Exhibit No.: _____

Issue(s):	Natural Gas Costs
Witness/Type of Exhibit:	Busch/Rebuttal
Sponsoring Party:	Public Counsel
Case No.:	ER-2004-0034

REBUTTAL TESTIMONY

OF

JAMES A. BUSCH

Submitted on Behalf of the Office of the Public Counsel

AQUILA, INC.
D/B/A AQUILA NETWORKS—MPS

CASE NO. ER-2004-0034

February 27, 2004

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Request of Aquila, Inc., d/b/a Aquila Networks-L&P and Aquila Networks-MPS, to Implement a General Rate Increase in Electric Rates.	))))	Case No. ER-2004-0034

AFFIDAVIT OF JAMES A. BUSCH

STATE OF MISSOURI)
) ss
COUNTY OF COLE)

James A. Busch, of lawful age and being first duly sworn, deposes and states:

1. My name is James A. Busch. I am the Public Utility Economist for the Office of the Public Counsel.

2. Attached hereto and made a part hereof for all purposes is my rebuttal testimony consisting of pages 1 through 14.

3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.

James A. Busch

Subscribed and sworn to me this 27th day of February 2004.

KATHLEEN HARRISON
Notary Public - State of Missouri
County of Cole
My Commission Expires Jan. 31, 2006

Kathleen Harrison, Notary Public

My commission expires January 31, 2006.

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REBUTTAL TESTIMONY

OF

JAMES A. BUSCH

CASE NO. ER-2004-0034

AQUILA, INC

d/b/a

AQUILA NETWORKS – MPS

[redacted]

Q. Please state your name and business address.

A. My name is James A. Busch and my business address is P. O. Box 2230, Jefferson City, MO 65102.

Q. Are you the same James A. Busch that filed direct testimony in this proceeding?

A. Yes I am.

Q. What is the purpose of your rebuttal testimony in this case?

A. The purpose of my rebuttal testimony is to respond to the direct testimony of Aquila Inc, (Aquila or Company) witnesses Mr. John C. Browning and Mr. Keith G. Stamm; Federal Executive Agencies/Sedalia Industrial Energy Users Association/St. Joseph, Missouri Industrial Energy Users (Intervenors) witnesses Mr. Maurice Brubaker and Mr. Robert R. Stephens; and Missouri Public Service Commission Staff (Staff) witness Mr. Graham A. Vesely concerning natural gas prices.

Q. How is your rebuttal testimony structured?

A. First, I will address the natural gas price recommendation of the various witnesses in this case. Second, I will address the various fuel cost recovery mechanisms that have been proposed in this proceeding.

NATURAL GAS PRICE RECOMMENDATIONS

AQUILA

Browning

Q. Briefly reiterate Mr. Browning's direct testimony regarding natural gas prices.

A. Mr. Browning argues that neither historical nor NYMEX (New York Mercantile Exchange) futures prices should be utilized in establishing an appropriate price for natural gas. Instead, Mr. Browning's method is to sample various industry sources for their prediction of natural gas prices for 2003, plus the settlement prices from the NYMEX expiration for January and February of 2003, then average those eight numbers to establish a price for natural gas.

Q. Do you agree with this methodology for determining the appropriate natural gas costs for this case?

A. No.

Q. Why?

A. There are several problems with Mr. Browning's natural gas price methodology.

Q. What is the first problem with Mr. Browning's discussion?

A. The first problem is that the estimates that Mr. Browning uses in his analysis are for 2003. As this testimony is being written, it is late January 2004. The time frame of the analysis that Mr. Browning chose has passed. Of the six price predictions utilized by Mr. Browning, five also gave a prediction for 2004. Those

predictions ranged from a high of $5.35 per MMBtu to a low of $3.50 per MMBtu. On average, the industry analysts expected prices for 2004 to be nearly $0.70 lower than 2003 prices, however, Mr. Browning chose to ignore this additional information in his development of an appropriate price for natural gas.

Q. Why is this a problem?

A. This is a problem because rates will be set in early 2004 for some period of time into the future. For example, Aquila's last case was filed in 2001. Thus Mr. Browning is using year 2003 specific predictions for natural gas prices for determining the appropriate price of natural gas for the years 2004 and beyond.

Q. Please explain why using these 2003 predictions for natural gas prices is bad for establishing the appropriate natural gas price to use in establishing electric rates.

