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MISSOURI PUBLIC SERVICE COMMISSION

CASE NO.: EO-2011-0390

DIRECT TESTIMONY

OF

WM. EDWARD BLUNK

ON BEHALF OF

KCP&L GREATER MISSOURI OPERATIONS COMPANY

Kansas City, Missouri
February 2012

"[redacted]**" Designates "Highly Confidential" Information Has Been Removed.**
Certain Schedules Attached To This Testimony Designated "Highly Confidential" Have Been Removed Pursuant To 4 CSR 240-2.135.

GMO Exhibit No. 3 NP
Date 6-05-12 Reporter KF
File No. EO 2011-0390

DIRECT TESTIMONY

OF

WM. EDWARD BLUNK

Case No. EO-2011-0390

Q: Please state your name and business address.

A: My name is Wm. Edward Blunk. My business address is 1200 Main Street, Kansas City, Missouri 64105.

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

A: I am employed by Kansas City Power & Light Company ("KCP&L") as Supply Planning Manager.

Q: On whose behalf are you testifying?

A: I am testifying on behalf of KCP&L Greater Missouri Operations Company ("GMO" or the "Company") for the territories served by St. Joseph Light & Power ("L&P") and Missouri Public Service ("MPS").

Q: What are your responsibilities?

A: My primary responsibilities are to facilitate the development and implementation of fuel and power sales purchase and risk management strategies for KCP&L and for GMO, formerly known as Aquila, Inc.

Q: What is your education, experience and employment history?

A: I received a Bachelor of Science degree in 1978 in agricultural economics cum laude as an Honors Scholar from the University of Missouri at Columbia. I received a Master in Business Administration degree in finance from the University of Missouri in 1980. I have also completed additional graduate courses in forecasting theory and applications.

Before graduating from the University of Missouri, I joined the John Deere Company in 1977 and through 1981 performed various marketing, marketing research, and dealer management tasks. I joined Kansas City Power & Light Company in 1981 as Transportation Special Projects Analyst. My responsibilities included fuel forecasting, fuel planning and other analyses related to commercial negotiations and disputes with railroads and coal companies. I was promoted to the position of Supervisor, Fuel Planning in 1984. That position was upgraded in 2007 to Manager, Fuel Planning. In 2009 my position was changed to Supply Planning manager. While in these positions I have been responsible for developing risk management and hedging programs.

Q: What experience and expertise do you possess with regard to hedging and related financial instruments?

A: While I first became acquainted with hedging in high school it was my studies in agricultural economics at the University of Missouri that truly introduced me to hedging with futures contracts. The first futures markets were developed to meet the needs of farmers and agricultural producers, so agriculture has used hedging and similar concepts probably longer than any other industry. I have been involved in hedging coal and coal prices for KCP&L since the early 1980s. I have been to several seminars and workshops which addressed risk and risk management. The various seminars focused on different aspects of risk and strategies for managing risk. The first such seminar I attended was in 1982. Since then I have attended seminars presented by Princeton Energy Programme and served on EPRI advisory groups focused on energy markets and risk management. I have been instrumental in the design and implementation of KCP&L's natural gas hedging program since it began in 2001.

Q: Have you previously testified in a proceeding at the Missouri Public Service Commission or before any other utility regulatory body?

A: I have previously testified before both the Missouri Public Service Commission ("MPSC") and the Kansas Corporation Commission ("KCC") in multiple cases on issues regarding fuel prices, fuel price forecasts, hedging and other strategies for managing fuel price risk, fuel-related costs, fuel inventory, and the management of emission allowance inventory.

Q: What is the purpose of your direct testimony?

A: The purpose of my direct testimony is to refute certain statements the MPSC Staff ("Staff") made in (a) Staff's Third Prudence Review Report and Recommendation on KCP&L Greater Missouri Operations Company's FAC dated November 29, 2011 ("Staff Report A" hereafter), and (b) Prudence Review of Costs Related to the Fuel Adjustment Clause for the Electric Operations of KCP&L Greater Missouri Operations Company dated November 28, 2011 ("Staff Report B" hereafter) (collectively, "Staff Reports"). I will address Staff's charge that "it was imprudent for GMO to link natural gas futures purchase contracts with spot market purchases for purchased power during the review period June 1, 2009 through November 30, 2010 ("review period" hereafter)."[1]

Q: How is your testimony organized?

A: After introducing myself and describing the purpose of my testimony I present my testimony according to the following outline:

[1] Missouri Public Service Commission Staff Report, Prudence Review of Costs Related to the Fuel Adjustment Clause for the Electric Operations of KCP&L Greater Missouri Operations Company, Case No. EO-2011-0390 (Nov. 28, 2011), p. 10.

I. EXECUTIVE SUMMARY

Q: Please summarize your testimony.

A: I make three key points in my testimony:

1) Using natural gas futures and options to hedge electricity price risk is a fundamentally sound practice that has been taught by risk management experts for well over a decade. Other utilities are or have used natural gas derivatives to hedge electricity price risk.

2) Staff and interveners have investigated GMO's hedging practices since 2005 and have had multiple opportunities to raise any concerns well before now. If using natural gas futures and options to hedge electricity price risk was an unreasonable practice,

certainly Staff or one of the interveners would have objected over the past seven (7) years, four (4) rate cases, and two (2) prudence reviews since 2005.

3) GMO's program of using natural gas futures and options to hedge electricity price risk has been successful. GMO's program shielded customers from annual price risk estimated to be **[redacted]** and mitigated rate volatility. Moreover, compared to a reasonable alternative GMO's program saved **[redacted]** over the review period.

II. STAFF'S POSITION

Q: What points in Staff's Reports will you be addressing?

A: I will address Staff's claim that GMO was imprudent to use natural gas derivatives to hedge electricity price risk. I will also comment on Staff's claim "that GMO's FAC does not provide for these hedging costs to flow through it." Finally, I will correct the sum which Staff claims was over-collected by adjusting it pursuant to the terms of the Stipulation and Agreement as to Certain Issues in Case No. ER-2007-0004 and GMO's FAC Tariff.

Q: What did Staff allege regarding the prudence of GMO's hedge program?

A: Staff alleged that

- A reasonable person would not buy options to purchase natural gas at fixed prices in the future to hedge against future purchases of electricity in the spot market because there is no direct link between these two markets sufficient upon which to base such "hedging."
- GMO's "hedging" practice actually increases GMO's risk exposure, to the detriment of GMO's ratepayers.

Q: Would a reasonable person buy options or natural gas futures contracts to hedge the price of electricity?

A: Yes. In the section of my testimony where I focus on cross hedging, I will show that using natural gas derivatives to cross hedge electricity price risk is a recognized industry practice and there are specific benefits of using New York Mercantile Exchange ("NYMEX") natural gas derivatives to cross hedge electricity price risk.

Q: Did Staff cite any authorities in challenging the "use of futures contracts to purchase natural gas as a means of mitigating risk associated with spot market purchased power"?

A: No. Company witness Dr. C.K. Woo is an authority on the reasonableness of using natural gas derivatives to hedge future electricity purchases. He expounds on the reasonableness of the practice.

Q: Is there a link between natural gas and electricity markets sufficient upon which to use natural gas derivatives to hedge future electricity purchases?

A: Yes. GMO is a member of the Southwest Power Pool ("SPP"). Since 2004 all but one of the annual "State of the Market Reports" prepared by the Market Monitoring Unit ("MMU") for the SPP have discussed "...the link between natural gas prices and SPP's electricity prices..."[2]

Q: Did GMO's hedging program increase GMO's risk exposure?

A: No. When a hedger buys a futures contract to hedge a "short"[3] position they reduce their risk from upward price movement in exchange for giving up the opportunity to follow

[2] Southwest Power Pool, Inc., *2009 State of the Market Report*, May 26, 2010, p. 5, available at: http://www.spp.org/publications/SPP_MSOM_Report_200905.pdf.

prices down. When a hedger buys call options to hedge a short position, they effectively pay someone else to insure them against the risk of upward prices. GMO used a portfolio of futures and call options to manage its risk from upward price movement. It paid for that risk management and price stability with option premiums and by giving up some opportunity should prices drop.

Q: How could Staff conclude that a "hedging" practice increased one's risk exposure?

A: When discussing the hedge adjustment, Staff's Reports focus on the derivative side of the hedges. One of the distinctions between a hedger and a speculator is the hedger's natural or non-derivative position. GMO is naturally "short." That is, GMO needs to purchase power and natural gas to provide energy for its customers. Therefore when GMO buys futures contracts or options it creates a hedge by offsetting that natural short position with a "long"[4] futures position. The risk inherent in the natural position is offset with an equal and opposite risk in the purchased derivative. A speculator on the other hand, does not have a natural or underlying position. When a speculator takes a position they increase their risk because they do not have an offsetting natural position. Staff could incorrectly conclude that GMO increased its risk exposure if Staff failed to recognize both the natural and derivative positions which formed the hedge.

Q: Did Staff evaluate the reasonableness of the hedge adjustment compared to the risk exposure of not hedging?

A: As I reviewed Staff's Reports, I did not find any reference to a calculation or estimation of the risk that GMO faced from energy market price volatility.

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[3] One's position is referred to as "short" when (1) they have sold a futures contract to establish a market position, (2) they have a market position that obligates them to deliver, (3) their net position shows they have sold more than they possess.

Q: Why is this calculation of risk exposure important?

A: By estimating the risk exposure we create a measure for evaluating the cost of mitigating the risk. For example, if you determined your risk was $5 million, it would not be reasonable to choose a mitigation plan that cost $10 million. On the other hand, if your risk was $40 million and you were able to mitigate it for less than $20 million that could be reasonable. If your risk was less than $100, you might not even try to mitigate it.

Q: Did Staff compare the hedge adjustment to an alternative such as using at-the-money call options to in effect insure customers against upward market price spikes?

A: No. Since all hedging alternatives have some cost and Staff is recommending that all of the hedge adjustment be refunded, it seems the only option Staff found as a reasonable comparison was to keep all of the risk and not hedge.

Q: Based upon your review of Staff's Reports, did Staff challenge the prudency of GMO's hedging program?

A: No. Staff made no claims that GMO's hedging program was imprudent. Staff challenged the prudence of using "futures contracts to purchase natural gas as a means of mitigating risk associated with spot market purchased power."

Q: How long has GMO been using natural gas futures and options to hedge purchased power risk?

A: As Staff reported in ER-2005-0436, GMO began using natural gas futures and options to hedge purchased power risk in 2004.

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[4] One's position is referred to as "long" when (1) they have bought a futures contract to establish a market position, (2) they have a market position that obligates them to take delivery, (3) they own an inventory of commodities.

Q: How long has the cost of using natural gas futures and options to hedge purchased power risk been recovered through GMO's rates?

