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*Witness:* Graham A. Vesely  
*Sponsoring Party:* MoPSC Staff  
*Type of Exhibit:* Surrebuttal Testimony  
*Case No.:* ER-2004-0034

*Date Testimony Prepared:* February 13, 2004  
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MISSOURI PUBLIC SERVICE COMMISSION  
UTILITY SERVICES DIVISION

**FILED**

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Missouri Public  
Service Commission

SURREBUTTAL TESTIMONY

OF

GRAHAM A. VESELY

AQUILA, INC. d/b/a AQUILA NETWORKS-MPS (Electric)

CASE NO. ER-2004-0034

*Jefferson City, Missouri*  
*February 2004*

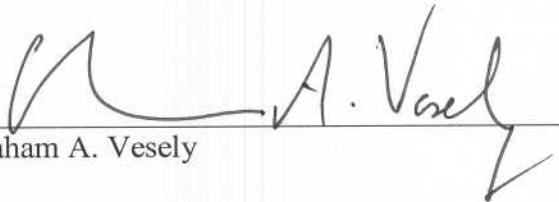
**BEFORE THE PUBLIC SERVICE COMMISSION**  
**OF THE STATE OF MISSOURI**

In the matter of Aquila, Inc. d/b/a Aquila ) Case No. ER-2004-0034  
Networks-L&P and Aquila Networks-MPS to )  
implement a general rate increase in )  
electricity. )

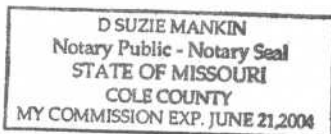
AFFIDAVIT OF GRAHAM A. VESELY

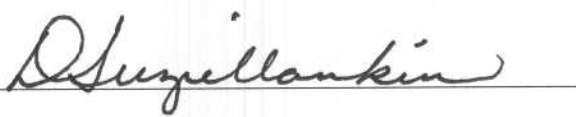
STATE OF MISSOURI     )  
  )     ss.  
COUNTY OF COLE     )

Graham A. Vesely, of lawful age, on his oath states: that he has participated in the preparation of the following surrebuttal testimony as modified on February 27, 2004, in question and answer form, consisting of 8 pages to be presented in the above case; that the answers in the following surrebuttal testimony as modified on February 27, 2004, were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true and correct to the best of his knowledge and belief.

  
\_\_\_\_\_  
Graham A. Vesely

Subscribed and sworn to before me this 26<sup>th</sup> day of February 2004.



  
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**TABLE OF CONTENTS OF  
SURREBUTTAL TESTIMONY OF  
GRAHAM A. VESELY  
AQUILA, INC. d/b/a AQUILA NETWORKS-MPS (Electric)  
  
CASE NO. ER-2004-0034**

Jerry G. Boehm Testimony ..... 1  
James W. Okenfuss Testimony ..... 3  
Joseph M. O'Donnell Testimony ..... 4  
John C. Browning Testimony ..... 7



1 Staff data requests. I provided the Company a copy of all my work papers at the time of my  
2 direct filing.

3 Q. Did Aquila use coal prices based on the September 30, 2003 update period for  
4 this case?

5 A. No. In my rebuttal filing, I took issue with Aquila's recommendation to use  
6 coal contract increases that go into effect in 2004, well past the update period ordered by the  
7 Commission. Apparently, Mr. Boehm is continuing to press this position, a fact that could  
8 explain in large part why Aquila's resulting coal costs are higher than those of the Staff.

9 Q. On page 3 of his rebuttal, Mr. Boehm states that a flaw in the way you selected  
10 the Staff's natural gas price was in "assuming that historical costs (cost-based) are no  
11 different than the market's prices (price-based)". Please respond.

12 A. It is difficult to say exactly what point Mr. Boehm is trying to make here. He  
13 goes on to state "Cost-based analysis identifies the results of production. It can be useful for  
14 reviewing the historical operation of the plant, but it does not reflect the input to the actual  
15 operations and so it should not be used to represent the input to the production [fuel] model".  
16 The natural gas prices that I reviewed in preparing Staff's recommendation in this case were  
17 prices actually paid by the Company for natural gas used in its actual generation operations. I  
18 can only assume Mr. Boehm is re-stating the view that certain past (historical) prices,  
19 specifically the lower past prices paid during the test year, should not be used in this rate case.  
20 Mr. Boehm's reference to "costs," then, serves only to cloud the issue.

21 Q. What is the Staff's view on this matter?

22 A. In order to determine the normal amount of fuel expense to include in this case,  
23 it is necessary to make a decision, among other things, about what each unit of natural gas

Surrebuttal Testimony of  
Graham A. Vesely

1 will cost. Neither the Staff, nor Aquila knows for sure what the price of natural gas will be in  
2 the future; therefore both have been required to make an estimate. The Staff has reviewed the  
3 history of natural gas prices and attempted to estimate the normal cost of natural gas to Aquila  
4 based on market prices actually paid by the Company. Aquila has made different assumptions  
5 and arrived at a different result, but its position is nonetheless also simply an estimate of what  
6 it will have to pay for each unit of natural gas.

