BEFORE THE PUBLIC SERVICE COMMISSION STATE OF MISSOURI

In the Matter of the Third Prudence Review of)	
Costs Subject to the Commission-Approved Fuel)	Case No. EO-2011-0390
Adjustment Clause of KCP&L Greater Missouri)	
Operations Company.	

KCP&L GREATER MISSOURI OPERATIONS COMPANY'S PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW

COMES NOW KCP&L Greater Missouri Operations Company ("GMO"), and, for its Proposed Findings of Fact and Conclusions Of Law, submits the following:

Procedural History

- 1. On June 9, 2011, the Staff filed its Notice To Start Third Prudence Review which initiated this case.
- 2. On November 29, 2011, the Staff filed its Staff Report entitled "Prudence Review Of Costs Related To The Fuel Adjustment Clause For The Electric Operations Of KCP&L Greater Missouri Operations Company" ("Staff Report") This matter arises out of Staff's recommendation in its Staff Report that certain costs, incurred by GMO between June 1, 2009, and November 30, 2010 ("the review period"), and passed on to ratepayers through its fuel adjustment clause ("FAC"), be disallowed as imprudent and that GMO be required to make corresponding refunds to ratepayers, with interest at the short term interest rate, through its FAC.¹

¹ A fuel adjustment clause is a device authorized by statute that permits an electric utility to pass fuel price changes on to customers through a surcharge without the requirement of a general rate case. One requirement of the authorizing statute is a prudence review at 18-month intervals. This is the third such review since GMO was granted its FAC.

- 3. In its Staff Report, the Staff recommended that "the Commission find GMO imprudent for including costs and revenues associated with GMO's hedging future purchases of spot market power by buying options to purchase natural gas during that period in determining the associated FAC charges both because such costs and revenues are not within the scope of GMO's FAC and because such "hedging" is in and of itself imprudent, and order GMO to refund to its customers, in the aggregate, \$18,755,865 plus interest accrued at GMO's short-term interest rate until refunded by an adjustment to its FAC charge." ² More specifically, Staff is contending that the two markets—the Purchase Power and the NYMEX Natural Gas markets—are not directly linked sufficiently that a prudent person would use purchases in the natural gas futures market to prudently offset the risk of price volatility in the spot purchased power market.³
- 4. On December 5, 2011, GMO filed its Request For Hearing which disputed the Staff's claim of imprudence, and requested a hearing in the matter.
- 5. On February 22, 2012, GMO filed testimony of Dr. C.K. Woo, Wm. Edward Blunk, Tim M. Rush, and Scott H. Heidtbrink which explained the reasons that GMO disputed Staff's claims.
- 6. On March 21, 2012, the Staff filed the Direct/Rebuttal Testimony of Dana E. Eaves, Rebuttal Testimony of Lena Mantle, and Rebuttal Testimony of Charles R. Hyneman which explained the Staff positions in this case.
- 7. On May 10, 2012, GMO filed its Surrebuttal Testimony of Dr. C.K. Woo, Wm. Edward Blunk, Tim M. Rush, Gary L. Clemens and Ryan A. Bresette.
 - 8. Evidentiary hearings were held on June 5-6, 2012. The parties filed their

2

² Staff Report, p. 4. ³ Id.

Initial Briefs on July 6, 2012, and their Reply Briefs and proposed Findings of Fact and Conclusion of Law on July 27, 2012.

Issues List

In this Report and Order, the Commission will address the following issues that were specifically listed in the joint Issues List filed by the parties on May 11, 2012:

- 1. Has Staff raised a serious doubt as to the prudence of GMO's use of natural gas hedges to mitigate the price risk associated with spot purchased power?
- 2. Was GMO imprudent in its use of natural gas hedges to mitigate the price risk associated with spot purchased power during the FAC audit period?
- 3. If so, should the Commission order GMO to refund to consumers an amount plus interest through GMO's Fuel Adjustment Clause mechanism?
- 4. If the Commission finds that a refund is appropriate, what is the amount that should be refunded?
- 5. Did GMO properly account for its hedging costs? If not, what is the appropriate remedy?
- 6. Was the GMO's Fuel Adjustment Clause mechanism intended to include hedging costs for of natural gas hedges used to mitigate the price risk associated with spot purchased power?
- 7. Does the Commission want GMO to stop hedging using natural gas futures contracts to mitigate the price risk associated with spot purchased power?
 - 8. Should the Commission establish a policy which addresses the

appropriateness of the use of natural gas hedges by electric utilities?

Findings of Fact

Based upon the competent and substantial evidence in the record, the Commission finds⁴:

Jurisdiction:

- 1. GMO is a Delaware general business corporation in good standing, duly authorized to do business in Missouri. Its principal place of business is located at 1200 Main Street, Kansas City, Missouri 64105, and its registered agent is National Registered Agents, Inc., 300 B East High Street, Jefferson City, Missouri 65101.
- 2. GMO has been, since July 14, 2008, a wholly-owned subsidiary of Great Plains Energy, Inc. ("GPE"), a publicly-traded, unregulated, public utility holding company that also owns Kansas City Power and Light Company (KCPL). Collectively, KCPL and GMO operate and present themselves to the public under the brand and service mark "KCP&L." The workforce for GMO consists of KCPL employees; GMO has no employees of its own. Before it was acquired by GPE, GMO was named Aquila, Inc., and before that, Utilicorp United, Inc.⁵
- 3. GMO is in the business of owning, controlling and operating electric plant, as defined at § 386.020(14), RSMo, used for generating, transmitting and distributing electricity for sale to the public for light, heat and power. According to GPE's Form 10-K

⁴ Paragraphs 1-11 below have been largely taken from the Joint Stipulation of Non-Disputed Material Facts filed by the Company and the Staff on June 1, 2012.

⁵ For convenience, the Company will be uniformly referred to as GMO in this document, regardless of its historic name during the period under discussion.

filed with the United States Securities and Exchange Commission in February, 2010, GMO is "an integrated, regulated electric utility that primarily provides electricity to customers in the state of Missouri [and] also provides regulated steam service to certain customers in the St. Joseph, Missouri area." GMO has approximately 312,000 customers, including 273,500 residential customers, 38,000 commercial customers, and some 500 industrial, municipal, and other utility customers. To serve these customers, GMO owns 2,182 MW of generating capacity, of which 1,025 MW is coal capacity, 1,094 MW is natural gas-fired combustion turbine capacity, and 63 MW is oil-fired combustion turbine capacity.

- 4. By virtue of its activities described in Paragraph 3, above, GMO is an "electrical corporation" within the intendments of § 386.020(15), RSMo, and a public utility within the intendments of § 386.020(43), RSMo, and therefore "subject to the jurisdiction, control and regulation of the commission and to the provisions of this chapter[.]"
- 5. In addition to -- or in place of -- energy generated by its native capacity described above in Paragraph 3, GMO also purchases power on the spot market when prices are such that purchased power is the least cost alternative for serving its native load. Spot market purchased power currently represents about 35.8% of the energy sold at retail by GMO.

GMO's Fuel Adjustment Clause (FAC):

6. The Commission authorized a FAC for GMO on May 27, 2007, in Case No. ER-2007-0004, finding that fuel and purchased power costs constituted approximately 46% of GMO's test year operations and maintenance expenses; that

GMO's fuel and purchased power costs increased on average between 13% and 20% annually; that GMO had "heavy reliance" on both purchased power and gas-fired generation; that the purchased power and natural gas markets were characterized by "high volatility"; and that these factors were outside of GMO's control.6 Commission authorized-FAC included two annual adjustments⁷ and a 95% passthrough cap to encourage efficient management.⁸ These features continue to characterize GMO's FAC.

GMO's FAC allows GMO to recover from its ratepayers 95% of its prudently 7. incurred variable fuel and purchased power costs above a base amount that is set in a general rate case. Likewise, 95% of any reduction of GMO's fuel and purchased power costs below the base amount is returned to ratepayers through the FAC. GMO's fuel and purchased power costs are accumulated during six-month accumulation periods; each of which is followed by a 12-month recovery period during which the underrecovery or over-recovery is flowed through to ratepayers by an increase or decrease in the Cost Adjustment Factor ("CAF"). Adjustments to the CAF are designed to offset the under-recovery or over-recovery by the end of the 12-month recovery period. GMO's FAC is also designed to true-up any over-recoveries or under-recoveries during recovery periods. Any disallowance made by the Commission due to a prudence review is accounted for as a true-up item. As required by statute and Commission rule, GMO's FAC is subject to prudence reviews at intervals not longer than 18 months.

⁶ See In the Matter of Aquila, Inc., Case No. ER-2007-0004 (Report & Order, eff. May 27, 2007) at pp. 30-38.

⁷ Id. at 48. In other words, the FAC permits two price adjustments per year. Each 6-month adjustment period is referred to as an "accumulation period."

⁸ *Id.* at 51-55.

- 8. In the *Stipulation And Agreement As To Certain Issues* in Case No. ER-2007-0004, the Signatories, including Aquila and the Staff, agreed: "The Signatories agree that ultimate settlement values of Aquila's hedge contracts in place on March 27, 2007 for the period June 1, 2007 through December 31, 2009 will be subject to the provisions of any fuel cost recovery mechanism approved by the Commission in this case. However, the ultimate settlement values will not be subject to challenge as to a prudence disallowance relative to Aquila's original decisions to enter into these hedge positions."
- 9. In the Commission's *Order Clarifying Report and Order* issued on May 22, 2007 in Case No. ER-2007-0004 (Aquila's 2007 rate case), the Commission stated on page 1: "Under the Stipulation and Agreement, prudently incurred hedging costs will flow through the fuel adjustment clause..." ¹⁰

The Prudence Reviews:

10. The first prudence review of GMO's FAC, Case No. EO-2009-0115, concerned accumulation periods 1 and 2, June 1, 2007, through May 31, 2008. Staff did not recommend any disallowance in the first prudence review. In its report, Staff noted regarding hedging that "the Company attempts to hedge against the fluctuations of natural gas, coal and diesel prices." The *Report* went on to state with respect to natural gas hedging costs: 12

The Company had a net loss through its natural gas hedging program of approximately \$7 million for the June 1, 2007 to May 31, 2008

⁹ Stipulation And Agreement As To Certain Issues, Case No. ER-2007-0004, pp. 5-6.

¹⁰ Order Clarifying Report & Order, Case No. ER-2007-0004, p. 1 (May 22, 2007).

See In the Matter of Aquila's First Prudence Review, Case No. EO-2009-0115 (Staff Report, filed Dec. 1, 2008) at 9.

¹² *Id.*

time period of this audit. The program had losses through the months of June 2007 through March 2008 – the first 10 months of the audit year. In the last two months of the audit year, the company's hedging program produced a gain of approximately \$1.5 million.

Even though the losses discussed above included the cross-hedges for purchased power, the *Report* did not expressly refer to the cross-hedging of purchased power spot market price risk with financial instruments based on natural gas futures.

11. The second prudence review of GMO's FAC, Case No. EO-2010-0167, concerned accumulation periods 3 and 4, June 1, 2008, through May 31, 2009. Staff did not recommend any disallowance in the second prudence review. Staff's report included a section headed, "Financial Hedges of Natural Gas." The *Report* went on to state with respect to natural gas hedging costs: 14

The Company had a net gain, i.e., it was able to purchase natural gas at a price lower than the market price, through its natural gas hedging program of approximately ** \$2 million ** for the June 1, 2008 to May 31, 2009 time period of this audit. The program had a gain or increase of approximately ** \$5 million ** through the months of June 1, 2008 through December 31, 2008 – the first seven months of the prudence review period. In the last five months of the prudence review period, the company's hedging program produced a loss or decrease of approximately ** \$3 million **. Because the company's financial hedging program is used to avoid market fluctuations in natural gas prices, there will be times that GMO benefits and times that they do not. If it was found that GMO had been imprudent in its financial hedges and natural gas fuel purchases, ratepayer harm could result from an increase in fuel costs recovered through the FAC. The Company had a net loss through its natural gas hedging program of approximately \$7 million for the June 1. 2007 to May 31, 2008 time period of this audit. The program had losses through the months of June 2007 through March 2008 - the first 10 months of the audit year. In the last two months of the audit year, the company's hedging program produced a gain of approximately \$1.5 million.

¹³ See *In the Matter of KCP&L GMO's Second Prudence Review,* Case No. EO-2010-0167 (*Staff Report,* filed May 28, 2010) at 6.

¹⁴ *Id.* at 7.

Even though the gains and loss discussed above included the cross-hedges for purchased power, the *Report* did not expressly refer to the cross-hedging of purchased power spot market price risk with financial instruments based on natural gas futures.