A: Since the implementation of rates pursuant to the Report and Order in Case No. ER-2005-0436 as the Nonunanimous Stipulation and Agreement between GMO and Staff provided:

> The Signatory Parties agree, for accounting and ratemaking purposes, that **hedge settlements**, both positive and negative, and related costs (e.g. option premiums, interest on margin accounts, and carrying cost 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. [emphasis added]

Q: In the time since Case No. ER-2005-0436 has any party claimed GMO's use of natural gas futures and options to hedge spot electricity price risk was an unreasonable practice?

A: While I have not read every piece of testimony, I have made a determined effort to survey relevant witnesses for both Staff and interveners. I did not find any witness for either Staff or intervener prior to Staff's Reports to claim the use of natural gas derivatives to cross hedge electricity price risk was unreasonable.

Q: Did Staff explain why after seven years it has now determined "that a reasonable person would not buy options to purchase natural gas at fixed prices in the future to hedge against future purchases of electricity in the spot market because there is no direct link between these two markets sufficient upon which to base such 'hedging'"?

A: No.

Q: In the time GMO has been using natural gas to hedge future purchases of electricity has there been reason to believe there was a direct link between these two markets sufficient upon which to base such "hedging?"

A: Yes. Below I list key phrases from some of SPP's annual "State of the Market Reports"[5] which illustrate that SPP has believed for years there is a strong link between natural gas and electricity markets:

- 2004: Rising natural gas prices are a driving force in the increase of on-peak electricity prices in the current bilateral electricity market in the SPP footprint. This is to be expected given the region's heavy dependence on natural gas for power generation, and a range of statistical tests confirms this result. At 3.
- 2005: Rising natural gas prices are a driving force in the increase of on-peak electricity prices in the current bilateral electricity market in the SPP footprint. This is to be expected given the region's heavy dependence on natural gas for power generation, and a range of statistical tests confirms this result. At 4.
- 2008: This is important because, in SPP, natural gas-fired resources are at the margin (and therefore setting the price) more during on-peak periods than during off-peak periods. In 2008 in SPP, natural gas was at the margin about 89% of the time during on-peak periods, while only 54% of the time during off-peak periods. At 5.
- 2010: Gas prices are very closely associated with average system prices in the SPP region. This is logical, because the marginal resources that set overall prices are most often gas units. At 36.

Q: If Staff believed that it was improper to "buy options to purchase natural gas at fixed prices in the future to hedge against future purchases of electricity in the spot market" why should it have challenged the practice when it first learned about it in 2005?

A: In writing for the National Regulatory Research Institute, Kenneth Costello and John Cita assert:

[5] Southwest Power Pool's annual *State of the Market Reports* are available at: http://www.spp.org/section.asp?group=642&pageID=27.

> The reasonableness of a hedging program should be evaluated before a program is actually implemented. If regulators decide to perform *ex post* reviews, they run the risk of creating unrealistic or inefficient performance standards, or both. The success of a risk-management program should not be evaluated strictly on how things turn out.[6]

Q: Did Staff assert that GMO's hedging program was not needed?

A: No.

Q: Did Staff identify an alternative to using natural gas futures contracts to mitigate risk associated with on-peak spot power market purchases?

A: No. Staff said, "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."[7]

Q: Since Case No. ER-2005-0436 has Staff been party to any other Stipulations or Agreements with GMO (or Aquila) regarding the use of natural gas derivatives to hedge electricity price risk?

A: Yes. The Stipulation and Agreement as to Certain Issues in Case No. ER-2007-0004 addressed hedging and stated that ultimate settlement values of certain hedges "would not be subject to challenge as to a prudence disallowance relative to Aquila's [GMO's] original decisions to enter into these hedge positions."

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[6] Kenneth W. Costello, Senior Institute Economist, and John Cita, Ph.D, Chief, Economic Policy and Planning Kansas State Corporation Commission, *Use of Hedging by Local Gas Distribution Companies: Basic Considerations and Regulatory Issues*, The National Regulatory Research Institute, May 2001, p. 51, available at: http://nrri.org/pubs/gas/01-08.pdf.

[7] Missouri Public Service Commission Staff Report, Prudence Review of Costs Related to the Fuel Adjustment Clause for the Electric Operations of KCP&L Greater Missouri Operations Company June 1, 2009 through November 30, 2010, Case No.EO-2011-0390 (Nov. 28, 2011) p. 9.

Q: When Staff entered that Stipulation and Agreement in Case No. ER-2007-0004, was it known that GMO's (or Aquila's) original decision to enter into those hedges included the decision to use natural gas futures and options to hedge electricity price risk?

A: Yes. The practice was so well known and understood that Maurice Brubaker testifying on behalf of an intervener in Case No. ER-2007-0004 stated "Aquila hedges natural gas not only for the expected direct gas burns in generating facilities, but also as a hedge against the cost of purchased power."[8]

Q: Was part of GMO's original decisions to enter into those hedge positions referenced in that Stipulation and Agreement based on using natural gas futures and options to hedge electricity price risk?

A: Yes.

III. HEDGING

Q: What is hedging?

A: Staff quotes Encyclopaedia Britannica (at britannica.com) to define hedging as:

> hedging, method of reducing the risk of loss caused by price fluctuation. It consists of the purchase or sale of equal quantities of the same or very similar commodities, approximately **simultaneously, in two different markets** with the expectation that a future change in price in one market will be offset by an opposite change in the other market. [emphasis added][9]

[8] Supplemental Direct Testimony of Maurice Brubaker on behalf of Federal Executive Agencies, Sedalia Industrial Energy Users' Association, Ag Processing, Inc. a Cooperative, with St. Joe Industrial Group, Case No. ER-2007-0004, p 7.

[9] hedging. (2012). In *Encyclopædia Britannica.* Retrieved from http://www.britannica.com/EBchecked/topic/259286/hedging

The Energy Information Administration defined hedging as:

> **Taking a position in a futures market opposite to a position held in the cash market** to minimize the risk of financial loss from an adverse price change; a purchase or sale of futures as a temporary substitute for a cash transaction that will occur later. [emphasis added][10]

Hedging is the process of protecting oneself against risk. Hedging employs various techniques but, basically, involves taking equal and opposite positions in two different markets as offsets to one another.

Q: Please give an example of how GMO uses hedges.

A: 1) Assume GMO has an obligation to provide electricity to its customers next July. GMO must buy the fuel and power necessary to meet that obligation. In other words, GMO is "short" fuel and power next July.

2) GMO offsets this short position for fuel and power by going "long" purchasing natural gas futures and options for next July.

3) Natural gas futures contracts "expire" three (3) business days prior to the first day of the delivery month. That means the NYMEX will cease trading the July contract about June 27th. If GMO holds that contract through expiration, the NYMEX will match GMO with a seller who will deliver natural gas to GMO at Henry Hub in Erath, Louisiana. While GMO can transport the natural gas from Sabine Pipe Line Company's Henry Hub to its plants it is more convenient to take delivery on Panhandle Eastern Pipeline, Southern Star Central Pipeline, or Texas Gas Transmission pipeline.[11] Consequently as the July contract approaches expiration near the end of June, GMO will

[10] Energy Information Administration, *Derivatives and Risk Management in the Petroleum, Natural Gas, and Electricity Industries*, October 2002, p. 84, available at:
http://www.eia.gov/oiaf/servicerpt/derivative/pdf/srsmg(2002)01.pdf

[11] According to CME Group, only 9,018 of the 76,864,334 natural gas contracts traded on the NYMEX in 2011 were ultimately delivered as physical natural gas at Henry Hub. That is about 0.01%.

sell the July contracts it purchased in step 2. When GMO sells the July futures contracts, it will recognize as either a gain or loss the difference between the price it paid when it purchased the July futures contract and the price it received when it sold those same contracts. Since those "hedge adjustments" are for natural gas futures contracts they are recorded in Account 547, GMO's primary natural gas account.

4) In July GMO will purchase natural gas and power on the spot market to then provide electricity to its customers. The cost for the natural gas is recorded in Account 547. The cost of the purchased power is recorded in Account 555. Since both of these accounts are accumulated in the FAC, the customers' risk of spiking power prices is offset with the hedge adjustments from the natural gas derivatives even though they are recorded in Account 547. The key, as with hedging in general, is the net effect.

5) GMO's customers are protected from adverse price changes in natural gas and power because both spot or cash natural gas and on-peak power prices are positively correlated to the NYMEX futures price for natural gas. When the cash price for natural gas and power goes up, the NYMEX futures price for natural gas goes up. Continuing with my example, GMO would then experience a gain from the time it purchased the futures contracts until it sold them. That gain from the futures transactions would offset the price increase for the spot or cash market. **It is the simultaneous offsetting of cash and futures positions that neutralizes the market volatility.** Likewise, when the cash prices go down, the NYMEX prices go down. GMO would then experience a loss on its futures contracts. But remember, there are two parts of a hedged transaction. The cash prices will also be lower. GMO will be paying less for natural gas and power than

expected when the hedge was placed. Again, it is the simultaneous offsetting of cash and futures positions that neutralizes the market volatility.

Q: Can you determine the success or failure of a hedging program by only looking at the transactions in one of the two markets?

A: No.

Q: Did Staff consider the impact of both markets in determining its recommended disallowance?

A: No. Staff did not make any showing of how the decline in the natural gas market had a similar decline in the purchased power market. Nor did Staff show that these parallel declines offset each other just as the definition it cited from britanica.com describes.

Q: Are there market participants that only focus on the futures market and do not use the futures to offset a spot or cash position?

A: Yes. Speculators will take a futures position without having an underlying cash or natural position. Speculators are focused only on trying to gain from their futures transactions. Unlike GMO they do not have a cash or natural position that will offset the gain or loss from the futures transaction.

IV. CROSS HEDGING

Q: What is cross hedging?

A: Cross hedging is a risk management strategy that involves offsetting a position in one commodity with an equal position in a different commodity with similar price movements. Cross hedging is often used in markets where there is no active futures trading for the commodity of concern. Company witness Dr. C.K. Woo gives several examples of cross hedges.

Q: Staff alleges "that a reasonable person would not buy options to purchase natural gas at fixed prices in the future to hedge against future purchases of electricity in the spot market...." Is the use of natural gas futures and options to hedge electricity price risk a reasonable practice?

A: Yes. As Company Witness Dr. C.K. Woo explains, natural gas futures are an effective cross hedge for electricity price risk. Over the past 11 years, PGS Energy Training has taught this hedging technique to over 400 energy professionals across many major utilities, banks, gas producers and energy/power marketing companies. Ironically, on February 22, 2012, the day this testimony is to be filed, PGS Energy Training will be conducting a webinar on "How to Financially Hedge Natural Gas & Electricity Price Risk." Part of that webinar focuses on "How to hedge electricity price risk using natural gas futures." A copy of the webinar description is attached as Schedule WEB-1.

