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Witness: Gary L. Gottsch  
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Sponsoring Party: KCP&L Greater Missouri Operations  
Company  
Case No.: HC-2010-0235  
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**MISSOURI PUBLIC SERVICE COMMISSION**

**CASE NO.: HC-2010-0235**

**DIRECT TESTIMONY**

**OF**

**GARY L. GOTTSCH**

**ON BEHALF OF**


**KCP&L GREATER MISSOURI OPERATIONS COMPANY**

Kansas City, Missouri  
October 2010

Exhibit No. 102  
Date 11-18-10 Reporter MC  
File No. HC-2010-0235

AG PROCESSING INC., A COOPERATIVE,  
Complainant,  
v.  
KCP&L GREATER MISSOURI OPERATIONS  
COMPANY,  
Respondent.

**STATE OF MISSOURI            )**  
**) ss**  
**COUNTY OF JACKSON          )**

  
Gary Gottsch

Nicol A. Wray  
Notary Public

**"NOTARY SEAL"**  
Nicole A. Wehry, Notary Public  
Jackson County, State of Missouri  
My Commission Expires 2/4/2011  
Commission Number 07391200

**DIRECT TESTIMONY**

**OF**

**Gary L. Gottsch**

**Case No. HC-2010-0235**

1    **Q:    Please state your name and business address.**

2    **A:    My name is Gary L. Gottsch. My business address is 1200 Main Street, Kansas City,**  
3       **Missouri 64105.**

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

5    **A:    I am employed by Kansas City Power & Light Company (“KCP&L”) as a Natural Gas**  
6       **Buyer.**

7    **Q:    What are your responsibilities?**

8    **A:    My primary responsibilities are to coordinate fuel needs with the day ahead and hourly**  
9       **dispatch operators and act upon those needs, negotiate transportation and fuel supply**  
10      **contracts for each generating facility, implement and manage any fuel hedging strategies**  
11      **for our electric utilities, and interact with various pipelines and local distribution**  
12      **companies (“LDCs”).**

13   **Q:    Have you ever worked for Aquila, Inc. (“Aquila”), now known as KCP&L Greater**  
14      **Missouri Operations Company (“GMO” or “Company”)?**

15   **A:    Yes.**

16   **Q:    What were your job responsibilities at Aquila?**

1 A: My primary responsibilities at Aquila were similar to my current responsibilities at  
2 KCP&L.

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

4 A: I have Bachelor of Science (B.S.) in Business Administration from The University of  
5 Nebraska at Omaha. After college I was employed by R.B.&H. commodities and worked  
6 at the Chicago Mercantile Exchange in the Live Cattle trading pit for three years. This  
7 led to a position trading commodities and hedging agricultural positions for both family  
8 and other long time customers for 10 years. I joined Aquila in June 1999, working in the  
9 Merchant Division, initially responsible for scheduling gas on various interstate pipelines.  
10 In April 2000, I began handling fuel management responsibilities for our natural gas fired  
11 generation units. This consisted of day ahead and real time interactions with the power  
12 marketers responsible for dispatching Aquila's Merchant fleet as well as third party  
13 customers. My duties included purchasing supply, managing transport, pipeline  
14 interaction and balancing natural gas on various interstate pipelines for Aquila's  
15 merchant division's Capacity Services group. In August 2003, I assumed a position with  
16 Aquila Networks performing similar responsibilities for our gas fired generation units in  
17 addition to managing the natural gas hedging programs for Aquila's electric utilities.

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

20 A: I have managed customer accounts or maintained hedge programs for roughly 21 of the  
21 last 24 years. Working on the floor of the Chicago Mercantile Exchange gave me some  
22 insights into how the futures markets work. Besides managing agricultural commodities

1 accounts, I have also managed the Aquila and GMO hedging program for Natural Gas  
2 since 2005.

3 **Q: Have you previously testified in a proceeding at the Missouri Public Service**  
4 **Commission?**

5 **A:** Yes. I filed Direct Testimony in Aquila's 2007 electric rate case, Case No. ER-2007-  
6 0004.

7 **Q: What is the purpose of your Direct Testimony?**

8 **A:** The purpose of my testimony is to provide my opinions on why the natural gas hedging  
9 program adopted by Aquila for its St. Joseph steam operations at the Lake Road Plant  
10 was prudent and reasonably designed and administered, and on why the results of this  
11 program do not indicate imprudence. I will also provide comments on and critique the  
12 Direct Testimony of Donald E. Johnstone, submitted on September 22, 2010 on behalf of  
13 Ag Processing, Inc.

