Exhibit No.:
Issues: Fuel Expense

Witness: David W. Elliott
Sponsoring Party: MO PSC
Type of Exhibit: Rebuttal Testimony
Case No.: HR-2005-0450
Date Testimony Prepared: November 18, 2005

MISSOURI PUBLIC SERVICE COMMISSION

UTILITY OPERATIONS DIVISION

REBUTTAL TESTIMONY

OF

DAVID W. ELLIOTT

AQUILA, INC. D/B/A AQUILA NETWORKS-MPS
AND AQUILA NETWORKS L&P

CASE NO. HR-2005-0450

Jefferson City, Missouri
November, 2005

****Denotes Highly Confidential Information****

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BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Aquila, Inc. d/b/a Aquila Networks-L&P, for Authority to File Tariffs Increasing Steam Rates for the Service Provided to Customers in the Aquila Networks-L&P Area.	)))))	Case No. HR-2005-0450

AFFIDAVIT OF DAVID W. ELLIOTT

STATE OF MISSOURI)
) **ss**
COUNTY OF COLE)

David W. Elliott, of lawful age, on his oath states: that he has participated in the preparation of the following Rebuttal Testimony in question and answer form, consisting of 6 pages of Rebuttal Testimony to be presented in the above case, that the answers in the following Rebuttal Testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true to the best of his knowledge and belief.

David W. Elliott

Subscribed and sworn to before me this 17th day of November, 2005.

ROSEMARIE RIEDL
MY COMMISSION EXPIRES
June 1, 2009
NOTARY SEAL
#05509538
COLE COUNTY
NOTARY PUBLIC, STATE OF MISSOURI

Notary Public

My commission expires June 1, 2009

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CASE NO. HR-2005-0450

Q. Please state your name.

A. David W. Elliott.

Q. Are you the same David W. Elliott who has previously filed direct testimony in this case?

A. Yes, I am.

Q. What is the purpose of your rebuttal testimony?

A. The purpose of my rebuttal testimony is (1) to provide the Missouri Public Service Commission Staff's (Staff) updated production cost simulation results that reflect a change made to the hourly system load by the Staff following the pre-hearing conference, and (2) to address the major difference between the Staff's spot purchased power inputs used in the production cost simulation and the spot purchased power inputs used by Aquila Networks-MPS and Aquila Networks-L&P (Aquila).

EXECUTIVE SUMMARY

Q. Please provide an executive summary of your testimony.

A. This testimony identifies the updated production cost simulation results due to a change in the hourly system load, and addresses the difference between the methodologies used by Staff and Aquila to determine their respective spot purchase power prices. The hourly load change results in a revised electric joint fuel cost of

** _____ ** which is an increase of ** _____ **, and a revised steam sales cost of ** _____ ** which is an increase of ** _____ **.

This testimony also responds to the direct testimony of Aquila Witness James W, Okenfuss in regard to spot purchase power prices and availability. Aquila forecasts spot purchased power prices based on a methodology which used a projected natural gas price, and assumes up to 900 MW are randomly available for purchase. The Staff methodology relies on an analysis of actual hourly spot power prices and availability. The difference between the two methodologies results in a difference in the fuel model results of approximately ** _____ **.

PRODUCTION COST MODEL RESULTS

Q. What are the results of the updated production cost simulations?

A. The results of the revised electric and steam production cost simulations are shown in Schedule 1. These results indicate that the appropriate level of annual fuel and purchased power cost for Aquila, Inc. (Aquila) is ** _____ ** for electric joint dispatch and ** _____ ** for steam sales.

Q. What caused the change from the fuel cost appearing in your direct testimony?

A. A revision to the hourly system load is the only reason for this change. Staff witness Shawn Lange's rebuttal testimony explains this change.

SPOT PURCHASED POWER

Q. What fuel model issues does Staff believe still exist?

A. Based on my understanding of prehearing discussions, the only contested issue is spot purchase power prices and availability. Staff has quantified the issue by running its production cost simulation model once using Aquila's spot purchase inputs,

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and once using Staff's own spot purchase power inputs. The difference is approximately ** _____ **.

Q. What is the impact of spot purchased power price?

A. If the price of spot purchase power is unrealistically high, then the overall fuel and purchased power cost is going to increase regardless of whether the model elects to purchase that high priced energy, or elects to run high cost generating units.

