BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of a Working Docket to Address	)	
the Hedging Practices of Electric Utilities	)	**File No. EW-2013-0101**
Used to Mitigate the Rising Costs of Fuel	)	

ADDITIONAL STAFF REPORT

COMES NOW the Staff of the Missouri Public Service Commission, by and through counsel, and files the Additional Staff Report which is attached hereto, pursuant to the Commission's Order dated October 15, 2013. In support thereof, Staff respectfully states as follows:

1. The Commission opened this docket on September 5, 2012. On February 28, 2013, Staff filed a short Status Report and Request for Further Direction. In response to Staff's February 28 filing the Commission issued, on March 4, 2013, an *Order Directing Staff to File a Comprehensive Report and Setting a Deadline for Responses*. In response to that Order, on April 8, 2013, Staff filed a comprehensive report which recommended, among other things, that the Commission keep this workshop docket open for further discussions.

2. On May 1, 2013, the Commission issued an *Order Directing Staff to Proceed with Its Investigation*. That Order concluded by ordering Staff to "file a report regarding its further investigation into the natural gas hedging practices of Missouri's investor-owned electric utilities" by no later than November 1, 2013. On October 15, 2013, Staff filed a brief Update Report but, due to scheduling considerations, requested that it be given until February 1, 2014, to file a more detailed report regarding its further

investigation into the natural gas hedging practices of Missouri's investor-owned electric utilities.

3. Later in the day on October 15, 2013, the Commission issued an *Order Granting Request for Additional Time to File a Detailed Report* in which it ordered, "No later than February 1, 2014, the Commission's Staff shall file a report regarding its further investigation into the natural gas hedging practices of Missouri's investor-owned electric utilities." Pursuant to the October 15, 2013 Order, Staff submits the attached Additional Staff Report.

4. The attached Additional Staff Report is not intended to replace the Report Staff previously filed on April 8, 2013, but supplements the April 8 Report. As stated in the attached, this Additional Staff Report is limited to Staff's *further* investigation into the natural gas hedging practices of Missouri's investor-owned electric utilities since Staff's April 8 Report.

5. Staff notes that one of the recommendations set forth in the **Conclusions/Recommendations** section of the attached Additional Staff Report is that the Commission allow interested stakeholders an opportunity to respond to the attached Report, particularly to the Conclusions/Recommendations set forth therein, or in the alternative, issue an Order closing this file.

WHEREFORE, Staff submits the attached Additional Staff Report in compliance with the Commission's October 15, 2013, *Order Granting Request for Additional Time to File a Detailed Report* and requests that the Commission issue an Order allowing interested stakeholders an opportunity to respond to the attached Report, particularly to the Conclusions/Recommendations set forth therein, or in the alternative, issue an Order closing this file.

Respectfully submitted,

***/s/* Jeffrey A. Keevil**

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CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing have been mailed, hand-delivered, or transmitted by facsimile or electronic mail to all counsel of record this 31st day of January, 2014.

***/s/* Jeffrey A. Keevil**

MISSOURI PUBLIC SERVICE COMMISSION

ADDITIONAL STAFF REPORT ON

THE HEDGING PRACTICES OF ELECTRIC UTILITIES

FILE NO. EW-2013-0101

Jefferson City, Missouri
January 31, 2014

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ADDITIONAL STAFF REPORT

Background

The Missouri Public Service Commission (the "Commission") opened this investigatory docket on September 5, 2012, "to review policies or procedures with regard to electric companies' hedging programs that will hopefully assist the utilities with developing effective hedging programs that serve the public interest by mitigating the rising costs of fuel."[1]

As reflected in the Commission Staff's ("Staff's") previous filings herein, Staff conducted an initial workshop in this docket on November 14, 2012 and a second workshop on January 31, 2013. Representatives of Missouri's investor-owned electric utilities ("IOUs") and natural gas local distribution companies ("LDCs"), along with Staff and the Office of the Public Counsel ("OPC"), participated in one or both of these workshops either in person or by phone. On February 28, 2013, Staff filed a short Status Report and Request for Further Direction. In response to Staff's February 28 filing the Commission issued, on March 4, 2013, an *Order Directing Staff to File a Comprehensive Report and Setting a Deadline for Responses*. In response to that Order, on April 8, 2013, Staff filed a comprehensive report which recommended, among other things, that the Commission keep this workshop docket open for further discussions.