A. It is my understanding that the industry analysts that publish natural gas predictions for a specific period use data that is specific for that year in developing their respective price prediction. These predictions are updated as conditions change, like they did throughout 2003. For example, as pointed out in the direct testimony of Mr. Stephens, nearly all of Mr. Browning's chosen predictions cited low storage levels as a key factor in their respective price predictions. Those low storage levels have disappeared.

Q. What are the current storage levels?

A. As of the week ending January 16, 2004, total natural gas in storage was 2,258 Bcf. Last year, storage was at a level of 1,976 Bcf. The five-year of storage for this same time period was 2,065. (Source: Energy Information Administration Weekly Report)

Q. Should the industry analysts' estimates be given extra credence in this preceding?

A. No.

Q. Why?

A. One reason is that those analysts are not here to be cross-examined in this case. We do not know the methodologies that these analysts used in determining their natural gas price prediction. We have no way of finding out if the assumptions that they used to make their predictions were reasonable.

Q. What is another problem with Mr. Browning's analysis?

A. Mr. Browning discusses in his testimony that he is not a proponent of using historical prices to estimate future gas prices. However, Mr. Browning does just that. He utilizes the historical prices of January and February 2003 in conjunction with industry predictions to establish his gas price. This is especially interesting since the industry analysis he uses comes up with a price of $5.11 per MMBtu. He adds the two historical prices to this result, which causes his price recommendations to be even higher than it already would be. This is interesting since when higher gas prices are used in the establishing of electric rates, it benefits the Company.

Q. On page 7, lines 11 and 12, Mr. Browning states that every industry forecast he read indicated that there was no relief in sight. What happened to natural gas prices since Mr. Browning's statement?

A. Gas prices dropped. After a high of $9.133 for the March contract at NYMEX, prices generally fell through the summer and fall of 2003, reaching a monthly low of $4.43 per MMBtu for October delivery. Granted, this is still a relatively high

price for natural gas, but it is lower than the prevailing market prices during the spring of 2003.

Q. What is currently happening in the natural gas market?

A. Currently, prices are extremely volatile for the near term. This volatility is generally caused by the following factors. The first factor is the relatively cold weather being experienced in the Northeast, with predictions for colder-than-normal weather for the Midwest as well. The second factor is storage. As I pointed out in my direct testimony, storage enjoyed near record injections through the injection season. Currently, storage levels remain high compared to the last year's levels and the five-year average. This, despite the colder-than-normal weather experienced in the Northeast. Finally, there seem to be fears that an economic recovery may add demand stress to the market. These conflicting factors are causing the price of natural gas to have substantial day-to-day swings.

Q. Have the recent spikes in natural gas prices raised eyebrows across the nation?

A. Yes. It is my understanding that the United States Senate has called for investigations into price manipulation concerning the recent price increases.

Q. Are there any other problems with Mr. Browning's analysis?

A. Yes. The predictions relied upon by Mr. Browning are for NYMEX prices. Aquila does not purchase its gas from the Henry Hub, the underlying delivery point for NYMEX prices. Mr. Browning needs to update his methodology for any basis differential.

Q. Should Mr. Browning's $5.14 per MMBtu natural gas price be used in the establishment of Aquila's electric rates?

A. No.

INTERVENORS

Stephens

Q. What methodology does Mr. Stephens recommend for establishing an appropriate natural gas price for use in setting electric rates in this case?

A. Mr. Stephens recommends using NYMEX prices for the time period 2004 through 2006. At the time of his filed testimony, that average was $4.71 per MMBtu. Mr. Stephens, however, recommends that a price of $4.35 per MMBtu should be used in setting rates. This price is the midpoint between the NYMEX price and the Energy Information Administration's prediction of $3.99 per MMBtu for 2004, which I also mentioned in my direct testimony.

Q. Do you agree with Mr. Stephens' methodology?

A. No, I do not.

Q. Please explain.

A. I do applaud Mr. Stephens' attempt to use natural gas prices through 2006. Aquila's rates will not be in effect for the year 2003 or just 2004, but for a period of time that potentially could last at least through 2006. However, NYMEX contracts beyond about one year suffer from a lack of liquidity. This means that there are not a lot of open contracts for gas to be delivered two – three years in the future. It also implies that there is little or no trading of those open contracts. With little or no activity on these contracts, the price today has practically nothing to do with anyone's perception of future prices. For example the June 2005 contract on January 22, 2004 had an open interest of only 4,447 contracts and a

trading volume of 5. Compare this with the February 2004 contract, which expires in 5 days, had 31,356 open contracts and a trading volume of 28,416.