Staff's Proposed Disallowance and Refund

- 12. This case is the third prudence review of GMO's FAC and concerns accumulation periods 5, 6 and 7, June 1, 2009, through November 30, 2010. Staff recommended the disallowance of \$18,755,865 reflecting GMO's use of natural gas hedges to mitigate risk associated with its future purchases in the spot power market. Staff characterized that practice as imprudent. Staff recommended that GMO be required to refund that amount, plus interest at the short term rate, to ratepayers through the FAC. 17
- 13. In its Position Statement filed on May 25, 2012, Staff revised the amount of its proposed disallowance and refund recommendation. Staff stated: "GMO must refund \$14.9 million, with interest at its short-term borrowing rate, to ratepayers through its FAC mechanism."
- 14. Staff's disallowance is based upon GMO's use of a long-standing hedging practice that has been implemented by GMO since 2004.¹⁹

GMO's Cross-Hedging Program

15. GMO's hedging program uses natural gas futures contracts to cross-hedge the price risk associated with spot purchased power risk. This hedging practice involves

¹⁵ See *In the Matter of KCP&L GMO's Third Prudence Review,* Case No. EO-2011-0390 (*Staff Report,* filed Nov. 28, 2011) at 2. Staff has since agreed that the figure in question is \$14.9 million.

¹⁶ *Id*.

¹⁷ *Id.*

¹⁸ Staff Position Statement, p. 2 (filed on May 25, 2012).

¹⁹ GMO Ex. 5, Heidtbrink Direct, p. 4; Tr. 141, 216.

"The act of hedging ones position by taking an offsetting position in another good with similar price movements."20

- 16. Although the two goods are not identical, they are correlated enough to create a hedged position as long as the prices move in the same direction.²¹
- The Company has used natural gas futures contracts to cross-hedge the price of purchased power because there is no viable electric futures market for electricity in the Southwest Power Pool region where GMO operates. There is no organized market where GMO could buy electric futures contracts in the SPP region.²²
- 18. Staff contends that there is no reasonable method of hedging electric price risk using financial instruments, but instead the only reasonable methods are to build power plants or enter into purchase power agreements.²³
- 19. If GMO stopped its hedging efforts using financial instruments, then it would "play the market" and buy purchased power on the spot market at the prevailing price at the time. The Company would pass along those purchased power costs to customers through the Fuel Adjustment Clause ("FAC")—whatever those purchased power costs turned out to be at the time of purchase.
- 20. The Staff does not contend that it is imprudent for GMO to hedge its purchased power costs, but it believes that it should not have used financial instruments to do so.²⁴

²⁰ Tr. 268.

²² Staff Ex No. 10, Staff Report, p. 9; Tr. 210-11.
²³ Staff Ex No. 2NP, p. ; Tr. 210-12.

²⁴ Tr. 213. 247.

- 21. However, the only alternative method of hedging electric prices suggested by Staff is to construct power plants or enter into purchase power agreements.²⁵ The Company contends that neither of these alternatives are realistic methods of hedging electric prices in the near term since the lead times on such projects are several years.
- 22. Company witness Wm. Ed Blunk includes in his testimony tables that shows how to use natural gas futures contracts to hedge the price of spot purchase power. He shows how the gain or loss in the physical position is offset by the gain or loss in the futures market. Essentially, when constructing a hedge for spot purchased power, the Company performs two transactions that are directly and inseparably linked.²⁶
- 23. The Company contends that it needs to physically buy on peak purchased power for its customers. In order to offset the risk of price spikes in electricity, it enters into natural gas futures contracts for the BTU-equivalent of the purchased power it expects to buy. Together, these two actions create the hedge—the physical purchase of the spot purchased power, and the entering into the natural gas futures contracts for a BTU equivalent amount of natural gas that can be sold in the future.²⁷
- 24. Buying the purchased power is referred to as the "physical side" of the hedge. Buying the natural gas futures contracts is sometimes referred to as the "derivative side" of the hedge transaction. At the same time that the Company buys its purchase power, it also has natural gas futures contracts that it can sell to offset the increased price for electricity.²⁸

²⁵ Staff Ex No. 2, Mantle Rebuttal, pp. 1-6; Tr. 132, 211.

²⁶ GMO Ex No. 2NP, Blunk Surrebuttal, pp. 8-10.

²⁷ ld.

²⁸ GMO Ex No. 1NP, Blunk Direct, pp. 14-15; GMO Ex. 2, Blunk Surrebuttal, pp. 8-11.

- 25. This method provides a hedge or insurance against skyrocketing electric prices. For example, GMO knows in February that it is going to be buying purchased power in August to meet the peak demands of its customers. GMO knows that electric power prices are volatile, and GMO is concerned that that the prices for electric power in August may be higher than presently anticipated.
- 26. At this point, GMO has a choice: (1) either it can attempt to hedge the risk that prices may be substantially higher than forecasted, or (2) it could just "play the market" by purchasing spot purchased power at the prevailing price without a hedge, and merely passing along to its customers whatever price it turns out to be in August through the Fuel Adjustment Clause.
- 27. During the FAC audit period in this case, GMO chose to enter into a hedge to protect its customers against skyrocketing electric prices. GMO chose this approach based upon (a) its own professional judgment that hedging was the prudent thing to do to protect its customers, (b) the policy statement contained in Commission's *Natural Gas Price Volatility Mitigation Rule* (4 CSR 240-40.018) that encourages LDC's to hedge, and (c) Commission orders and other signals received from the regulatory community that hedging was expected or at least strongly encouraged.
- 28. As explained by GMO witness Mr. Tim M. Rush, the Company had many reasons to believe that the Commission intended for it to continue to hedge price risk to protect its customers.²⁹
- 29. Over the course of Aquila's rate cases beginning with Case No. ER-2005-0436 ("2005 Case"), various Staff members and intervenors have promoted the use of

²⁹ GMO Ex No. 7, Rush Surrebuttal, pp. 4-5. (footnotes omitted)

hedging to mitigate risk as well as the importance of the inclusion of these costs in rates.30

- 30. Mr. Featherstone promoted the inclusion of the hedging impact in an Interim Energy Charge ("IEC") if one were to be approved in Case No. ER-2005-0436 (an IEC was not approved in that case).31
- 31. Intervenor witness Maurice Brubaker also indicated that hedge settlements should be recorded above-the-line.³²
- 32. In Mr. Featherstone's Direct Testimony in Case No. ER-2007-0004 he again indicated that Aguila should include hedge settlements in any fuel clause authorized by the Commission.³³
- 33. Mr. Hyneman acknowledged that during the Case No. ER-2007-0004, he recommended that Aquila continue hedging. His concern was with the rigidity of the program in place at that time.34
- 34. In the Concurring Opinion of Chairman Jeff Davis in Case No. ER-2007-0004, Commissioner Davis states, "Aquila should be very mindful that the majority of this commission took a bold step in awarding Aquila a fuel adjustment mechanism. This commission and the General Assembly will be watching. If Aquila fails to adopt a proper hedging strategy, fails to follow its hedging strategy or abuses the discretion given to it by this commission in any other way, this commissioner will not hesitate to modify or reject Aguila's FAC application in a future proceeding." 35

³⁰ ld.

³¹ ld.

³² ld.

³³ ld.

³⁵ GMO Ex No. 7, Rush Surrebuttal, pp. 4-5. (footnotes omitted)

- 35. The Company also noted that GMO shareholders do not profit by entering into a hedge. GMO's shareholders don't make money by hedging since the gains or losses in the physical market are largely offset by the opposite gains or losses in the derivative market. The gains or losses in the derivative market are passed along to consumers just as are the gains or losses in the physical market. Therefore, hedging does not create profit opportunities for shareholders.
- 36. Hedges are designed to protect consumers and give them insurance against skyrocketing electric prices, and not make money for the Company or its shareholders. However, GMO and its shareholders will be directly and adversely affected if the Commission accepts the Staff's position in this case and disallows the losses on the derivative side of the hedge, while ignoring the offsetting gains in the physical market.
- 37. The Company contends that cross-hedging electricity prices with natural gas futures is a widely accepted technique for hedging spot purchased power price risk used by the electric industry.³⁶
- 38. Cross-hedging has been taught by the Electric Power Research Institute ("EPRI") since the mid-1990s³⁷, and numerous Staff personnel, including Dana Eaves and Charles Hyneman, have attended webinars presented by PGS Energy Training where this cross-hedging technique was explained and taught.³⁸
- 39. The Company contends that cross-hedging is a widely used technique for hedging commodities where the hedged commodity does not have a futures contract

³⁶ GMO Ex No. 1, Blunk Direct, p.15-18; GMO Ex No. 2, Blunk Surrebuttal, p. 35; GMO Ex No. 17· Tr 307)

³⁷ GMO Ex No. 2, Blunk Surrebuttal, p. 35; GMO Ex. No. 17.

³⁸ GMO Ex No. 2, Blunk Surrebuttal, pp. 33-36, Schedule WEB-15, pp. 1-8; GMO Ex No. 7, Rush Surrebuttal, p. 23.

available. The National Rural Electric Cooperative Association, American Public Power Association and Large Public Power Council go so far as to say, "Cross-commodity hedging is commonplace."39

- The R-squared of the correlation coefficient of around 0.80 is considered by the electric industry, accounting standards, and the SEC staff as demonstrating that the data are highly correlated.40
- Staff witness Dana Eaves' own analysis compares SPP Electricity Prices 41. with the NYMEX natural gas settlement prices from February 2007 through August 2011. Staff concludes at page 15: "Staff would call this relationship as having a strong positive association for the data set in the analysis period."41 Mr. Eaves also states that "For the period February 2007 thru October 2011 the data has a correlation coefficient of 0.8941."42
- 42. Mr. Blunk used data contained in Staff's workpapers to determine that the correlation coefficient between SPP's electric prices and the NYMEX natural gas settlement price for the 12 months preceding the FAC audit review period, the approximate timeframe in which the decision makers at GMO would have been making the decision to cross-hedge their electric prices using natural gas futures, was 0.9411. That equates to an R-squared of 0.89 (0.9411 x 0.9411) and exceeds the R-squared threshold of 0.80 for determining a hedge is "highly effective." 43

³⁹ GMO Ex No. 1, Blunk Direct, p.15-18; GMO Ex No. 2, Blunk Surrebuttal, p. 35; GMO Ex No.

⁴⁰ GMO Ex No. 3, Bresette Surrebuttal, pp. 9-10; GMO Ex No. 2, Blunk Surrebuttal, pp. 22; Schedule WEB-13.

⁴¹ Eaves Direct/Rebuttal, Ex. No. 1, p. 15. ⁴² Id.

⁴³ GMO Ex. No. 2, Blunk Surrebuttal, p. 24.

- 43. Staff has been aware of GMO's cross-hedging program since 2005 and has never previously suggested that it was imprudent to use natural gas futures contracts to hedge the price of electricity. 44 Staff auditors, including Mr. Charles R. Hyneman, have been aware that the Company uses natural gas futures contracts to cross-hedge purchase power costs since 2005.⁴⁵
- 44. Initially, Staff recommended a proposed disallowance and refund of approximately \$18.8 million in its Staff Report and the Direct/Rebuttal Testimony of Dana E. Eaves on the ground that it was imprudent for GMO to have used natural gas futures contracts to hedge the risk associated with purchased power costs.⁴⁶ Later, the Staff's proposed disallowance was ostensibly "corrected" to approximately \$14.9 Million after the Staff reviewed the Company's testimony in this case. Staff had failed to consider that it had previously entered into a Stipulation And Agreement in Case No. ER-2007-0004 which precluded disallowance related to hedges in place on March 27, 2007.⁴⁷
- 1. Has Staff raised a serious doubt as to the prudence of GMO's use of natural gas hedges to mitigate the price risk associated with spot purchased power?
- The Commission finds that Staff has not provided competent and 45. substantial evidence to raise a "serious doubt" regarding the reasonableness or prudence of the Company's hedging practice. The Staff has presented conclusory

⁴⁴ GMO Ex No. 6, Rush Direct, p. 10; GMO Ex No. 5, Heidtbrink Direct, pp. 3-10; GMO Ex No. 4, Clemens Surrebuttal, pp. 4-10.

⁴⁵ GMO Ex No. 6, Rush Direct, p. 10; GMO Ex No. 5, Heidtbrink Direct, pp. 3-10; GMO Ex No. 4, Clemens Surrebuttal, pp. 4-10.

Staff Ex No. 10, Staff Report, p. 4; Staff Ex No. 1, Eaves Direct/Rebuttal, pp. 2-5.

GMO Ex No. 7, p. 6; Tr. 208-09.

statements in the Staff Report and its Direct/Rebuttal Testimony of Dana E. Eaves without supporting evidence to demonstrate that cross-hedging the risk of purchased power costs by using natural gas futures contracts is unreasonable or imprudent, judged by existing industry standards. As a result, since the Staff has failed to raise a serious doubt as to the prudence of the cross-hedging technique, GMO's hedging expenditures are entitled to the legal presumption of prudence.