Thereafter, on May 1, 2013, the Commission issued an *Order Directing Staff to Proceed with Its Investigation*. The May 1 Order reflected that Staff's April 8 report indicated "that no broad agreement has been reached about how to evaluate whether an electric utility's gas

[1] This docket originated with a request by KCP&L Greater Missouri Operations Company ("GMO") for additional guidance from the Commission regarding the appropriateness of the use of natural gas hedging by electric utilities. GMO also suggested that the Commission implement a process to avoid disputes over its hedging programs in the future. EO-2011-0390, EFIS No. 132, *Report and Order,* p. 65-66.

hedging program is cost effective, and discussions have highlighted the challenge of judging such gas hedging programs." In the May 1 Order the Commission stated, "The Commission encourages Staff to continue its investigation with the workshops and individual meetings it suggests [in the April 8 Report]. The Commission will direct Staff to file an additional report regarding its further investigation." The May 1 Order concluded by ordering Staff to "file a report regarding its further investigation into the natural gas hedging practices of Missouri's investor-owned electric utilities" by no later than November 1, 2013.

Since filing its comprehensive report herein on April 8, 2013, and in furtherance of the Commission's May 1, 2013, *Order Directing Staff to Proceed with Its Investigation,* Staff submitted a list of questions to the Missouri IOUs on May 31, 2013. The IOUs were requested to separately provide their answers in EFIS to the list of questions no later than July 3, 2013. On July 3, 2013, the IOUs provided their answers.

Prior to scheduling the individual meetings with the IOUs, which were contemplated by the Staff's April 8 Report and the Commission's May 1 Order, Staff needed to review the utilities' responses to the list of questions in order to determine if additional information was needed from the IOUs before meeting with them individually. Staff then began scheduling meetings with each Missouri IOU so that Staff, OPC, and each of the IOUs could further discuss each individual utility's hedging program(s).

According to the Commission's May 1 Order, Staff was to file its additional report on November 1, 2013; however, due to the scheduling of the individual meetings with the IOUs in October and November, Staff, on October 15, 2013, requested that it be given until February 1, 2014, to file a more detailed report regarding its further investigation into the natural gas hedging practices of Missouri's IOUs. Also on October 15, 2013, the Commission issued an *Order*

Granting Request for Additional Time to File a Detailed Report in which it ordered, "No later than February 1, 2014, the Commission's Staff shall file a report regarding its further investigation into the natural gas hedging practices of Missouri's investor-owned electric utilities."

<u>Additional Staff Report Regarding Further Investigation</u>

This report does not replace Staff's April 8 Report, but supplements it. More specifically, this report is limited to Staff's *further* investigation into the natural gas hedging practices of Missouri's IOUs since Staff's April 8 Report. Therefore, the two reports should be read together, since this report is intended to be cumulative to Staff's April 8 Report, not to supplant it.

As mentioned above, since filing the April 8 Report, Staff submitted a list of written questions to the IOUs in May and each of them submitted written responses in July. These responses, all filed on July 3, 2013, are available in EFIS. The IOU responses reflect varying opinions on hedging programs and practices. The written comments of The Empire District Electric Company ("Empire") explain the diverse IOU views as follows: "Empire notes that hedging programs are not one-size-fits-all and that hedging policies and procedures and individual hedging decisions must be based upon the particular facts and circumstances then known to the utility, certain market realities, and the utility's unique structure and history." While Staff will attempt, in this report, to give an overview of some of the points made in the IOU responses, given the differences between the responses, Staff refers the Commission to the respective responses filed in EFIS on July 3, 2013, in this file, since any overview could not fully capture everything contained in those responses.

<u>Overview of Written Responses of Investor-owned Electric Utilities</u>

As mentioned above, this docket was opened "to review policies or procedures with regard to electric companies' hedging programs that will hopefully assist the utilities with developing effective hedging programs that serve the public interest by **mitigating the rising costs** of fuel."[2] (Emphasis added) In fact, the caption of the file for this docket is *In the Matter of a Working Docket to Address the Hedging Practices of Electric Utilities Used to* ***Mitigate the Rising Costs*** *of Fuel*. (Emphasis added) However, one point which the IOUs have made consistently throughout this docket, including in their written responses, is that it is their position that the purpose of hedging is to protect against *price volatility* – not to *reduce* price. Their responses even indicate that the effectiveness of a hedging strategy should be measured by its effectiveness in reducing price volatility, *i.e.*, producing greater stability and predictability in rates, and that a reduction in price volatility is the "measureable" benefit which customers should receive from a hedging strategy. (See responses to questions 1, 7 and 9) The responses also indicate that "[h]edging strategies which mitigate volatility may not result in the lowest cost for the fuel or power hedged;" "hedging does not provide a means to reduce the expected price in and of itself" but "should be expected to carry with it a premium just as other forms of insurance do;" and "[r]egulators must recognize that hedging resulting in higher prices to customers may still be regarded as successful and prudent."