Q: When was the first time you were instructed in how to use natural gas futures to cross hedge electricity price risk?

A: The first discussion I remember on using natural gas derivatives to hedge electricity price risk was at a workshop presented by the Electric Power Research Institute ("EPRI") in Kansas City in 1997.

Q: Do you know of other electric utilities that have used natural gas derivatives such as NYMEX futures contracts or options to cross hedge electricity price risk?

A: Yes. We recently conducted an informal survey asking utilities if they have used natural gas derivatives such as futures contracts or options to cross hedge electricity price risk.

Q: How did you survey other electric utilities?

A: We asked the Edison Electric Institute to send a short email survey regarding hedging to the members of its Rate Committee. Knowing that companies typically do not discuss details about their hedging strategies I presented just three simple yes/no questions which I felt could be answered while honoring that desire for confidentiality.

Q: What did you learn through your survey?

A: Twelve companies responded to our survey. Half of those twelve responded yes to the question, "Do you or have you ever used natural gas derivatives (futures, options, forwards, etc.) to cross hedge electricity price risk?" Two-thirds answered yes to the questions, "Do you or have you ever used derivatives (futures, options, forwards, etc.) to hedge natural gas price risk?" and "Do you or have you ever used derivatives (futures, options, forwards, etc.) to hedge electricity price risk?"

Q: Why does GMO cross hedge spot electricity price risk with natural gas futures and options?

A: The simple answer is liquidity. Company Witness Gary L. Gottsch's Direct Testimony in Case No. ER-2007-0004 more thoroughly explained on page 3,

> Since a large portion of Aquila's budget is tied to purchased power, Aquila believes that it is appropriate to mitigate this price exposure and minimize this risk. Approximately **[redacted]**% of this purchased power is to cover on-peak needs and it's these volumes that have the greatest exposure to volatile markets. On-peak power prices are closely tied to natural gas prices as loads increase. When the full amount of coal based capacity is absorbed, the next set of units to come online are staggered by heat rates, namely gas fired combined cycle combustion turbines, then simple cycle peaking units. For example, the local power market is trading at coal priced generation early in the morning and as the load picks up, the next prices quoted in the market area are tied to what gas fired combined cycle turbines would cost to run. As loads continue to build, the next level of prices are equivalent to what peaking units would cost to come online. Rather than implement a generally less efficient on-peak purchase power

hedge plan at a remote hub, **Aquila converts on-peak purchase power into equivalent quantities of natural gas. By hedging with NYMEX based swaps, the Company has increased flexibility due to the much more liquid NYMEX natural gas markets.** [emphasis added]

Q: What are the benefits of using NYMEX natural gas futures contracts and options to cross hedge electricity price risk?

A: Perhaps the three most significant benefits of using NYMEX natural gas futures contracts and options to hedge electricity price risk are:

1) Liquidity – the NYMEX natural gas market is very liquid. That is NYMEX natural gas contracts can easily be bought or sold quickly. There are large numbers of buyers and sellers ready and willing to trade at any time during market hours. Because of high trading volumes there tend to be low spreads between asking and selling prices which results in little to no premium when entering or exiting a position.

While the Company could probably hedge its purchased power risk with electricity bilateral forward contracts, it would be at a price. There is not a liquid secondary market where the Company could sell out of a position should its requirements change. Even if it could sell out it would likely be at a significant discount.

2) Minimal counterparty credit risk – the NYMEX uses a central counterparty clearing model. All trades are cleared through the Exchange clearinghouse which becomes the ultimate counterparty, acting as the "buyer to every seller" and the "seller to every buyer." Counterparty credit risk is shared among clearing members, who represent some of the largest names in financial services. Consequently, the NYMEX has received and maintains an AA+ long-term counterparty credit rating from Standard & Poor's.

3) Contract size – one (1) NYMEX natural gas contract represents 10,000 mmBtus of natural gas. That is roughly equivalent to one (1) megawatt hour (MWh) of electricity.

Given the liquidity of the NYMEX there is essentially no premium for entering or exiting a position as small as one MWh. That liquidity gives GMO the ability to fine tune its hedge position as expectations change.

4) Besides the benefits of using the NYMEX there is another benefit of combining GMO's projected natural gas usage with natural gas equivalent volumes for it projected purchased power requirements. It manages the risk that while the total load served might equal the projection, the supply mix between GMO's natural gas-fired generation and purchased power might be different than projected.

V. THE COMMISSION'S HEDGING GUIDANCE

Q: Do regulated utilities in Missouri such as GMO use derivatives to hedge?

A: Yes. Missouri utilities were using futures, options, and collars to hedge before 1998.[12] Moreover, the MPSC has encouraged hedging through its Natural Gas Price Volatility Mitigation Rule 4 CSR 240-40.018 which states that "natural gas local distribution companies should undertake diversified natural gas purchasing activities as part of a prudent effort to mitigate upward natural gas price volatility..." That rule goes on to delineate call options, collars, futures contracts, financial swaps, options and other instruments as tools for managing price and/or usage volatility. KCPL has engaged in hedging natural gas since 2001. GMO began hedging natural gas and using natural gas derivatives to cross hedge electricity price risk for purchased power before 2005.

[12] Missouri Public Service Commission, *Natural Gas Roundtable/Consumer Choice: Opportunities and Risks*, Kansas City, July 7, 1998.

Q: Has the Commission conducted any inquiries into energy market price risk management?

A: Yes. The MPSC has conducted multiple such inquiries natural gas. The most recent was in 2005 in response to the Office of the Public Counsel's request that the Commission "ensure that natural gas utilities have done everything in their power to mitigate price spikes and keep rates stable."[13] The Commission expressed its concern regarding "gas acquisition strategies that will ameliorate price spikes" and agreed to "take evidence on this issue as requested by Public Counsel."[14]

Q: What was the result of the 2005 investigation?

A: On February 24, 2006 the Commission received from MPSC Staff the 44-page Joint Report on Natural Gas Market Conditions, *PGA Rates, Customer Bills & Hedging Efforts of Missouri's Natural Gas Local Distribution Companies*, which was described by Staff as a "consensus document" submitted by the parties to the proceeding. See Joint Report, Case No. GW-2006-0110 (Feb. 27, 2006). The cover of the Joint Report contained a satellite photograph of Hurricane Katrina approaching landfall and a graph depicting natural gas prices from the beginning of 2004 to the beginning of 2006.

Q: What observations did the Joint Report make with regard to hedging and hedging strategies?

A: The Joint Report noted that Commission Rule 4 CSR 240-40.018 contained the following purpose statement: "This Rule represents a statement of Commission policy that natural gas local distribution utilities should undertake diversified natural gas purchasing activities as part of a prudent effort to mitigate upward natural gas price volatility and

[13] Public Counsel's Motion to Open a New Case, Case No. GW-2006-0110 (Sept. 12, 2005).
[14] Order Establishing Case, Case No. GW-2006-0110. (Sept. 27, 2005) p. 6.

secure adequate natural gas supplies for their customers." Id., p. 3. In this context, the Joint Report concluded:

> A central question is what is an appropriate hedging strategy? The answer depends on your view of hedging's objectives, benefits, costs and risks. Hedging strategies that obtain price certainty in lieu of price variability may not result in the lowest costs. If a utility sets an objective to achieve the lowest delivered cost to customers, and if market prices stay at, or increase from, current levels, then the lower the percentage of market price exposure, the better. If market prices drop significantly, the opposite will be true. If a utility has targeted its hedging strategy at limiting exposure to market price spikes, the appropriate level of hedging for that utility will depend on its perception of forecasted market price trends and the benefits, costs and risks of relative hedging mechanisms.

Q: The Commission's Natural Gas Price Volatility Mitigation Rule is directed to Local Distribution Companies ("LDC"). How is it relevant to this case?

A: The LDC's Rule is instructive in identifying the Commission's concern about the impact of energy market price volatility on utility customers. The State's LDCs pass natural gas costs through a purchased gas adjustment ("PGA") to their customers. GMO passes natural gas and purchased power costs through a fuel adjustment clause ("FAC") to its customers. While PGAs and the FAC have differences, both sets of customers are ultimately exposed to the market price of energy.

Q: Does the Commission have rules that direct or encourage electric utilities to hedge?

A: Yes. The electric utility rules are not as specific in describing what instruments to use to mitigate volatility but they do convey the Commission's concern regarding rate volatility and its understanding that fuel and purchased power are key drivers in rate volatility. Specifically the Commission's rule about filing and submission requirements for Electric Utility Fuel and Purchased Power Cost Recovery Mechanisms as specified in 4 CSR 240-3.161(2) and 4 CSR 240-3.161(3)(K) require "A complete explanation of any rate volatility mitigation features designed in the proposed RAM" (Rate Adjustment

Mechanism). The Electric Utility Fuel and Purchased Power Cost Recovery Mechanisms as specified in 4 CSR 240-20.090(2)(H) states, "Any party to the general rate proceeding may propose a cap on the change in the FAC, reasonably designed to mitigate volatility in rates, provided it proposes a method for the utility to recover all of the costs it would be entitled to recover." Taken together, these two rules show that the Commission is concerned about mitigating the impact of fuel and purchased power market volatility on customers in a way that allows the utility to recover all of the costs of fuel and purchased power.

Q: Has the Commission given GMO specific guidance regarding a hedging program?

A: Yes in that the Commission has included hedging costs in GMO's cost of service and rate adjustment mechanisms ("RAM") since 2005. Perhaps the most pointed guidance was Chairman Jeff Davis' May 17, 2007 Concurring Opinion in Case No. ER-2007-0004 wherein he specifically exhorted GMO to hedge against the risk of rising fuel and purchased power prices. Key statements from that Opinion highlight Chairman Davis' exhortation as follows:

- "Skyrocketing fuel and purchased power prices can compound rate risk for consumers," p. 3.
- "This commission recognizes the hardship rate volatility can place on all classes of consumers - residential, commercial and industrial," p. 4.
- "If Aquila fails to adopt a proper hedging strategy, fails to follow its hedge strategy or abuses the discretion given to it by this commission in any other way, this commissioner will not hesitate to modify or reject Aquila's FAC application in a future proceeding." p. 7.

Q: Has this Commission allowed GMO to use natural gas derivatives to cross hedge electricity price risk?

A: Yes. In ER-2005-0436 on pages 5-6 of its Order Approving Stipulation and Agreement, this Commission authorized Aquila [GMO] "to record in FERC Account 547 or Account 555, as part of fuel cost and purchased power costs, hedge settlements, both positive and negative, and related costs (e.g. option premiums, interest on margin accounts, and carrying cost on option premiums) directly related to natural gas generation and on-peak purchases power transactions...."