In the Staff Report⁴⁸ filed on November 28, 2011, the Staff recited the following conclusory statement:

Staff knows of no formal organized market that allows for spot purchased power to be hedged which would aid GMO in mitigating the risk associated with buying spot market purchased power. It appears in the absence of such a formal market GMO has tried to create its own purchased power hedge market by purchasing NYMEX natural gas futures contracts to offset its risk in the spot market for purchased power. Staff concludes that purchasing natural gas futures contracts to mitigate risk associated with the purchase of spot purchase power is imprudent. The two markets (NYMEX Natural Gas and Purchase Power Markets) are not directly linked sufficiently that a prudent person would use option purchases in the natural gas futures market to prudently offset the risk of price volatility in the spot purchased power market. Under GMO's concept, GMO's actions are akin to placing a bet in the stock market in hopes of generating enough cash to pay for a future variable expense. GMO's "hedging" practice actually increases GMO's risk exposure, to the detriment of GMO's ratepayers: GMO must guess right when placing the bet, otherwise the initial risk exposure to volatile spot purchase power market remains. GMO's linking of natural gas futures contracts with purchases it makes in the spot market for purchased power is imprudent.

47. In its Staff Report, Staff failed to include any evidence that demonstrated that the two markets (NYMEX Natural Gas and Purchase Power Markets) are not directly linked sufficiently that a prudent person would use natural gas futures contracts to prudently offset the risk of price volatility in the spot purchased power market.⁴⁹

⁴⁸ Staff Ex No. 10, pp. 9-10. ⁴⁹ Tr. 309, 312.

48. In fact, Staff witness Eaves testified that at the time he filed the Staff Report which recommended an \$18.8 million refund, he had not conducted any correlation analysis to determine if the NYMEX Natural Gas and electric prices were correlated. 50

49. According to the testimony in this case, all Mr. Eaves had done prior to filing the Staff Report was to look at some graphs and charts contained on a website of the Southwest Power Pool. The record does not include those charts or graphs in the Staff Report or any of Staff's testimony to support Mr. Eaves' unsubstantiated conclusion that there was insufficient correlation between the NYMEX Natural Gas and Purchased Power Markets.⁵¹

50. As a result, the Commission finds that there is no information in the Staff Report that raised a "serious doubt" regarding correlation between the natural gas futures and spot electricity markets. Staff's Report merely made an unsupported allegation that the markets "are not directly linked sufficiently that a prudent person would use [futures]⁵² purchases in the natural gas futures market to prudently offset the risk of price volatility in the spot purchased power market.⁵³

51. Staff witness Dana E. Eaves' Direct/Rebuttal Testimony stated: "For the period February 2007 thru October 2011 the data has a correlation co-efficient of 0.8941" between the SPP Electricity Price and the NYMEX natural gas settlement prices. According to Mr. Eaves' testimony, "Staff would call this relationship as having a strong positive association for the data set in the analysis period."54

⁵⁰ Tr. 311.

⁵² Staff amended its original statement in its Staff Report. (Tr. 261) ⁵³ Staff Ex No. 10, p. 10.

⁵⁴ Staff Ex No. 1, Eaves Direct/Rebuttal, p. 15.

52. After reading the Company's Direct Testimony, Staff witness Eaves did finally conduct a correlation analysis of the SPP electric prices and the natural gas futures prices. Mr. Eaves found that: "For the period February 2007 thru October 2011 the data has a correlation co-efficient of 0.8941."55

53. Based upon this correlation analysis, Staff witness Eaves concluded: "Staff would call this relationship as having a strong positive association for the data set in the analysis period."56

54. Mr. Eaves did not conduct a study of the correlation between natural gas markets and on-peak purchased power markets prior to the filing of the Staff Report in this case on November 29, 2011.⁵⁷

55. Mr. Eaves analysis showed that these markets have a "strong positive association for the data set in the analysis period."58 This testimony does not raise a serious doubt regarding the prudence of using the cross-hedging technique to mitigate the risk of price spikes in the electric power markets.

56. When asked in Data Request No. 118 and during cross-examination, what was the minimum level of coefficient correlation that he would require to conclude that the data set has a "strong positive association", Mr. Eaves replied: "As a rule of thumb, a strong correlation or relationship has an R value range of between 0.85 to 1 or negative 0.85 to 1.59 Mr. Eaves believes that the correlation between natural gas prices and electricity prices "should almost be perfect all the time" before GMO could prudently

⁵⁵ ld.

 ⁵⁸ Staff Ex No. 1, Eaves Direct/Rebuttal, p. 15.
 ⁵⁹ Tr. 315; GMO Ex No. 18.

use cross-hedging of natural gas futures contracts to hedge the price of spot purchase power costs.⁶⁰ While Mr. Eaves recognized that a correlation coefficient to 0.85 indicated a "strong positive association", he applied a "perfect correlation" standard in his analysis of the data in this case to conclude that natural gas prices and electric prices were not sufficiently linked to support a cross-hedging strategy.⁶¹

57. According to Mr. Eaves, he would not be comfortable with the use of cross-hedging unless there was a perfect correlation almost all of the time between natural gas and electricity prices.⁶²

58. The Commission finds that Mr. Eaves' "perfect correlation" standard is not the standard used by the electric industry, the accounting profession, or any known regulatory agency in the country, and it will not be applied by the Commission in this case.

59. Prior to filing of the Staff Report or its Direct/Rebuttal Testimony of Dana E. Eaves, Staff had not conducted any surveys among electric companies across the country or in Missouri to determine if the use of natural gas futures contracts to cross hedge the risk of electric price spikes is commonly used by the electric industry. Instead, Mr. Eaves merely relied upon his understanding of the practices of other electric companies in Missouri. Nor did Mr. Eaves attach any information to his testimony in this case that showed what the electric industry practices were at the time with regard to the use of natural gas futures to hedge electric price risk. In fact, Mr.

⁶⁰ Id. at 102.

⁶¹ Tr. 318-20

⁶² Id

⁶³ Tr. 304-05.

⁶⁴ Tr. 305.

⁶⁵ Tr. 306.

Eaves testified that prior to March 26, 2012, the date he received an industry survey from the Company, he did not have any surveys that showed what the electric industry practices were with regard to the use of natural gas futures to hedge electric price risk. ⁶⁶ There was no testimony or other competent and substantial evidence presented by Staff that raised a "serious doubt" showing that GMO was using a hedging technique that was considered imprudent by the electric industry or other experts in the field of hedging.

60. In fact, the competent and substantial evidence filed by GMO demonstrated that other electric companies across the country, including Arizona Public Service, Florida Power & Light, Madison Gas & Electric, Mississippi Power—Southern Company, Portland General, and Ameren, use this cross-hedging technique, when necessary, to mitigate the price risk of spot purchased power. For example, GMO's email survey includes a response from Ameren's Wil Cooper that indicates that Ameren "used natural gas derivatives (futures, options, forwards etc.) to cross hedge electricity price risk". It is clear from the Company's survey that about one-half of the electric companies that responded to the survey have used this cross-hedging technique to mitigate the price risk associated with the spot purchase power market.

61. Staff witness Dana E. Eaves did not include in the Staff Report, his Direct/Rebuttal Testimony, or his workpapers any Missouri Public Service Commission decision, or any decisions from other public utility commissions in the country that has found that the cross-hedging technique was unreasonable or imprudent. Staff witness

⁶⁶ Tr. 307.

⁶⁷ GMO Ex No. 17; GMO Ex. No. 2, Blunk Surrebuttal, p. 37, and Schedule WEB-17.

ья Id.

⁶⁹ GMO Ex No. 17; GMO Ex. No. 2, Blunk Surrebuttal, p. 37.

Lena Mantle also was unfamiliar with any decisions in Missouri or elsewhere that had found the cross-hedging method was imprudent. The Staff also failed to raise any "serious doubt" by citing authoritative sources that questioned the use of the crosshedging technique. In fact, Staff witness Eaves was unable to cite any textbook, treatise, or scholarly article or publication that found that it was imprudent to use natural gas futures contracts to hedge the risk associated with electric price spikes.⁷¹ In fact, Mr. Eaves couldn't even recall any specific articles that he had read regarding this cross-hedging technique, with the exception of the articles authored by Dr. C.K. Woo, the Company's expert witness. 72 Dr. Woo's scholarly research supported the use of natural gas futures contracts to hedge the price risk associated with spot purchased power. He also concluded in his testimony that GMO's cross hedging program was prudent and reasonable, based upon the circumstances that existed at the time the decision to cross hedge spot purchased power risk was made. 73 In his testimony, Dr. Woo specifically stated: "[I]t is prudent to use NYMEX natural gas futures to effectively cross hedge the daily on-peak electricity price..." ⁷⁴ The only Missouri Public Service Commission publication related to hedging that had been reviewed by Mr. Eaves was the Joint Report on Natural Gas Market Conditions, PGA Rates, Customer Bills & Hedging Efforts of Missouri's Natural Gas Local Distribution Companies in Case No. GW-2006-0110 which specifically encouraged LDCs to hedge their natural gas supplies.⁷⁵ This Commission publication was certainly no support for Staff's attempts to

⁷⁰ Tr. 212-13.

⁷¹ Tr. 280.

⁷² Tr 280-81

⁷³ GMO Ex. No. 9, Woo Surrebuttal, p. 2.

⁷⁴ GMO Ex No. 9, Woo Surrebuttal, p. 2.

⁷⁵ Tr. 282.

raise a serious doubt about the prudence of hedging energy supplies by Missouri public utilities.

- 62. Finally, Staff did not present any information from hedging webinars or seminars that raised a "serious doubt" regarding the prudence of the use of natural gas futures contracts to hedge the risk of spot purchase power. To the contrary, the only webinar that Staff witness Eaves attended on the subject of electricity price hedging specifically explained and taught the use of the cross-hedging technique utilized by GMO for hedging the price of electricity using natural gas futures contracts.⁷⁶
- The only "doubt" that Staff was able to raise in its Staff Report or its 63. testimony in this case was the fact that in the particular FAC audit period reviewed (a period of declining natural gas and electricity prices), the derivative side of the hedge transactions incurred losses rather than gains. The competent and substantial evidence indicates that such losses are expected in a declining energy market.⁷⁷
- 64. It was the fact that there were losses on the derivative side of the hedge transaction that "caught the attention" of Mr. Eaves, and was the basis for his disallowance.⁷⁸ However, as the Commission has pointed out in its *Natural Gas Price* Volatility Mitigation Rule ("Rule"), 4 CSR 240-40.01879, the existence of losses in a hedging program is not unanticipated, and does not suggest that the hedging program is unreasonable or imprudent. In fact, the Commission has recognized in its Rule that "this is recognized as a possible result of prudent efforts to dampen upward volatility":

⁷⁶ Tr. 279. ⁷⁷ Tr. 135. ⁷⁸ Tr. 217, 230.

⁷⁹ GMO Ex. No. 16.

- (A) As part of a prudent planning effort to secure adequate natural gas supplies for their customers, natural gas utilities should structure their portfolios of contracts with various supply and pricing provisions in an effort to mitigate upward natural gas price spikes, and provide a level of stability of delivered natural gas prices.
- (B) In making this planning effort, natural gas utilities should consider the use of a broad array of pricing structures, mechanisms, and instruments, including, but not limited to, those items described in (2)(A) through (2)(H), to balance market price risks, benefits, and price stability. Each of these mechanisms may be desirable in certain circumstances, but each has unique risks and costs that require evaluation by the natural gas utility in each circumstance. Financial gains or losses associated with price volatility mitigation efforts are flowed through the Purchased Gas Adjustment (PGA) mechanism, subject to the applicable provisions of the natural gas utility's tariff and applicable prudence review procedures.
- (C) Part of a natural gas utility's balanced portfolio may be higher than spot market price at times, and this is recognized as a possible result of prudent efforts to dampen upward volatility. (emphasis added)
- 65. The Staff witness Lena Mantle recognized that hedging losses cannot be known until "after the fact". 80 In other words, only with the benefit of perfect hindsight does the decision-maker know if there will be losses or gains as a result of the use of hedges.

-

⁸⁰ Tr. 230.

- 66. The Commission and the courts have clearly pointed out that the reliance on hindsight is improper when applying the Commission's prudence 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." Re Kansas City Power & Light Company, Case No. ER-2010-0355 (April 12, 2011) at 74-77; See also State ex rel. Associated Natural Gas v. Public Serv. Comm'n, 954 S.W.2d 520, 528-529 (Mo. App. W.D. 1997). Yet, the Commission finds that it is the existence of losses which are only known after the fact, that have played a prominent role in Staff's analysis and conclusion that the cross-hedging program is imprudent.
- 67. The only other "doubt" raised by Mr. Eaves was based solely upon his personal view that there needed to be a "perfect" correlation between natural gas futures and electric prices before cross-hedging was a prudent practice.⁸¹ The Commission finds that this position lacks credibility and is contrary to the electric industry and accounting industry standards for evaluating cross-hedging practices.
- 68. In summary, the Commission finds that Staff has failed to meet its burden to raise a "serious doubt" regarding GMO's long-standing practice of using natural gas futures contracts to hedge the purchase power costs. As a result, the Company is entitled to rely upon the legal presumption of prudence with regard to the hedging expenditures at issue in this case. The Staff's proposed disallowance and refund will therefore be rejected.

