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Witness: *Graham A. Vesely*
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MISSOURI PUBLIC SERVICE COMMISSION

UTILITY SERVICES DIVISION

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Service Commission

REBUTTAL TESTIMONY

OF

GRAHAM A. VESELY

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

CASE NO. ER-2004-0034

Jefferson City, Missouri
January 2004

NP

Denotes Highly Confidential Information

Exhibit No. 1120 NP
Case No(s). ER-2004-0034
Date 3-1-04 Rptr 4LT

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE 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 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 rebuttal testimony as modified on February 27, 2004, in question and answer form, consisting of 13 pages to be presented in the above case; that the answers in the following rebuttal 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.

G A Vesely

Graham A. Vesely

Subscribed and sworn to before me this 26th day of February 2004.

D SUZIE MANKIN
Notary Public - Notary Seal
STATE OF MISSOURI
COLE COUNTY
MY COMMISSION EXP. JUNE 21,2004

D Suzie Mankin

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GRAHAM A. VESELY

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

CASE NO. ER-2004-0034

Q. Please state your name and business address.

A. Graham A. Vesely, Noland Plaza Office Building, 3675 Noland Road, Suite 110, Independence, MO 64055.

Q. Are you the same Graham A. Vesely who has previously filed direct testimony in this case?

A. Yes, I am. On December 9, 2003 I filed direct testimony on the area of fuel prices.

Q. What is the purpose of your rebuttal testimony?

A. The purpose of my rebuttal testimony is to respond to the direct testimony of Aquila (Aquila or Company) witness John C. Browning related to fuel prices. Further, I will describe how the Staff's disagreement with using forecasted natural gas prices also applies to the approach taken by Office of Public Counsel witness James A. Busch, and Sedalia Industrial Energy Users Association witness Robert R. Stevens.

A. Please summarize the Staff's position regarding Mr. Browning's direct testimony.

Q. The Staff believes that both the method Mr. Browning used to select the price of natural gas recommended in Aquila's cases, and the result he arrived at are incorrect for the following reasons:

- Rather than using only known and measurable prices, Mr. Browning's estimating method also uses forecasted prices.
- His estimate includes three months of data beyond the September 30, 2003 update period.
- By using exclusively 2003 natural gas prices, whether actual or forecasted, Mr. Browning's recommended natural gas price does not adequately take the high variability of prices into account.

The Staff recommends that the natural gas price should be determined using the average known and measurable, historical prices Aquila paid throughout the 2002 test year and the update period ended September 30, 2003. Additionally, the Staff recommends that the Commission deny the Company's request to use coal prices updated beyond September 30, 2003.

Q. In your direct testimony you discuss the possibility of establishing a mechanism for including in this case a base and ceiling level of fuel and purchased power costs, subject to a true-up and refund of any over-collection. Is Staff still considering this possibility?

A. Yes. Other parties in this case also have identified in direct testimony the possibility of using a fuel mechanism to address the natural gas and purchased power volatility being experienced by the utility industry in general and, more specifically, by Aquila. During the week of January 12, 2003 at the prehearing conference, the majority of the parties to this case met to discuss this topic and made progress towards agreeing on a recommendation. However, without Commission approval of any eventual recommendation, it is necessary in this rebuttal filing for the Staff to maintain its position on the price of natural gas in the absence of the special mechanism mentioned above.

Natural Gas Prices for Generation

Forecasted data/Not known and measurable

Q. Please explain why Mr. Browning's use of forecasted and out-of-period data in his recommended natural gas price is not consistent with the Commission's ratemaking methods.

A. As Mr. Browning explains on page 12, lines 4 through 11, of his direct testimony, he recommends using in this rate case his estimate for 2003, which he obtained by averaging together the January and February 2003 actual market prices (NYMEX) and the forecast for the remainder of 2003 provided by six natural gas industry analysts. These analyst forecasts were published in the February-March 2003 period. NYMEX is the New York Mercantile Exchange.

Q. Did Mr. Browning update his original natural gas price recommendation to known and measurable changes through September 30, 2003 as ordered by the Commission?

