Exhibit No.:
Witness: Maurice Brubaker
Type of Exhibit: Direct Testimony – Revenue Requirements
Issues Summary and Fuel Costs
Sponsoring Party: Federal Executive Agencies,
Sedalia Industrial Energy
Users' Association
St. Joe Industrial Group
Case No.: ER-2007-0004

Before the Public Service Commission
of the State of Missouri

In the Matter of Aquila, Inc. d/b/a Aquila Networks-MPS and Aquila Networks-L&P, for authority to file tariffs increasing electric rates for the service provided to customers in the Aquila Networks-MPS and Aquila Networks-L&P service areas	))))))	Case No. ER-2007-0004

Direct Testimony and Schedules of

Maurice Brubaker

on Revenue Requirement Issues

On behalf of

Federal Executive Agencies
Sedalia Industrial Energy Users' Association
St. Joe Industrial Group

Project 8629
January 18, 2007

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

PUBLIC VERSION

Exhibit No. 500-NP
Case No(s). ER-2007-0004
Date 4/11/07 Rptr MW

Before the Public Service Commission
of the State of Missouri

In the Matter of Aquila, Inc. d/b/a Aquila Networks-MPS and Aquila Networks-L&P, for authority to file tariffs increasing electric rates for the service provided to customers in the Aquila Networks-MPS and Aquila Networks-L&P service areas	)	Case No. ER-2007-0004

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

Affidavit of Maurice Brubaker

Maurice Brubaker, being first duly sworn, on his oath states:

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

2. Attached hereto and made a part hereof for all purposes is my direct testimony and schedules which were prepared in written form for introduction into evidence in Missouri Public Service Commission Case No. ER-2007-0004.

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

Maurice Brubaker

Subscribed and sworn to before this 17th day of January, 2007.

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

Notary Public

My Commission Expires February 26, 2008.

Before the Public Service Commission
of the State of Missouri

In the Matter of Aquila, Inc. d/b/a Aquila Networks-MPS and Aquila Networks-L&P, for authority to file tariffs increasing electric rates for the service provided to customers in the Aquila Networks-MPS and Aquila Networks-L&P service areas	))))))	Case No. ER-2007-0004

Direct Testimony of Maurice Brubaker

Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A Maurice Brubaker. My business address is 1215 Fern Ridge Parkway, Suite 208, St. Louis, Missouri 63141-2000.

Q WHAT IS YOUR OCCUPATION?

A I am a consultant in the field of public utility regulation and president of Brubaker & Associates, Inc., energy, economic and regulatory consultants.

Q PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A This information is included in Appendix A to my testimony.

Q ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?

A I am appearing on behalf of the Federal Executive Agencies (FEA), Sedalia Industrial Energy Users' Association (SIEUA) and the St. Joe Industrial Group (SJIG). The FEA, and the SIEUA and SJIG memberships are large energy consumers with facilities served by Aquila-L&P and Aquila-MPS.

Introduction

Q WHAT SUBJECTS ARE ADDRESSED IN YOUR TESTIMONY?

A I address fuel and purchased power issues, including price levels for natural gas and purchased power, adjustments for coal contracts, appropriate capacity charges associated with the capacity deficit of MPS, and the allocation of joint dispatch costs between L&P and MPS.

Q ARE ANY OTHER WITNESSES ALSO APPEARING FOR THESE PARTIES?

A Yes. Mr. Michael Gorman presents evidence concerning an appropriate return on equity, capital structure, cost of debt, and overall rate of return for Aquila. He also testifies about a depreciation issue.

Mr. Donald Johnstone will present testimony addressing the recovery of fuel and variable purchased power expense and the design or structure of any adjustment clause that might be used in connection with that recovery.

Q HAVE YOU AND THE OTHER WITNESSES COLLECTIVELY ADDRESSED ALL APPROPRIATE REVENUE REQUIREMENT ADJUSTMENTS?

A No. Our testimony addresses only selected revenue requirement issues. To the adjustments we recommend should be added adjustments that are recommended by others (and accepted by the Commission) in order to determine the overall final revenue requirement that is appropriate for Aquila-L&P and Aquila-MPS.