⁸¹ Tr. 318-20.

- 2. Was GMO imprudent in its use of natural gas hedges to mitigate the price risk associated with spot purchased power during the FAC audit period?
- The Company presented the testimony of five witnesses to rebut each and every claim raised by Staff in this case to demonstrate that its hedging program is reasonable and prudent. The Company also addressed accounting issues raised by Staff.
- 70. The Company's outside expert, Dr. C.K. Woo, is an economist and a renowned expert on cross-hedging. Dr. C.W. Woo is one of the most renowned experts on the topic of cross-hedging of natural gas futures contracts and spot purchase power. Having received his Ph.D from the University of California-Davis, Dr. Woo specializes in public utility economics, applied microeconomics and applied finance. With 30 years of experience in the electricity industry, Dr. Woo has testified and prepared expert testimony for use in regulatory and legal proceedings in California, British Columbia and Ontario. He has published over 100 reference articles on electricity deregulation, procurement, risk management, and numerous other topics.⁸² More specifically, he has published sixteen (16) professional journal articles on electricity procurement and risk management.83
- 71. Mr. Ed Blunk, the Company's Supply Planning Manager, explained how the Company uses natural gas futures contracts to mitigate the price risk associated with spot purchase power costs, and the reasons for doing so. GMO witness Mr. Wm. Edward Blunk is employed by Kansas City Power & Light Company as Supply Planning

⁸² GMO Ex No. 8, Woo Direct, Schedule CDW-1.83 GMO Ex No. 8, Woo Direct, pp. 1-4.

Manager with the primary responsibilities to facilitate the development and implementation of fuel and power sales purchase and risk management strategies of KCP&L and GMO. With a Masters in Business Administration degree in finance from the University of Missouri, he has worked for the Kansas City Power & Light Company for thirty-one (31) years. Currently, Mr. Blunk has responsibilities for developing risk management and hedging programs. He has been involved with hedging coal and coal prices for KCP&L since the early 1980s. He has also been instrumental in the design and implementation of KCP&L's natural gas hedging program since it began in 2001. He has also attended seminars presented by Princeton Energy Programme, the Electric Research Policy Institute (EPRI), and PGS Energy Training on energy markets and risk management.⁸⁴

72. Mr. Scott H. Heidtbrink, KCP&L's Executive Vice President and Chief Operating Officer, testified about the history of the Company's cross-hedging program, going back to its initiation in 2004. Mr. Scott H. Heidtbrink previously served as Senior Vice President—Supply for KCP&L and was responsible for KCP&L's and GMO's energy generation resources, generation dispatch, off-system sales coal procurement, and asset management for the jointly owned generation facilities. Having received a Bachelor of Science degree in electrical engineering from Kansas State University in 1986, he joined Aquila in 1987, and previously served as Vice President, Power Generation and Energy Resources of Aquila's regulated gas and electric operations.⁸⁵

⁸⁴ GMO Ex No. 1, Blunk Direct, pp. 1-2.

⁸⁵ GMO Ex No. 5, Heidtbrink Direct, pp. 1-2.

Mr. Heidtbrink was at Aquila during those years, and discussed the history around its initiation.⁸⁶

73. Mr. Gary L. Clemens was also at Aquila when the cross-hedging program began and is personally familiar with discussions with the Staff and other parties in past Aquila rate cases. He discussed some of the interactions with Staff over the years related to the Company's hedging practices.⁸⁷

74. Mr. Ryan A. Bresette, the Company's Assistant Controller, oversees margin accounting and derivative accounting. Mr. Ryan A. Bresette graduated from Rockhurst University in 1994 with a Bachelor of Science in Business Administration with a major in Accounting. In 1997, he passed the Certified Public Accountant's examination. In May 2010, he received a Masters in Business Administration from the University of Missouri—Kanas City. He has worked for KCP&L since 2004 in various accounting-related positions. During the last seven years, he has either prepared or approved the accounting designation for financial instruments and forward contracts such as natural gas, purchased power and coal contracts.⁸⁸

75. Mr. Bresette explained the basis for the accounting related to the hedges, and addressed specific accounting issues raised by Staff.⁸⁹

76. Mr. Tim Rush discussed the Company's interactions with the Staff over hedging program issues, the details around the Company's Fuel Adjustment Clause ("FAC") tariffs, and rebutted suggestions by Staff that hedging costs were not expected

⁸⁶ GMO Ex No. 5, Heidtbrink Direct, pp. 1-12.

⁸⁷ GMO Ex No. 4, Clemens Surrebuttal, pp. 2-10.

⁸⁸ GMO Ex No. 3, Bresette Surrebuttal, pp. 1-2.

⁸⁹ GMO Ex No. 3, Bresette Surrebuttal, pp. 1-22.

to be flowed through the FAC mechanism.⁹⁰ Mr. Tim M. Rush serves as KCP&L's Director, Regulatory Affairs, overseeing the preparation of rate cases, class cost of service and rate design for KCP&L and GMO. He has been employed by KCP&L since 2001. Having received a Masters of Business Administration degree from Northwest Missouri State University and an undergraduate degree in Business Administration with a concentration in Accounting from the University of Missouri-Columbia, he was employed by St. Joseph Light & Power Company for over 24 years where he had responsibility for the regulatory area, marketing, energy consultant, customer service, and managed the Rates and Market Research Department for fifteen years.⁹¹

- 77. The Staff's proposed disallowance and refund of GMO's hedging costs is based upon the contention that: "Staff has found GMO was imprudent in its use of natural gas hedges to mitigate risk associated with its future purchases in the spot power market." More specifically, Staff is contending that the two markets—the Purchase Power and the NYMEX Natural Gas markets—are not directly linked sufficiently that a prudent person would use purchases in the natural gas futures market to prudently offset the risk of price volatility in the spot purchased power market. 93
- 78. The Commission finds that the Staff's position is not based upon competent and substantial evidence and will be rejected by the Commission.
- 79. Based upon the competent and substantial evidence in the record, the Commission finds and concludes that the natural gas and electric markets are highly

⁹⁰ GMO Ex No. 6, Rush Direct, pp. 1-13; GMO Ex No. 7, Rush Surrebuttal, pp. 1-27.

⁹¹ GMO Ex No. 6, Rush Direct, pp. 1-2.

⁹² Staff Ex No. 10, Staff Report, p. 2.

⁹³ Staff Ex No. 1, Eaves Direct/Rebuttal, pp. 2-3.

correlated⁹⁴ and GMO's hedges themselves are considered "highly effective" judged by existing industry and accounting standards.⁹⁵

- 80. Under the first test, the R-squared must be greater than or equal to 0.80. R-squared is a statistic that measures the strength of the relationship between two data sets. Specifically, it gives the proportion, or if multiplied by 100, the percent, of the variability in one data set explained by the variability in another data set. The R-squared is the square of the correlation coefficient such that a correlation coefficient of 0.90 would yield an R-squared of 0.81. In this case, an R-squared of 0.80 means changes in natural gas prices explain 80% of the changes in electricity prices.⁹⁶
- 81. Under the Dollar Offset test, the change in value of the derivative is compared to the change in value of the hedged item. Hedges that yield a ratio within the range of 80-120 percent are deemed "highly effective." 97
- 82. The R-squared test is based upon a review of the correlation coefficients of the data. This test looks at how closely two data sets move in the same direction--or are correlated. 98
- 83. The competent and substantial evidence shows that the electric industry, the accounting profession, the Financial Accounting Standards Board, and the staff of the Securities and Exchange Commission consider an R-squared of around 0.80 indicative that the daily on-peak electricity and natural gas prices are highly correlated,

⁹⁷ GMO Ex No. 2, Blunk Surrebuttal, p. 12.

⁹⁴ GMO Ex. No. 8, Woo Direct, p. 5-28; GMO Ex No. 9, Woo Surrebuttal, pp. 3-8; 10-20.

⁹⁵ GMO Ex No. 3, Bresette Surrebuttal, pp. 9-10; GMO Ex No. 1, Blunk Direct, pp. 30-36; GMO Ex No. 2, Blunk Surrebuttal, pp. 44-51; Schedule WEB-9.

⁹⁶ Id. at 22

⁹⁸ GMO Ex No. 2, Blunk Surrebuttal, pp. 22-24; GMO Ex No. 3, Bresette Surrebuttal, pp. 9-10.

and that these markets are sufficiently linked so that cross-hedging would be considered "highly effective". 99

- The R-squared test applies to all hedges, including cross-hedges. 100 84.
- 85. It also uses a 0.80 R-squared as an indication that a hedge is "highly effective". 101
- 86. If a proposed hedge fails to exhibit an R-squared of 0.80, it does not mean it is not a viable hedge, but merely means that the hedge receives a different accounting treatment from a "highly effective" hedge. 102
- 87. Mr. Blunk used data on electric and natural gas prices contained in Staff's workpapers for the 12 months preceding the FAC audit review period to determine a correlation coefficient between SPP's electric prices and the NYMEX natural gas settlement price. 103 This would be the approximate timeframe in which the decision makers at GMO would have been making the decision to cross-hedge their electric prices using natural gas futures.
- For this period, there was a correlation coefficient of 0.9411 between SPP 88. electric prices and the NYMEX natural gas settlement prices. The 0.9411 correlation coefficient for the 12 months preceding the review period yields an R-squared of 0.89 which exceeds the R-squared threshold of 0.80 for determining a hedge is "highly effective." That R-squared of 0.89 means that 89% of the change in the electricity prices was explained by the changes in the natural gas prices for this period. 105

⁹⁹ Id.

¹⁰⁰ GMO Ex No. 2, Blunk Surrebuttal, p. 22.

¹⁰¹ GMO Ex No. 2, Blunk Surrebuttal, pp. 22-24.

¹⁰³ GMO Ex No. 2, Blunk Surrebuttal, p. 24.

¹⁰⁵ Id. at 22.

- 89. Dr. Woo also assessed the correlation between the daily on-peak per MWh procurement cost of a utility that owns natural-gas-fired generation and the dailiy natural gas price at Henry Hub. At the assumed 7 MMBtu/mwh level, Ameren and Associated Electric had correlation coefficients of 0.921 and 0.937, respectively. This data are indicative that daily per MWH procurement costs and the daily Henry Hub natural gas prices and electric prices are highly correlated, supporting the use of cross hedging to effectively manage the per MWh procurement cost risk in Missouri. 106
- Dr. Michael Proctor, formerly of the Commission Staff also reviewed the correlations between the electric and natural gas markets. Dr. Proctor's testimony in the 2009 GMO rate case concluded that 87.23% of the variation in SPP's electricity prices over a five year period was explained by variation in natural gas prices, and that there was little doubt that natural gas prices drove electricity prices for most of the hours of the year in the SPP region. 107
- Staff witness Eaves' own analysis contained in his Rebuttal Testimony compares SPP Electricity Prices with the NYMEX natural gas settlement prices from February 2007 through August 2011. While he disagreed that the markets are "highly correlated," he states at lines 9-10 on page 15: "Staff would call this relationship as having a strong positive association for the data set in the analysis period." (emphasis added) Mr. Eaves also states that "For the period February 2007 thru October 2011 the data has a correlation co-efficient of 0.8941."109

¹⁰⁶ Id. at 13-14.

¹⁰⁷ Ex. No. 22, Surrebuttal Testimony of Michael Proctor, filed April, 2009 in Case ER-2009-0090, p. 5; GMO Ex. No. 2, Blunk Surrebuttal, p. 31. 108 Staff Ex. No. 1, Eaves Direct/Rebuttal, p. 15.

¹⁰⁹ Id. at 15.

- 92. Mr. Eaves also included in his Direct/Rebuttal Testimony a "One Day" Analysis for August 3, 2009, and compared what GMO paid for peak spot market electricity to GMO's NYMEX monthly natural gas settlement price. Based upon this analysis, he concluded there was almost zero correlation in this data. However, as Mr. Blunk explained in his surrebuttal testimony, the Commission finds that Staff's "One Day" analysis is flawed and erroneous. The following is a list of the more obvious errors with Staff's "One Day" analysis which are discussed in detail in Mr. Blunk's Surrebuttal Testimony:
- (a) With over 500 days of data readily available Staff randomly chose 1 day of data and suggested that 1 randomly chosen day was representative.
- (b) Staff misinterpreted or misunderstood the Company's data filings made pursuant to 4 CSR 240-3.190 ("3.190 data filings").
 - (c) Staff relied exclusively on hindsight data.
- (d) Staff used the wrong New York Mercantile Exchange ("NYMEX") pricing data or misinterpreted the data used.
 - (e) Staff's calculations cannot be verified or replicated.
- 93. The competent and substantial evidence in the record supports a finding that the natural gas and electricity markets are "highly correlated" when evaluated using the R-squared test. Utilizing this R-squared test, the Company's hedges would be highly correlated, and it would be reasonable to use natural gas futures to cross-hedge the risk associated with spot purchased power.