In the Order Clarifying Report & Order of ER-2007-0004 this Commission made it clear that hedging costs were to flow through the FAC. It also reiterated the provision of that case's Stipulation and Agreement which provided that "the ultimate settlement values of Aquila's hedge contracts in place on March 27, 2007, will not be subject to prudence review."

Q: Has any other public utility commission expressed any opinion regarding GMO's use of natural gas derivatives to cross hedge electricity price risk?

A: Yes. GMO (formerly Aquila) presented a hedging plan for its electricity operations to the KCC which included the use of natural gas derivatives to cross hedge electricity price risk. See Schedule WEB-2, Application, *In re Aquila, Inc. for Approval of an Accounting Order to Establish a Natural Gas Hedge Program for Electric Generation*, KCC Docket No. 06-AQLE-494-HED (Nov. 3, 2005).

In response to GMO's Application, KCC Staff filed a memorandum in support of a proposed Stipulation and Agreement that would approve the program, stating:

"This program is designed to reduce, but not eliminate the volatility of [Aquila's] monthly ECA [energy cost adjustment] prices. It is Staff's opinion the proposed program would work as designed.

"Aquila-WPK submitted a well developed Application and the presentation of its 'preferred hedge plan' is the best Staff has ever seen. Aquila should be commended."

See Schedule WEB-3, Staff Memorandum in Support of Stipulation and Agreement, Docket No. 06-AQLE-494-HED (Dec. 22, 2005), Attach. 1 at 3.

Q: Did the Kansas Corporation Commission approve the proposed Stipulation and Agreement?

A: Yes. In an Order issued December 27, 2005, the KCC granted the Joint Motion and approved the Stipulation, finding that it was "reasonable, in the public interest, and should be approved." See Schedule WEB-4, Order Granting Joint Motion and Approving Stipulation and Agreement, Docket No. 06-AQLE-494-HED (Dec. 27, 2005).

VI. GMO'S HEDGING PROGRAM

Q: What risk is GMO managing through its hedge programs?

A: GMO is hedging to mitigate adverse upward price volatility in natural gas and power. In brief, GMO is concerned about increasing natural gas and power prices.

Q: How does market price uncertainty for natural gas affect GMO?

A: Natural gas market price uncertainty primarily affects GMO in two ways. The first way is the direct impact on the price the Company pays for the natural gas it consumes. The second impact is the effect of natural gas pricing on the market price for electricity.

Q: Does GMO use the same program to manage both the impact of natural gas market uncertainty on the price the Company will pay for the natural gas it consumes and the market price for electricity the Company will purchase?

A: Yes.

Q: What strategy does a company that is concerned about increasing commodity prices employ?

A: It is to hedge its "short" physical position, by going "long" in a financial position through buying call options or buying futures contracts.

Q: How do companies use futures contracts and options in their hedging strategies?

A: A hedger such as GMO with a short position would buy futures contracts to "lock in" a future price. Alternatively to "cap" a future price, a hedger with a short position might: (1) buy calls, (2) buy calls and sell puts to create a collar, (3) buy calls, sell puts, and sell calls to create a 3-way collar, or (4) buy futures and buy puts to create a synthetic call. All four scenarios can protect against the risk of prices moving upward and offer some degree of allowing the hedger to follow market prices down but with different premium costs and risk profiles.

Q: How is a hedging strategy developed?

A: The first step in developing a hedging strategy is to identify the hedger's purpose. What is the risk that causes concern and how does the hedger want to change that risk? There are a number of strategies that may be employed, depending on the objectives of the program. As a hedger the goal of these strategies is to reduce risk. By contrast, a speculator assumes risk in the pursuit of profit.

Q: What is the objective of GMO's hedging program?

A: The objective of GMO's hedging program is to reduce energy price risk inherent with floating with the market without substantively degrading the Company's overall competitiveness. The program's goals are to 1) protect the Company and its customers from large upward fluctuations in the price of natural gas and 2) assure a reasonable probability that budgets are met in a cost-effective manner.

Q: Is the objective of GMO's hedging program consistent with the Commission's objectives for a hedging program?

A: Yes.

Q: Briefly describe GMO's hedging strategy.

A: GMO's natural gas hedging program is oriented toward finding a balance between the need to protect against high prices and the opportunity to purchase gas at low prices. GMO's hedging program first divides the hedge volume into two parts. One-third of the volume is not hedged but is left to primarily absorb the risk of requirements being less than projected and secondarily float with the market. The remaining two-thirds are hedged under two hedging programs, Kase and Company, Inc.'s HedgeModel and ezHedge.

Q: How did GMO develop its program for managing the price risk for natural gas and purchased power?

A: In mid-2007 GMO's predecessor Aquila retained Kase and Company, Inc., 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. GMO has continued that program. In 2010 KCP&L combined its natural gas hedge

program with GMO's hedge program. The merged hedge program retains the volume drivers that are unique to each utility. **[redacted]** were similar for both the KCP&L and GMO plans, so the merged parameters are not substantially different than either of the original plans.

Q: How does the HedgeModel program work?

A: The approach of the HedgeModel program is to identify statistically favorable points at which to hedge. The strategy can be thought of as a three-zone strategy comprised of high price, normal price and low price zones. The high price zone identifies prices that are threatening to move upward. In this price zone actions are taken to protect against unfavorable high price levels, mostly through the use of options-related tactics. The normal price zone identifies prices that are in a "normal" range, neither high enough to warrant protecting price, nor low enough to be considered "opportunities." No action is taken whenever prices are deemed to be in the normal price range. The low price zone identifies prices that are statistically low. In this zone, actions are taken to capture favorable forward prices as the market moves into a range where the probability of prices remaining at or below these levels is decreasing. While the main focus in the high price zone is defensive, to set a maximum or ceiling on prices, in the low price zone the focus is on capturing attractive prices.

Q: How does the ezHedge model work?

A: 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 case 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.

Q: What distinguishes these two hedging models?

A: 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.

Q: How does GMO determine the amount of natural gas to hedge under its price risk management program?

A: GMO uses natural gas derivatives to hedge natural gas price risk and "on peak" purchased power price risk. The natural gas component is GMO's projected natural gas usage. The natural gas equivalent usage for projected purchased power is determined using the market implied heat rate from the Company's market model. "On peak" is defined as the Monday-Friday 5x16 block, excluding North American Electric Reliability

Corporation holidays. GMO may hedge up to 67 percent of the sum of projected natural gas usage and projected "on peak" natural gas equivalent for purchased power.

Q: How does GMO's hedge program manage the risk of volume uncertainty?

A: 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.

Q: Does GMO adjust its hedges for changes in projected usage?

A: Yes. 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 we already have the two-thirds hedged, those hedges that exceed the two-thirds are liquidated. If the decrease were material, we would develop a remediation strategy.

Q: What percentage of the hedges have been adjusted for reductions in requirements projections?

A: There were no liquidations due to volume adjustments for calendar year 2009. For 2010, less than five (5) percent of the hedges were liquidated because of a decrease in projected requirements.

Q: How often does GMO use the HedgeModel and ezHedge?

A: GMO monitors the HedgeModel and ezHedge daily. **[redacted]**

Q: How would you evaluate a hedge program?

A: I would start with information known at the time the hedger took action. Ken Costello, Senior Institute Economist of the National Regulatory Research Institute, put it this way:

> **Hedging is one of those activities, similar to purchasing of insurance, where by design it is expected to result in a net loss to consumers.** Consequently, hedging is vulnerable to *ex post* regulatory interpretation. But, in view of the intent to avoid large losses or harm – a 'peace of mind-type' benefit – hedging with the result of higher prices to consumers or lower profits to a utility can still be regarded as successful and prudent. … [S]econd-guessing lies counter to the traditional prudence standard and discourages utility hedging. [emphasis added][15]

Key *ex ante* evidence revolves around the program's objective. Is it the right objective? Is it reasonable to believe the program as designed will achieve that objective? Does it have a history of meeting that objective? Implementing a hedge program is much like buying insurance and like buying insurance there is a price to pay for someone else to take on your risk. Some costs can be considered *ex ante*. What does it cost to implement? What does it cost to administer? How much are the hedges expected to cost? Are those costs reasonable compared to the risk? How do the costs compare to the alternatives?

Q: Does GMO's hedge program have the right objective?

A: Yes.

Q: Why do you think GMO's hedge program has the right objective?

A: GMO's objective of protecting the Company and its customers from large upward fluctuations in the price of natural gas and purchased power, while assuring a reasonable probability that budgets are met in a cost-effective manner, is consistent with the

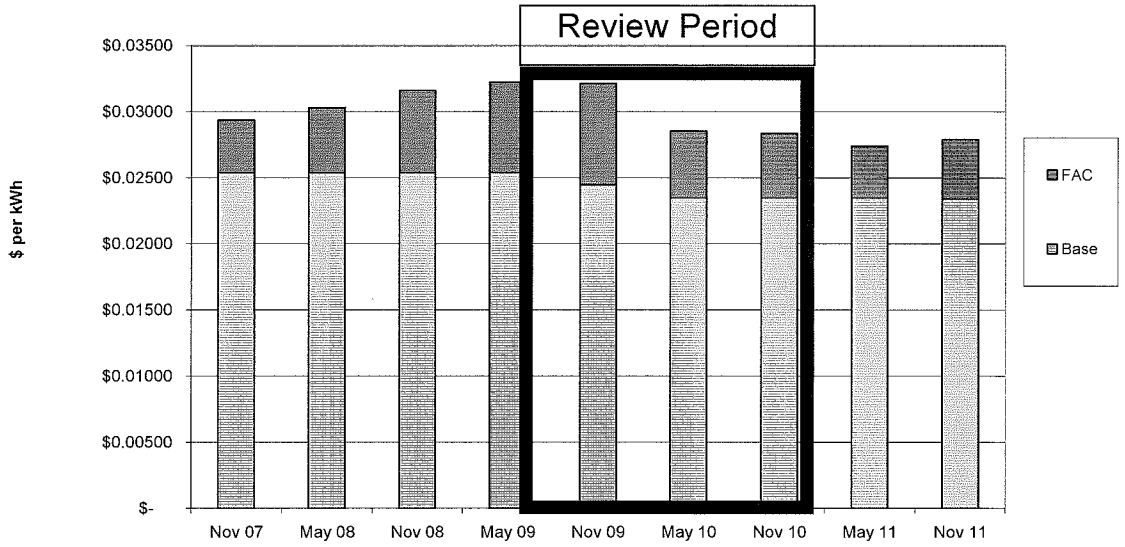
[15] *Regulatory Questions on Hedging: The Case of Natural Gas*, by Ken Costello Senior Institute Economist, National Regulatory Research Institute, February 2002, p. 16.