14 **I. HEDGING DESIGN**

15 **Q: Can you summarize Aquila's natural gas hedging strategy for steam generation?**

16 **A:** Aquila's approach for hedging natural gas was to procure one-third of the monthly  
17 forecast quantity through fixed price New York Mercantile Exchange ("NYMEX")  
18 futures contracts, one-third in option contracts (straight calls or fences), and the  
19 remaining one-third at the then prevailing spot market (the daily or monthly market  
20 indexes). Had Aquila's natural gas hedging strategy for steam generation been permitted  
21 to run its course, these positions were to be acquired over a 28 month process that would  
22 have allowed Aquila to capture a greater averaging effect.

23 **Q: Please briefly explain a fixed NYMEX futures contract.**

1 A: A futures contract is a standardized contract between two parties to buy or sell a specified  
2 asset of standardized quantity at a specified future date at a price agreed to on the day of  
3 transaction. The NYMEX is an exchange that facilitates these transactions and becomes  
4 the clearing house for these transactions.

5 **Q: Please briefly explain an option contract.**

6 A: An option contract is a contract that gives you the right to buy or sell (call or put) an  
7 agreed upon volume at a specified price (strike) on a given date for a premium (cost). If  
8 you want to buy that right, you pay a premium to a counterparty who is willing to take  
9 that premium and take the opposite position if exercised upon.

10 **Q: How was Aquila's gas hedging strategy for steam generation developed?**

11 A: Schedule GLG-1 describes Aquila's policy for gas hedging regarding its steam  
12 operations. This February 15, 2006 memo explains that Aquila's hedging strategy for  
13 steam generation was developed in response to "a substantial forecasted increase in  
14 Natural Gas requirements to cover steam generation for new and existing customers at  
15 the Lake Road facility." See Schedule GLG-1. The goal of this hedging program was to  
16 mitigate price volatility, and it was designed to be market neutral. Aquila's policy for gas  
17 hedging regarding its steam operations was similar to a program that Aquila established  
18 for the electric operations of Aquila Networks-MPS, as set forth in Schedule WEB-5,  
19 attached to the Direct Testimony of Wm. Edward Blunk.

20 The Kansas Corporation Commission ("KCC") reviewed and approved Aquila's  
21 gas hedging program for electric operations. Mr. Blunk describes generally in his Direct  
22 Testimony in this case how a hedging strategy is developed, and describes the KCC's  
23 review and approval of Aquila's gas hedging program for electric operations, which was

1 the model for the hedging strategy implemented for steam operations. See Blunk Direct  
2 at 7–8.

3 **Q: Please describe the goal of Aquila’s gas hedging strategy for steam generation.**

4 A: The goal of Aquila’s gas hedging strategy was to mitigate the potential impact of the  
5 volatility of natural gas prices on the consumer. When prices are rising the hedge  
6 program will reduce costs by producing offsetting gains. When prices are falling, the  
7 hedge program will produce offsetting costs. By methodically purchasing financial  
8 contracts over an extended period of time, this program was designed to dampen the  
9 effect of rapidly rising or declining markets on the cost of natural gas supply. Such a  
10 hedging strategy will not guarantee the lowest price but instead is implemented to reduce  
11 the impact of gas price volatility. This goal of Aquila’s hedging strategy is in contrast to  
12 the goal of a speculation strategy, which assumes risks to attempt to increase the potential  
13 profit to the investor.

14 **Q: How is reducing volatility different from reducing costs?**

15 A: Reducing volatility is not the same as reducing costs. The purpose of this program was to  
16 reduce volatility and create a more even pricing structure from period to period,  
17 dampening steep price increases during periods of extreme price movements, while at the  
18 same time acknowledging that one would not be able to participate fully in large price  
19 declines.

20 **Q: Can you give an example of a situation in which volatility is reduced but costs are**  
21 **not?**

22 A: Yes. A good analogy is in the insurance industry. A homeowner buys fire insurance to  
23 avoid the risk (volatility) of the loss of his home to fire. Every year that he buys the

1 insurance and does not have a fire, his costs are higher than if he did not buy the  
2 insurance. If the homeowner never has a fire, buying insurance did not reduce his costs.  
3 However, it did reduce his volatility. In other words, his risk in the instance of a fire was  
4 reduced each year he purchased fire insurance. The homeowner will experience a gain  
5 on his fire insurance only in the event of a fire.