¹¹⁰ Staff Ex No. 1, Eaves Direct/Rebuttal, p. 17.

¹¹¹ GMO Ex No. 2, Blunk Surrebuttal, pp. 13-17.

94. Mr. Blunk also applied the Dollar Offset Method to the data for the FAC audit review period. In Mr. Blunk's Schedule WEB-9, he demonstrated that the estimated physical market change of value for on-peak electricity was 109.6% of the actual change in the value of the natural gas cross hedges. 112 This means that by hedge accounting standards, GMO's natural gas cross hedges for on-peak electricity were in hindsight "highly effective." That is, the hedges did what they were supposed to do. The electricity price movement was offset by a similar movement in the price of natural gas.

95. In this case, Staff did not directly address or otherwise controvert Mr. Blunk's testimony that the Dollar Offset method shows that GMO's hedges were "highly effective." The real dispute in this case seems to now turn upon what standard should be applied to this data. Staff is arguing that natural gas futures contracts and spot purchased power prices are not directly linked sufficiently to permit the use of cross-hedging.

96. Initially, Mr. Eaves indicated in response to DR No. 118 that as a rule of thumb, a 0.85 correlation coefficient (which equates to an R-squared of 0.72) was the "minimum level" to define a hedge as having a strong positive association. 114 During the hearings, he also testified that a 0.85 correlation coefficient would be necessary for a hedge to be "highly correlated." 115

Mr. Eaves was not satisfied that a 0.85 correlation coefficient would be satisfactory to find that the use of natural gas futures contracts would be prudent to

¹¹² GMO Ex. No. 2, Blunk Surrebuttal, p. 12 and Schedule WEB-9.

¹¹³ Staff Ex. No. 10, Staff Report, pp. 8-10; and Staff Ex. No. 1, Eaves Direct/Rebuttal, pp. 1-22. 114 GMO Ex. No. 18; Tr. 315.

¹¹⁵ Tr. 318.

hedge electric price risk.¹¹⁶ Instead, he believed that there should be almost a perfect correlation of the data almost all of the time to permit the use of the cross-hedging technique.¹¹⁷

98. Mr. Eaves also testified that while he had reviewed FASB Opinion No. 133 which addresses the effectiveness of hedges for financial accounting purposes at some point in his career, he had not reviewed it recently or within the immediate period before he filed the Staff Report.¹¹⁸

99. Rather than applying the industry standard for determining when natural gas prices and electricity prices are sufficiently correlated to permit cross-hedging, Staff witness Dana Eaves has applied his own personal standard or "comfort" level of an almost perfect correlation all of the time. Mr. Eaves was not aware of any article, textbook, or Commission opinion in Missouri or elsewhere in the country finding that the correlation should be "almost perfect all of the time" before it would be prudent to cross hedge electricity prices with natural gas futures contracts. In addition, Mr. Eaves was unwilling to recommend that the Commission apply his personal perfect correlation standard to this case.

100. As the Commission weighs the evidence and Mr. Eaves' personal "perfect correlation" standard for determining if the natural gas and on-peak electricity prices are sufficiently linked to allow for cross-hedging of electric prices with natural gas futures

¹¹⁶ Tr. 318-20.

¹¹⁷ Id.

¹¹⁸ T. 00

¹¹⁹ Tr. 310, 318-20.

¹²⁰ Tr. 326.

¹²¹ Tr. 328.

contracts, it has also considered the inexperience of Mr. Eaves with the cross-hedging issue.

101. Mr. Eaves has never taken an undergraduate or graduate course that addressed cross-hedging of natural gas and electricity prices. The only formal training course that Mr. Eaves has taken on the topic of energy hedging was the PGS Energy Training webinar. The PGS Energy Training webinar that Mr. Eaves and other staff attended on January 18, 2008 was entitled "How to Financially Hedge Natural Gas & Electricity Price Risk" which taught the cross-hedging technique utilized by GMO. Mr. Eaves has never previously testified on cross-hedging electricity prices with natural gas futures contracts. Until this case, Mr. Eaves had never previously recommended a prudence disallowance based upon an electric company's financial hedges or hedging activities.

102. Mr. Eaves had never authored a white paper, article or treatise on the subject of hedging.¹²⁶ He did not include any publications or articles from other authors on cross-hedging in his workpapers or testimony in this case.¹²⁷

103. When Mr. Eaves was questioned in cross-examination, he was unable to recall an article or textbook that he had reviewed on cross-hedging, with the exception of some of those sixteen (16) articles authored by GMO's expert witness Dr. C.K. Woo.¹²⁸

¹²³ Tr. 277

¹²² Tr. 283.

¹²⁴ Tr 286

¹²⁵ Tr 288

¹²⁶ Tr. 286.

¹²⁷ Tr. 279-80.

¹²⁸ Tr. 280-81.

104. Nor was he able to cite any independent support (i.e. article, textbook, Missouri PSC opinion, or other regulatory agency decision) for his opinion that the correlation between natural gas prices and electric prices should be "almost perfect all of the time" before it would be prudent to use natural gas futures contracts to crosshedging spot purchase power prices. 129

105. Based upon the competent and substantial evidence in the record, the Commission finds and concludes that natural gas and on peak electricity prices are highly correlated, and GMO was prudent in using natural gas futures contracts to hedge its customers' risk associated with spot purchased power.

106. The Commission also finds that GMO's cross hedging program was prudent and reasonable, based upon the circumstances that existed at the time the decision to cross hedge the risk associated with volatile spot purchased power risk was made. 130 The Commission also specifically rejects Staff's assertion that it is imprudent to use natural gas futures contracts to hedge the spot purchase power price risk for GMO's customers, and instead find that GMO's hedging program was prudent during the FAC review period in this case.

107. In Staff's testimony, Mr. Eaves expressed his fundamental concern regarding cross-hedging: "Since the spot market is hourly and the cost of gas in NYMEX natural gas futures contracts is an average monthly price it is difficult to see how there could be a strong correlation between the two sufficient enough to hedge the more time granular spot market prices with the less time granular gas cost of the

¹²⁹ Tr. 325. ¹³⁰ GMO Ex No. 8, Woo Direct, pp. 1-30; GMO Ex No. 9, Woo Surrebuttal, pp. 1-20; GMO Ex No. 9, Woo Surrebuttal, pp. 1-51.

NYMEX futures."¹³¹ Contrary to the opinion expressed by Mr. Eaves, Dr. Woo testified that while the spot electricity market is hourly, NYMEX natural gas futures can be used to cross hedge the daily on-peak electricity price.¹³² The Commission finds that Dr. Woo is a more credible witness than the Staff witnesses on this issue.

108. As Mr. Blunk also explained in his surrebuttal testimony¹³³, electricity prices can change hourly and the NYMEX settles its natural gas contract monthly. According to Mr. Blunk's testimony, every futures market that he is aware of settles less frequently than the physical market it hedges. However, the Commission finds that Staff is incorrect that monthly natural gas futures contracts cannot be used to hedge electricity prices that change more frequently that monthly. The Commission finds that all futures markets settle less frequently than the cash market it hedges. The Commission finds that the Staff's criticism is not realistic or appropriate given the way futures markets work in the real world.

109. Dr. Woo presents analyses in his surrebuttal testimony that shows how natural gas prices are highly correlated with hourly on-peak electricity prices when a reasonable time period is considered. Based upon his analysis, Dr. Woo concluded that the "daily on-peak per MWH procurement cost of a utility that owns natural-gasfired generation is highly correlated with the daily natural gas price at Henry Hub, thus justifying the utility's use of cross hedging to manage its procurement risk." 135

110. He also concluded that "For the 18-month period of December 2007 through May 2009, the coefficients of correlation evaluated at heat rates of 7, 9, and 11

 $^{^{131}}$ Staff Ex No. 1, Eaves Direct/Rebuttal, p. 3.

¹³² GMO Ex No. 9, Woo Surrebuttal, pp. 3.

¹³³ GMO Ex No. 2, Blunk Surrebuttal, p. 17.

¹³⁴ GMO Ex No. 9, Woo Surrebuttal, pp. 10-15.

¹³⁵ Id. at 4.

MMBTU/MWH are (a) AMRN: 0.921, 0.886, and 0.860; and (b) AECI: 0.937, 0.906, and 0.879." 136

- 111. Based upon this evidence, the Commission finds and concludes that it was prudent for GMO to have used monthly natural gas futures contracts to hedge and effectively manage daily on-peak price risk for spot purchase power.
- 112. The Commission finds that cross-hedging spot purchased power with natural gas futures contracts is a widely accepted method of hedging the risk associated with volatile spot purchased power costs.¹³⁷
- 113. The Company's informal survey showed that about one-half of the companies surveyed used natural gas futures contracts to hedge the on-peak spot purchased power prices. In particular, Arizona Public Service, Florida Power & Light, Madison Gas & Electric, Mississippi Power—Southern Company, Portland General, and Ameren, responded to the survey and indicated that these companies use this crosshedging technique. ¹³⁸
- 114. The cross-hedging technique has also been explained and taught by reputable industry and educational organizations over the years. Cross-hedging has been taught by the Electric Power Research Institute ("EPRI") since the mid-1990s. PGS Energy Training is an educational organization that specializes in training related to electricity and natural gas industries. Over the years at least 55 Staff members from this Commission have attended various PGS Energy Training webinars. Mr. Blunk and numerous Staff, including Dana Eaves and Charles R. Hyneman, have attended

¹³⁶ ld.

¹³⁷ GMO Ex No. 1, Blunk Direct, p.15-18; GMO Ex No. 2, Blunk Surrebuttal, p. 35; GMO Ex No.

^{17;} Tr. 30

id.

¹³⁹ GMO Ex No. 2, Blunk Surrebuttal, p. 35; GMO Ex. No. 17.

webinars presented by PGS Energy Training where this cross-hedging technique was explained and taught.¹⁴⁰ The webinar that Mr. Eaves and other staff attended on that day in 2008 was entitled "How to Financially Hedge Natural Gas & Electricity Price Risk". In that webinar, there were two 90-minute sessions. The first session was on the general topics of hedging electric and natural gas price risk. And the second session was entitled: "Hedging Electricity Price Risk with Natural Gas Futures Contracts."¹⁴¹

115. The second half of this webinar focused on the cross-hedging technique that was utilized by GMO to cross-hedge electricity price risk using natural gas futures contracts.¹⁴²

116. Based upon the competent and substantial evidence in the record, the Commission finds and concludes that the use of natural gas futures contracts to hedge the risk associated with spot purchased power is a widely accepted and common hedging technique in the electric industry.

117. Staff has been aware of GMO's cross-hedging practice since 2005 and has never previously suggested that it was imprudent to use natural gas futures contracts to hedge the price of electricity. In fact, Staff has never previously suggested that cross-hedging was imprudent in the four rate cases, and two FAC prudence reviews that have been conducted since the Company began this hedging practice. ¹⁴³

118. In his rebuttal testimony, Mr. Charles R. Hyneman confirmed that he was aware of GMO's use of natural gas futures contracts to hedge the risk of purchased

¹⁴⁰ GMO Ex No. 2, Blunk Surrebuttal, pp. 33-36.

¹⁴¹ GMO Ex No. 2, Blunk Surrebuttal, Schedule WEB-16, Slide 51.

¹⁴² GMO Ex No. 2, Blunk Surrebuttal, Schedule WEB-16.

¹⁴³ GMO Ex. No. 6, Rush Direct, p. 10; GMO Ex. No. 5, Heidtbrink Direct, pp. 3-10; GMO Ex. No.

^{4,} Clemens Surrebuttal, pp. 4-10.

power since 2005: "I do agree that Staff became aware of Aquila's use of purchasing hedges for purchased power at some point during Aquila's 2005 rate case." 144

auditors had issued data requests in previous FAC prudence review cases (Case Nos. EO-2010-0167, EO-2009-0115) which had requested that the Company provide its hedging costs for both generation and purchased power hedges. Based upon these data requests, Ms. Mantle concluded that the Staff person that drafted the data request would have been previously aware that GMO uses natural gas hedges for hedging purchase power. Prior to this case, the Staff has never previously informed GMO personnel that they believed their hedging program using natural gas futures contracts to hedge the risk associated with spot purchased power was imprudent.

120. Mr. Tim M. Rush has provided the Commission with a detailed timeline of regulatory interactions with the Staff and Commission prudence reviews regarding the Company's hedging program dating to 2004.¹⁴⁸

121. Mr. Rush summarized the Company's concerns with regard to the Staff approach to this case:

Unfortunately, the Company feels surprised and disappointed by Staff's effort to discredit the Company's cross-hedging strategy and contention that the cross-hedging plan is imprudent per se.

The Company has participated in two FAC Prudence audits reviewed by Staff, and the Staff has, until this case, found the Company's practices to be prudent and recommended to the Commission no disallowances. The Company has had its practices

¹⁴⁴ Staff Ex No. 3, Hyneman Rebuttal, p. 10.

¹⁴⁵ GMO Ex Nos. 13, 14 and 15; Tr. 221-26.