A. No. Though known and measurable, historical natural gas price data for the months of March through September 2003 were available after it filed its original case, Aquila's position continued to be based on the forecasted values used in its originally filed case. In hindsight, Mr. Browning 's estimate for 2003 average natural gas prices turned out to be close to actual experience. However, the Staff believes this result to be coincidental and unsuitable for setting rates.

Q. What are some problems with using forecasted data for ratemaking purposes?

A. The Commission traditionally uses known and measurable, historical information for setting rates. No one knows what natural gas prices will be in any future period, including industry analysts. Forecasts typically attempt to project current trends to future periods. In ratemaking, recognition of a cost trend, for example, affects the decision of whether the most recent end of period cost likely best reflects the cost of that item on a going-forward basis. However, no attempt would be properly made to build into the case the result of assuming continuation of the trend beyond the update period of the case.

According to Mr. Browning, industry analysts look at many factors that affect the price of natural gas. The task of trying to discern trends in the numerous factors, and the uncertainty of whether each trend is likely to continue or change, points to a subjective element in producing forecasts, and probably explains the "fairly wide" range of analyst forecasts provided in Mr. Browning's testimony ($4.50 to $6.50). This leaves ample room to argue the merits of the results. Further, industry analysts update and revise their forecasts with the passage of time, and every type of forecast can turn out to be very different than actual experience. The Staff recommends that the Commission continue to rely on known and measurable, historical data without reference to industry analyst forecasts.

Q. On page 7 of his direct testimony, Mr. Browning states that none of the witnesses that filed in Aquila's last electric case, Case No. ER-2001-672, accurately predicted the price of natural gas. Please comment on this statement.

A. Since a settlement of Case No. ER-2001-672 was agreed to by the parties, and the settlement reflected a compromise with respect to the filed position of the parties, it is not possible to speak in terms of a natural gas price that was reflected in the rates that came out of that case.

Q. Did the Commission approve the settlement in the last Aquila rate case?

A. Yes. The Commission issued an Order approving the terms of the Unanimous Stipulation and Agreement (Stipulation) on February 21, 2002 with rates effective on March 21, 2002. The Commission authorized the Company to reduce rates by $4.25 million.

Q. Does Aquila know what natural gas prices were used in the Company's last case?

A. No. Since the case was a stipulation, no one is in position to know how any one party valued the differences and issues in the case. While each party may file a particular position supporting various elements of the revenue requirement determination, it is impossible to assign a dollar value to issues within a case that is settled through negotiations among the parties.

Under terms of the Stipulation, the parties to the case including the Company, agreed to the following language under Section 18. Reservations:

> A. The terms of this Stipulation and Agreement have resulted from extensive negotiations among the Parties and are interdependent. By entering into this Stipulation and Agreement, none of the Parties shall be deemed to have approved or

> acquiesced in any ratemaking or procedural principle, or any method of cost determination or cost allocation, and none of the Parties shall be prejudiced or bound in any manner by the terms of this Stipulation and Agreement in this or any other proceeding, except as expressly specified herein. Unless the Commission approves this Stipulation and Agreement in its entirety, without condition or modification, this Stipulation and Agreement shall be null and void, and none of the Parties shall be bound by any of the terms hereof.
>
> B. The Parties agree that this Stipulation and Agreement and any and all discussion related hereto shall be privileged and shall not be subject to discovery, admissible in evidence, or in any way used, described or discussed in any proceeding, except as expressly specified herein.
> [source: Stipulation and Agreement in Case No. ER-2001-672, page 8]

Q. For the sake of comparison, what where the filed positions of the Staff and Aquila with respect to the price of natural gas for generation, and what actual prices occurred in the market after the case?

A. Even though it is impossible to specifically identify and quantify the parties' final positions in that case, as addressed above in the Stipulation, the Staff can address the issue of comparison of natural gas prices strictly from what was filed in the direct testimony of the parties in question.

The Staff filed an average value of $ 3.13, and Aquila witness Stephen L. Ferry filed an average value of $ 7.32 in Case No. ER-2001-672. In the twelve months after rates went into effect in March of 2002, the average NYMEX price turned out to be $ 3.73 per MMBtu or MCF. Admittedly, the price began rising quickly at the end of 2002. But considering that rates went into effect March 21, 2002, the actual price paid by Aquila for much of 2002 turned out to be reasonably similar to the Staff's estimate of what price should be included in Aquila's last case. The table below shows actual monthly prices in $/MCF terms paid by Aquila at the indicated generation sites. The

Data are from Company invoices and reflect differing variable transportation costs to each plant.

