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Service Commission

Exhibit No.:
Issue: Fuel Prices
Witness: Graham A. Vesely
Sponsoring Party: MoPSC Staff
Type of Exhibit: Surrebuttal Testimony
Case Nos.: ER-2004-0034 and
HR-2004-0024 (consolidated)
Date Testimony Prepared: February 13, 2004

MISSOURI PUBLIC SERVICE COMMISSION

UTILITY SERVICES DIVISION

SURREBUTTAL TESTIMONY

OF

GRAHAM A. VESELY

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

and AQUILA NETWORKS-L&P (Electric and Steam)

CASE NOS. ER-2004-0034 AND HR-2004-0024

(Consolidated)

Exhibit No. 121
Case No(s) ER-2004-0034
Date 2/23/04 Rptr KF

Jefferson City, Missouri
February 2004

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

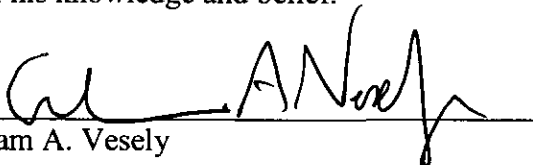
In the matter of Aquila, Inc. d/b/a Aquila) Case No. ER-2004-0034
Networks-L&P and Aquila Networks-MPS to)
implement a general rate increase in)
electricity.)

In the matter of Aquila, Inc. d/b/a Aquila) Case No. HR-2004-0024
Networks-L&P to implement a general rate)
increase in Steam Rates.)

AFFIDAVIT OF GRAHAM A. VESELY

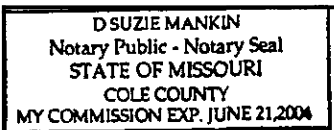
STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

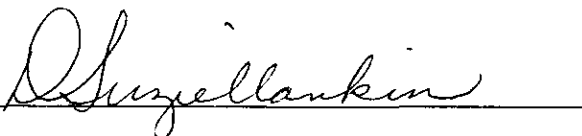
Graham A. Vesely, of lawful age, on his oath states: that he has participated in the preparation of the following surrebuttal testimony in question and answer form, consisting of 8 pages to be presented in the above case; that the answers in the following surrebuttal testimony were given by him; that 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 12th day of February 2004.





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2 **SURREBUTTAL TESTIMONY OF**

3 **GRAHAM A. VESELY**

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

5 **AND AQUILA NETWORKS-L&P (Electric and Steam)**

6 **CASE NOS. ER-2004-0034 AND ER-2004-0024**

7 **(Consolidated)**

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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

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

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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?

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.

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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.