¹⁴⁶ Tr. 256.

¹⁴⁷ Tr. 291.

¹⁴⁸ GMO Ex No. 7, Rush Surrebuttal, Schedule TMR-3.

reviewed in two rate cases since GMO was acquired by GPE. Staff never raised cross-hedging of electric price risk using natural gas futures contracts as any type of concern. In fact, the Staff had requested and the Company provided its risk management policy, which contains the description of its cross-hedging program. understanding that the Company had previously provided its hedging plan to the Staff in previous Aquila rate cases, and the hedging plan was attached to Staff testimony in those cases. The Company confident that when it changed hedging its strategy, as recommended by Staff, that it was addressing Staff's concerns.

The Company also tried to keep Staff apprised of each step in the process of developing its hedging strategy by inviting Staff's participation in the overview of the program. For Staff to take the position that the cross-hedging costs were never intended to be included in the FAC is another surprising and disappointing position. Again, the Company has gone through two FAC reviews and two rate cases with the cross-hedging costs contained in the adjustment mechanism. The Company went through a prior case where the hedging costs had been "below the line" and the Staff and other parties wanted these cost placed "above the line' and reflected in the Company's cost of service. placing these costs in cost of service implies to me that they will be reflected in rates to customers, unless found to be imprudent.

122. Staff also argued that "GMO was unable to provide to Staff any studies performed before GMO implemented its cross-hedging program that show that such a hedging program would be prudent and effective." 149 Staff also suggested that "GMO should have engaged in discussions with the Staff before initiating a hedging program of this sort." In light of the events discussed below, the Commission finds that such criticism is unwarranted.

123. The evidence indicates that Staff has been aware of the Company's hedging program for seven years. Staff has criticized the program on occasion, and the Company has responded to those criticisms. GMO encouraged the Staff itself to

¹⁴⁹ Staff Brief at 19-20.

¹⁵⁰ Id. at 20.

participate in the development of its most recent hedging program. The Company also tried to keep Staff apprised of each step in the process of developing its hedging strategy by inviting Staff's participation in the overview of the program. It is therefore incorrect for the Staff to suggest that GMO has not provided Staff with opportunities to discuss the hedging program, or other relevant information as GMO implemented its cross-hedging program.

124. Since 2004, GMO has employed essentially three different hedging programs. All three programs hedged purchased power with natural gas derivatives. GMO's February 25, 2005, hedge program, which has sometimes been referred to as the "One-Third Strategy" and at other times as the "post 2004 Hedging Strategy," was attached as Schedule 2-2 to Staff witness Charles R. Hyneman's Direct Testimony in Rate Case No. ER-2005-0436 ("ER-2005-0436") and Schedule 4-2 to Staff witness Charles R. Hyneman's Surrebuttal Testimony in Rate Case No. ER-2007-0004 ("ER-2007-0004").

125. Staff first investigated GMO's hedging program in 2005. Staff witness Charles R. Hyneman included a copy of "Missouri Natural Gas & Purchase Power Hedge Strategy" GMO's February 25, 2005, hedge program as a Schedule to his Direct Testimony in Case No. ER-2005-0436. He also discussed the program through the course of the case. In Case No. ER-2005-0436 Direct Testimony, Staff witness Cary G. Featherstone at page 32 stated: "Staff's position is that hedging is done to mitigate

¹⁵¹ GMO Ex No. 7, Rush Surrebuttal, pp. 24-25.

¹⁵² Mr. Scott Heidtbrink has provided a lengthy history of, and Staff's involvement in the Company's hedging program. (GMO Ex. No. 5, Heidtbrink Direct, pp. 3-11) The following history is taken from this testimony.

natural gas and energy costs and should be reflected in the IEC mechanism to reduce the substantial risk of extremely high energy markets." ¹⁵³

a concern about Aquila's "post-2004 Hedging Strategy" that was in place at that time. Mr. Hyneman felt that program was too systematic and too rigid. Staff witness Cary G. Featherstone expressed concern that Aquila was booking hedging costs to Account 430.17, i.e., "below-the-line". At page 33 of his testimony, Mr. Featherstone advocated that "the results of the hedging program and prudently incurred costs to implement such program should be included in the true-up IEC Audit," i.e., "above-the-line." His testimony also indicated that "The proposed IEC mechanism that may result from the Commission's decision in this case, should include the results from a well thought out, managed and prudently executed hedging program." 156

127. In Case No. ER-2007-0004, Staff witness Charles R. Hyneman repeated his concern about Aquila's "post-2004 Hedging Strategy" as being too systematic without giving consideration to current market conditions. He also noted that Aquila had made no changes in its hedging policy since he examined it in 2005. He again attached Aquila's "Missouri Natural Gas & Purchase Power Hedge Strategy" as a Schedule to his Surrebuttal Testimony. 157

128. Based upon the concerns voiced by Staff, GMO agreed to include hedge costs and benefits in its retail revenue requirement from Case No. ER-2005-0436. GMO included the results of its hedging programs in its FACs beginning with Case No.

¹⁵³ GMO Ex. No. 5, Heidtbrink Direct, pp. 5-7.

¹⁵⁴ GMO Ex. No. 5, Heidtbrink Direct, p. 6.

¹⁵⁵ ld. at 6.

¹⁵⁶ GMO Ex. No. 4, Clemens Surrebuttal, p. 5

¹⁵⁷ GMO Ex. No. 5, Heidtbrink Direct, p. 6.

ER-2007-0004, and continuing on through Case Nos. ER-2009-0090 and ER-2010-0356. 158

129. Following the conclusion of Case No. ER-2007-0004, GMO agreed to look into other available hedging programs and decided to retain Kase and Company, Inc. ("Kase"), a risk-management and trading technology firm which provides trading, hedging and analytical solutions for managing market risk, to develop a natural gas price hedging program.¹⁵⁹

130. In April 2007, the Company invited Commission Staff members Robert Schallenberg, Cary Featherstone and Charles R. Hyneman to attend an overview and training meeting relating to the Kase program of hedging natural gas for peak generation as well as to mitigate the risk of peak purchased power price volatility. ¹⁶⁰

131. Mr. Hyneman attended by telephone. Staff did not give any feedback relating to the program, other than the endorsement of the KCP&L program mentioned in their testimony. Mr. Hyneman did encourage the Company to continue to hedge its risk but to do it with a program other than the One-Third program in place.¹⁶¹

132. As Company witness Wm. Edward Blunk explained, GMO has continued that Kase program. GMO ultimately chose Kase because it was a proven program, the Staff's familiarity with the program, (KCP&L was using the Kase Hedging Program) and the program provided for some subjectivity. 163

¹⁵⁸ Id. at 6-7.

¹⁵⁹ Id. at 7.

¹⁶⁰ GMO Ex. No. 4, Clemens Surrebuttal, p. 7.

¹⁶¹ ld.

¹⁶² GMO Ex No. 1, Blunk Direct, pp. 26-30.

¹⁶³ GMO Ex. No. 5, Heidtbrink Direct, p. 7

133. Based upon this extensive regulatory history and Staff involvement in the Company's hedging program, the Commission finds and concludes that the Company provided Staff with opportunities to discuss and have input into the development of the Company's evolving hedging program. Therefore, Staff's criticism that it should been provided with more information or opportunities to discuss the Company's hedging program will be discounted and rejected by the Commission.

134. Finally, Staff argued that "GMO's hedging program actually increased the risk to the ratepayers because it was - and is -insensitive to the market." This criticism first appeared in the case in Staff's Position Statement. 165 Commission finds that this allegation is not based upon any evidence presented by Staff witnesses, and it is not correct.

135. Ms. Lena Mantle indicated during cross-examination that this criticism, to the best of her knowledge, was not included anywhere in her testimony or other Staff witness's testimony. 166

136. The Commission has reviewed Staff's testimony for references to "insensitivity" or "rigid" in the testimony of Staff witnesses Mantle, Eaves and Hyneman. The Commission did not find any allegations that the current GMO hedging program is "insensitive to the market" or "rigid", as alleged by Staff counsel. The only reference that is remotely close is Mr. Hyneman's discussion of Staff's position in the 2005 Aquila rate case where Staff suggested that the One-Third Program was "too systematic and too rigid." 167 GMO specifically stopped utilizing its One-Third Program in favor of the

Staff Brief at 20.Staff Position Statement at 1.

¹⁶⁷ Staff Ex No. 3, Hyneman Rebuttal, p. 15, lines 7-9.

Kase Program in order to employ a less rigid and more market sensitive approach to its hedging decisions. 168 As explained by Mr. Blunk, 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. There is no evidence that demonstrates that GMO's hedging program during this FAC review period was rigid or marketinsensitive.

137. GMO's hedging program first divides the hedge volume into two parts. Onethird 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 twothirds are hedged under two hedging programs, Kase and Company, Inc.'s HedgeModel and ezHedge. 169

138. 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 optionsrelated 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

¹⁶⁸ GMO Ex. No. 5, Heidtbrink Direct, pp. 5-7. GMO Ex No. 1, Blunk Direct, p. 26.

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. 170

139. Kase's ezHedge generates hedging signals based on market cycles and uses a volume averaging approach, similar to dollar cost averaging. The model divides a price range into five zones based on an evaluation of percentile levels over a range of look-back periods. It selects the look-back length based on market behavior relative to the highest and lowest zones. This approach results in hedges being placed under all but the most favorable conditions, in which volumes are left unhedged. The volume averaging aspect results in more frequent hedges when prices are in the lower priced zones and fewer hedges are in the higher price zones. 171

140. ezHedge usually results, over time, in all of the volumes placed in that program being hedged. On the other hand, if prices do not fall low enough, or if prices stay too high, there is a possibility that certain contract months could go unhedged when using HedgeModel. Combining ezHedge with HedgeModel helps ensure that at least a modest portion of the exposure has a high probability of being hedged. 172

141. The primary purpose for leaving one-third of the forecast volume requirements unhedged is to provide a cushion for the possibility that actual requirements may turn out to be less than projected. GMO updates its projected requirements monthly. If the projected requirements are determined to be significantly different than prior projections, hedge volumes may be adjusted. If the volumes increase, the increases are added to the volume available to hedge. If the volumes decrease but the decrease is not material and GMO already has the two-thirds hedged,

¹⁷⁰ Id. at 27. ¹⁷¹ Id. at 28.

¹⁷² ld.

those hedges that exceed the two-thirds are liquidated. If the decrease were material, GMO would develop a remediation strategy. 173

142. Based upon the competent and substantial evidence, the Commission finds that GMO's hedging program is not rigid or market-insensitive, as alleged by Staff. GMO's hedging program has been specifically designed to take into account changing market conditions.

143. Staff observed in its Brief that: "Natural gas prices collapsed after mid-2008, from nearly \$13.60 per MMBTU to \$2.50 by August, 2009." The Commission finds that declining energy prices were beneficial to customers, but this collapse in the energy markets also explains, in large measure, the reason that there were losses on the derivative side of the hedge transactions during this FAC audit review period.

144. As Mr. Heidtbrink explained in his direct testimony, it was always understood that in a declining natural gas market that the natural gas hedges would lose money. It is also important to look at both sides of the equation. The Commission has found that natural gas and wholesale power prices are correlated. As would be expected, GMO's cost for purchased power has decreased during the FAC audit period when natural gas prices were plummeting.

145. As shown in Mr. Blunk's Direct Testimony, the cost of fuel plus purchased power including hedges has decreased since May 2009. 175

146. The losses that occurred were anticipated in a declining energy market. This expected result does not indicate, as Staff alleges, that "GMO's hedging program"

¹⁷³ Id. at 29. ¹⁷⁴ Staff Brief at 23.

¹⁷⁵ GMO Ex. No. 5, Heidtbrink Direct, p. 11.

was overly-rigid and un-thoughtful." The Commission finds that Staff is engaging in hindsight analysis of the Company's hedging program, without providing any evidence of what the Company should have done under the circumstances that existed at the time the Company was making its hedging decisions.

147. Staff also lodged the criticism that the hedging insurance was "too costly." 177 However, the Commission finds that this criticism is not supported by the record. During the hearings, Mr. Blunk explained that the Commission needs to look at both sides of the hedge transaction—the physical side and the derivative side—to properly analyze the "cost" of the hedging insurance. 178 When both sides of the hedging transaction are considered, the record indicates that GMO's cost of the hedging was reasonable and appropriate. The cost of the hedging insurance was less than 9%. According to the testimony in this case, the industry considers costs of 30% or less to be reasonable. 179

3. If so, should the Commission order GMO to refund to consumers an amount plus interest through GMO's Fuel Adjustment Clause mechanism?

Since the Commission has found that Staff has not raised a serious doubt regarding the prudence of GMO's cross-hedging program, and the Commission has also found that GMO's cross-hedging program is reasonable and prudent, the Commission finds and concludes that no disallowance and refund is appropriate.

Staff Brief at 23.
 Staff Brief at 24.
 Tr. 118-20.