6 **Q: Do you believe it is possible to always produce gains with hedged positions?**

7 A: It would be extremely difficult if not impossible. A true hedger will always be on one  
8 side of the market, whether long or short, and the market would have to continue moving  
9 in one direction indefinitely for positions to be constantly in the money.

10 **Q: Why was a hedging strategy so important in the market environment of 2006?**

11 A: Natural gas was one of the most volatile commodities at the end of 2005 due to Hurricane  
12 Katrina, with daily price swings of up to 12% per previous settlement. I understand that  
13 Aquila implemented a gas hedging program for its steam operations at the request of  
14 AGP. See Clemens Direct at 4. After the decision was made to implement a steam  
15 hedging strategy, it was prudent for Aquila to take immediate action in an environment  
16 where market expert analysts were predicting potential repeat of 2005 events in 2006.

17 **Q: How were Aquila and Aquila's steam customers protected when prices go up?**

18 A: One-third of the monthly forecast quantity is procured through fixed price NYMEX  
19 contracts and one-third in option contracts (straight calls or collars). Only one-third of  
20 the monthly forecast quantity is procured at the then prevailing daily or monthly market  
21 indexes. Thus, two-thirds of Aquila's total exposure is protected against upward price  
22 moves, since one-third is fixed and one-third is capped.

23 **Q: How did Aquila and Aquila's customers benefit when prices went down?**



1    A:     Again, because one-third of the monthly forecast quantity is procured through option  
2           contracts, which need not be exercised, and one-third is left to float with the market, price  
3           drops affect two-thirds of the total exposure (since only one-third of the monthly forecast  
4           quantity is procured through fixed price NYMEX contracts). Thus, in a falling market,  
5           Aquila and its customers benefit with the one-third of the budgeted volumes that are left  
6           to float with the market in addition to the one-third of the budgeted volumes covered in  
7           options, minus the premium being paid for the call. In an extreme drop in the market  
8           price, the third of Aquila's natural gas program covered by options would establish a  
9           floor price by the short puts, whose strike price was below the market when the positions  
10          were placed.

11   Q:     Do you agree with Mr. Johnstone's statements on page 15 of his Direct Testimony  
12           that "[i]f Aquila had purchased puts in combination with its swap position, it would  
13           have been buying protection in a falling market," and that by not doing just that,  
14           Aquila "chose risk for Aquila and customers instead of protection for Aquila and  
15           customers"?

16   A:     I do not. Mr. Johnstone looks at the selling of puts as an exclusive strategy in the Aquila  
17           hedge program when, in fact, it was part of a well-known option strategy referred to by  
18           some as a "collar" and others as a "fence." This strategy applies the premium gathered  
19           from selling a put to the costs of the premium of the call. Aquila sold the puts with  
20           strike prices well below current market prices, so that if the puts were exercised, it would  
21           be at a level below market entry levels.

22   Q:     What is the purpose of acquiring positions over a 28-month period?

1 A: Aquila's steam hedging strategy was designed to be market neutral, meaning that Aquila  
2 did not try to predict the price of natural gas as either rising or falling, but rather to  
3 purchase financial contracts that would result in an average market cost over a period of  
4 time in the future. Aquila's hedging program can best be identified as a dollar cost  
5 averaging hedge program used to mitigate price volatility at the time of an unstable  
6 market. The program's intention was for purchases to be spread out over a 28-month  
7 period beginning in July three years prior to the budget year after the annual budget  
8 update, and ending in October of the preceding year.

9 In other words, when the program became fully cycled, purchases were to begin  
10 in July after the budget numbers became available for the next three years, and the  
11 purchase cycle would end in the October before the hedge year began. For example,  
12 when the July 2007 budget was made available, Aquila would begin making purchases in  
13 August 2007 for year 2010. Purchases would be spread out evenly through October  
14 2009, with adjustments made after the 2008 and 2009 budgets were released each July.

15 This allows a 28-month period for revisions in expected volumes to be adjusted and  
16 reflected in the hedges. Increases are reflected as ratable increases in purchases for the  
17 balance of the buying cycle. Decreases are implemented by unwinding existing positions  
18 or by ratable decreases in purchases for the balance of the buying cycle.