Commission's expressed concerns about rate volatility and its mission to ensure Missouri consumers have reliable and reasonably priced utility service.

Q: Has GMO's hedging strategy achieved the Commission's charge of avoiding rate risk from skyrocketing fuel and purchased power prices?

A: Yes. As Figure 1 below shows that total variable fuel and purchased power costs have not skyrocketed but have even decreased through this review period.

Figure 1:
Total Variable Fuel and Purchased Power Cost



Q: Why do you need to look at the total effective rate?

A: There are two reasons we need to evaluate the effectiveness of GMO's program for hedging fuel and purchased power by looking at the total effective rate. First, all hedges have two sides. As I discussed earlier, hedging is taking equal and opposite positions in two positively correlated markets. The hedge position cancels out the risk in the existing position. Speculation on the other hand, is one sided. Speculation attempts to profit from

the risk that is not cancelled out. Looking at the total allows us to see both sides of the hedge simultaneously. The second reason we need to look at the total of base rates and FAC is to avoid misinterpretations that may result merely from resetting the FAC's base.

Q: Are there other factors that would influence the total rate?

A: Yes but the single largest variable in GMO's cost of service is the cost of purchased energy either as fuel or power.

Q: Has GMO's hedging program achieved its objectives of 1) protect the Company and its customers from large upward fluctuations in the price of natural gas and 2) assure a reasonable probability that budgets are met in a cost-effective manner?

A: Yes.

Q: How did you evaluate the performance of GMO's natural gas hedge program?

A: Because GMO's hedge volume represents the sum of natural gas for generation and natural gas equivalent for purchased power, I evaluated it by looking at the total volume. I constructed GMO's average $/megawatt-hour ("MWh") equivalent values from the sum of purchased power and natural gas expense, including hedge costs, for GMO. The $/MWh equivalent value constructed from budget data represented GMO's market expectations for the period. I compared that value to the $/MWh equivalent value constructed from actual results.

Q: Based on your evaluation how has this program performed for GMO?

A: For the period 2008 through 2011 the $/MWh equivalent value constructed from actual results was slightly less than the budgeted value. In other words, GMO's hedge program met its objective of protecting GMO's customers from large unexpected upward market

price fluctuations while holding the cost of natural gas and purchased power below budget.

Q: What about the program's costs? What does it cost to implement and administer?

A: Because the hedge program is using the NYMEX, there are minimal costs to execute the hedges and maintain margin accounts.

Q: How much did the hedges cost?

A: Staff is claiming that GMO's cross hedges for purchased power resulted in over collections of **[redacted]**. Staff determined that number from values I provided in response Staff Data Request No. 56. Staff failed to adjust its claim to conform with the provisions of the Stipulation and Agreement as to Certain Issues in Case No. ER-2007-0004 and the 95 percent Customer's Responsibility adjustment in GMO's FAC tariff. Had Staff made those adjustments, the alleged over collection would have been **[redacted]**. Schedule WEB-5 illustrates how I determined the properly adjusted number.

Q: Why does Staff's claim need to be adjusted for the provisions of the Stipulation and Agreement as to Certain Issues in Case No. ER-2007-0004?

A: The Stipulation and Agreement as to Certain Issues in Case No. ER-2007-0004 provided that:

> The Signatories [Staff and the Company] 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 would be subject to any fuel 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. [emphasis added]

Q: Why does Staff's claim need to be adjusted for the provisions of GMO's FAC tariff?

A: Since GMO's FAC was first implemented pursuant to the Report and Order of Case No. ER-2007-0004, only 95 percent of the incremental fuel and purchased power costs pass through the FAC as the Customer's Responsibility.

Q: How does the cost including lost opportunity that GMO experienced compare to the market price risk GMO faced?

A: My response to Staff Data Request No. 59 included a copy of the Company's risk assessment which determined that GMO faced an annual average on-peak power price risk of ** [redacted] ** per year for the period 2009-2012.

Q: What alternatives to hedging purchased power risk were available to GMO?

A: Perhaps the two alternatives that represent the opposite ends of the spectrum of alternatives are 1) not hedge anything which would have left the Company exposed to that ** [redacted] ** and 2) cross hedge everything with at-the-money natural gas calls.

Q: How does the cost of premiums plus lost opportunity to follow the market that GMO experienced compare to the cost of hedging purchased power with at-the-money natural gas calls?

A: Over the time period GMO would have purchased calls to protect 2009 and 2010 power purchases, the premiums for calls averaged 25.9 percent of the underlying when the contract month settled. That means a reasonable cost for hedging GMO's spot purchased power risk would have been ** [redacted] **. Schedule WEB-6 shows that even using Staff's ** [redacted] ** as the cost of hedging GMO's actual cost was only ** [redacted]

[redacted]** for the review period. In other words, using Staff's number as the cost of hedging, GMO's hedge programs saved **[redacted]** for the review period.

Q: Has GMO's strategy of using natural gas futures and options to hedge purchased power risk been successful?

A: Yes. The program's objective is consistent with the Commission's concerns about rate volatility and reasonable cost. The strategy held costs below *a priori* expectations. Moreover actual costs including the opportunity cost that was traded for price stability was significantly less than either 1) the risk exposure or 2) the cost of insurance without the opportunity cost. In comparison to the insurance option, GMO's program saved **[redacted]** over the review period.

VII. CONCLUSION

Q: Based upon your experience in working with financial instruments and hedging programs, what is your opinion regarding GMO's use of natural gas derivatives to cross hedge electricity price risk?

A: I believe that GMO made a reasonable decision to use natural gas futures contracts and options to cross hedge electricity price risk. The program was designed appropriately for the goal of mitigating price volatility. As Staff noted in its Report, the program was also administered properly. Overall, based on the information that was known and acted upon at the time, the hedging program was reasonable and prudent.

Q: Do you have other observations you believe the Commission should consider as it reviews the Company's use of cross hedging to mitigate spot electricity price risk?

A: Yes. Staff alleges that "[i]f GMO is allowed to recover these losses through the FAC, ratepayer harm will result from an increase in costs collected through the FAC." I

disagree. Long-term ratepayer harm will result if only one side of GMO's hedges is passed through the FAC. Rejection of the derivative side of the hedges would represent a complete reversal of the Commission's position in Case Nos. ER-2005-0436, ER-2007-0004, ER-2009-0090, and ER-2010-0356 and be in stark contrast with its other expressions about the need to protect customers from energy market induced rate volatility. In essence rejecting the derivative side of hedges that worked would be to reject hedging altogether. To abandon hedging when energy prices are the lowest they have been in over a decade could prove to be very short-sighted.

While not an issue in this case, the Commission and Staff should be aware that as we move towards Southwest Power Pool's Integrated Marketplace, there will be an even greater need to hedge. Likely hedging portfolios will include cross hedging. I believe it would be in the best interest of Missouri's electric utilities and their customers for the Commission to consider an inquiry into the market risks electric utilities face and will soon face. Such an inquiry could yield benefits similar to those gained by the inquiries the Commission conducted in natural gas market risk a few years ago.

Q: Does that conclude your testimony?

A: Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

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

AFFIDAVIT OF WILLIAM EDWARD BLUNK

STATE OF MISSOURI)
) ss
COUNTY OF JACKSON)

William Edward Blunk, appearing before me, affirms and states:

1. My name is William Edward Blunk. I work in Kansas City, Missouri, and I am employed by Kansas City Power & Light Company as Supply Planning Manager.

2. Attached hereto and made a part hereof for all purposes is my Direct Testimony on behalf of KC&PL Greater Missouri Operations Company consisting of Thirty-Six (36) pages, having been prepared in written form for introduction into evidence in the above-captioned docket.

3. I have knowledge of the matters set forth therein. I hereby affirm and state that my answers contained in the attached testimony to the questions therein propounded, including any attachments thereto, are true and accurate to the best of my knowledge, information and belief.

William Edward Blunk

Subscribed and affirmed before me this 22nd day of February, 2012.

Nicole A. Wehry
Notary Public

My commission expires: Feb. 4 2015

NICOLE A. WEHRY
Notary Public - Notary Seal
State of Missouri
Commissioned for Jackson County
My Commission Expires: February 04, 2015
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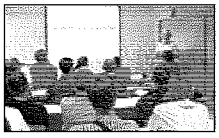


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5. What basis risk is, and how "basis blowout" can destroy a buyer's or seller's futures hedge.

What You will Learn - Session Two (3:00 pm to 4:30 pm)

1. How to use a basis swap to hedge natural gas locational basis risk.
2. How to hedge both basis and delivery risk using trigger deals.
3. The components that make up the master hedging & trading equation, and what the difference is between financial and physical locational basis "fin" versus "phys".
4. What a heat rate linked power transactions is, and why it such a powerful hedging tool for electricity.
5. How to hedge electricity price risk using natural gas futures

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Schedule WEB-1

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Schedule WEB-1

2005.11.04 11:40:58
Kansas Corporation Commission
/S/ Susan K. Duffy

BEFORE THE STATE CORPORATION COMMISSION
OF THE STATE OF KANSAS

STATE CORPORATION COMMISSION

NOV 0 3 2005

Docket Room

In the Matter of the Application of Aquila, Inc., d/b/a Aquila Networks-WPK, for Approval of an Accounting Order to Permit Aquila, Inc., d/b/a Aquila Networks-WPK, to Recover Amounts Necessary to Expend in Order to Establish and Maintain a Natural Gas Hedge Program for Electric Generation for the 2006 Summer Season; and for Approval of its "Gas Hedge Program for Electric Generation"	)	Docket No. 06-AQLE-494-HED

APPLICATION

COMES NOW Aquila, Inc., d/b/a Aquila Networks-WPK ("Aquila"), and pursuant to K.S.A. 2002 Supp. 66-117, files this application with the Kansas Corporation Commission ("KCC") for an order approving its request for an accounting order to permit Aquila to recover such amounts of its funds as may be necessary to expend in order to establish and maintain a gas hedging program for the 2006 summer season, defined as June 1 through September 30, under the Gas Hedge Program for Electric Generation and for approval of its "Gas Hedge Program for Electric Generation." In support of its application, Aquila states as follows:

1. Aquila is a corporation duly organized under the laws of the State of Delaware, with a principal place of business at 20 West Ninth Street, Kansas City, Missouri 64105. Aquila is authorized to do business and is conducting business in the State of Kansas.

2. Aquila is engaged, generally, in generating, transporting, distributing and selling electricity in portions of Kansas. Aquila provides service to nearly 70,000 electric customers in Kansas. Aquila's Kansas operations are subject to the jurisdiction of the KCC.