The IOUs agree that customers place a value on less volatility, *i.e.*, more predictable and steady rates. (See responses to question 3) However, they put forth differing opinions as to how that value should be, or could be, determined.

They also agree that their fuel adjustment clauses (FAC), although perhaps not intended to be a price mitigation tool, have the practical effect of mitigating price volatility for customers.

[2] See footnote 1 above.

(See responses to question 5) As for whether or not investor-owned electric utilities should have a budget for their hedging programs, responses varied somewhat but leaned toward a common view that a "hedge cost budget which is seen as a constraint can act as a disincentive for placing prudent hedges in a volatile market" and "it would run contrary to the stated purpose of a hedging program to limit hedging activity to only that amount included" in a hedging budget. (See responses to question 10) Although the IOU responses agreed that the natural gas market has changed since 2009, the IOUs continue to extol the benefits of hedging, even in the changed market. (See responses to question 12)

However, in response to questions concerning changing hedging strategy based on new market conditions and new information, one IOU response indicated that the "need for changing the hedge strategy given changes in market conditions depends on the hedge strategy and the market conditions" and "a geopolitical event such as carbon or fracking legislation may create a new normal thereby affecting the forward market and support changing the hedge strategy," while another opined that "market conditions and new information should be monitored by the electric utilities." (See responses to question 11) As to whether the investor-owned electric utilities should change or modify their strategy in response to the changes in the market since 2009, one IOU responded "that depends on their strategy." (See responses to question 12)

<u>Overview of the Individual Investor-owned Electric Utility Hedging Meetings</u>

Staff scheduled and conducted individual meetings related to hedging practices employed by the IOUs. The individual meetings allowed Staff and OPC to discuss, with each IOU, company-specific, potentially confidential[3] information related to hedging practices, fuel acquisitions and other related operational issues. These meetings were held respectively with

[3] For this reason, this overview of the meetings will only address the matters discussed at the meetings on a very general level.

Empire, Ameren Missouri, and Kansas City Power & Light Company ("KCPL") and GMO, on October 17, October 21, and November 5, 2013.

During these meetings the IOUs openly discussed their answers to the questions previously submitted by Staff, and other ad-hoc questions posed by Staff and OPC. Major areas of focus for the Staff and OPC centered on two issues: First, based on market changes, the abundance of shale gas, and the downturn in the economy, should IOUs still continue to hedge their fuel costs? Second, is there an appropriate review methodology to determine the effectiveness of an IOU's hedging policy? There were no consensus answers to these questions.

New sources of shale gas supply and decreased demand due to economic forces in the United States have dramatically driven down the price of natural gas. However, the IOUs made it clear that just because the market price of natural gas is lower than it has been in the past, there is no guarantee the price will remain at current levels, and price volatility still remains a concern. All of the IOUs emphasized that hedging is done to mitigate risk, not for price speculation, and that price risk still exists, even when commodity prices are relatively low.

The IOUs' hedging policies are comprised of three major categories: (1) **Fuel hedging** activities can include fixed, forward price coal, natural gas, and wind contracts,[4] natural gas futures contracts,[5] and option contracts. (2) **Cross-hedging** involves taking a position in a commodity to off-set the risk of a different commodity, the price movements of which are highly correlated – directly or inversely. (3) Participating in regional transmission organizations ("RTOs") has required a new risk management strategy for **transmission/congestion** costs through the RTO's Financial Transmission Right (FTR) and Auction Revenue Right (ARR)

[4] Fixed price forward contracts are agreements between a buyer and a supplier of a commodity in which the buyer agrees to purchase a specific quantity at an agreed upon price and the supplier agrees to deliver the commodity at the contracted price and quantity.
[5] Natural gas futures contracts are financial instruments that can be traded through a market exchange such as the New York Mercantile Exchange.

processes. The IOUs have developed hedging strategies that will allow them to mitigate the risk associated with these new market changes.

Fuel Hedging

Each of the IOUs uses a fuel hedging strategy to reduce price volatility and to ensure an adequate supply of coal and natural gas that will be used to generate electricity. The IOU's risk management committee develops and approves the structure of that IOU's hedging strategies. The IOUs enter into fixed-priced, forward contracts to acquire coal either directly from the coal mines or with coal suppliers for a fixed price and quantity. An IOU may use fixed-priced, forward contracts for some of its natural gas needs, but primarily IOUs use natural gas futures contracts to financially hedge the price volatility of the majority of their natural gas requirements. The IOUs also use fixed-price, forward contracts to secure electricity generated by wind generators.