4. If the Commission finds that a refund is appropriate, what is the amount that should be refunded?

See Commission findings and conclusion in related to Issue No. 2 and 3, above.

ACCOUNTING ISSUES

5. Did GMO properly account for its hedging costs? If not, what is the appropriate remedy?

148. In this case, Staff has suggested that the Company accounted for the costs of its electric hedging program in the wrong FERC Account. Staff has argued that the Company did not place the hedge costs in the correct FERC account No. 555. This is an account for purchased power costs. Instead the Company has placed hedge costs in Account No. 547 which relates to natural gas costs. Staff goes on to say that not placing these costs in this account is a misstatement. Staff also states that Staff never intended hedging costs placed in account 555 to be a part of the FAC. Therefore, any hedging costs in Account 555 would not be recoverable for this reason.

149. First, Staff has argued that the Company accounted for the costs of its electric hedging program in the wrong FERC account. Staff has argued that the Company did not place the hedge costs in the correct FERC Account No. 555, Purchased Power. According to Staff, the Company has instead placed hedge costs in Account No. 547, Natural Gas, in an attempt to mislead. Staff goes on to argue that booking the natural gas hedging costs used to mitigate the volatility of purchased power costs in FERC Account 547, Natural Gas, is "unauthorized," and "results in distorted

4

¹⁸⁰ Staff Brief at 11.

financial statements that, at the very least, misrepresent the state and condition of the Company's finances and operations." 181

150. Second, Staff argues that the FAC tariff does not include hedging costs in Account 555, and therefore hedging costs associated with natural gas hedges that are intended to mitigate the volatility associated with spot purchased power should not be recoverable through the FAC mechanism. As discussed below, the Commission finds and concludes that these assertions are simply incorrect. In addition, Staff has failed to present competent and substantial evidence to demonstrate that any of the Company's accounting practices are misleading, unauthorized, or resulted in distorted financial statements.

151. GMO witnesses Ryan Bresette and Tim Rush have testified that the Company maintains its books and records in accordance with FERC's Uniform Standard of Accounts (USOA). GMO's accounting treatment of its hedging program is also in accordance with the Generally Accepted Accounting Principles (GAAP) and FERC accounting. In addition, Mr. Bresette testified that GMO fully discloses its accounting methods in its financial reports.

152. As explained by Mr. Bresette, the hedging of natural gas financial instruments has been and should always be included in FERC Account 547. Natural gas expenses should be booked to the FERC natural gas expense account 547. Staff is suggesting the Company record natural gas hedging cost to an account (FERC

¹⁸¹ Staff Brief at 11.

¹⁸² GMO Ex. No. 3, Bresette Surrebuttal, p. 15; GMO Ex No. 6, Rush Direct, p. 6.

¹⁸³ GMO Ex. No. 3, Bresette Surrebuttal, p. 15-16.

¹⁸⁴ GMO Ex. No. 3, Bresette Surrebuttal, pp. 7-8.

¹⁸⁵ Id. at 19.

Account 555) that has nothing to do with natural gas in order to disallow prudently incurred costs from GMO's FAC mechanism. 186

153. The Company accounted for the natural gas hedge costs associated with its cross-hedging practice in Account 547 because at the time the hedges actually settle, the determination of whether or not the Company will generate or purchase power has not yet been made since that determination is based upon a review of the least cost option. 187 Therefore, all hedge settlements costs are actually natural gas settlement costs and are recorded in the 547 account, the natural gas account. 188

154. As Mr. Bresette has testified, if GMO had started by booking its cross hedges as Staff is now saying it should, it would have had a very perverse impact on the pre-merger FAC mechanism. Since the pre-merger FAC mechanism did not include revenue from Account 447, GMO's customers would have effectively paid double for all electricity that was hedged. Customers would have paid when the physical electricity was purchased and recorded in Account 555. They would have also paid for the futures contract as it was recorded in Account 555 but they would not have received the revenue from the sale of the futures contract because it would have been recorded in Account 447.¹⁸⁹

155. If the Company had forward purchase electricity contracts that did not qualify for normal purchase and normal sale, then the related realized gains or losses would be recorded to FERC account 555. If the Company had forward sale electricity contracts, then the realized revenue from that sale would be recorded to FERC account

¹⁸⁷ GMO Ex. No. 7, Rush Surrebuttal, pp. 10-11.

¹⁸⁹ Id. at 15-16,

447.¹⁹⁰ However, hedging costs associated with natural gas futures contracts are booked in FERC 547, Natural Gas, since they are natural gas hedges.

156. On page 12 of the Staff Brief, Staff discusses the Nonunanimous Stipulation And Agreement in Aguila's 2005 rate case, Case No. ER-2005-0436 ("Stipulation"), and suggests that paragraph 17 of the Stipulation "was not intended to grant discretion to the Company to record hedge costs in either account at its whim." The Company agreed that this provision was not intended to give the Company discretion to account for its hedging program expenses and revenues in either account "at its whim". 192 However, the Commission finds and concludes the Company has followed the USOA rules for booking its hedge costs, and it has consistently done so since 2005.

157. GMO fully complied with this language of the Stipulation (and Staff's Suggestions) by recording the hedge settlements for natural gas generation to FERC Account 547. In addition, natural gas hedge settlements to mitigate power price volatility were appropriately recorded to FERC Account 547. However, GMO did not incur any hedge settlements directly related to on-peak purchased power transactions that would have been appropriately charged to FERC Account 555.

158. Staff also suggests that hedging costs associated with on-peak spot market purchases of electricity are not expressly included in the "PP = Purchased Power Costs" of the FAC. 193 As Mr. Rush explained, the specific language of the FAC tariffs changed during the FAC audit review period to add more clarity to the components in the FAC. 194 In the original version of the FAC tariffs, all costs associated with both FERC accounts

¹⁹⁰ Id. at 16.

¹⁹¹ Staff Brief at 12.

¹⁹² GMO Reply Brief at 9.

¹⁹³ Staff Brief at 16.

¹⁹⁴ GMO Ex No. 6, Rush Direct, p. 7.

547 and 555 were to be included in the FAC mechanism. At Staff's request, the tariff was revised in an attempt to specifically identify the types of costs referenced. 195 but the revisions were never intended to exclude prudently incurred hedging costs that had been previously included in Accounts 547 or 555.

159. Since the Company has been recording the settlement gains or losses associated with its hedging program to Account 547 since the 2005 rate case, and since these costs were expressly included in the FAC in Case No. ER-2007-0004, the tariff listed hedging costs in the description of FAC includable costs in Account 547. Company, and apparently the Staff, did not see the need to explicitly include the word "hedging" in the description of Account 555. This is because the hedging and settlement costs have been booked to Account 547 since the Company was ordered to record those costs above the line in Case No. ER-2005-0436. 196

160. As explained by Mr. Bresette, some of the hedge costs associated with the electricity that is hedged using NYMEX natural gas futures contracts are included in the "PP = Purchased Power Costs" component of the FAC. Sometimes GMO will convert a natural gas cross hedge to an electricity forward. When that happens, the hedge adjustment from the natural gas contract that effectively fixed the future price of electricity through the cross hedge is recorded in Account 547 and included in the "FC = Fuel Costs Incurred to Support Sales" component of the FAC. The price fix which began as a natural gas cross hedge is converted from one derivative to another derivative. It is converted from a NYMEX futures contract for natural gas to a forward contract for electricity. Much like the hedge adjustment recorded in Account 547 which

 $^{^{195}}$ GMO Ex No. 6, Rush Direct, p. 4. 196 GMO Ex No. 6, Rush Direct, p. 8.

occurred because the natural gas market had moved from the time the hedge was initiated to the time it was closed. The Company is locked into a price for electricity that ends up being either less or more than the prevailing spot price for electricity. That non-cash opportunity gain or loss on the electricity forward which began as a NYMEX natural gas futures contract is included in Account 555 and the PP = Purchased Power Costs" component of the FAC.¹⁹⁷ Staff's allegation that GMO's accounting of its hedge program is intended to mislead and "misrepresent the state and condition of the Company's finances and operations" is not credible or based upon competent and substantial evidence on the whole record.

161. As Mr. Bresette testified, GMO discloses its accounting methods in the notes to the financial statements of GMO's FERC Form 1. ¹⁹⁹ In GMO's FERC Form 1, GMO discloses the fair value of these contracts that are subject to regulatory treatment. In addition, the Company has consistently disclosed that the gain or loss on these types of contracts which mitigate both fuel and power price risk are recorded to fuel expense (i.e. FERC Account 547). ²⁰⁰ In the derivative footnote, GMO discloses the hedging program and the purpose of the program. GMO typically states something to the effect of:

GMO's risk management policy is to use derivative instruments to mitigate price exposure to natural gas price volatility in the market. The fair value of the portfolio relates to financial contracts that will settle against actual purchases of

-

¹⁹⁷ GMO Ex. No. 3, Bresette Surrebuttal, p. 12.

¹⁹⁸ Staff Brief at 11.

¹⁹⁹ GMO Ex. No. 3, Bresette Surrebuttal, p. 7.

²⁰⁰ See GMO Ex No. 3, Bresette Surrebuttal, Schedule RAB-1 for copies of GMO's derivative footnote from 2006 – 2011.

natural gas and purchased power. (KCP&L Greater Missouri Operations Company, FERC Form No. 1, Page 123.29)

162. In a table in the footnote, the Company discloses the fair value of the natural gas hedges recorded in a regulatory account and the amount of gain or loss recorded in fuel expense in 2009 and 2010.²⁰¹

Staff also challenged the relevance or importance of the Suggestions in Support of Nonunanimous Stipulation And Agreement filed in Case No. ER-2005-0436 and the transcript of the on-the record presentation related to the Stipulation. ²⁰² As noted in GMO's Initial Brief at 46-48, the Staff's Suggestions In Support Of Nonunanimous Stipulation And Agreement in Case No. ER-2005-0436 clearly indicated that Staff understood that Aquila's hedging program included both "natural gas and purchased power hedging." 203 The Suggestions goes on to state: "This accounting authority is acceptable to the Staff and should be implemented by the Commission because it allows Aquila to track the benefits and related costs for its hedging program consistent with how fuel costs are developed and be in compliance with generally accepted accounting principles once the Commission grants the authority."204

164. At page 13 of the Staff Brief, the Staff argued that "Purchased power is not a fuel cost". However, Staff has previously recognized in the Suggestions in Case No. ER-2005-0436 that the hedging program costs should be booked consistent with "how

²⁰¹ GMO Ex. No. 3, Bresette Surrebuttal, p. 7.

²⁰² Staff Brief at 13-14.

²⁰³ GMO Ex. No. 11, pp. 1-2. ²⁰⁴ Id. at 2. (Tr. 166-70)

fuel costs are developed and in compliance with generally accepted accounting principles."²⁰⁵ GMO has acted consistently with these principles.

165. The Commission finds and concludes that the accounting issues raised by Staff are not "prudence" issues at all, but appear to be Staff's attempt to prevent recovery of prudently incurred hedging costs, based upon Staff's strained interpretation of a Non-unanimous Stipulation and Agreement in Aquila 2005 rate case (Case No. ER-2005-0436) and Staff's requested revisions to the Company's FAC tariff sheets.

166. Staff's reason for raising this issue is revealed in the Staff Brief when they attempt to explain "Why is this accounting issue important?" (Staff Brief at 15) Staff claims that the FAC Tariff Sheets allow recovery through the FAC of hedging costs in Account 547, but not in Account 555. Therefore, any hedging costs in Account 555 would not be recoverable for this reason.²⁰⁶

167. In the process of constructing an argument designed to deny recovery of prudently incurred hedging costs, Staff failed to even address the Commission's Order Clarifying Report and Order issued on May 22, 2007 in Case No. ER-2007-0004, (Aguila's 2007 rate case), where the Commission clearly stated on page 1: "Under the Stipulation and Agreement, prudently incurred hedging costs will flow through the fuel adjustment clause...." The Commission reaffirms this statement in this case, and finds that all prudently incurred hedging costs should be flowed through the Company's fuel adjustment clause.

²⁰⁵ GMO Ex. No. 11, p. 2. ²⁰⁶ Id. at 15.

168. The Company has been recording the settlements of those hedges in account 547 since the 2005 Aquila rate case. 207

169. The Company has been audited by Staff for two previous FAC audit periods and had its rates and operations reviewed in four rate cases, and the Company also has external auditors who have given GMO unqualified statements related to its books and records.²⁰⁸ Deloitte & Touche, LLP, the Company's external auditors, have stated in these opinions: "In our opinion, such regulatory-basis financial statements present fairly, in all material respects, the assets, liabilities, and proprietary capital of the Company as of December 31, 2010, and the results of its operations and its cash flows for the year ended December 31, 2010, in accordance with the accounting requirements of the Federal Energy Regulatory Commission as set forth in the Uniform System of Accounts and published accounting releases."²⁰⁹

170. Staff has argued that certain hedging costs were placed in the wrong account, and therefore, they should not be allowed for recovery from the customers that the hedging programs were designed to protect. Staff auditors have been aware that GMO was hedging its purchased power with natural gas hedges, and the Staff has never questioned the accounting of these hedge costs until this case. In fact, until this case, GMO has had no indication from Staff that it disagreed with the inclusion of hedge settlement in the FAC.

