP.org, Integrated Marketplace

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

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

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

Summary Statistics
Monthly Summary

2015 Month	ATC Price ($/MWh)	Avg. OSS Sales
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

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

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

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

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

Q. Does this conclude your direct testimony?

A. Yes, it does.

John S. Riley, CPA
Summary of Case Participation

EMPIRE DISTRICT ELECTRIC COMAPANY	CASE NO. ER-2016-0023
KCP&L GREATER MISSOURI OPERATIONS COMPANY	CASE NO. ER-2016-0156