REDACTED
Per Commission Directive
on February 26, 2004

Exhibit No.	
Witness:	Robert R. Stephens
Type of Exhibit:	Surrebuttal Testimony
Sponsoring Party:	Federal Executive Agencies, SIEUA and St. Joseph Missouri Industrial Users
Subjects:	Revenue Requirements: Natural Gas Prices
Date:	February 27, 2004

BEFORE THE

PUBLIC SERVICE COMMISSION OF MISSOURI

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

Surrebuttal Testimony and Schedule of

Robert R. Stephens

On Behalf Of

Federal Executive Agencies
Sedalia Industrial Energy Users Association
St. Joseph, Missouri Industrial Energy Users

February 27, 2004
Project 8051, 8052, 8053

BRUBAKER & ASSOCIATES, INC.
ST. LOUIS, MO 63141-2000

BEFORE THE

PUBLIC SERVICE COMMISSION OF MISSOURI

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

Affidavit of Robert R. Stephens

STATE OF MISSOURI)
) SS
COUNTY OF ST. LOUIS)

Robert R. Stephens, being first duly sworn, on his oath states:

1. My name is Robert R. Stephens. I am a consultant with Brubaker & Associates, Inc., having its principal place of business at 1215 Fern Ridge Parkway, Suite 208, St. Louis, MO 63141-2000. We have been retained by the Federal Executive Agencies, the Sedalia Industrial Energy Users Association, and the St. Joseph, Missouri Industrial Energy Users in this proceeding on their behalf.

2. Attached hereto and made a part hereof for all purposes is my surrebuttal testimony and schedule which were prepared in written form for introduction into evidence in the ER-2004-0034 Proceeding.

3. I hereby swear and affirm that my surrebuttal testimony and schedule are true and correct and show the matters and things they purport to show.

Robert R. Stephens

Robert R. Stephens

Subscribed and sworn before this 27th day of February, 2004.

CAROL SCHULZ
Notary Public - Notary Seal
STATE OF MISSOURI
St. Louis County
My Commission Expires: Feb. 26, 2008

Carol Schulz

Notary Public

My Commission expires on February 26, 2008.

BEFORE THE

PUBLIC SERVICE COMMISSION OF MISSOURI

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Surrebuttal Testimony and Schedule of Robert R. Stephens

Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A Robert R. Stephens; 1215 Fern Ridge Parkway, Suite 208, St. Louis, MO 63141-2000.

Q ARE YOU THE SAME ROBERT R. STEPHENS WHO HAS PREVIOUSLY FILED TESTIMONY IN THIS PROCEEDING?

A Yes.

Q WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY IN THIS PROCEEDING?

A I will respond to the rebuttal testimonies of Aquila witnesses John C. Browning, Joseph M. O'Donnell . As in my direct testimony, the topics I will address are the natural gas prices assumptions used by Aquila in the fuel and purchased power forecasts .

NATURAL GAS COSTS

Response to Aquila Witness Joseph M. O'Donnell

Q AT PAGE 17 OF HIS REBUTTAL TESTIMONY, MR. O'DONNELL INDICATES THAT YOUR USE OF THE ENERGY INFORMATION ADMINISTRATION'S (EIA) WELLHEAD PRICE IS NOT APPROPRIATE AS IT IS NOT COMPARABLE TO THE HENRY HUB-BASED NYMEX PRICE, AND THAT YOU SHOULD USE A MARKET PRICE AT THE HENRY HUB TO AVOID UNREALISTICALLY LOW PRICE CALCULATIONS. HOW DO YOU RESPOND?

A What Mr. O'Donnell fails to point out is that in the December 2003 EIA "Short-Term Energy Outlook," on which my direct testimony was based, there is no forecast of natural gas prices at the Henry Hub. Instead, average wellhead was the only choice.

Since that time, EIA has added a second price forecast called "composite spot," which Mr. O'Donnell cites to at page 17. However, he has not indicated how this particular measure compares to the Henry Hub price, or any other price. Hence, his own criticism may apply to his use of the composite spot price. Further, Mr. O'Donnell did not indicate what type or scale of adjustment would make either the average wellhead or the composite spot prices comparable to the Henry Hub prices.

Although Aquila is quick to criticize EIA's forecasts,[1] unlike Aquila's purported forecast sources, at least EIA forecasts provide publicly available information, which anyone with Internet access can view. If the Commission intends to reflect forecasted natural gas prices in Aquila's revenue requirement, it should not ignore EIA forecasts on the criticisms of Aquila.

[1] See rebuttal testimony of Aquila witness Empson, at page 8.