Q BASED ON THE REVENUE REQUIREMENT ISSUES THAT HAVE BEEN ADDRESSED IN YOUR TESTIMONY AND THAT OF MR. GORMAN, PLEASE SUMMARIZE THE ADJUSTMENTS TO THE FILINGS OF L&P AND MPS THAT WOULD BE APPROPRIATE.

A This is summarized in the following table.

TABLE 1

Adjustments Identified to the Filings of L&P and MPS, to be Combined With Adjustments Sponsored by Other Parties
$000

Description	L&P	MPS
1. Reduce ROE from 11.5% to 10.0% and adjust MPS's debt cost	(2,200)	(10,700)
2. Depreciation expense adjustment	(200)	(2,100)
3. Adjust natural gas and purchased power energy prices	******	******
4. Adjustments for C.W. Mining contract issues	******	******
5. Maintain current F&PP allocation method	******	******
6. Capacity Charge		(39,600)

Background on Aquila's Service Areas and Electric Generation

Q PLEASE DESCRIBE AQUILA'S ELECTRIC SERVICE OPERATIONS.

A Until 1999, Aquila operated in Missouri through its operating division, Missouri Public Service (MPS). MPS is certified to provide electric service in numerous locations in western Missouri including Raytown, Warrensburg, and Sedalia. In 1999, Aquila entered into an agreement to purchase the operations of St. Joseph Light & Power Company (L&P). Unlike the other electric utilities in Missouri which operate as a

single, consolidated entity throughout its entire Missouri service area, Aquila operates in Missouri as two separate and distinct divisions: MPS and L&P. As a result, Aquila has filed for two separate rate increases; one for its MPS service division and another for its L&P division.

Q HOW DOES AQUILA GENERATE ELECTRICITY FOR ITS MPS AND L&P OPERATING DIVISIONS?

A From an operating perspective, Aquila dispatches the two systems jointly in order to make the best use of each utility's generating assets. How these jointly dispatched fuel and purchased power costs are assigned or allocated to MPS and L&P is very important, as I will discuss later in this testimony.

From a generation capacity perspective, each division is planned to have capacity adequate to serve its own needs, without leaning on the other division.

South Harper Project

Q HAS AQUILA-MPS PROPOSED TO INCLUDE IN RATE BASE THE INVESTMENT ASSOCIATED WITH THE THREE COMBUSTION TURBINES THAT IT HAS INSTALLED AT THE SOUTH HARPER SITE?

A Yes, it has.

Q ARE YOU AWARE OF ANY LEGAL ISSUES WITH RESPECT TO THESE FACILITIES?

A Yes. It is my understanding that there are court proceedings underway which challenge the right of Aquila to install and operate these turbines at the South Harper site.

Q IF THESE ACTIONS ULTIMATELY RESULT IN A FINDING THAT AQUILA DID NOT HAVE AUTHORITY TO INSTALL THESE FACILITIES AT THE SOUTH HARPER SITE, WHAT ACTION WOULD YOU RECOMMEND THE COMMISSION TAKE?

A Based on the assumption that the South Harper turbines were the logical economic choice for meeting the needs of MPS, and also making the assumption that Aquila was otherwise prudent in the development of the site and the installation of the facilities, I would recommend that the Commission calculate MPS's revenue requirement, for this and future cases, based on these turbines having been properly and legitimately installed.

Q WHY DO YOU MAKE THAT RECOMMENDATION?

A The responsibility for developing the appropriate expansion plan, and for executing that plan in compliance with all pertinent law and regulatory requirements, rests with the electric utility. This includes the obligation to ensure that all necessary permissions, permits, agreements, etc. that are necessary to install and operate the facilities are put in place. If the utility fails to do so, and it ultimately is determined that the facility did not meet all necessary requirements, it is only because of the fault of the utility. Consumers are not at fault, and should not be required to bear any adverse economic consequences as a result of the utility's actions. Accordingly, the customers should be shielded from such effects.

The way to shield customers from these effects is to assume, for ratemaking purposes, the circumstances that would exist if the utility acted properly and secured the necessary permits and permissions. Thus, if the utility is required to incur additional costs, those additional costs are not charged to consumers. By calculating

the revenue requirement in this case and in future cases based on the turbines having been appropriately installed, consumers are shielded from any adverse impacts, and the utility then is obligated to absorb any additional costs that are incurred to provide the necessary service.