171. In the Non-Unanimous Stipulation and Agreement in Aquila's 2005 rate case, Case No. ER-2005-0436, the parties agreed as follows: "The Signatory parties agreed, for accounting and ratemaking purposes, that hedge settlements, both positive

²⁰⁷ GMO Ex. No. 6, Rush Direct, p. 5. ²⁰⁸ GMO Ex No. 3, Bresette Surrebuttal, Schedule RAB-2.

²⁰⁹ Id. at Schedule RAB-2, page 6 of 7.

and negative, related costs (e.g. option premiums, interest on margin accounts, and carrying costs on option premiums) directly related to natural gas generation and on-peak purchased power transactions under a formal Aquila Networks-MPS hedging plan will be considered part of the fuel cost and purchased power costs recorded in FERC Account 547 or Account 555 when the hedge arrangement is settled."²¹⁰

- 172. The Stipulation also required that Aquila "maintain separate accounting in Accounts 547 and 555 to track the hedging transaction expenditures recorded under this agreement."²¹¹
- 173. The Stipulation also required that Aquila "maintain separate accounting in Accounts 547 and 555 to track the hedging transaction expenditures recorded under this agreement."²¹²
- Staff filed Staff's Suggestions In Support Of Nonunanimous Stipulation And Agreement in Case No. ER-2005-0436 which clearly indicated that Staff understood that Aquila's hedging program included both "natural gas and purchased power hedging." ²¹³ The Suggestions goes on to state: "This accounting authority is acceptable to the Staff and should be implemented by the Commission because it allows Aquila to track the benefits and related costs for its hedging program consistent with how fuel costs are developed and be in compliance with generally accepted accounting principles once the Commission grants the authority."²¹⁴

²¹⁰ Ex No. 22, Non-Unanimous Stipulation And Agreement, Case No. ER-2005-0436, p. 10.

²'' ld.

²¹² ld.

²¹³ GMO Ex No. 11, pp. 1-2.

²¹⁴ Id. at 2. (emphasis added.)(See also Tr. 166-70)

- 175. Staff has previously recognized in the Suggestions that the hedging program costs should be booked consistent with "how fuel costs are developed and in compliance with generally accepted accounting principles." ²¹⁵
- 176. Given the Commission's previous statement that all prudently incurred hedging costs should be passed through the FAC mechanism, the Commission finds that it should not matter which account, Account 547 or Account 555 the hedge costs associated with the cross-hedging program were booked in. Both accounts include hedging-related entries, and all prudently incurred hedging costs are supposed to be flowed through the Fuel Adjustment Clause, as noted by the Commission's *Order Clarifying Report and Order* in the 2005 Aquila rate case, and agreed to by the parties to the Aquila 2005 stipulation.
- 177. The Company has been recording its hedging costs associated with its cross-hedging program in Account 547 since the 2005 rate case. Company witnesses Ryan Bresette and Ed Blunk have explained the appropriateness of this accounting practice.
- 178. Staff auditors have been aware that GMO was hedging its Purchased Power with natural gas hedges, and the Staff has never questioned the accounting of these hedge costs until this case. Until this case, GMO has had no indication from Staff that it disagreed with the inclusion of hedge settlement in the FAC.
- 179. The Commission finds that the Company has followed the terms of this stipulation and agreement and Staff's Suggestions In Support. The stipulation required the Company to record the settlement costs in Accounts 547 or 555 when the hedges were settled and required the Company to maintain separate accounts for those costs.

²¹⁵ ld.

The Company followed this requirement.²¹⁶ For the reasons stated herein, the Commission will reject Staff's position that the Company has not properly accounted for its hedging costs, or that hedging costs are not recoverable under the FAC mechanism. Instead, the Commission finds and concludes that GMO has properly accounted for its hedging costs, consistent with the Uniform System of Accounts, previous stipulations and agreements, and orders of the Commission. The Commission finds that Staff's position on this issue is not credible and it will not adopt Staff's recommendation that GMO's prudently incurred hedging costs should not be recovered through the FAC mechanism.

7. Does the Commission want GMO to stop hedging using natural gas futures contracts to mitigate the price risk associated with spot purchased power?

[The Company believes it would be helpful if the Commission provided its recommendation to GMO regarding whether GMO should stop hedging using natural gas futures contracts to mitigate the price risk associated with spot purchased power]

-

²¹⁶ GMO Ex No. 6, Rush Direct, pp. 9-10.

8. Should the Commission establish a policy which addresses the appropriateness of the use of natural gas hedges by electric utilities?

180. In this proceeding, GMO suggested that additional guidance from the Commission regarding the appropriateness of the use of natural gas hedged by electric utilities such as GMO would be helpful.²¹⁷ GMO also suggested that the Commission implement a process to avoid similar disputes over the Company's hedging programs in the future. 218 Having considered the Company's request, the Commission agrees that this is a reasonable approach, and will open a new investigatory docket to review policies or procedures with regard to electric companies' hedging programs that will hopefully lessen the type of hindsight analysis that has occurred in this case.

CONCLUSIONS OF LAW

The Missouri Public Service Commission has arrived at the following conclusions of law.

1. Commission Jurisdiction and Authority

Section 386.020(15), RSMo, defines "electrical corporation" as including:

every corporation, company, association, joint stock company or association, partnership and person, their lessees, trustees or receivers appointed by any court whatsoever, other than a railroad, light rail or street railroad corporation generating electricity solely for railroad, light rail or street railroad purposes or for the use of its tenants and not for sale to others, owning, operating, controlling or managing any electric plant except where electricity is generated or distributed by the producer solely on or through private property for railroad, light rail or street railroad

63

²¹⁷ GMO Ex No. 2, Blunk Surrebuttal, pp. 50-51. ²¹⁸ GMO Brief at 51

purposes or for its own use or the use of its tenants and not for sale to others.

Section 386.020(42) defines "public utility" as including "every . . . electrical corporation . . . as [this term is] defined in this section, and each thereof is hereby declared to be a public utility and to be subject to the jurisdiction, control and regulation of the commission and to the provisions of this chapter."

GMO is an "electrical corporation" and a "public utility," as defined in Sections 386.020(15) and (42), and is subject to the jurisdiction, supervision, and control of the Commission under Chapters 386 and 393 of the Missouri Revised Statutes. GMO is an "electrical corporation" and a "public utility," as defined in Sections 386.020(15) and (42), and is subject to the jurisdiction, supervision and control of the Commission under Chapters 386 and 393.

2. The Prudence Standard

The Commission recently reviewed and reaffirmed the prudence standard used in Missouri in its *Report & Order* in <u>Re Atmos Energy Corporation</u>, Case No. GR-2008-0314 (November 9, 2011) at 20-22; and Case No. GR-2009-0417 (December 21, 2011) at 18-21; in <u>Re Kansas City Power & Light Company</u>, Case No. ER-2010-0355 (April 12, 2011) at 74-77. As explained by the Commission in the *Kansas City Power & Light Company* decision, the prudence standard is articulated in the *Associated Natural Gas Case* 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 an expenditure, then the applicant has the burden of dispelling these doubts and proving the questioned expenditure to have been prudent. (Citations omitted).

In the [Union Electric] 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.

See State ex rel. Associated Natural Gas v. Public Serv. Comm'n, 954 S.W.2d 520, 528-529 (Mo. App. W.D. 1997).

Furthermore, in order for the Commission to disallow a utility's recovery of costs from its ratepayers, the Commission must apply the following two pronged test: (1) evaluate whether the utility acted imprudently (that is, did it act reasonably at the time under the applicable circumstances); and 2) evaluate whether such imprudence was the *cause* of the harm (increased costs) to the utility's ratepayers. *See Associated Natural Gas*, 945 S.W.2d at 529.

As stated above, under the prudence standard, the Commission presumes that the utility's costs were prudently incurred. See State ex rel. Associated Natural Gas v. Public Serv. Comm'n, 954 S.W.2d 520 (Mo. App. W.D. 1997); State ex rel. GS Technologies Operating Co. Inc. v. Public Serv. Comm'n, 116 S.W.3d 680 (Mo. App. W.D. 2003) (citations omitted). This holding means that utilities seeking recovery of their fuel, purchased power and hedging costs are not required to demonstrate in their cases-in-chief that all expenditures were prudent. *See Union Electric,* 66 P.U.R.4th at 212. Such expenditures are presumed to be prudent as a matter of law. Staff agrees that there is a presumption of prudence for public utility expenditures. (Staff Ex No. 10, pp. 5-6; Tr. 197)

Staff or any other party may challenge the prudence of an expenditure by presenting competent and substantial evidence that creates "a serious doubt" as to the prudence of an expenditure. Once a serious doubt has been raised, then the burden shifts to the public utility to "dispel those doubts" and prove that the questioned expenditure was prudent.

Missouri case law has described the showing necessary to create a serious doubt sufficient to shift the burden back to the utility. In the Associated Natural Gas case, the Missouri Court of Appeals held that the Staff must provide evidence that the utility's actions caused higher costs than if prudent decisions had been made. See Associated Natural Gas, 945 S.W.2d at 529. Substantive and competent evidence regarding higher costs includes evidence about the particular controversial expenditures and evidence as to the "amount that the expenditures would have been if the [utility] had acted in a prudent manner." See id. In other words, Staff or the other parties must satisfy the following two-pronged evidentiary test to support a disallowance: 1) identify the imprudent action based upon industry standards and the circumstances at the time the decision or action was made; and 2) provide proof of the increased costs caused by GMO's imprudent decisions. To meet this standard, a party must provide substantive, competent evidence establishing a causal connection or "nexus" between the alleged imprudent action and the costs incurred. In this case, Staff has failed to meet its burden.

3. Specific Conclusions Related To Issues In This Proceeding

Based upon the competent and substantial evidence in the whole record, the Commission concludes that it will reject the unprecedented position being advocated by

the Commission Staff in this case. As the record clearly demonstrates, cross-hedging of electric price risk using natural gas futures contracts is a widely taught and accepted hedging technique. The Staff has been aware that the practice of cross-hedging has been used by Aquila since 2005, and while they have raised other concerns about Aquila's previous hedging programs (which the Company previously addressed), cross-hedging has not been previously raised as an issue. When Aquila revised its hedging program in 2007 in response to the Staff's concerns, the Staff was included in the discussions that set up the current program. However, until this case, GMO was never informed that Staff had any issues with the use of the cross-hedging method.

When the competent and substantial evidence is fully considered, the Commission finds and concludes that Staff failed to raise a "serious doubt" regarding the prudence of the Company's hedging program. Notwithstanding Staff's failure to meet its burden of proof under the prudence standard, the Commission concludes that the Company has fully addressed the arguments and issues raised in the record, and the Company has shown that its hedging program is reasonable and prudent.

The competent and substantial evidence on the whole record demonstrates that:

- (1) Natural gas and spot purchased power prices are highly correlated when judged by industry and accounting standards. The hedge data meets both the "R-squared Test" of around 0.80, and the related "Dollar Offset Test" used by the industry and the accounting profession to determine the effectiveness of the hedges.
- (2) The Staff's "perfect correlation" test is unrealistic and is not used anywhere in the industry or by other regulatory agencies for judging the link between natural gas and electricity prices, and will be rejected by the Commission.

(3) GMO has properly accounted for its hedging costs under the uniform system of accounts, previous stipulations and agreements, Staff's suggestions in support of a previous stipulation and agreement, Staff's testimony in a previous case, and orders of the Commission.

(4) GMO'S FAC tariffs authorize purchased power hedging costs to be passed on the customers through the FAC mechanism.

(5) Most importantly, the evidence indicates that the Company's hedging program is prudent, and there is no lawful basis for a disallowance and refund in this case.

DECISION

Based upon the competent and substantial evidence in this case, the Commission finds and concludes that Staff's proposed disallowance and refund is not supported by the evidence, and must therefore be rejected.

WHEREFORE, GMO submit its Proposed Findings of Fact and Conclusions of Law for consideration by the Commission.

Respectfully submitted,

/s/ James M. Fischer James M. Fischer, MBN 27543 Fischer & Dority, P.C. 101 Madison—Suite 400 Jefferson City, MO 65101 Phone: (573) 636-6758 ext. 1

Email: jfischerpc@aol.com

Roger W. Steiner, MBN 39586 Kansas City Power & Light Company 1200 Main—16th Floor Kansas City, Missouri 64105 Phone: (816) 556-2314

Phone: (816) 556-2314 Fax: (816) 556-2110 Email: roger.steiner@kcpl.com

Attorneys for KCP&L Greater Missouri
Operations Company

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing have been mailed, hand-delivered, transmitted by facsimile or electronically mailed to all counsel of record this 27th day of July, 2012.

/s/ James M. Fischer
James M. Fischer