19 Q: Why did Aquila believe that this hedging approach was appropriate?

20 A: This approach allowed Aquila to mitigate the natural gas price volatility (through fixed  
21 price and option contracts) while still allowing it to take advantage of decreases in natural  
22 gas prices (through option contracts and spot market purchases).

23 Q: How is hedging different from speculation?

1 A: Hedging involves taking an offsetting position in a derivative in order to lock in a price  
2 for an underlying commodity, attempting to eliminate volatility of the price of that  
3 commodity. The purpose of speculating is to profit by betting on the price direction of a  
4 commodity.

5 Q: Do you agree with Mr. Johnstone's testimony on pages 5, 15, 21, and 31 of his Direct  
6 Testimony that the puts that Aquila sold in October 2006 were "speculative" or  
7 being carried out for "speculative profit"?

8 A: No, I do not. The premiums gained from selling the puts was used to help lessen  
9 premium costs for the calls that were purchased. Furthermore, the buying of calls and  
10 selling of puts were not exclusive of one another, but were rather employed together in a  
11 strategy called a "fence." This strategy creates a minimum price while leaving the top  
12 side open. For example, in October 2006 we paid \$1.15 for at the money \$8 strike call  
13 options. But we also received \$.33 for the \$6.00 puts we sold, thereby reducing the costs  
14 of the call options to \$.82 while putting in a \$6.00 floor price (approximately \$2.00, or  
15 25% below the current futures price and EIA October forecasted price).

16 Q: Was Aquila's hedging program speculative?

17 A: No. As stated before, this program can best be identified as a dollar cost averaging hedge  
18 program used to mitigate price volatility at the time of a unstable market. All volumes  
19 hedged were just 66% of usage requirements based on forecasted budgeted volumes. At  
20 no time was this program ever managed to speculate on market direction.

## 21 II. HEDGING ADMINISTRATION

22 Q: How were Aquila's budgeted volumes for steam customers determined?

23 A: Aquila's budgeted volumes were determined by Aquila's Resource Planning Group.

1    **Q:    Please explain.**

2    A:    Per my understanding, typically in the second quarter of each year, the Resource  
3          Planning Group established initial volumetric forecasts for the natural gas needed to meet  
4          Aquila's net system requirements during the three subsequent years. The Energy  
5          Resources Group, of which I was a member, would then update current years and  
6          establish quotas for the next roll out year. Thus, in general, an annual revision is made to  
7          the three year volumetric power forecasts. Budget reruns can occur within the year and  
8          updates to volumes are made as necessary.

9    **Q:    How did the Resource Planning Group determine its volumetric forecasts?**

10   A:    As I understood it, the Resource Planning Group based its forecasts on the volume needs  
11          that steam customers anticipated they would have. The steam customers, which include  
12          Ag Processing, provided Joe Fangman with their anticipated volumes. Joe Fangman  
13          passed the steam customers' anticipated volumes to Tim Nelson, a member of the  
14          Resource Planning Group. Mr. Nelson established a forecast based on these numbers  
15          received from steam customers. Mr. Fangman describes this process in detail in his  
16          Direct Testimony in this case. See Fangman Direct at 3-4, 6-9.

17   **Q:    Are hedge positions also based upon budget estimates from steam customers?**

18   A:    Yes. Because steam customers, like Ag Processing, provided Joe Fangman with their  
19          anticipated volumes, and it was these anticipated volumes that Mr. Fangman provided to  
20          the Resource Planning Group, hedge positions were based upon those anticipated volume  
21          budgets supplied by customers.

1 Q: Do you agree with Mr. Johnstone's statement on page 13 of his Direct Testimony  
2 that "there was no assurance that any particular volume of gas supply would be  
3 needed"?

4 A: No, I do not. Such assurances came directly from the steam customers themselves, as is  
5 described by Joe Fangman in his Direct Testimony. See Fangman Direct at 6-10. In my  
6 daily conversations with plant personnel, there was never any indication that customers  
7 would not increase volumes to budgeted levels.

8 Q: Can Aquila's hedging program take into account a degree of inaccurate information  
9 from customers?

10 A: Yes. There is some room in the One-Third Strategy for actual volumes to come in under  
11 budget. Wm. Edward Blunk addresses this in detail in his Direct Testimony in this case.  
12 See Blunk Direct at 17.