While on the topic of EIA's forecasts, I would note that, beginning with the January 2004 report, the EIA now includes forecasted natural gas prices for both 2004 and 2005.

Q AT PAGE 17 OF HIS REBUTTAL TESTIMONY, MR. O'DONNELL INDICATES THAT IF YOU WERE TO REFILE YOUR TESTIMONY USING DECEMBER 19, 2003 DATA AND THE CURRENT EIA FORECAST YOUR RECOMMENDED PRICE WOULD BE $5.07 PER MCF. IS THIS ACCURATE?

A Not entirely. First, Mr. O'Donnell assumes that I would switch from the average wellhead price to the composite spot price which he cites in his rebuttal testimony. I have no basis to assume that the composite spot price, which I understand to include a composite of prices at several hubs, is more directly comparable to Henry Hub futures prices than is the average wellhead price. Second, I would take into account the 2005 forecast prices now available.

Further, Mr. O'Donnell's estimate would not be the most current information available from EIA in any event.

Q USING THE METHODOLOGY LAID OUT IN YOUR DIRECT TESTIMONY, WHAT WOULD BE THE MOST CURRENT GAS PRICE ESTIMATE?

A Using the methodology laid out in my direct testimony, the average Henry Hub price for NYMEX natural gas futures for the period June 2004 through May 2007 would be $5.020/MMBtu, as shown on Schedule 1 to this testimony, based on futures prices for the 10 days ending February 9, 2004.[2]

[2] Note that I have shifted the time period by five months, to begin with the time in which the new rates established in this case are expected to take effect, June 2004.

Using the data underlying the forecast in the February 2004 EIA "Short-Term Energy Outlook" report (posted 2/10/04), EIA forecasts average wellhead prices of $4.676 per Mcf for the period of June 2004 through May 2005. The midpoint of the range between the NYMEX value and the EIA value (which is the basis used in my direct testimony) is $4.85/MMBtu. If current information is to be used for projecting future gas prices in conjunction with a gas cost recovery proposal, this is the value I recommend.

<u>Response to Aquila Witness John C. Browning</u>

Q AT PAGES 10 THROUGH 11 OF HIS REBUTTAL TESTIMONY, MR. BROWNING ALSO CRITICIZES YOUR USE OF THE EIA WELLHEAD PRICE IN COMPARISON TO THE HENRY HUB PRICE USED BY NYMEX. WHAT IS YOUR RESPONSE?

A Like Mr. O'Donnell, Mr. Browning fails to acknowledge that EIA does not report a Henry Hub gas price forecast.

Q MR. BROWNING ALSO TESTIFIES THAT THE USE OF NYMEX FUTURES IS QUESTIONABLE IN BOTH THE NEAR TERM AS WELL AS THE LONG TERM FOR PREDICTING FUTURE SPOT PRICES. HOW DO YOU RESPOND?

A My response is threefold. First, Mr. Browning's position seems to contradict Mr. O'Donnell's position related to the use of NYMEX futures prices. To wit, Mr. O'Donnell states at page 14 of his rebuttal testimony as follows:

> "I agree with Mr. Vesely [that it is common to use an averaging method] but would <u>recommend the use of cost averaging in the NYMEX futures markets</u> where prices are more reflective of current market conditions and price expectations rather than using historical data." (emphasis added)

Second, predicting future spot prices is only one aspect of the use of NYMEX futures prices. The margin of error in nearly any forecast increases the further into the future one forecasts. However, these futures contracts also provide an opportunity for buyers and sellers to cap their financial exposure to future changes in prices. Consequently, even though I agree with Mr. Browning that trading volumes of contracts for periods multiple years in the future is low,[3] this does not mean that Aquila cannot cap its cost exposure through actual participation in the futures market even in the "out years."

Third, Mr. Browning's criticism leads to a much larger issue. Aquila has been critical of my use of NYMEX natural gas futures prices as well as use of EIA forecasts. However, what the Aquila witnesses fail to acknowledge is that Aquila's original price estimate in this case of $5.14/MMBtu (which it still proposes) is based on a combination of <u>actual</u> 2003 prices (January and February only) and averages of analysts' predictions of 2003 prices.

I am hard pressed to find <u>any</u> logical basis for Aquila's proposed gas price.

- It does not cover the test year, 2002;
- It does not cover the update period (through September 30, 2003), since it only uses actual numbers from January and February of 2003;
- It does not purport to reflect 2004, 2005 or 2006, the period when rates are likely to be in effect; and
- It is based in large part on proprietary industry analysts' forecasts, which have been demonstrated to be highly variable and, as pointed out by others, are not subject to cross-examination in this case.