Q. Do you have other concerns?

A. Yes, even though Mr. Stephens used a 10-day period to determine the futures prices in his analysis, he is to some degree relying on the futures market to help establish an appropriate natural gas price. Whereas I also factor the futures market into my analysis, I temper the market with historical prices. The futures market by itself is a poor predictor of natural gas prices because it is the markets view of future prices based upon current conditions. As those conditions change, daily, futures prices change daily. Also, futures prices move based on short-term phenomenon that will have little or no impact on future prices, such as cold weather forecasts or hurricanes.

Q. Do you have any other problems with Mr. Stephens' estimate?

A. Yes. Mr. Stephens utilizes NYMEX prices. Aquila does not purchase its physical supplies from NYMEX. Therefore, there should be some recognition of the basis differential between the Henry Hub and Aquila's purchase points to arrive at a more accurate natural gas price. For a further discussion of basis differential, please refer to my direct testimony.

STAFF

Vesely

Q. What methodology does Mr. Vesely use for determining the appropriate price for natural gas?

A. Mr. Vesely averaged the actual prices paid by Aquila from the beginning of the test year through the update period. Further, Mr. Vesely developed different prices for each of Aquila's generating facilities.

Q. What is the price of natural gas utilized by Mr. Vesely?

A. Mr. Vesely's price of natural gas varies between approximately $3.50 and $4.50 per MMBtu.

Q. Do you agree with Mr. Vesely's methodology?

A. Not necessarily. As pointed out by other witnesses, the past has little to do with what the future prices will be. Further, historical prices by themselves could be influenced by market conditions that will no longer affect the market in the future. However, since his natural gas prices would on average nearly match my recommendation, the use of his prices would be satisfactory if the Commission ultimately rejects my recommendation.

GAS/FUEL COST RECOVERY MECHANISMS

AQUILA

Stamm

Q. On page 23 of Mr. Stamm's direct testimony, he states that Mr. Browning's natural gas price amount of $5.14 "is based upon a number of forecasts of what gas costs will be **during the period that the rates established in this proceeding are in effect.**" (emphasis added) Do you agree with this statement?

A. No. The forecasts relied upon by Mr. Browning are for the period of 2003. We are now in 2004. The forecasters relied upon by Mr. Browning also had predictions for the price of natural gas for the year 2004. The price forecasts for

the year 2004 as given in Mr. Browning's testimony are on average $0.70 lower then their 2003 predictions.

Q. On page 24 of Mr. Stamm's testimony, he discusses hedging. Does Aquila currently hedge its natural gas costs?

A. Yes it does.

Q. On lines 13 and 14 on page 24 of his direct testimony, Mr. Stamm states that when executed, a hedge does not provide an opportunity to buy below the current market price. Do you agree with this statement?

A. No. While it is true that if the hedging instrument used is a futures or forward contract, the buyer does not have an opportunity to enjoy the benefits of lower gas costs. However, the use of options is another way to hedge against rising gas costs while giving the purchaser an opportunity to take advantage of falling prices. Granted, there is a slightly higher cost when purchasing an option, however, this cost can be offset if the price goes above the strike price, or ceiling, or if the actual cost is below the strike price.

Q. On lines 19 – 21 of page 24 of his testimony, Mr. Stamm indicates that ratepayers would benefit from hedging by knowing what the actual cost incurred is the cost that is built into rates. Do you agree with this statement?

A. No. Ratepayers already know what the gas costs that they are paying in electric rates. Those rates are established in the course of a rate case and do not change until the Company files a new rate case.

Q. In his testimony, Mr. Stamm proposes a gas cost recovery mechanism (GCRM) as an alternative to the traditional practice of establishing a single rate for gas costs

to be built into electric rates. What is Public Counsel's opinion of Aquila's GCRM?

A. Generally, Public Counsel is opposed to this type of fuel recovery mechanisms.

Q. Why?

A. First, I have been informed by legal counsel that this type of single-issue ratemaking mechanism is similar to the fuel adjustment clause formula that was struck down by the Missouri Supreme Court in Case No. UCCM v. PSC, 585 S.W.2d 41 (Mo. Banc 1979).

Second, this type of plan is akin to retroactive ratemaking. The actual cost to the consumers will not be known until after the fact. Once that happens, a refund mechanism will have to be in place to give the money back to ratepayers.

Third, this plan reduces the Company's incentive to lower costs. Under Aquila's proposal, the Company will refund all costs that are below the $5.64 ceiling. Thus Aquila receives no benefit from getting the best deal for its consumers except for the time value of money, which is the amount of time they have with the customer's money before Aquila has to refund the money, and thus little incentive to seek out the best deal.