3. Based upon meetings that Aquila has conducted with members of the KCC Staff, CURB and based anecdotally upon discussions which took place during the formal roundtable discussions and the most recent focus group study held by the KCC regarding natural gas price

volatility, Aquila believes it is important that some type of price protection should be afforded to its residential and commercial customers by establishing a ceiling price to be paid on a percentage of its projected summer natural gas for generation volumes as well as fixing another percentage for the 2006 summer season. In order to establish a ceiling price on a percentage of the projected summer natural gas for generation volumes to be purchased for the 2006 summer season, it is likely that Aquila will have to spend approximately $600,000.00. Aquila requests that the KCC authorize Aquila to expend up to $600,000.00 to establish such a ceiling price. Aquila is willing to invest such funds, as needed, to establish a ceiling price on the percentage of gas purchases for which the ceiling price is being established. However, Aquila will invest such funds to reach the target price cap expenditure only if the KCC authorizes the recovery of the funds expended through a separate average charge per customer (expressed as a per kilowatt-hour charge) and stated separately on customer bills. The $600,000, or $.924 per month per residential customer, $3.264 per month per commercial customer for the summer season, is the suggested budget.

4. Aquila is requesting the KCC issue an accounting order authorizing Aquila to: 1) record those monies expended by Aquila in establishing a gas ceiling price for one third of the 2006 budgeted summer season natural gas generation budget in an account to accrue interest at the KCC approved interest rate for customer deposits; 2) recover the program costs from all of its residential and commercial customers on a per customer basis (expressed as a separate per kilowatthour charge) during the months of December 1, 2005 through May 31, 2006, or as soon after the program is approved by the KCC; 3) to reconcile the expenditures to the recoveries reflecting any over or under recovery through the ECA process; and 4) to make such report or reports deemed necessary by the KCC regarding such account. Any resulting cost or benefit resulting from the settlement of the call options or futures swaps shall be credited or recovered, respectively, through Aquila's monthly ECA

filings during the months of July 1, 2006 through October 31, 2006.

5. Attached hereto and incorporated herein by reference is the testimony of Gary L Gottsch. Mr. Gottsch is a Gas Supply Representative for the Energy Resources group of Aquila Networks and is testifying in support of Aquila's request for approval of an accounting order in this matter and approval of Aquila's Gas Hedge Program for Electric Generation.

6. Attached hereto and incorporated herein by reference is Aquila's proposed changes to its ECA tariff to reflect the Gas Hedge Program.

7. The authority requested by this application will allow Aquila to take actions, which are reasonably designed to mitigate the volatility of natural gas prices in the summer months. It is the goal of Aquila's Gas Hedge Program for Electric Generation that these actions will mitigate price volatility, at a reasonable cost, relative to Aquila's traditional operations. Therefore, Aquila requests the KCC find the authority requested is in the public interest.

WHEREFORE, Aquila respectfully requests that the KCC issue an order granting Aquila's request for an accounting order to permit Aquila to recover such amounts of its funds as may be necessary to expend in order to establish and maintain a gas ceiling price for a portion of the 2006 summer season under the Gas Hedge Program for Electric Generation; for approval of its Gas Hedge Program for Electric Generation; and for such other relief as the KCC may deem appropriate.

James G. Flaherty, #11177
ANDERSON & BYRD, LLP
216 S. Hickory, P. O. Box 17
Ottawa, Kansas 66067
(785) 242-1234, telephone
(785) 242-1279, facsimile
Attorneys for Aquila, Inc., d/b/a Aquila Networks - WPK

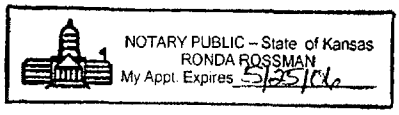
VERIFICATION

STATE OF KANSAS, FRANKLIN COUNTY, ss:

James G. Flaherty, of lawful age, being first duly sworn on oath, states: That he is an attorney for Aquila, Inc., d/b/a Aquila Networks - WPK; that he has read the above and foregoing Application, knows the contents thereof; and that the statements contained therein are true.

James G. Flaherty

SUBSCRIBED AND SWORN to before me this 3rd day of November, 2005.



Notary Public

My Commission Expires:

AQUILA INC d/b/a AQUILA NETWORKS-WPK
(Name of Issuing Utility)

Schedule: 04-ECA

Replacing Schedule 04-ECA Sheet 4
Which was filed March 30, 2005

ENTIRE SERVICE AREA
(Territory to which schedule is applicable)

No supplement or separate understanding shall modify the tariff as shown hereon.

Sheet 4 of 4 Sheets

Statistics	Summer Period May - September Limits	Summer Period May - September Alternative* Fuel Ratios	Winter Period October - April Limits	Winter Period October - April Alternative* Fuel Ratios
Thermal Efficiency (Heat rate)	Max. Of 12,100 BTU/kWh		Max. Of 12,200 BTU/kWh	
Percentage of BTU from:				
Coal	16% to 100%	30%	16% to 100%	25%
Oil	0% to 25%	15%	0% to 75%	42%
Gas	0% to 84%	55%	0% to 84%	33%
Nuclear	-% to -%	-%	-% to -%	-%
Line Loss	Maximum of 14%		Maximum of 14%	

*These alternative fuel ratios must be used in calculating the fuel cost, if actual performance falls outside the limit values.

Assessment for Estimating Accuracy: In the event that the estimated total energy costs per kWh for any three (3) consecutive months exceed by more than five percent (5%) the actual cost per kWh for those same months, The Company shall submit an explanation. If the Company cannot show that the estimate was realistic and the actual costs was the lowest overall cost that could have been incurred, the Kansas Corporation Commission may, at its discretion, assess the Company, for the purpose of recovering administrative costs of handling the adjustment, in an amount not to exceed the difference between the amount billed to customers under the estimated rate and the actual increase in energy costs for those billing periods.

Electric Hedge Program
The Company shall operate its Electric Hedge Program pursuant to the Commission's orders in Docket No. 06-AQLE-___-___. Costs and revenues associated with any purchase of straight call options and other alternative risk management strategies, the balance of which shall not exceed $600,000 per year, shall be recovered as a separate cost component from all participating customers during the months of December through May. Any over or under recovery, and any of the budget amount not used by the Company, shall be reflected in the Company's ECA filings. During the months of July through October, the monthly costs and revenues generated from the exercise of all financial derivatives shall be flowed back to all participating customers as a cost component of the respective monthly ECA. The Company shall also make such report or reports deemed necessary by the Commission regarding such costs and revenues.

Issued October 31, 2005
Month Day Year

Effective Upon Commission Approval
Month Day Year

By Maurice L. Arnall Director, Regulatory
Signature Title

06-AQLE-____-___
Approved
Kansas Corporation Commission
_____ __, 2005
/S/ Susan K. Duffy

2005.12.22 15:49:03
Kansas Corporation Commission
/S/ Susan K. Duffy

BEFORE THE STATE CORPORATION COMMISSION
OF THE STATE OF KANSAS

STATE CORPORATION COMMISSION

DEC 2 2 2005

Docket Room

In the Matter of the Application of Aquila, Inc., d/b/a Aquila Networks-WPK, for Approval of an Accounting Order to Permit Aquila, Inc., d/b/a Aquila Networks-WPK, to Recover Amounts Necessary to Expend in Order to Establish and Maintain a Natural Gas Hedge Program for Electric Generation for the 2006 Summer Season; and for Approval of its "Gas Hedge Program for Electric Generation".	)	Docket No. 06-AQLE-494-HED

STAFF MEMORANDUM IN SUPPORT OF STIPULATION AND AGREEMENT

COMES NOW the Staff of the State Corporation Commission of the State of Kansas ("Staff" and "Commission", respectively) and files its Memorandum in support of the Stipulation and Agreement filed by Aquila, Inc., d/b/a Aquila Networks-WPK (Aquila), Staff and Citizens' Utility Ratepayer Board (CURB) on December 22, 2005.

1. On December 22, 2005, Aquila, Staff and CURB (Joint Movants) entered into a Stipulation and Agreement in this matter and filed their Joint Motion for an Order Approving Stipulation and Agreement.

2. In support of the Stipulation and Agreement entered into and filed by Joint Movants, Staff incorporates herein by reference the Memorandum prepared by Dr. John Cita, Chief of Economic Policy and Planning, dated December 22, 2005, which is attached hereto as Attachment 1.

Respectfully submitted,

Otto A. Newton #8760
Assistant General Counsel
Kansas Corporation Commission
1500 SW Arrowhead Road
Topeka, KS 66604-4027
(785) 271-3157

VERIFICATION
06-AQLE-494-HED

STATE OF KANSAS)
) ss.
COUNTY OF SHAWNEE)

Otto A. Newton, being duly sworn upon his oath deposes and states that he is an Assistant General Counsel for the State Corporation Commission of the State of Kansas, that he has read and is familiar with the foregoing pleading and that the statements contained therein are true and correct to the best of his knowledge, information and belief.

Otto A. Newton

Subscribed and sworn to before me this 22nd day of December, 2005.

NOTARY PUBLIC - State of Kansas
JANET R. BAUMGARTNER
My Appt. Exp. 3/5/06

Notary Public

My appointment expires: March 5, 2006

Attachment 1

MEMORANDUM

To: Chair Brian Moline
Commissioner Robert Krehbiel
Commissioner Michael Moffet

From: John Cita
Date: December 22, 2005

RE: Staff's Discussion and Evaluation of the Summer 2006 Hedge Program Application of Aquila, Inc. and Support for the Joint Motion Seeking Approval of the Unanimous Stipulation and Agreement ("S&A"), Docket No. 06-AQLE-494-HED.

Background and Cumulative Performance of the Program

This Application is important because it is the first of what could be many. With this Application Aquila, Inc., d/b/a Aquila Networks-WPK ("WPK") becomes the first jurisdictional electric utility to seek approval of a Gas Hedge Program. In conjunction with approving its implementation of an ECA mechanism, the Commission has ordered Empire District Electric ("EDE") to submit a hedge program application. (Docket No. 05-EPDE-980-RTS.) In response to Westar Energy's ("WE") request to implement an ECA mechanism, Staff recommends that WE submit a Hedge Program Application. That recommendation was uncontested. (Docket No. 05-WSEE-981-RTS.) And finally, KCPL has indicated that it will soon request implementation of an ECA mechanism and, in response, Staff will recommend that KCPL submit a complementary Hedge Program Application (for the purpose of hedging on behalf of its ECA customers).[1]

As the Commission probably knows, if and when a utility employs an ECA mechanism, that implies its customers will be subject to monthly ECA charges/prices that change over time as the utility's fuel and purchase power expenses change. Having ECA mechanisms simply means retail customers will be faced with some degree of price volatility.