13 Q: Under Aquila's hedging strategy, what is the timeline for the purchases of budgeted  
14 volumes?

15 A: After receiving volumes from the Resource Planning Group, I would then purchase a  
16 proportional quantity of fixed-price and options contracts during each month of the  
17 subsequent three years that is sufficient to have fully procured the one-third volumes of  
18 fixed and options by October 31st of the calendar year immediately proceeding the  
19 calendar year of need (e.g., purchase of calendar 2009 monthly fixed needs in equal  
20 quantities during the 28 months from July 2006 through October 2008). Purchases occur  
21 on the day the spot contract expires to reduce volatility risk within the month. For  
22 clarification, June 2006 futures roll off on May 26th, which is the day Aquila will also

1 make purchases for 2007 and 2008, potentially avoiding liquidation of positions on down  
2 days and making new purchases on higher days previous to expiration.

3 **Q: Does Aquila ever deviate from this plan?**

4 A: Yes. There are some circumstances that require flexibility. However, before deviating  
5 from the plan the Energy Resources Group would discuss the situation with one of  
6 Aquila's Commodity Risk Management representatives and seek feedback regarding  
7 possible solutions.

8 **Q: What are some scenarios in which this might occur?**

9 A: One scenario would be a sudden spike in prices on expiration, due to a weather event that  
10 could be interpreted as short term. The Energy Resources Group would confer with a  
11 Commodity Risk Management representative to get his or her opinion about delaying the  
12 next round of purchases. Another situation is with the option purchases. There is not  
13 much liquidity in options past 18 months out, so possible solutions are to delay  
14 purchases, package purchases into larger single month blocks, or add additional fixed  
15 positions until the option market becomes more liquid. The ultimate goal is to have  
16 positions back on plan as quickly as reasonable.

17 **Q: Was the annual budget updated or revised at all during 2006 and 2007?**

18 A: Yes. Again, hedge positions are based upon budgeted volume numbers that Aquila  
19 receives directly from customers. Joe Fangman describes this process in detail in his  
20 Direct Testimony in this case. See Fangman Direct at 3-4. I received updated volumes  
21 from our Resource Planning Group in February 2006, June 2006, and July 2007. See  
22 Schedule GLG-2.

23 **Q: What steps did you take when given the revised forecast or updated budget?**

1 A: I adjusted volumes and hedge plans accordingly. Increases were reflected as ratable  
2 increases in purchases for the balance of the buying cycle. Decreases were implemented  
3 by unwinding existing positions or by ratable decreases in purchases for the balance of  
4 the buying cycle. As I explained in response to a data request from Ag Processing in  
5 Case No. HR-2007-0028, the February 15, 2006 forecast revision resulted in the volumes  
6 to which I managed the hedges placed on February 16, 2006. Aquila's remaining hedge  
7 purchases were adjusted to meet the new budgeted volumes updated in June 2006 and  
8 2007. See Schedule GLG-3.

9 Q: Why is having positions back on plan as quickly as reasonable the ultimate goal?

10 A: Aquila was concerned that adjustments to the plan would be more likely to be challenged,  
11 if only on the basis that we did not follow our general policy. Furthermore, deviations  
12 from the plan are more likely to be challenged as speculative if Aquila were to stray from  
13 the budget.

14 Q: Mr. Johnstone states on page 18 of his Direct Testimony that since physical volumes  
15 did not match up to budget, it was "akin to speculation." Do you agree?

16 A: No. While the physical volumes did not always tie out to the budgeted forecasts, there  
17 was never any intention to use inaccurate data nor would Aquila have any incentive to  
18 use volumes other than those that were best available at the time. Because Aquila had a  
19 duty to provide reliable service to its steam customers, it was bound by the steam load  
20 information that its customers provided to it.

### 21 III. STEAM HEDGE RESULTS

22 Q: Do you agree with Mr. Johnstone's characterization of the results of Aquila's  
23 hedging program in April 2006 and October 2006 as "perverse."

1 A: No. Not only is Mr. Johnstone engaging in 20/20 hindsight, but he ignores the market  
2 environment during those months. Any analysis of the results of Aquila's hedging  
3 program in 2006 and 2007 necessarily requires analysis of the market environment.