[3] The concern related to the potential staleness of prices during the out years expressed at page 11 of Mr. Browning's rebuttal testimony appears to be overstated. To test his claim, I reviewed the daily futures price information for the 10 trading day windows representing periods ending 11/26/03, 12/19/03 and 2/9/04 collected in conjunction with this case. The settlement price of futures contracts, even for periods in 2006 and 2007, changes virtually every day. In addition, according to Platt's *Gas Daily*, which documents futures trading volumes each trading day, in the 26 trading days so far in 2004 (through February 9), there were only 7 days in which no 2006 monthly contracts were traded.

Consequently, while Aquila is quick to criticize others' proposals for natural gas prices to be used in this case, the logic of its position is probably the weakest of all.

Q BUT YOU RECOMMEND USE OF PRICES OUTSIDE THE TEST YEAR AS WELL. WHY DO YOU PROPOSE THE USE OF JUNE 2004 THROUGH MAY 2007 PRICES?

A As I indicated at page 7 of my direct testimony, I recommended the use of expected prices in a 3-year future period for three reasons: (1) this is the time period during which rates established in this case are likely to be in effect; (2) the use of a three-year average price smoothes out year-to-year anomalies in prices; and (3) this period corresponds to the cost recovery proposal of my colleague, Maurice Brubaker. I recognized that this approach represented a deviation from normal test year principles, but I felt that it could be warranted in this case, given the expectation that future natural gas prices were likely to be significantly different from those in place during the test year and that if future actual prices turned out to be lower than forecast, there was a mechanism to protect customers.

However, if there is to be no gas cost recovery mechanism and if there is no acceptable indicator of future natural gas prices, as suggested by Aquila and Staff, I would be hard pressed to continue to recommend use of out-of-period prices in the context of this case.

While 2002 natural gas prices seem unlikely to be representative of future gas prices in the near term, given the amount of contention over what future natural gas prices might be, it is certainly difficult to consider forecasted natural gas prices as a "known and measurable change" to the test year in the traditional sense. Even if such changes are accepted as "known," they do not appear to be "measurable" to any significant degree.

As I mentioned, absent a program to refund potential over-collections through erroneously high natural gas forecast prices, the justification for deviation from the test year natural gas prices, perhaps with updates to 9/30/03 per the Staff recommendation, is greatly diminished.

Q GIVEN THE INABILITY OF ANYONE TO ACCURATELY PROJECT NATURAL GAS PRICES WITH HIGH LEVELS OF CONFIDENCE, IN THE EVENT THE COMMISSION DOES NOT APPROVE A GAS COST RECOVERY PROGRAM, HOW WOULD YOU RECOMMEND THAT THE COMMISSION ADDRESS THIS ISSUE?

A I believe that the Commission should lean toward being conservative and thus toward the lower bound of any range suggested. There are two major reasons for this recommendation. First, the utility always retains the ability to seek additional rate relief from the Commission and can, in appropriate cases, seek interim or emergency relief. Second, the ratepayers are in a more difficult position and are exposed to greater risk from the potential that the utility could "undercut" the natural gas cost level that is built into permanent rates, since there would be no protective refund cushion and the utility would simply retain any surplus revenues it received. Building permanent rates around the high end of the band of fuel assumptions would increase the likelihood of surplus revenues and thereby allow the utility to reap additional profits at the expense of ratepayers.

Q DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A Yes, it does.

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Schedule 1

NYMEX HENRY HUB FUTURES CONTRACTS
TEN DAY AVERAGE OF RECENT CLOSING PRICES ($/MMBtu)
(1/27/04 - 2/9/04)

Line	Month	2004-2005 (1)	2005-2006 (2)	2006-2007 (3)	Average (4)
1	Jun	5.175	4.896	4.599	4.890
2	Jul	5.198	4.931	4.599	4.909
3	Aug	5.211	4.943	4.611	4.921
4	Sep	5.180	4.915	4.596	4.897
5	Oct	5.190	4.945	4.625	4.920
6	Nov	5.384	5.123	4.810	5.106
7	Dec	5.570	5.298	4.995	5.287
8	Jan	5.706	5.291	5.118	5.371
9	Feb	5.666	5.346	5.077	5.363
10	Mar	5.495	5.163	4.897	5.185
11	Apr	4.963	4.709	4.537	4.736
12	May	4.868	4.601	4.502	4.657
13	Average	5.300	5.013	4.747	5.020

Source: NYMEX.com "Daily Natural Gas Market Data"