If ratepayers are risk averse, then facing price volatility can *reduce their welfare.* Moreover, risk averse ratepayers, by definition, are willing to pay extra in order to face less risk. Staff and others have gathered evidence that suggest (residential) customers of jurisdictional gas utilities *are* risk averse. Unfortunately, no such evidence has been gathered from WPK's retail customers; however, we have no reason to believe that WPK's retail customers are significantly different than the Kansas consumers that have thus far been surveyed.

[1] Incidentally, WE, EDE and KCPL have for some time and currently do hedge their shareholders' exposure to natural gas price volatility. When a utility takes advantage of the Commission's ECA provisions (as stated in Order dated April 19, 1977, Docket No. 75-GIMC-009-GIG) that has the effect of shifting gas price volatility from shareholders to ratepayers.

In summary, achieving *more stable* monthly ECA prices, at a small additional cost, is the motivation for this Hedge Program Application. All parties recognize WPK's retail customers currently face some degree of price volatility given WPK's reliance on an ECA mechanism. (As the Commission may be aware, complaints about both the level and volatility of WPK's recent ECA prices are discussed and evaluated in Docket No. 05-AQLE-972-GIE.) We do assume that WPK's customers are risk averse and, therefore, we assume that WPK's customers would be willing (and able) to pay extra in order to face lower price ***volatility***. As Staff has repeatedly stated, hedging serves to protect ratepayers from price *volatility*; hedging *does not* provide ratepayers with a lower price on average. And so it is in this case, hedging is not intended to provide customers with (speculation-induced) savings in the long run, rather its intent is to provide greater price *stability.*

Staff Evaluation of WPK's Proposed Inaugural Hedge Program

On Whose Behalf Would the Hedge Program be Implemented?
The proposed Program would be implemented on behalf of WPK's residential and commercial customers. Consequently, those two classes would be responsible for the cost of the program and would share in its benefits. The industrial class customers that are subject to the ECA would *not* participate in the program.[2]

What is the Proposed Program Budget Amount?
WPK proposes an annual budget of $600,000. The method used to arrive at that amount is *consistent* with the method that has been used to set approved budget amounts for the Natural Gas LDC Hedge Programs.

How Would the Approved Budget Amount be Recovered?
It would be recovered through a distinct *volumetric charge* appearing as a line item charge on the monthly bills of residential and commercial customers. The proposed charges are: $0.00178/kwh for residential and $0.00140/kwh for commercial. With these charges and given the expected usage levels over the time period the charges would be collected, the economic burden on the two classes as roughly equal. Moreover, the charges are proportional to the respective usage levels over the summer months, the months whose usage would be hedged. In short, the respective charges (i.e., costs) do match the respective benefits each class is expected to receive.

Which Summer Months would be Hedged?
Only the months of June through September 2006 would be hedged. The proposed Program would terminate after September 2006.

The Hedge Charges would be Assessed Over Which Months?

[2] As I understand it, WPK sought interest among its industrial class customers in having and paying for a hedge program installed on their behalf. Officials of WPK have indicated that sufficient interest was lacking.

The proposed hedge charges would apply from January through May. However, if WPK applies to renew this Program, to extend its life beyond September 2006, then it is anticipated the (new) hedge charges would apply to a longer time period, possibly October through May.

Has WPK Specified Which Derivatives Would be Used to Establish a Price Cap?
WPK plans to rely primarily on swaps and call options. Alternative hedging vehicles could be used. Given the size of the proposed budget, about a third of WPK's summer gas requirements would not be hedged and, therefore, would move with the market. Equivalently, about two-thirds of WPK's expected (i.e., normal)[3] summer gas purchases would be hedged. That proportion is *consistent* with the usual amounts hedged in Commission-approved Programs.

Has WPK Indicated when it plans to Place its Derivatives?
WPK submitted a detailed time schedule showing when it expects to arrange or purchase its preferred hedging instruments. The proposed schedule is *consistent* with that of a *bona fide* hedger.

At What Level Would WPK's Gas Purchase Prices be Capped?
As a practical matter, it is difficult to say with any degree of accuracy. The difficulty lies in not knowing where the market prices will be at the time hedges are placed. Suffice it to say, Staff has evaluated WPK's forecast price caps and found them to be reasonable given the requested hedging budget and expected hedge coverage.

Will WPK Submit Monthly Reports to Staff and CURB Showing the Progression of Implementation and Subsequent Program Performance?
Yes. As the Commission knows, Staff monitors both the implementation and resultant performance of approved programs. This monitoring is facilitated by the monthly reports.

Summary and Recommendation
This program is designed to reduce, but not eliminate the volatility of WPK's monthly ECA prices.[4] It is Staff's opinion the proposed program would work as designed.

Aquila-WPK submitted a well developed Application and the presentation of its "preferred hedge plan" is the best Staff has ever seen. Aquila should be commended.

The Hedge Program described through the proposed S&A is nearly identical to any of the Hedge Programs this Commission has approved over the years. Those programs have

---

[3] As a provider of electricity to retail customers, WPK purchases all of the various fuels used to generate the required electricity. In a normal year WPK purchases approximately 25 MMBtu of natural gas on behalf of its average residential customer. This hedge program is designed to hedge those natural gas purchases. This program would not hedge any other fuels nor would it hedge WPK's purchased power.

[4] If and when a competitive wholesale electric market is developed, it is likely that derivatives for directly hedging the price of electricity – such as an electricity futures contract – will be widely available and economical to use. When those instruments are available it may be possible to design hedge programs that would largely eliminate ECA price volatility.

worked to reduce the volatility of monthly bills at a very low cost.[5] Accordingly, such programs have worked to enhance the well being of risk averse retail customers.

For reasons stated and evidence presented in this Memorandum, Staff believes the Commission could find implementation of the proposed Hedge Program to be consistent with the public interest. It follows that Staff believes Commission approval of the unanimous S&A would be reasonable.

Cc: Don Low

[5] Incidentally, at this moment in time, the cumulative net cost of the Commission approved Hedge Programs is negative. That is, thus far, the Hedge Programs have delivered both less volatile bills and positive net savings on those bills.

VERIFICATION
06-AQLE-494-HED

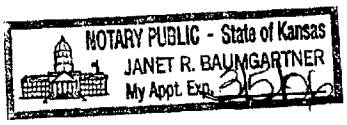
STATE OF KANSAS)
) ss.
COUNTY OF SHAWNEE)

John Cita, being duly sworn upon his oath deposes and states that he is Chief of Economic Policy and Planning for the State Corporation Commission of the State of Kansas, that he prepared the foregoing Memorandum and is familiar with the content thereof and that the statements contained therein are true and correct to the best of his knowledge, information and belief.

John Cita

John Cita

Subscribed and sworn to before me this 22nd day of December, 2005.



Janet R Baumgartner

Notary Public

My Appointment expires:
March 5, 2006

CERTIFICATE OF SERVICE
06-AQLE-494-HED

I hereby certify that a true and correct copy of the foregoing Staff Memorandum in Support of Stipulation and Agreement was placed in the United States Mail, postage prepaid, on this 22nd day of December, 2005, properly addressed to:

James G. Flaherty
Anderson & Byrd, LLP
216 S. Hickory, P.O. Box 17
Ottawa, KS 66067

Richard C. Green, Chairman, President & CEO
Aquila, Inc., d/b/a Aquila Networks-WPK/
Aquila Networks-KGO
20 West 9th Street
Kansas City, MO 64105

David R. Springe
Consumer Counsel
Citizens' Utility Ratepayer Board
1500 SW Arrowhead Road
Topeka, KS 66604-4027

Niki Christopher
Attorney
Citizens' Utility Ratepayer Board
1500 SW Arrowhead Road
Topeka, KS 66604-4027

Otto A. Newton
Assistant General Counsel

2005.12.27 11:42:54
Kansas Corporation Commission
/S/ Susan K. Duffy

THE STATE CORPORATION COMMISSION
OF THE STATE OF KANSAS

Before Commissioners: Brian J. Moline, Chair
Robert E. Krehbiel
Michael C. Moffet

In the Matter of the Application of Aquila, Inc., d/b/a Aquila Networks-WPK, for Approval of an Accounting Order to Permit Aquila, Inc., d/b/a Aquila Networks-WPK, to Recover Amounts Necessary to Expend in Order to Establish and Maintain a Natural Gas Hedge Program for Electric Generation for the 2006 Summer Season; and for Approval of its "Gas Hedge Program for Electric Generation".	)	Docket No. 06-AQLE-494-HED

ORDER GRANTING JOINT MOTION AND APPROVING STIPULATION AND AGREEMENT

NOW, the above-captioned matter comes before The State Corporation Commission of the State of Kansas (Commission) on the Joint Motion for an Order Approving Stipulation and Agreement filed by Aquila, Inc., d/b/a Aquila Networks-WPK ("Aquila" or "Company"), the Commission Staff (Staff) and Citizens' Utility Ratepayer Board (CURB). Having examined its files and records and being duly advised in the premises, the Commission finds and concludes as follows:

I. BACKGROUND

1. On November 3, 2005, Aquila filed its Application seeking an Order from the Commission approving its request for an accounting order to permit Aquila to recover such amounts of its funds as may be necessary to expend in order to establish and maintain a gas ceiling price for fuel for its electric generation for the 2006 summer season, defined as June 1 through September 30, under the Gas Hedge Program for Electric Generation and for approval of its "Gas Hedge Program for Electric

Generation" tariff. In support of its Application, Aquila filed its proposed tariff and the direct testimony of Mr. Gary L. Gottsch, its Gas Supply Representative in Aquila's Energy Resources division.

2. On November 8, 2005, Citizens' Utility Ratepayer Board (CURB) filed a Petition to Intervene seeking a Commission order granting CURB leave to intervene as a party in this matter. On November 14, 2005, the Commission issued its Order granting CURB's intervention.

3. On November 14, 2005, the Commission entered an Order suspending operation of the changes proposed in Aquila's Application for a period of two hundred forty (240) days from the date of filing the Application, November 3, 2005, until July 1, 2006.

4. On December 22, 2005, Aquila, Staff and CURB (collectively, "Joint Movants") filed their Joint Motion for an Order Approving Stipulation and Agreement (Joint Motion), including as Attachment A thereto the Stipulation and Agreement entered into by Joint Movants on December 22, 2005 (Stipulation and Agreement).

5. On December 22, 2005, Staff filed its Memorandum dated December 22, 2005 prepared by Dr. John Cita, Chief of Economic Policy and Planning, supporting approval of the Stipulation and Agreement.