4 **Q: What was the natural gas market environment in early 2006?**

5 A: In early 2006, the market was just coming down from the unprecedented high prices of  
6 mid-December 2005, following the devastation of Hurricanes Katrina and Rita on the  
7 infrastructure of the Natural Gas grid. On December 14, 2005 the Henry Hub cash mid  
8 point averaged \$15.395 and Southern Star Central (which fed Aquila's plants) averaged  
9 \$13.55. But December 2005 and January 2006 experienced some of the warmest  
10 historical temps on record, resulting in the market falling nearly 53% from its mid-  
11 December highs per the March 2006 futures contract.

12 **Q: Were Aquila's hedging purchases at that time reasonable?**

13 A: Yes. The feeling in early 2006 was that there was an opportunity to lock in natural gas at  
14 a satisfactory price level. Since Aquila did not have the benefit of accumulating  
15 purchases over the previous 28 months, the decision was made to make all purchases for  
16 2006 in February 2006. Dr. Bill Gray of Colorado State University had predicted another  
17 active Hurricane season for summer 2006. See Schedule GLG-4. This prediction  
18 continued throughout the spring. See Schedule GLG-5. In January and early February  
19 2006, before Aquila's first hedge purchases were placed, several analysts, including Bear  
20 Sterns and Raymond James, were predicting gas prices to remain supportive for  
21 foreseeable future. See Schedule GLG-6 at 1, 8. Furthermore, the Energy Information  
22 Agency ("EIA") had predicted in its February 7, 2006 update an average Henry Hub  
23 2006 price of \$8.87. Aquila's average hedge purchases for all of 2006 for steam



1 customers was \$8.15 for future contracts, an average strike price of \$8.71 for call option  
2 purchases, and we sold puts at a \$6.00 average (nearly \$3 below market projection).  
3 Thus, hedging purchases for April 2006 were made in February 2006, at a time when the  
4 general consensus was that there was opportunity in early 2006 to lock in natural gas at a  
5 satisfactory price level, and that prices would rise throughout the balance of the year.

6 **Q: Were the hedging purchases made for October 2006 reasonable?**

7 A: Yes. Mr. Johnstone references October because it was the worst performing month of the  
8 hedge positions in 2006. However, at the time of the purchase of October hedges in  
9 February 2006, the October contract had fallen nearly 30% from its highs just two  
10 months prior, and these positions were still in the money as late as July 31, 2006 when  
11 October futures settled the day at \$8.45. Aquila's October fixed purchases were made at  
12 a \$7.93 average.

13 Furthermore, it was not uncommon to see poor performance in October 2006  
14 among utilities that use hedging tools to protect against volatility. As noted by the  
15 American Gas Association, hedging tools do not guarantee that a utility pays the lowest  
16 possible price for gas; however, procuring gas supplies throughout the year as part of a  
17 hedging program "is the responsible thing to do." See Schedule GLG-7 at 7.

18 **Q: Mr. Johnstone presents numerous charts outlining the performance of the hedging**  
19 **program without using analysis of budgeted volumes. Should such an analysis have**  
20 **been included in Mr. Johnstone's charts?**

21 A: Yes. Mr. Johnstone attempts to address whether Aquila's steam hedge program was a  
22 viable program to mitigate price volatility. However, because Mr. Johnstone only  
23 analyzes actual volumes, his charts engage in 20/20 hindsight. To truly analyze the

1 prudence of Aquila's hedge program, Mr. Johnstone's charts would need to analyze  
2 budgeted volumes. Aquila employed its reasonable steam hedge program with the  
3 expectation that the forecasted volumes supplied to it by its steam customers were  
4 accurate.

5 **Q: Mr. Johnstone indicates that Aquila's hedging program created volatility, do you**  
6 **agree?**

7 **A:** No. In fact if you look at Mr. Johnstone's Charts 3 and 5, they confirm that if the actual  
8 volumes would have been near budget, the pricing levels of 'with hedges' versus 'without  
9 hedges' would have been nearer a flat line pricing scenario. For example in Chart 5, at  
10 \$15 gas, program gas costs are roughly \$11 and at \$4 gas, program costs approximately  
11 \$6. This shows a hedge program range of roughly \$6 to \$11 versus a range of roughly \$3  
12 to \$15 without a hedge program.

