Exhibit No.: OPC014
Issue(s): Fuel Adjustment Clause ("FAC")/ Fuel Hedging
Witness/Type of Exhibit: Riley/Rebuttal
Sponsoring Party: Public Counsel
Case No.: ER-2016-0023

REBUTTAL TESTIMONY

OF

JOHN S. RILEY

Submitted on Behalf of the Office of the Public Counsel

EMPIRE DISTRICT ELECTRIC COMPANY

CASE NO. ER-2016-0023

** **

Denotes Highly Confidential Information that has been redacted

May 2, 2016

 NP

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of The Empire District Electric Company's Request for Authority to Implement a General Rate Increase for Electric Service	))))	Case No. ER-2016-0023

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 rebuttal 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 2nd day of May 2016.

JERENE A. BUCKMAN
My Commission Expires
August 23, 2017
Cole County
Commission #13754037

Jerene A. Buckman
Notary Public

My Commission expires August 23, 2017.

REBUTTAL TESTIMONY

OF

JOHN S. RILEY

EMPIRE DISTRICT ELECTRIC COMPANY

CASE NO. ER-2016-0023

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 Accounting from Missouri State University and have completed six hours towards my Masters in Business Administration at Lincoln University.

Q. Please describe your professional work experience.

A. I previously worked for the OPC from 1987 to 1990. I was an auditor with the Missouri Department of Revenue from 1994 to 2000. I was an Accounting Specialist with the Office of the State Court Administrator until 2013 and the Court Administrator for the 19th Judicial Circuit for the past two plus years. I have also been employed by Krieger & Krieger Accounting as a tax consultant the past two tax seasons.

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

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

Q. What is the purpose of your rebuttal testimony?

A. To respond to Fuel Purchases and Purchased Power Expense ("FPP") for base rates and the fuel adjustment clause ("FAC") base factor from the testimony of Empire District Electric Company ("Empire" or "Company") witness Todd W. Tarter.

Q. What is OPC's position in this case on Empire's FAC?

A. OPC witness Lena M. Mantle filed direct testimony describing OPC's position that Empire's FAC should not be continued in this rate case. My rebuttal testimony supports this position.

Q. Please summarize OPC's position on Empire base fuel costs?

A. Based on a review of Empire's and Staff's cost of service direct filings; OPC is concerned Empire's natural gas hedging losses are excessive. In my review of Empire's direct filing, I have seen no support for Empire's hedging policy or hedging costs. Empire's hedging losses are significant and a significant component of Empire's natural gas prices that affect Empire's base fuel costs and its FAC.

Q. How did Empire calculate its base fuel costs levels for base rates and its fuel cost levels to include in its proposed FAC base factor?

A. In his direct testimony, Mr. Tarter explained that Empire used a modeling system known as PROSYM to assist the Company in its FPP expense levels to include in rates charged to customers. Empire employs this fuel model to develop FPP cost estimates that are then used for base rates and to determine a FAC base factor. The results of the production model are included Empire's calculation of the FAC base factor shown in Mr. Tarter Schedule TWT-10 attached to his direct testimony.

Q. Do you have a concern with Empire's use of the PROSYM model?

A. No. It is my understanding that substantially all, if not all, electric utilities use some form of fuel modeling. Computer modeling is very helpful in answering many utility production questions. PROSYM does not predict fuel pricing but assists Empire in estimating fuel usage and therefore fuel costs. But with any computer program, the accuracy of the output is governed by the data entered into the model.

Q. What is your specific concern as it relates to Empire fuel prices?

A. Mr. Tarter has explained the price of natural gas used in the model was a projected monthly average of ** ** per MMBTU.

Q. Did the Company provide information as to how they determined a ** ** per MMBTU natural gas price input into its fuel run?

A. Empire has provided the Public Service Commission Staff ("Staff") with Gas Position Summary Reports and other spreadsheets (Highly Confidential Schedule JSR-1) calculating its proposed natural gas price for their fuel run. The company lists ** ** as its expected hedge price and ** ** for the expected spot market price. Combining their respective fuel amounts provides the Company with an average fuel cost to use for their fuel calculations of ** **. OPC has submitted data requests to Empire to explain this further and will respond to such information in a future filing.

Q. What is your understanding of the natural gas costs that Empire reports to the Commission?

A. Empire's monthly fuel cost reports submitted to the Commission reflect three main components of natural gas prices. These natural gas price components are the actual market commodity price, the transportation costs to deliver the natural gas, and the hedging costs. The hedging costs are referred to by Empire as Gain/Loss on Derivatives in the fuel reports.

Q. Which component of Empire's natural gas price is a concern to OPC?

A. The sole purpose of Empire's natural gas hedging policy is to mitigate price volatility. As will be shown below, natural gas prices have not been volatile for a significant period of time. In addition, Empire has provided no evidence it expects this to change.