Q. What is the impact of the amount of energy available?

A. If the model has an unrealistic amount of energy available, it may produce inaccurate results. If the amount of energy available is too low, then the model has fewer chances to offset high-cost generation. If the amount of energy available is too high, then the model may purchase more low-cost energy to meet load than is realistic. In either case the variable fuel and purchase power costs may be distorted.

Q. Please describe the method Aquila used to determine spot purchased prices.

A. My description is based on my review of the direct testimony of Aquila Witness James W. Okenfuss. Prior to using the RealTime® model to determine annual variable fuel costs, Aquila used the Global Energy Decisions (GED) MIDAS Gold™ software with the GED Energy Velocity™ database to model multi-area markets to determine forecasted hourly spot purchase power prices for the Southwest Power Pool NERC region. The resulting hourly spot purchased power prices were used as an input to RealTime®.

Q. Did Staff perform its own independent analysis using Aquila's method to determine the spot purchased power prices?

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A. No. The Staff does not have the GED MIDAS Gold™ software or the GED Energy Velocity™ database necessary to do an independent analysis of Aquila's methodology.

Q. Does Staff have a concern with Aquila's methodology?

A. Yes. Staff is concerned because Aquila made the assumption that natural gas price was the major driver of spot purchased power prices. Staff is concerned that a methodology based on a forecasted natural gas prices will not result in reasonable spot purchased power prices.

Q. Did you make any comparison of the natural gas prices with spot purchased power prices?

A. Yes. Schedule 2 and Schedule 3 show the plot of monthly NIMEX closing prices of natural gas with the actual monthly spot purchased power prices taken from the monthly data provided by Aquila for the respective periods of January 2002 through August 2003, and January 2004 through June 2005.

Q. Does there appear to be any direct correlation between the gas price and the spot price?

A. There does not appear to be a direct correlation, as the highest price for spot purchased power doesn't align with the highest price for natural gas.

Q. Did Aquila perform any type of benchmark analysis that showed whether its methodology using actual historical gas prices would produce the actual historical spot purchased power prices?

A. Staff has issued a data request to Aquila asking for this information. Staff will review the response to this data request.

Q. Can you describe the methodology Aquila used to develop the available amount of spot purchased power in each hour?

A. No. I have reviewed the direct testimony of Aquila Witness James W. Okenfuss and found no mention of the methodology used to determine the amount of spot purchased power energy available. Staff has issued a data request asking for additional information. Staff will review the response to this data request.

Q. What were Aquila's inputs to its production cost simulation model for the amounts of spot purchased power available?

A. Aquila models the availability of purchased power as five contracts, with three of the contracts having forced outage rates.

Q. Do you have any concerns about Aquila's spot purchased power availability inputs?

A. Yes I have two concerns. One is that Aquila has 900 MW of energy available to the model to purchase, which is approximately ** ___ ** of the peak load of both MPS and L&P. The second concern is that Aquila has assigned forced outage rates of 5%, 15%, and 25% to three of its spot purchased power contracts, which will reduce the availability of spot purchased power.

Q. Why is the 900 MW available for purchase a concern?

A. The highest amount of spot energy purchased by Aquila in the test year was ** ___ ** MW for 31 hours in the month of August, and in total, Aquila purchased between ** ___ ** and ** ___ ** MW in only 340 hours of the test year. The idea that Aquila might purchase as much as 900 MW for somewhere between 6500 hours (assuming all forced outages occur in the same hour) and 4800 hours (assuming all forced outages occur in different hours) in a year seems rather improbable, considering that

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Aquila actually only purchased between ** ___ ** and ** ___ ** MW in 340 hours of the test year.

Q. Does the direct testimony of James W. Okenfuss contain an explanation for how the 900 MW was determined?

A. No. Staff has issued a data request to Aquila asking for this information. Staff will review the response to this data request.

Q. Why are the forced outages a concern?

A. Forced outages will reduce the amount of the spot purchased power available. If no spot is available, then a unit must be run to meet the hourly load regardless of the cost of running that unit compared to the possible cost of purchasing energy.

Q. Is the reason for these forced outages explained in the direct testimony of James W. Okenfuss?

A. No. Staff has issued a data request to Aquila asking for this information. Staff will review the response to this data request.

Q. Does this conclude your rebuttal testimony?

A. Yes, it does.

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Schedules 1, 2 and 3 Are Deemed Highly Confidential In Their Entirety

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