	Greenwood	Aries
March 2002	** ____ **	** ____ **
April	** ____ **	** ____ **
May	** ____ **	** ____ **
June	** ____ **	** ____ **
July	** ____ **	** ____ **
August	** ____ **	** ____ **
September	** ____ **	** ____ **
October	** ____ **	** ____ **
November	** ____ **	** ____ **
December	** ____ **	** ____ **
January 2003	** ____ **	** ____ **
February	** ____ **	** ____ **

Q. Did the Company plan on using the NYMEX forecast price in Case No. ER-2001-672?

A. No. Though it used such prices in its direct filing, Aquila planned on updating each month's natural gas prices with actual prices as each month became known. In Case No. ER-2001-672, shortly after the Company filed its rate case (June 8, 2001), natural gas prices began to fall. As the case progressed much of the Company's revenue requirement disappeared because of falling natural gas prices.

Q. *Did anyone forecasting the price of natural gas in the last case, predict with certainty what the prices would be?*

A. No. As can be seen from review of Mr. Browning's schedules attached to his direct testimony and based on a review of the actual natural gas prices experienced by Aquila from the end of the last case, no party, including Aquila itself, was able to predict exactly what natural gas prices would do.

<u>Out-of-period data</u>

Q. Please discuss the fact that Aquila's recommended use of 2003 natural gas prices contains out-of-period data.

A. The Commission ordered all parties filing testimony in this proceeding to base their cases on a calendar year 2002 test year with adjustments for known and measurable changes through September 30, 2003. Aquila's reliance on 2003 full-year forecasted data includes three months beyond the end of the update period, namely October, November, and December 2003.

Q. Having set a 2002 test year for this rate case, why has the Commission ordered parties to the proceeding to update their analysis through September 30, 2003?

A. Within the time limits available for issuing a final order in the case, having the parties update their analysis to include events through September 30, 2003 provides additional perspective from which to decide the need for adjustments to the test year. This is intended to produce better results at the end of the ratemaking process by using as current information as possible.

Q. Since the Commission ordered parties filing testimony to update their cases through September 30, 2003, would it not be even better to update natural gas prices through the end of 2003?

A. No. The Staff's entire case is based on an update of the 2002 test year for material known and measurable changes through September 30, 2003. An attempt to arbitrarily take natural gas prices beyond that date while leaving the other elements of the case at September 30, 2003 is known as an isolated out-period adjustment, and should be rejected.

Q. Please give an example of the Commission previously expressing itself on this subject.

A. As long ago as in Case No. ER-83-49, a rate case involving Kansas City Power & Light Company, the Commission stated:

> The Commission has no desire to entertain isolated adjustments, but seeks a "package" of adjustments designed to maintain the proper revenue-expense-rate base match at a proper point in time. Evidence of "picking and choosing" by a party with the intent of simply raising or lowering revenue requirement will not be condoned.
> [Commission Report and Order, Case No. ER-83-49, page 8]

<u>Variability of natural gas prices</u>

Q. Please explain why it is the Staff's position that natural gas prices have been, and continue to be highly variable?

A. The experience in this case provides a good illustration of such variability. The average actual (settlement) price for natural gas on the NYMEX during the nine months of the update period increased by 75% over the average test year NYMEX price ($ 5.65 vs. $ 3.22). Short-term spikes brought the price even higher.

Q. What difficulties does this create for those parties having a stake in the ratemaking process?

A. With proven price variability being so great since the beginning of the test year, it is not hard to see why there is concern on all sides when it comes to the question of what price to use for setting rates in this case. The Staff recognizes that the Company has a legitimate claim to protect its earnings. The Staff is equally concerned with the risk of using a price in rates that ends up charging customers significantly more than what Aquila's actual costs end up being. Actual experience after rates are set is understood to vary to some extent for many items from what was designed by the ratemaking process. But the risk of experience being materially different than what was foreseen, to the detriment of either the Company or the customers, is higher when there is greater risk of a rapid and material change in cost of an item after rates are set. Natural gas prices, given their proven volatility, are likely to represent the greatest risk of actual experience turning out materially different than what the ratemaking process envisioned.