MPS Capacity Deficit

Q HAS MPS PROPOSED TO INCLUDE IN ITS REVENUE REQUIREMENT THE COSTS ASSOCIATED WITH AN ADDITIONAL **** OF GENERATING CAPACITY?**

A Yes. It has done so using a capacity charge of ****** for ****** of capacity. This apparently was included in anticipation that Aquila would acquire the Aries generating station.

Q HAS AQUILA ACQUIRED ARIES?

A No. Although it apparently participated in the auction process, it was not the successful bidder.

Q DOES MPS HAVE A NEED FOR **** OF CAPACITY AT THIS POINT IN TIME?**

A No. According to Exhibit HDR-1, MPS is approximately ****** short of achieving a 15% reserve margin. This is far less than the ****** of capacity charges it has requested to have included in rates.

Q DO YOU AGREE WITH THIS ADJUSTMENT POSED BY MPS?

A No. Given that there is no long-term capacity commitment, and given that the short-term capacity need is only ******, I disagree with both the amount of capacity and the price.

Q WHAT WOULD YOU RECOMMEND FOR THIS ADJUSTMENT?

A I would recommend a provision for capacity charges of not more than ****** of capacity.

Q WHAT DO YOU RECOMMEND?

A I understand that Aquila has executed short-term contracts to cover its summer 2007 capacity needs, but the prices associated with those contracts have not yet been provided. I assume that they will be provided at some point in time and, if found reasonable after review, can be utilized in developing the revenue requirements. In the absence of receipt of that information and/or if the quantities and prices are not reasonable, then I would recommend using the results of Aquila's RFP for 2006 resources. The information about this RFP was provided in response to MPSC Data Request No. 413 in Case No. ER-2005-0436. The price level is ******. Based on these parameters, the revenue requirement would be ****** per year, rather than the ****** per year that MPS has included in its revenue requirements. This is a downward adjustment of $39.6 million in MPS's proposed revenue requirements.

High Btu Western Coal

Q WHAT IS THE ISSUE WITH RESPECT TO HIGH BTU WESTERN COAL?

A The issue involves the failure of C.W. Mining Company to deliver under a contract as executed with Aquila for delivery of high Btu Western coal to the Sibley and Lake Road generating stations. As a result of the failure to deliver, Aquila has replaced these supplies with higher costs supplies acquired in the market.

The initial term of the contract was through the end of calendar year 2006. However, the contract gave Aquila the option to extend it for two additional years at specified prices. These prices are substantially lower than the cost of replacement coal.

Q IS IT REASONABLE FOR CUSTOMERS TO PAY THE HIGHER REPLACEMENT PRICE?

A No. Customers should only be charged the contract price for the coal plus the rail charges for delivery.

Q WHY SHOULD CUSTOMERS PAY THIS AMOUNT?

A Aquila entered into the contract with C.W. Mining based on its own evaluations and analyses. Aquila is the one that was responsible for contracting for the coal, including the selection of the specific suppliers to perform this role. In addition, I understand that Aquila has taken legal action to assert its rights under the contract.

Until the litigation process is complete, and until there is a full airing of Aquila's actions surrounding the execution of the contract, its management of the contract, and the legal proceedings, customers should not be required to pay anything more than the initial contracted price.

Q HOW MANY TONS OF HIGH BTU COAL, AND AT WHAT PRICE, HAS AQUILA PROPOSED FOR PURPOSES OF DEVELOPING ITS REVENUE REQUIREMENTS?

A Based on my review of workpapers supplied by Aquila in connection with its direct testimony in this proceeding, I find the following information with respect to the purchases of high Btu coal for the test year.

TABLE 2

High Btu Coal Purchases for the Test Year (from Aquila's Direct Testimony)

Utility System	Tons	Cost per Ton
MPS Electric	******	******
L&P Electric	******	******

Q BASED ON THIS INFORMATION, HOW SHOULD ADJUSTMENTS BE MADE?

A The adjustment to be made is equal to the volumes indicated in this table, times the difference in price between what Aquila has included in its test year revenue requirement, and the contract price.