7 Q. Mr. Boehm further states, beginning on line 1, page 4 of his rebuttal testimony,  
8 that the Staff's use of a yearly average price, instead of a separate price for each month of the  
9 year, "...appears to ignore the month-to-month fluctuation of ...prices...[and] oversimplifies  
10 the fuel input costs in the model". How do you respond?

11 A. The Staff's approach averages all of the actual prices paid for natural gas for  
12 generation during the test year and update period. No months were excluded, and every  
13 month was given weight according to how much natural gas Aquila actually bought at that  
14 price. The Staff does not believe this approach makes any material impact compared to using  
15 a different price in the fuel model for each month of the year, nor has the Company presented  
16 any evidence to the contrary.

17 **James W. Okenfuss Testimony**

18 Q. On page 3 of his rebuttal testimony, Mr. Okenfuss disagrees with you  
19 sponsoring in the Staff's fuel model a natural gas price that is the same for each of the  
20 8,760 hours of the year. How do you respond?

21 A. The Company inputs monthly, not hourly, gas prices into its own fuel model so  
22 the reason he raises this concern is not clear. Given the volatility of gas prices, the Staff  
23 questions both the feasibility of trying to precisely predict monthly prices, let alone hourly

Surrebuttal Testimony of  
Graham A. Vesely

1 prices, and the reliability of the results. The mere act of inputting twelve different gas prices  
2 to the fuel model should not be assumed to yield better results. I believe that the real difficulty  
3 Mr. Okenfuss has with the Staff's natural gas prices I am sponsoring is that they are lower  
4 than those recommended by Aquila.

5 **Joseph M. O'Donnell Testimony**

6 Q. What is your understanding of Aquila witness Joseph M. O'Donnell's rebuttal  
7 to your direct testimony?

8 A. Though he cites many factors in support of his opinion, it appears that his view  
9 overall is summarized on page 2 of his rebuttal testimony, where he states that "[natural gas]  
10 Costs from 2002 are not representative of what Aquila has paid in 2003 or what it expects to  
11 pay in the future." As a result of this, Mr. O'Donnell concludes at the end of his testimony  
12 that Aquila's originally filed price of \$5.14 should be preserved.

13 Q. How do you respond to these points?

14 A. The disputed issue, of course, is not about 2002 costs being different from  
15 2003 costs. Instead, it is about deciding which natural gas prices represent the normal level  
16 that should be used for setting rates in this case. The Staff's overall view is that, given the  
17 volatility of natural gas prices in recent years, it is very risky to try to settle on any one single  
18 price, be it for a year or for a month, as being normal for purposes of this case.

19 Q. In spite of distancing himself from 2002 prices, does Mr. O'Donnell agree, in  
20 effect, that a review of pre-2003 natural gas prices is nonetheless relevant for understanding  
21 the current situation?

22 A. It would appear so, since on page 5 of his rebuttal testimony he uses the great  
23 jump in prices from the year 1999 to 2000 to start making his case for the limited

1 responsiveness of natural gas supply. The Staff also sees the year 2000 as the beginning of  
2 the period of very volatile natural gas prices that we are still experiencing. The Staff finds it  
3 noteworthy that during this period the price of natural gas, after rising sharply through early  
4 2001, then began a long decline and actually dropped 25% in 2002 before rising steeply again  
5 in 2003. It is because of this market's demonstrated ability to both rise and fall significantly,  
6 that the Staff decided to average the lower prices of 2002 in with the higher prices of 2003.

7 Q. Does Mr. O'Donnell base his support for using 2003 prices and not using 2002  
8 prices, on a forecast of future natural gas prices?

9 A. Yes. He presents a view of the current state of the U.S. natural gas market and  
10 cites numerous sources on how the outlook for prices is influenced by the various factors  
11 affecting supply and demand.

12 Q. Can you provide an example of gas prices turning out to be significantly  
13 different than forecasted?

14 A. Yes. On page 2 of its January 2001 Short-Term Energy Outlook (Outlook), the  
15 U.S. Department of Energy's Energy Information Administration (EIA) forecasted 2001  
16 average natural gas wellhead prices of \$5.20 per thousand cubic feet (MCF). Later, in Table 4.  
17 U.S. Energy Prices: Base Case contained in its December 2002 Outlook, EIA published  
18 information indicating that the actual average wellhead price for 2001 turned out to be  
19 \$4.13 per MCF. This is a good example of a forecast that underestimated by a full \$1 per  
20 MCF a major decline in prices in this volatile natural gas market.