Fourth, the refund mechanism, which has not been spelled out by Aquila in its direct testimony, could have implementation difficulties. Would Aquila pay interest on the excess cash received? Who would get the refunds? Will Aquila make the efforts necessary to repay the customers who paid the excess in gas costs even if those customers moved? What happens to any amounts that cannot be refunded to customers?

Finally, because the GCRM treats natural gas costs differently than other fuel costs, it would create an incentive for Aquila to favor natural gas as a fuel source. Since the Company will receive a dollar for dollar recovery of its gas costs, it may alter its mix to take advantage of this fact.

Q. What benefit does Aquila receive from its proposed GRCM?

A. First, Aquila receives the benefit of built in gas costs of $5.64. Only if gas prices remain consistently above that high level will Aquila suffer any short-term loss from high gas prices. Second, assuming gas prices are below this level, Aquila will have increased cash flow. This happens since it will be receiving payments for electricity sold based on a natural gas price of $5.64 when prices would be lower; thus its costs will be lower. Aquila would enjoy this excess cash flow until any refunds would be made.

Q. Did Public Counsel support Empire's interim energy charge (IEC) in Case No. ER-2001-299?

A. Yes. Public Counsel supported that mechanism in the context of a Stipulation and Agreement that was signed in the proceeding and resolved a number of issues solely for the purposes of settlement. However, in Empire's subsequent rate case, ER-2002-424, Public Counsel was in favor of its dissolution, and the IEC was abolished in that case.

Q. Is Public Counsel unwilling to accept any type of fuel recovery charge in this case or any future proceeding?

A. Not necessarily. Public Counsel is always open to discussions of potential settlement propositions in any proceeding and will weigh the pros and cons of all mechanisms at the appropriate time.

Q. If the Commission determines that the GCRM is an appropriate mechanism for Aquila in this case, should the base gas cost be set at $5.64?

A. No. Even if the Commission determines that a GCRM should be approved, an appropriate base cost would still need to be established. The Company's request of $5.64, $0.50 above its $5.14 recommendation is too high. I would recommend that the Commission adopt the gas price from my direct testimony of $3.99 per MMBtu and add $0.50 to it to come up with a $4.49 per MMBtu price in recognition of consumers potentially receiving a refund for all costs below $4.49.

Q. If the Commission approves this mechanism, should the fact that Aquila will have more certainty of gas cost recovery be reflected in the determination of an appropriate return on equity?

A. Yes. Under current market conditions, the financial community is aware that Aquila is operating without any fuel cost recovery mechanism and takes that fact into consideration. If this mechanism is approved, Aquila's risk will diminish. Aquila would have the certainty of knowing it will recover all gas costs below whatever amount is established by the Commission. In fact, the Company will have greater initial cash flow when gas costs are below base level used to establish rates. These factors lower the Company's risk. With lower risk, Aquila's return on equity would need to be lowered.

INTERVENORS

Brubaker

Q. Mr. Brubaker proposes a similar mechanism as the IEC that was approved in Empire's ER-2001-299 case. Do you agree with his approach?

A. No. I have similar concerns with Mr. Brubaker's approach as I do with the Company's approach. I will note however, that Mr. Brubaker does go into more detail regarding a refund mechanism. Furthermore, unlike the Company, Mr. Brubaker proposes a floor for fuel costs. This floor helps give incentive to the Company to acquire fuel as cheaply as possible. Finally, Mr. Brubaker's mechanism is more inclusive in that it incorporates all fuel and purchase power, not just natural gas costs.

Q. Does Public Counsel agree with Mr. Brubaker's proposed three-year refund mechanism?

A. No. If a recovery mechanism is approved in this case, refunds need to be given back on a yearly basis.

STAFF

Vesely

Q. Is Staff recommending a fuel recovery mechanism at this time?

A. No. However, Mr. Vesely indicates that the Staff, through negotiating, may support some sort of a gas/fuel recovery mechanism.

Q. What type of mechanism does Mr. Vesely discuss in his direct testimony?

A. Mr. Vesely discusses a mechanism similar to the Interim Energy Charge that was agreed to in the Empire case.

Q. What is Public Counsel's opinion regarding Staff's testimony discussing a potential gas cost recovery mechanism?

A. Public Counsel would agree that all options are open for discussion and if a positive result can be accomplished that will protect ratepayers, Public Counsel would support it.

Q. Does that conclude your rebuttal testimony?

A. At this time.