Q WHAT COST PER TON WOULD BE APPROPRIATE TO UTILIZE?

A The average contact price specified for the 2007 and 2008 option years of ******.

Q ON THE BASIS OF THESE PRICES, WHAT ARE THE APPROPRIATE REDUCTIONS TO AQUILA'S TEST YEAR FUEL COSTS?

A For MPS, it is $5.225 million; for L&P, it is $1.320 million.

Q SHOULD ADJUSTMENTS BE MADE FOR ANY ADDITIONAL SO_2 ALLOWANCES THAT AQUILA WAS REQUIRED TO BURN?

A Yes. To the extent that purchasing of substitute coal has caused Aquila to include in its proposed revenue requirements the costs associated with SO_2 allowances in addition to those that would have been required under the C.W. Mining contract, that adjustment should also be made in the revenue requirement.

Fuel and Purchased Power Expense

Q WHAT WAS THE BASIS FOR THE NATURAL GAS PRICES THAT AQUILA USED IN ITS PRODUCTION DISPATCH TO DEVELOP PROPOSED TEST YEAR COST LEVELS FOR FUEL AND PURCHASED POWER?

A As explained by Mr. Rooney at page 10 of his testimony, Aquila's natural gas prices were based on a natural gas price curve that consisted of the average of the NYMEX natural gas futures prices for calendar year 2007. The specific values were the average of the futures prices from each day in the first three months of calendar year 2006. Thus, at the time of filing, the most current price information used by Aquila was already 90 days old (end of March vs. first of July).

Q SHOULD NATURAL GAS PRICES BE UPDATED?

A Yes. These prices should be updated and more recent information utilized.

Q HAVE GAS PRICES DECREASED SINCE THE FIRST QUARTER OF 2006?

A Yes. Both the actual experienced gas prices and the 2007 futures prices have decreased since then.

Q HAVE YOU PREPARED ANY INFORMATION TO SHOW THESE CHANGES?

A Yes. Schedule MEB-RR-DIR-1 shows the gas prices used by Aquila. This is the line at the top of the graph. Also shown are the 2007 futures prices averaged over the 90-day period October through December 2006, and also as averaged over the month of December 2006. Both of these more current views show lower gas prices. Also shown on the chart (the lower line) is the actual closing prices for each of the months of calendar year 2006. Again, this is much lower than what Aquila has used in its filing.

Q HAVE YOU PREPARED ANY UPDATES TO AQUILA'S FILING USING MORE RECENT FUTURES PRICES?

A Yes. Schedule MEB-RR-DIR-2 shows an update using futures prices for 2007 averaged over a 90-day period October through December 2006. This calculation may be thought of as essentially an update to Aquila's methodology using more current prices. Schedule MEB-RR-DIR-3 uses 2007 futures prices averaged over the month of December 2006.

Q HAVE YOU MADE ANY CALCULATIONS USING ACTUAL 2006 NATURAL GAS PRICES?

A Yes. Schedule MEB-RR-DIR-4 shows the calculations using the actual experienced fuel prices for 2006.

Q HOW DID YOU MODIFY AQUILA'S NUMBERS TO REFLECT DIFFERENT MARKET PRICES FOR NATURAL GAS?

A The approach was to substitute the alternative prices for natural gas, which reflects the Henry Hub pricing, for Aquila's Henry Hub numbers. These numbers were then adjusted for basis differential following the pattern used by Aquila. To maintain consistency, the results of the hedging program are also determined using the same adjusted natural gas prices.

Q HOW DID YOU ADJUST AQUILA'S RESULTS FOR A DIFFERENT LEVEL OF PURCHASED POWER COSTS?

A To maintain internal consistency, three separate sets of purchased power prices were developed, corresponding to each of the three previously discussed gas price scenarios. In all cases, the market price was based on the SPP-North market price index. For 2006 actual, we used the average (by month) of the daily on-peak and off-peak actual market index prices. For the 2007 scenario using a three-month window to develop prices, we used forward market index prices for 2007 averaged over that 90-day period. For the 30-day scenario, the same analysis was performed using the 2007 forward price data averaged over the month of December 2006.

Q DID YOU USE SPP-NORTH FORWARD PRICES FOR THIS ANALYSIS?