Cross-Hedging

This strategy entails purchasing natural gas futures contacts in an effort to mitigate the volatility in on-peak energy prices.[6] As reflected in the *Report and Order* issued on September 4, 2012, in Case No. EO-2011-0390, GMO contends that on-peak energy prices are highly correlated with natural gas spot prices, and that natural gas futures contracts provide sufficient risk mitigation to be effective for use as a hedge against on-peak energy price volatility.[7] SPP[8] is

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[6] "GMO's hedging program is designed to mitigate adverse upward price volatility in natural gas and power. Stated in terms of risk, GMO uses natural gas derivatives to hedge natural gas price risk and 'on peak' purchased power price risk." *In the Matter of the Third Prudence Review of Costs Subject to the Commission-Approved Fuel Adjustment Clause of KCP&L Greater Missouri Operations Company*, Case No. EO-2011-0390, *Report and Order* issued September 4, 2012, page 33, paragraph number 83.

[7] Staff challenged the merit of this strategy in the past, and the Commission established this working docket, in part, to explore the issues surrounding the strategy. Staff still has certain concerns related to a cross-hedging strategy.

[8] "SPP is a Regional Transmission Organization, mandated by the Federal Energy Regulatory Commission to ensure reliable supplies of power, adequate transmission infrastructure, and competitive wholesale prices of electricity. As a North American Electric Reliability Corporation Regional Entity, SPP oversees compliance enforcement and

scheduled to implement its Integrated Marketplace in March 2014. This market change may have significant impact on cross-hedging strategies, and should be further explored in the IOUs continue this practice.

Hedging for Transmission/Congestion with FTRs/ARRs[9]

All of the IOUs appear to have developed operational strategies that will allow for appropriate utilization of these FTR and ARR processes as described in footnote number 9. MISO and SPP use somewhat different terminology when addressing these FTR and ARR hedging practices, but fundamentally they are substantially similar in practice.

Conclusions / Recommendations

As discussed in Staff's April 8 Report, the natural gas industry is just a few years into access to dramatic new supplies; meanwhile, IOUs' use of natural gas is also evolving, based on new developments in wind power and regional electricity markets. As only one example, in regard to new developments in regional electricity markets, the SPP is scheduled to implement its Integrated Marketplace in March 2014. Given the dramatic changes in the natural gas market since 2008 and the changes in the electricity market on the imminent horizon, Staff suggests

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reliability standards development. SPP has members in nine states." As quoted from http://www.SPP.org Welcome Page.

[9] "An Auction Revenue Right is a Market Participant's entitlement to a share of revenue generated in annual FTR auctions. A Market Participant's firm historical usage of MISO's transmission system determines its share, and depending upon the FTR auction clearing price of an ARR path, the share could result in revenue or a charge. MISO facilitates annual and monthly FTR Auctions. The annual FTR auction is conducted prior to the beginning of each planning year, and it is conducted in three rounds. Each round is comprised of eight separate markets –peak and off-peak for four seasons. Monthly FTR auctions are conducted prior to the beginning of each month. Each auction includes two separate markets – peak and off-peak. The peak FTR is valid for the duration of the applicable month for peak hours only."
https://www.misoenergy.org/MarketsOperations/MarketInformation/Pages/FTRMarket.aspx

"Auction Revenue Right (ARR) – A financial right, awarded during the annual ARR allocation process that entitles the holder to a share of the auction revenues generated in the applicable TCR [Transmission Congestion Right] auction(s) and/or entitles the holder to self-convert the ARRs into TCRs."
http://www.spp.org/publications/Glossary-and-Acronyms-HQ.pdf

periodic, informal, free discussions with the IOUs constitutes the most viable course of action at this time. As in its April 8 Report, Staff continues to recommend that, similar to presentations currently provided by LDCs, each electric utility under the Commission's jurisdiction schedule a yearly confidential meeting between the IOU, Staff, and OPC to discuss the past performance and future goals, policies and strategies of its individual hedging program(s). Such presentations should include review and discussion of the effectiveness of cross-hedging policies.

Given the recent developments and expected changes in the market, Staff also recommends that the IOUs develop and implement hedging policies based on the most prudent strategies to address current and reasonably expected circumstances for the company and its customers – not based on past activities or perceived directives or orders by the Staff or Commission.

Staff has done all it can within the context of the present docket, given the current circumstances facing the industry; therefore, Staff recommends the Commission allow interested stakeholders an opportunity to respond to this report, particularly to the Conclusions / Recommendations set forth above, or in the alternative, issue an order closing this file. Should future hedging activities or the annual IOU meetings highlight concerns to be brought to the Commission's attention, Staff will respond accordingly at that time.