

# EXHIBIT

58

Exhibit No.:

Issue(s):

Witness/Type of Exhibit:

Sponsoring Party:

Case No.:

Natural Gas Costs

Busch/Rebuttal

Public Counsel

ER-2004-0034

HR-2004-0024

(Consolidated)

## REBUTTAL TESTIMONY

OF

FILED

APR 28 2004

JAMES A. BUSCH

Missouri State Bar Association

Submitted on Behalf of the Office of the Public Counsel

AQUILA, INC.

D/B/A AQUILA NETWORKS—MPS

AND AQUILA NETWORKS—L&P

CASE NO. ER-2004-0034 & HR-2004-0024

(CONSOLIDATED)

January 26, 2004

Exhibit No.

58

Case No(s) ER-2004-0034

Date 2/23/04 Rptr ~~45~~

**BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI**

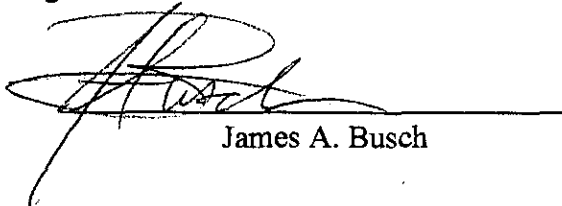
In the Matter of the Request of Aquila,            )  
Inc., d/b/a Aquila Networks-L&P and            )        Case No. ER-2004-0034  
Aquila Networks-MPS, to Implement a        )  
General Rate Increase in Electric Rates.    )

**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 26<sup>th</sup> day of January 2004.

  
Kathleen Harrison, Notary Public

My commission expires January 31, 2006.

**TABLE OF CONTENTS**

Natural Gas Price Recommendations.....2

    Aquila witness Browning.....2

    Intervenor witness Stephens.....6

    Staff witness Vesely.....7

Gas/Fuel Cost Recovery Mechanisms.....8

    Aquila witness Stamm.....8

    Intervenor witness Brubaker.....13

    Staff witness Vesely.....13

**REBUTTAL TESTIMONY**

**OF**

**JAMES A. BUSCH**

**CASE NO. ER-2004-0034**

**AQUILA, INC**

**d/b/a**

**AQUILA NETWORKS – MPS**

**AQUILA NETWORKS – L & P**

1  
2  
3  
4  
5  
6  
7  
8  
9  
10 Q. Please state your name and business address.

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

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

14 A. Yes I am.

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

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

23 Q. How is your rebuttal testimony structured?

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

4 **NATURAL GAS PRICE RECOMMENDATIONS**

5 **AQUILA**

6 **Browning**

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

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

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

16 A. No.

17 Q. Why?

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

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

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

1 predictions ranged from a high of \$5.35 per MMBtu to a low of \$3.50 per  
2 MMBtu. On average, the industry analysts expected prices for 2004 to be nearly  
3 \$0.70 lower than 2003 prices, however, Mr. Browning chose to ignore this  
4 additional information in his development of an appropriate price for natural gas.

5 Q. Why is this a problem?

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

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

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

19 Q. What are the current storage levels?

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

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

2 A. No.

3 Q. Why?

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

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

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

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

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

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

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

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

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

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

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

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

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



1 A. No.

2 **INTERVENORS**

3 **Stephens**

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

6 A. Mr. Stephens recommends using NYMEX prices for the time period 2004 through  
7 2006. At the time of his filed testimony, that average was \$4.71 per MMBtu. Mr.  
8 Stephens, however, recommends that a price of \$4.35 per MMBtu should be used  
9 in setting rates. This price is the midpoint between the NYMEX price and the  
10 Energy Information Administration's prediction of \$3.99 per MMBtu for 2004,  
11 which I also mentioned in my direct testimony.

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

13 A. No, I do not.

14 Q. Please explain.

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

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

3 Q. Do you have other concerns?

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

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

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

19 **STAFF**

20 **Vesely**

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

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

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

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

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

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

## 14 GAS/FUEL COST RECOVERY MECHANISMS

### 15 AQUILA

#### 16 Stamm

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

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

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

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

5 A. Yes it does.

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

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

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

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

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

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

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

4 Q. Why?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23

**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.



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

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

6 Q. Does that conclude your rebuttal testimony?

7 A. At this time.