Q. Does OPC recommend that Empire cease its current natural gas hedging policy?

A. Yes, unless Empire can show that it is prudent and reasonable to continue to hedge natural gas prices in a non-volatile natural gas market.

Q. Does OPC recommend Empire exclude natural gas hedging costs from its base fuel model in this rate case?

A. Yes. OPC recommends the Commission require Empire to justify why it continues to incur significant natural gas hedging costs in a non-volatile natural gas market and require Empire to demonstrate its hedging policies are prudent given the fact that, unlike other Missouri electric utilities, it does not employ hedging techniques in order to reduce the costs of recoverable natural gas purchases and thereby passes on through its FAC.

Q. Does OPC recommend Empire exclude natural gas hedging costs from its FAC?

A. Yes, until Empire demonstrates its natural gas hedging policy and its hedging costs are prudent and reasonable.

Q. Has the Commission allowed hedging costs to be included in Empire's previous rate cases and in its FAC?

A. Yes. It is my understanding the Commission allows hedging cost to be an incentive to assist in attempting to mitigate upward price volatility in the natural gas market.

Q. Has the Commission addressed hedging costs in its 4 CSR 240-20.090 Electric Utility Fuel and Purchased Power Cost Recovery Mechanisms rule ("FAC rule")?

A. Yes. The Commission addressed hedging in its FAC rule below:

> 4 CSR 240-20.090 Electric Utility Fuel and Purchased Power Cost Recovery Mechanisms.
>
> (1)(B) Fuel and purchased power costs means prudently incurred and used fuel and purchased power costs, including transportation costs. Prudently incurred costs do not include any increased costs resulting from negligent or wrongful acts or omissions by the utility. <u>If not inconsistent with a commission approved incentive plan, fuel and purchased power costs also include prudently incurred actual costs of net cash payments or receipts associated with hedging instruments tied to specific volumes of fuel and associated transportation costs.</u> (Emphasis added)

Q. Is this the only Commission rule that addresses hedging natural gas prices?

A. No. The Commission specifically mentioned mitigating "upward natural gas price volatility" in 4 CSR 240-40.018, Natural Gas Price Volatility Mitigation. The purpose of this rule is explained below:

> PURPOSE: This rule represents a statement of commission policy that natural gas local distribution companies should undertake diversified natural gas purchasing activities as part of a prudent effort to mitigate upward natural gas price volatility and secure adequate natural gas supplies for their customers.

Q. If the Commission has previously allowed rate recovery of hedging costs, why is OPC opposing its inclusion in this rate case?

A. As noted above, OPC is opposing the inclusion of hedging costs in Empire's base fuel cost and FAC until Empire demonstrates its natural gas hedging policy is prudent. Empire must address why it continues to hedging in a non-volatile hedging market, why its hedging policy is so aggressive in a non-volatile natural gas market, and why its hedging policies do not consider hedging techniques to keep natural gas hedging costs to a minimum.

OPC defines "prudently incurred hedging policies" as "policies that seek to both reduce significant price volatility and upward energy price risk." Both factors must be present in order for a hedging policy to be prudent. Since Empire's customers benefit significantly from lower fuel costs, it is important that both factors be the basis of any prudent hedging plan. OPC has received Empire's hedging policies and seen no indication reducing fuel costs through its hedging plan is even contemplated. Empire appears to use natural gas hedging transactions only to create price predictability.

Q. Does OPC believe that the Commission expects electric utilities to reduce their energy purchase cost whenever possible?

A. Yes. The Commission makes this statement in Commission Rule 4 CSR 240-3.161 *Electric Utility Fuel and Purchased Power Cost Recovery Mechanisms Filing and Submission Requirements* (paragraph 1.161(3) (R) which is referenced in Mr. Tarter's testimony:

> (R) Information that shows that the electric utility has in place a long –term resource planning process, important objectives of which are to minimize overall delivered energy costs and provide reliable service;

Q. Why do you believe Empire does not hedge to reduce price risk?

A. Quoting from the page 10 of the current Empire District Electric Company ENERGY RISK MANAGEMENT POLICY manual, attached to this testimony as Highly Confidential Schedule JSR-2, under the section titled Hedging Strategy:

> **
>
> **

Empire's current hedging position, as outline in the Gas Position Summary Report for December 31, 2015 was at ** **of 2016 expected purchases. At page 11 of the manual, Empire lists its four year guidelines:

NP

**

**

Q. How did Empire's hedging strategy affect the prices it paid for natural gas in 2015?

A. Referring to Empire's monthly fuel cost reports submitted to Staff, the hedging strategy increased the cost of fuel by ** ** or ** ** of the total costs of natural gas purchases in 2015. (Highly Confidential Schedule JSR-3) The hedging strategy never reduced fuel costs by recording a hedging gain instead of a hedging loss.