13 **Q: Do you agree with Mr. Johnstone's statement that a "windfall would have been**  
14 **welcomed" in the case of \$14.00 gas prices, but that such gas prices were "not**  
15 **likely"?**

16 **A:** While I'm sure any customer would welcome gains from hedges in a rapidly rising  
17 market, a "windfall" is not the object of a hedging program for a regulated public utility.  
18 As I have stated earlier in my testimony, hedging programs are not designed with a profit  
19 motive. Such a motive is speculative in nature. Furthermore, I do not agree that \$14.00  
20 gas prices were not likely in 2006. As I discuss in my testimony, market observers were  
21 predicting continued inflated prices in 2006. \$14.00 gas would certainly not have  
22 shocked market observers given the right circumstances.

23 **Q: Did the Aquila hedge program ever have a positive value?**

1 A: Yes. The hedge program was "in the money," meaning that it had a positive value, in  
2 mid-2008. At that point in time, Aquila offered to Ag Processing to liquidate the hedges  
3 already set. I recall that after Mr. Johnstone and Mr. Stuart Conrad, counsel for Ag  
4 Processing, were made aware that the hedged positions were in the money, Aquila was  
5 advised by them to do nothing at that time. Aquila therefore did not take any action to  
6 sell or liquidate the hedges.

7 Q: Have the results of Aquila's steam hedging program been compared to what the  
8 results would have been under an alternative hedging program?

9 A: Yes. Aquila ran a comparison study of what the results would have been if a gas hedging  
10 program administered by Kase & Company known as EZ Hedge had been used in 2006  
11 and 2007. EZ Hedge would have lost \$1,457,660 for 2006 and \$3,686,720 for 2007.  
12 Both of these amounts are significantly higher than Aquila's one-third hedging strategy  
13 losses for those same years. See Schedule GLG-8.

#### 14 IV. CHANGES IN THE NATURAL GAS MARKET

15 Q: How would you characterize the natural gas market over the past ten years?

16 A: As I stated earlier in my testimony, natural gas is by far one of the most volatile  
17 commodities in today's marketplace, and has been so over the past ten years. Again, this  
18 volatility in natural gas price can be created by many factors including an abnormal  
19 weather condition like a heat wave or hurricane in the Gulf Coast, the economy, an  
20 unplanned major pipeline outage, national gas storage inventory levels, or by simple  
21 perception changes of commodities traders. After Hurricanes Katrina and Rita struck the  
22 Gulf Coast in 2005, market observers were predicting continued record price levels. Mr.  
23 Wm. Edward Blunk describes in his Direct Testimony in this case the changes that have

1 occurred in the natural gas market and natural gas costs over the past ten years in greater  
2 detail. See Blunk Direct at 20–29.

3 **Q: How did Aquila’s hedging strategy address these predictions?**

4 A: As I stated earlier in my testimony, two-thirds of Aquila’s total exposure is protected  
5 against upward price moves, since one-third of the monthly forecast quantity is procured  
6 through fixed price NYMEX swaps and one-third in option contracts (straight calls or  
7 collars).

8 **Q: Was it prudent to enter into a hedging program during the period immediately**  
9 **following Hurricanes Katrina and Rita?**

10 A: Yes. Not only were market observers predicting that natural gas prices would remain  
11 near record levels, but the general consensus was that natural gas prices would be high  
12 for the foreseeable future. By hedging two-thirds of the steam customers’ total exposure,  
13 Aquila was protecting the customers against the volatility in natural gas prices that were  
14 predicted to continue for the foreseeable future. Furthermore, should prices drop (which  
15 was not the general consensus), under Aquila’s hedging strategy two-thirds of the steam  
16 customers’ total exposure was protected against downward price moves, as one-third of  
17 the monthly forecast quantity is procured through option contracts, which need not be  
18 exercised, and one-third is left to float with the market.

19 **V. CONCLUSION**

20 **Q: Based upon your experience in working with financial instruments and hedging**  
21 **programs, do you believe that the Aquila gas hedging program for steam operations**  
22 **could achieve its goal of mitigating price volatility and protecting customers from**  
23 **upward price spikes?**

1    A:    Yes, this program could protect customers from rising prices and mitigate price volatility.  
2    Q:    Based upon your experience in working with financial instruments and hedging  
3           programs, do you believe that the Aquila gas hedging program for steam operations  
4           was prudent?  
5    A:    Yes, I believe that it was designed and administered in a prudent and reasonable fashion,  
6           given the facts that were available to Aquila at the time that the program was designed  
7           and the purchases were made.  
8    Q:    Does that conclude your testimony?  
9    A:    Yes, it does.  
10