A SPP-North forward prices are not readily available. However, our analysis indicates that the SPP-North and "into Entergy" are highly correlated (greater than 96%). Therefore, for the 2007 market price scenarios, we used the 2007 forward index prices for "into Entergy."

Q DO THE FIGURES ON SCHEDULES MEB-RR-DIR-2, -3 AND -4 INCORPORATE THE ADJUSTMENT WHICH YOU HAVE PREVIOUSLY DISCUSSED FOR C.W. MINING?

A Yes. They do. They also reflect the allocation between L&P and MPS that is discussed next.

Q WHAT ARE THE RESULTS OF YOUR ADJUSTMENTS FOR NATURAL GAS AND PURCHASED POWER PRICES?

A If the Commission decides to use the 2007 price outlook using the three-month (October-December) average, the total adjustment is ****** for MPS and ****** for L&P (Schedule MEB-RR-DIR-2).

If the Commission decides to use the 2007 price outlook using only the December prices, the total adjustment is ****** for MPS and ****** for L&P (Schedule MEB-RR-DIR-3).

If the Commission decides to use 2006 actual prices, the total adjustment is ****** for MPS and ****** for L&P (Schedule MEB-RR-DIR-4).

Allocation of Joint Dispatch Costs Between L&P and MPS

Q SINCE THE MERGER BETWEEN L&P AND MPS, HOW HAVE VARIABLE FUEL AND PURCHASED POWER COSTS FROM THE JOINT DISPATCH RUNS BEEN APPORTIONED TO L&P AND MPS?

A The approach used in the rate cases has consistently been to allocate the joint dispatch energy costs in proportion to the results of the stand-alone dispatches. For

example,[1] if the stand-alone dispatch for MPS was 85 and the stand-alone dispatch for L&P was 15, the costs from the joint dispatch would be allocated 85% to MPS and 15% to L&P. If the joint dispatch was 90, MPS would be allocated 85% of that amount, or 76.5, and L&P would be allocated 15% of that amount, or 13.5. This approach ensures that customers on each system will receive an allocation of fuel and purchased power cost that is less than what their stand-alone costs would have been.

Q WHAT IS AQUILA PROPOSING IN THIS CASE?

A In this case, Aquila proposes to use an average of what it has assigned on its books over the last four years. Aquila claims that the joint dispatch approach which it historically has used does not replicate what it actually does in practice.

Q DOES AQUILA HAVE ANY WRITTEN DOCUMENTS OR GUIDELINES SPECIFYING HOW THIS PROCEDURE OF ASSIGNMENTS ON AN HOURLY BASIS BETWEEN THE TWO SYSTEMS WILL BE ACCOMPLISHED?

A No. In response to SIE Data Request No. 82, Aquila provided a very brief description of the concept that it follows, along with a very general block diagram, but in response to requests to provide:

> "A copy of all agreements which detail and explain how joint dispatch costs are allocated hourly to L&P and MPS."
>
> and
>
> "A copy of the specific agreement(s) governing this operating procedure, with all amendments and a copy of all commission orders approving this approach."

[1] In actual practice, the total dollars of fuel and variable purchased power costs would be used. For purposes of this example, the numbers have been simplified in order to illustrate the methodology.

Aquila responded "none."

A copy of this response is included as Schedule No. MEB-RR-DIR-5.

Q WHAT ALLOCATION FACTORS HAS AQUILA USED IN ITS FILING?

A Based on the last several years of history, it has proposed to allocate ****** to L&P and ****** to MPS.

Q WHAT ARE THE ALLOCATION FACTORS IF THE STAND-ALONE DISPATCHES ARE UTILIZED AS THE BASIS FOR THE ALLOCATION?

A This can be calculated from Schedule HDR-2. For L&P the factor is ****** and for MPS it is ******.

Q DO YOU BELIEVE THE PROPOSAL WHICH AQUILA HAS MADE IS REASONABLE?

A No. There are several reasons why I take this view. First, Aquila has provided essentially no information to support the methodology it actually uses to make the assignments on the books. There is no written guideline and it would be virtually impossible to audit the Company's assignments.

Second, if Aquila's proposed allocation factors are used, the amount of fuel and variable purchased power expense allocated to L&P would exceed the amount allocated on a stand-alone basis by more than $4 million.