Q. Is OPC saying that Empire's natural gas hedging policies are imprudent just because it did not result in any hedging gains and just incurred hedging losses?

A. No. OPC has concerns the hedging policies are imprudent because they, to my knowledge, do not seek to minimize hedging costs and are only concerned with providing natural gas price certainty.

Q. Should Empire compare its hedging strategies and hedging models with other electric utilities, a process referred to as benchmarking?

A. Yes. Benchmarking is an important tool for utilities to use to improve its service to customers. Benchmarking allows for the development of "best practices" and "industry standards" for utility policies and procedures including fuel procurement policies and procedures.

For example, while Empire's needs are different from other Missouri electric utilities, it can learn how to improve its hedging policies from reviewing the hedging policies of other utilities.

Q. Do you have an example where Empire's benchmarking with other Missouri utilities could improve Empire's natural gas hedging practices?

A. Yes. In Case No. ER-2016-0156, Kansas City Power & Light Company-Greater Missouri Operations ("GMO") witness Edward Blunk explained GMO's hedging strategy that has been in place for several years and significantly focused on price reduction as well as price mitigation. The question Empire needs to answer is why it does not have the same focus in its hedging program. Of relevance:

> **Q: What is the objective of GMO's hedging program?**
>
> A: The objective of GMO's hedging program is to reduce energy price risk inherent with floating with the market. The program is to protect the Company and its customers from large upward fluctuations in the price of natural gas while providing some opportunity to capture low prices.
>
> **Q: Briefly describe GMO's hedging strategy.**
>
> A: GMO's natural gas hedging program is oriented toward finding a balance between the need to protect against high prices and the opportunity to purchase gas at low prices.
>
> GMO's hedging program first divides the hedge volume into two parts. One-third of the volume is not hedged but is left to primarily absorb the risk of requirements being less than projected and secondarily float with the market. The remaining two-thirds are hedged under two hedging programs, Kase and Company, Inc.'s HedgeModel and ezHedge.
>
> **Q: How does the HedgeModel program work?**
>
> A: The approach of the HedgeModel program is to identify statistically favorable points at which to hedge. The strategy can be thought of as a three-zone strategy comprised of high price, normal price and low price zones. The high price zone identifies prices that are threatening to move upward. In this price zone actions are taken to protect against unfavorable high price levels, mostly through the use of options-related tactics. The normal price zone identifies prices that are in a "normal" range, neither high enough to warrant protecting price, nor low enough to be considered "opportunities." No action is taken whenever prices are deemed to be in the normal price range. The low price zone identifies prices that are

> statistically low. In this zone, actions are taken to capture favorable forward prices as the market moves into a range where the probability of prices remaining at or below these levels is decreasing. While the main focus in the high price zone is defensive, to set a maximum or ceiling on prices, in the low price zone the focus is on capturing attractive prices.
>
> [Direct testimony of KCPL-GMO witness Wm. Edward Blunk, Case No. ER-2016-0156, February 23, 2016, pages 24-25]

GMO specifically included hedging strategies that seek to take advantage of the natural gas market through the attainment of hedging gains as opposed to just hedging losses. While GMO's hedging strategy may be primarily based on price mitigation, it includes a substantial focus on price reductions. Empire's does not. That is why OPC has a concern with the prudence of Empire's hedging strategy.

Q. How does OPC view Empire Electric's hedging expenses?

A. Given that natural gas prices have been steady for a significant period of time, OPC questions if Empire should be incurring monthly hedging losses at all. Reviewing the past 27 months of Henry Hub spot market prices indicates a gradual downward trend in natural gas prices.

Henry Hub Natural Gas Spot Prices (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									

* Copied from the U.S. Energy Information Administration Website.

Q. Do you understand possible reasons why Empire management does not employ hedging practices that seek to mitigate or reduce the price of natural gas purchases?

A. Yes. Empire has an FAC that flows through all hedging losses with little threat of not recovering hedging losses. It appears that, because of the incentive to reduce the cost of natural gas in its FAC does not exist; Empire has eliminated any focus of its hedging program on natural gas price reduction.

OPC doesn't believe adding more than ** ** to natural gas costs for the sole purpose of allowing the company to predict their future costs is a prudent and reasonable expense for Empire to pass on to its customers. OPC requests the Commission exclude all hedging costs from Empire's base fuel costs in this case and in its FAC until Empire can demonstrate why its hedging strategy is prudent and reasonable.

Q. Does this conclude your testimony?

A. Yes.

Attachments

JRS-1 through JRS-3

have been deemed

"Highly Confidential"

in their entirety