21 Q. Could actual natural gas prices for a future year turn out again to be  
22 significantly lower than forecasted?



Surrebuttal Testimony of  
Graham A. Vesely

1           A.     Yes, I don't see how that can be ruled out. The Staff believes that in a volatile  
2 market, forecasting is necessarily more difficult.

3           Q.     What would be the result, in the absence of some flexible pricing mechanism,  
4 of natural gas prices over a one-year period averaging \$1 per MCF less than the price  
5 incorporated in electric rates?

6           A.     If all other elements that contribute to earnings stayed the same, and based on  
7 the natural gas quantities (10,420,168 MCFs) currently estimated by Staff witness  
8 David Elliott's joint dispatch fuel model run, Aquila could potentially over-collect from its  
9 customers by more than \$10 Million in a year.

10          Q.     Is there some way to lessen the concern of this happening?

11          A.     Yes. The flexible fuel and purchased power pricing mechanism, as described in  
12 Staff witness James R. Watkins' surrebuttal testimony, would mitigate this concern, and  
13 would also reduce Aquila's risk of not collecting sufficient funds to cover its prudent costs.  
14 The Staff recommends that the Commission adopt this pricing mechanism as the best solution  
15 in this difficult natural gas environment.

16          Q.     Do you have any final comments on Mr. O'Donnell's testimony?

17          A.     Yes. Staff witness Kwang Y. Choe explains in his surrebuttal testimony the  
18 reasons for the Staff's opposition to using natural gas futures prices in setting rates for this  
19 case. The Staff concurs with Company witness John C. Browning's statement on page 7 of  
20 his direct testimony in this case that "...futures are not good indicators of actual future  
21 prices."

1 **John C. Browning Testimony**

2 Q. Please summarize your understanding of Mr. Browning's rebuttal to your  
3 direct testimony.

4 A. On page 2 of his rebuttal testimony, Mr. Browning makes clear that he intends  
5 to press the point that, with regard to natural gas for generation, "Costs from 2002 are not  
6 representative of what we have paid in 2003 or what we will expect to pay in the future." He  
7 then cites various sources as support for his contention that the low prices of 2002 were due to  
8 circumstances applicable only to that time period, and why the high prices of 2003 can be  
9 traced to a new set of conditions that threatens to persist into the future.

10 Q. What type of evidence does Mr. Browning provide to support his  
11 recommended natural gas price?

12 A. In his rebuttal testimony, Mr. Browning provides excerpts of many articles and  
13 other information releases published throughout 2003. The sources of this information vary in  
14 nature and degree of technical orientation, from newspapers, to governmental agencies, to  
15 energy industry specialists.

16 Q. Do these sources attempt both to explain the high natural gas prices of 2003  
17 and, in some cases, to make predictions for the price in the future?

18 A. Yes. To the extent that the sources Mr. Browning cites make forecasts  
19 regarding the future of natural gas prices, the Staff's position is the same as that expressed  
20 above in response to Mr. O'Donnell. Though forecasters attempt to consider all known  
21 factors that affect supply and demand in the natural gas market, the results cannot always be  
22 counted on to be accurate. Earlier in my testimony, I provided a recent example of results that  
23 differed substantially from the forecast.

Surrebuttal Testimony of  
Graham A. Vesely

1 Q. On page 8 of his rebuttal testimony, Mr. Browning states "The use of  
2 Mr. Vesely's cost of gas will guarantee gross under-recovery of the Company's actual costs  
3 going forward". Do you agree with this?

4 A. No, because no one knows what Aquila will actually pay for natural gas when  
5 it comes time to make actual purchases in the future. For 2004, Aquila has indicated only  
6 having purchased in advanced 30% of its estimated natural gas needs for March (\$4.977) and  
7 April (\$4.694).

8 Q. Please summarize your surrebuttal testimony.

9 A. The Staff recommends the Commission continue the practice of setting rates  
10 by matching, on a single specified date, the known and measurable historical elements of  
11 revenue, expense, rate base, and capital structure. The Staff acknowledges, though, the  
12 impossibility in this volatile natural gas market, of determining one price that can reliably be  
13 termed "normal" for this rate case, and that does not bring with it the risk of being, in  
14 hindsight, significantly too high or too low. The Staff has attempted to reflect both the ups  
15 and downs of prices, as well as the general up-trend of recent years, a point at least partially  
16 acknowledged by Aquila witness Keith G. Stamm on pages 1 and 2 of his rebuttal testimony.  
17 However, the Staff believes that in the existing natural gas market no single price, regardless  
18 of how it is arrived at, provides the opportunity for equitable results offered by the flexible  
19 pricing mechanism described in Staff witness James R. Watkins' testimony.

20 Q. Does this conclude your surrebuttal testimony?

21 A. Yes, it does.