II. DISCUSSION

6. Aquila believes it important that some type of price protection be afforded its residential and commercial customers by establishing a ceiling price to be paid on a percentage of its projected summer natural gas for generation volumes as well as fixing another percentage for the 2006 summer season. In order to establish a ceiling

price on a percentage of the projected summer natural gas for generation volumes to be purchased for the 2006 summer season, Aquila estimates that it will need to spend approximately $600,000. Aquila is willing to invest such funds, as needed, to establish a ceiling price on the percentage of gas purchases for which the ceiling price is being established so long as the Commission authorizes recovery of the funds expended. Aquila seeks authorization to recover the funds expended through a separate average charge per customer, expressed as a per kilowatt-hour charge, and stated separately on customer bills. Application at p. 2. Aquila's Application requests the Commission issue an accounting order authorizing the Company to: 1) record those monies expended by Aquila in establishing a gas ceiling price for one-third of the 2006 budgeted summer season natural gas generation budget in an account to accrue interest at the Commission approved interest rate for customer deposits; 2) recover the program costs from all of its residential and commercial customers on a per customer basis, expressed as a separate per kilowatt-hour charge, from the date the program is approved through May 31, 2006; 3) reconcile the expenditures to the recoveries reflecting any over or under recovery through the ECA process; and 4) make such report or reports deemed necessary by the Commission regarding such account. Any resulting cost or benefit resulting from the settlement of the call options or futures swaps shall be credited or recovered, respectively, through Aquila's monthly ECA filings during the months of July 1, 2006 through October 31, 2006. Application at pp. 2 and 3. Aquila states that its proposed risk management strategy for the 2006 summer program is the purchase of straight call options for one-third of the budgeted volumes of gas requirements for generation, fixing the price on another one-third of the position with NYMEX futures which will be

converted to swaps, leaving one-third of budgeted volumes to float in the market. Purchases will occur between December 2005 and May 2006, with the exception of the purchases for the June budgeted usage which will be condensed into December 2005 through April 2006 due to financial expiration of June positions in May. For the 2006 summer program, Aquila plans to concentrate on managing the price risk for the period between June and September. Aquila will attempt placement of positions on the 15th of each month, December 2005 through May 2006. Gottsch Pre-filed Direct at pp. 2 and 3.

7. According to Staff, Aquila's Application is important because it is the first of what could be many applications by jurisdictional electrical utilities seeking to implement a gas hedge program. Staff Memorandum at p. 1. Staff concludes that although hedging does not provide ratepayers with a lower price on average, it does serve to protect ratepayers from price volatility. Evidence gathered from focus groups in the past suggests that residential customers of jurisdictional gas utilities are willing to pay extra in order to face less risk. Staff suggests that the retail electric customers of Aquila would not be significantly different in their views on seeking protection from price volatility. Staff Memorandum at pp. 1 and 2. Therefore, Staff concludes that Aquila's electric customers would be willing and able to pay extra in order to achieve lower price volatility. Achieving more stable monthly ECA prices, at a small additional cost, is the motivation for Aquila's Gas Hedge Program Application. Staff Memorandum at p. 2.

8. The Stipulation and Agreement presented by Joint Movants for the Commission's consideration and approval, together with Staff's verified Memorandum, reflects Staff's investigation of the Company's Application, as well as extensive negotiations between the parties in this matter. Joint Movants constitute all of the parties

in this docket and all are signatories to the Stipulation and Agreement. Staff's Memorandum prepared by Dr. Cita supports approval of the Stipulation and Agreement. Joint Movants stipulate and agree that the Gas Hedge Program for Electric Generation as requested and filed by Aquila in its Application should be modified and conditioned as follows:

A. The budget for Aquila's Gas Hedge Program for Electric Generation shall not exceed $600,000 for the 2006 summer season defined as June 1, 2006, through September 30, 2006. All Hedge Program costs incurred by Aquila, such as transaction costs, interest on margin accounts and the direct costs of financial derivatives are to be covered by the approved budget. The rate of interest on margin accounts will be the prime rate as published in the *Wall Street Journal*. An interest charge will be assessed on the initial margin amount, starting from when the account is first established through the expiration of the swap or futures contract, as the case may be. Aquila may file a Motion to adjust the approved budget depending on market conditions.

B. All payoffs, positive or negative, associated with the settlement of financial derivatives shall be passed through to Aquila's ECA clause and applied only to its residential and commercial customers in accordance with the clause's provisions.

C. Consistent with the basic design of Hedge Programs implemented by the Commission's jurisdictional natural gas LDCs, Aquila's preferred hedge strategy is the placement of a price cap. Aquila has met with and consulted Staff and CURB regarding details and implementation of its preferred, or planned,

Hedge Program design. The program design details or parameters that have been presented and resolved include the following:

1. quantity or volume of gas to hedge;
2. summer months to be hedged;
3. price cap (and possibly floor) level;
4. hedge instruments to be used to set the cap;
5. timing of hedge placement.

For its selection of the actual, planned parametric values, Aquila has provided reasonable discussion and analysis and, thus, adequate support.

D. As the Hedge Program is actually implemented, Aquila shall have full discretion over selection of the final Gas Hedge Program for Electric Generation parameters. Aquila shall also meet with Staff and CURB throughout the implementation period, as needed, for the purpose of discussing significant changes from the planned hedge program.

E. Aquila shall recover the program costs for the Gas Hedge Program for Electric Generation from its ECA residential and commercial customers during the months of January 2006 through May 2006 on a volumetric basis. The charge for residential customers will be $0.00178/kwh and for commercial customers $0.00140/kwh. Aquila shall maintain a monthly balance for amounts spent on hedge costs compared to amounts recovered from customers through the hedge charge. To the extent the net monthly balance shows that Aquila's expenditures on hedges exceed the amounts recovered from customers, Aquila shall accrue interest on the excess amount during the following month at the

prime rate as published in the *Wall Street Journal*. To the extent the monthly balance shows that Aquila's expenditures on hedges are less than the amounts recovered from customers through the hedge charge, Aquila shall accrue interest on the shortfall during the following month at the Commission's approved rate for customer deposits. Aquila shall recover or pay interest pursuant to the methodology above through a charge to or credit to the approved budget. The interest charges set forth in this paragraph E are separate from the interest on margin accounts described in paragraph A, which are treated separately. Aquila shall show the amounts collected from customers through the hedge charge as a separate line item on the customer's bill during the months of January 2006 through May 2006.

F. Aquila shall submit monthly hedge reports to Staff and CURB throughout the program year. Reports during the implementation months (January through May) shall detail actual implementation of the program while reports during the summer months (June through September) will detail actual program performance. Monthly reports will be submitted electronically and during the first week of each month. The implementation reports will describe all activity during the prior calendar month while the performance reports will summarize performance for the instant calendar month. At the end of the 2006 program year, Aquila shall also submit a report on the cumulative, historical performance of its hedge program efforts.

G. Aquila shall retain all information and records necessary to verify derivative transactions performed either by Aquila or on its behalf so that Staff or CURB may perform an audit of those transactions.

H. The parties agree that the Gas Hedge Program for Electric Generation shall be for the summer of 2006. To the extent that the Company, Staff or CURB believe that modifications to the approved program are necessary, such as a change in the budget, it shall file a Motion in this Docket requesting such changes as it deems necessary. In the event the Company desires to continue the Hedge Program for the summer of 2007, it shall file an appropriate application making the request no later than July 15, 2006.

9. Aquila must file its Gas Hedge Program for Electric Generation tariff with the Commission for approval within thirty (30) days of the date of the Order approving the Stipulation and Agreement. Stipulation and Agreement at paragraph 6.

10. The Stipulation and Agreement expresses the parties' agreement with regard to certain modifications and conditions applied to the Gas Hedge Program for Electric Generation as requested in Aquila's Application. According to Staff, the Hedge Program described through the proposed Stipulation and Agreement is nearly identical to any of the hedge programs approved by the Commission in the past achieving reduced volatility of monthly gas bills at a very low cost. All parties support the Company's implementation of a Gas Hedge Program for Electric Generation, as modified and conditioned by the Stipulation and Agreement, and take the position that the Stipulation and Agreement is reasonable and could be found by the Commission to be in the public interest.

III. FINDINGS AND CONCLUSIONS

11. Aquila provides retail electric service to nearly 70,000 customers in the State of Kansas. Aquila is a certificated electric public utility subject to regulatory jurisdiction of the Commission. The Application, as modified and conditioned by the Stipulation and Agreement, affects the cost of electricity as allowed under the monthly ECA; therefore, the Commission, pursuant to K.S.A. 66-101, *et seq.*, K.S.A. 66-104, K.S.A. 66-117, and K.S.A. 66-131 has jurisdiction over Aquila and the subject matter herein.

12. Settlements are favored in the law, *Bright v. LSI Corporation*, 254 Kan. 853, 86 P.2d 686 (1994). However, the Commission must make an independent judgment concerning whether the settlement is in the public interest and should be approved. In making this assessment, the Commission takes into consideration the immediate and future effects on consumers.

13. The Gas Hedge Program for Electric Generation proposed in the Application, as modified and conditioned by the Stipulation and Agreement, is likely to reduce the risk of price volatility for Aquila's residential and commercial electric customers. Implementing Aquila's Gas Hedge Program for Electric Generation will afford the Company's customers a measure of protection against such price volatility during the forthcoming summer season. The Commission concludes that the Gas Hedge Program for Electric Generation is a reasonable means of providing each customer an absolute increase in the level of price protection.

14. The Stipulation and Agreement provides that Aquila's activities will be effectively monitored by Staff through monthly reporting and consultation. The reporting

requirements of the Stipulation and Agreement will facilitate Staff keeping the Commission apprised of all program developments, particularly in the event that immediate corrective action is needed.

15. For the foregoing reasons, the Commission finds that the Stipulation and Agreement is reasonable, in the public interest, and should be approved.

IT IS THEREFORE, BY THE COMMISSION ORDERED:

(A) The parties' Joint Motion is hereby granted and the Stipulation and Agreement is hereby approved and incorporated in this Order by reference.

(B) Aquila's Application, as modified and conditioned by the Stipulation and Agreement, is hereby approved.

(C) Aquila shall file its Gas Hedge Program for Electric Generation tariff referenced in paragraph 9 above with the Commission for approval within thirty (30) days from the date of this Order.

(D) The Commission retains jurisdiction over the subject matter and the parties for the purpose of entering such further order or orders, as it may deem necessary and proper.

(E) A party may file a petition for reconsideration of this Order within fifteen (15) days from the date of service of this Order. If service is by mail, service is complete upon mailing, and three (3) days shall be added to the above time frame.

BY THE COMMISSION IT IS SO ORDERED.

Moline, Chr.; Krehbiel, Com.; Moffet, Com.

Dated: DEC 27 2005

ORDER MAILED

DEC 27 2005

Executive Director

Susan K. Duffy
Executive Director

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SCHEDULES WEB-5 and WEB-6

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