Q. How does the Staff's selection of its natural gas price attempt to balance the risk of highly variable natural gas prices equally between the Company and its customers?

A. As described in my direct testimony, the Staff recommends using a natural gas price that reflects the actual weighted average cost to the Company at each of its generating plants over the period of the test year and update period. The main obvious difference with Aquila's proposed method is that the Staff sees prices as being too uncertain to be able to tell which monthly prices, if any, best represent the going-forward at September 30, 2003. Therefore, all prices have been given equal representation, and weighted with respect to the gas quantities purchased at each price. The Staff's attempt was to reflect the reality of both the lower prices seen during the test year, as well as the higher prices in the update period. The Company chose to give more weight to the prices experienced during the update period.

Q. The Staff's pricing method uses an average over a 21-month period, but why was it not willing to use, for example, a 12-month average instead?

A. When the price of natural gas is so volatile, choosing a smaller window of time over which to determine the average price will make a bigger difference in the results, depending on which period is chosen. For example, the average NYMEX price for the 2002 test year and the 12-month period ending September 30, 2003 were $ 3.22 and $5.24, respectively. If an even shorter period is selected, the outcome can vary even more.

Q. So during a period of highly variable prices, selecting a wider window of time (during that period of high volatility) over which to average the price of natural gas better serves the objective of being neutral in terms of future expectations?

A. Yes. This is why the Staff recommends averaging natural gas prices over the entire 21-month period spanning the test year and the update period. To make the judgment Aquila has made, that the price of natural gas during the twelve months of 2003 better represents the price at September 30, 2003 on a going-forward basis, suggests either extraordinary knowledge of the future, or simply a preference for the safer position of recommending the higher prices of the update period. A position based on an opposite preference (i.e., for the lowest prices experienced) might dictate the selection, for example, of only the test year prices, to the exclusion of the higher update period prices.

Q. But aren't the update period data better indicators of the natural gas price on a going-forward basis, since they are more recent?

A. No. If the Commission finds the overall data persuasive that natural gas prices have been highly volatile since the beginning of the test year, then it should agree with the Staff's recommendation that all prices throughout the 21-month period should be given equal weight in the absence of some pricing mechanism that includes a true-up and refund provision. Reliance on most recent price alone is appropriate for costs that, unlike natural gas, have shown stability.

Q. What portion of Office of the Public Counsel witness James A. Busch's direct testimony do you wish to rebut?

A. Mr. Busch arrived at his recommended natural gas price by averaging historical prices for the three years 2001-2003 together with the futures market forecast for 2004. Without repeating reasons discussed above, the Staff recommends against using a forecasted 2004 natural gas price in setting rates. Consistent with this, the revenues, expenses, rate base, and capital structure used in the Staff's filing are data that were known and measurable at September 30, 2003. The data were annualized and an attempt was made at normalization in order to reflect the going-forward value.

Q. What portion of Sedalia Industrial Energy Users Association witness Robert R. Stevens' direct testimony do you wish to rebut?

A. Mr. Stevens arrived at his recommended natural gas price by averaging the futures market forecasts for the period 2004-2006. This method is also inconsistent with the way rates have been set by this Commission. The Staff agrees with Mr. Stevens that Aquila's recommendation gives too much weight to gas prices during "abnormally high levels". However, we recommend normalizing the natural gas price built into rates by analyzing prices over the historical period I have described.

Coal Prices

Out-of-period data

Q. Has Mr. Browning proposed using coal prices that went into effect after he September 30, 2003 update period?

A. Yes. Beginning on page 13 of his testimony, he describes coal price changes scheduled for 2004 at the Sibley plant. The Staff has only included in its case the contractual price of all coal and freight at September 30, 2003. As mentioned by Staff witness David W. Elliott in his rebuttal testimony, I have, however, revised the Staff's price of coal used at the Jeffrey Energy Center to reflect an October 1, 2003 increase as occurring, in substance, within the update period.

Q. Does this conclude your rebuttal testimony?

A. Yes, it does.