Third, when these costs are put into Aquila's proposed fuel adjustment, the difference between the average cost per kWh for the two systems is 0.72¢ per kWh (2.15¢ for L&P and 2.87 for MPS); whereas, the Company's actual operating results

for calendar year 2005 show a difference of about ******. These disparities are far too large and are certainly not explained.

Q WHAT IS YOUR RECOMMENDATION?

A Unless and until Aquila can provide some written documentation for the assignment that it advocates, and can demonstrate why it would be reasonable for L&P to be allocated costs more than the division would be allocated on a stand-alone basis, and unless and until Aquila can explain the disparity between the fuel costs of the two systems when actual book results for 2005 are compared to the results in this case, the current methodology of allocating the joint dispatch costs in proportion to the results of the stand-alone dispatches should be continued.

Q HAVE YOU QUANTIFIED THIS ADJUSTMENT?

A Yes, this adjustment has a cost impact of ******. Therefore, L&P's revenue requirement is reduced by ****** and MPS's revenue requirement is increased by ******, compared to Aquila's new allocation approach.

Fuel and Purchased Power – Summary

Q ARE YOU MAKING A SPECIFIC PROPOSAL AS TO GAS AND PURCHASED POWER PRICES AT THIS TIME?

A No. The information I am presenting at this time is designed to show that both actual historic data and more recent futures price information produced lower values than contained in Aquila's pro forma numbers. I will make a specific proposal in a subsequent filing.

Q DOES THIS CONCLUDE YOUR TESTIMONY AT THIS TIME?

A Yes.

Appendix A

Qualifications of Maurice Brubaker

Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A Maurice Brubaker. My business address is 1215 Fern Ridge Parkway, Suite 208, St. Louis, Missouri 63141.

Q PLEASE STATE YOUR OCCUPATION.

A I am a consultant in the field of public utility regulation and President of the firm of Brubaker & Associates, Inc., energy, economic and regulatory consultants.

Q PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A I was graduated from the University of Missouri in 1965, with a Bachelor's Degree in Electrical Engineering. Subsequent to graduation I was employed by the Utilities Section of the Engineering and Technology Division of Esso Research and Engineering Corporation of Morristown, New Jersey, a subsidiary of Standard Oil of New Jersey.

In the Fall of 1965, I enrolled in the Graduate School of Business at Washington University in St. Louis, Missouri. I was graduated in June of 1967 with the Degree of Master of Business Administration. My major field was finance.

From March of 1966 until March of 1970, I was employed by Emerson Electric Company in St. Louis. During this time I pursued the Degree of Master of Science in Engineering at Washington University, which I received in June, 1970.

In March of 1970, I joined the firm of Drazen Associates, Inc., of St. Louis, Missouri. Since that time I have been engaged in the preparation of numerous studies relating to electric, gas, and water utilities. These studies have included analyses of the cost to serve various types of customers, the design of rates for utility services, cost forecasts, cogeneration rates and determinations of rate base and operating income. I have also addressed utility resource planning principles and plans, reviewed capacity additions to determine whether or not they were used and useful, addressed demand-side management issues independently and as part of least cost planning, and have reviewed utility determinations of the need for capacity additions and/or purchased power to determine the consistency of such plans with least cost planning principles. I have also testified about the prudency of the actions undertaken by utilities to meet the needs of their customers in the wholesale power markets and have recommended disallowances of costs where such actions were deemed imprudent.

I have testified before the Federal Energy Regulatory Commission (FERC), various courts and legislatures, and the state regulatory commissions of Alabama, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Guam, Hawaii, Illinois, Indiana, Iowa, Kentucky, Louisiana, Michigan, Missouri, Nevada, New Jersey, New Mexico, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, South Dakota, Texas, Utah, Virginia, West Virginia, Wisconsin and Wyoming.

The firm of Drazen-Brubaker & Associates, Inc. was incorporated in 1972 and assumed the utility rate and economic consulting activities of Drazen Associates, Inc., founded in 1937. In April, 1995 the firm of Brubaker & Associates, Inc. was formed. It includes most of the former DBA principals and staff. Our staff includes consultants

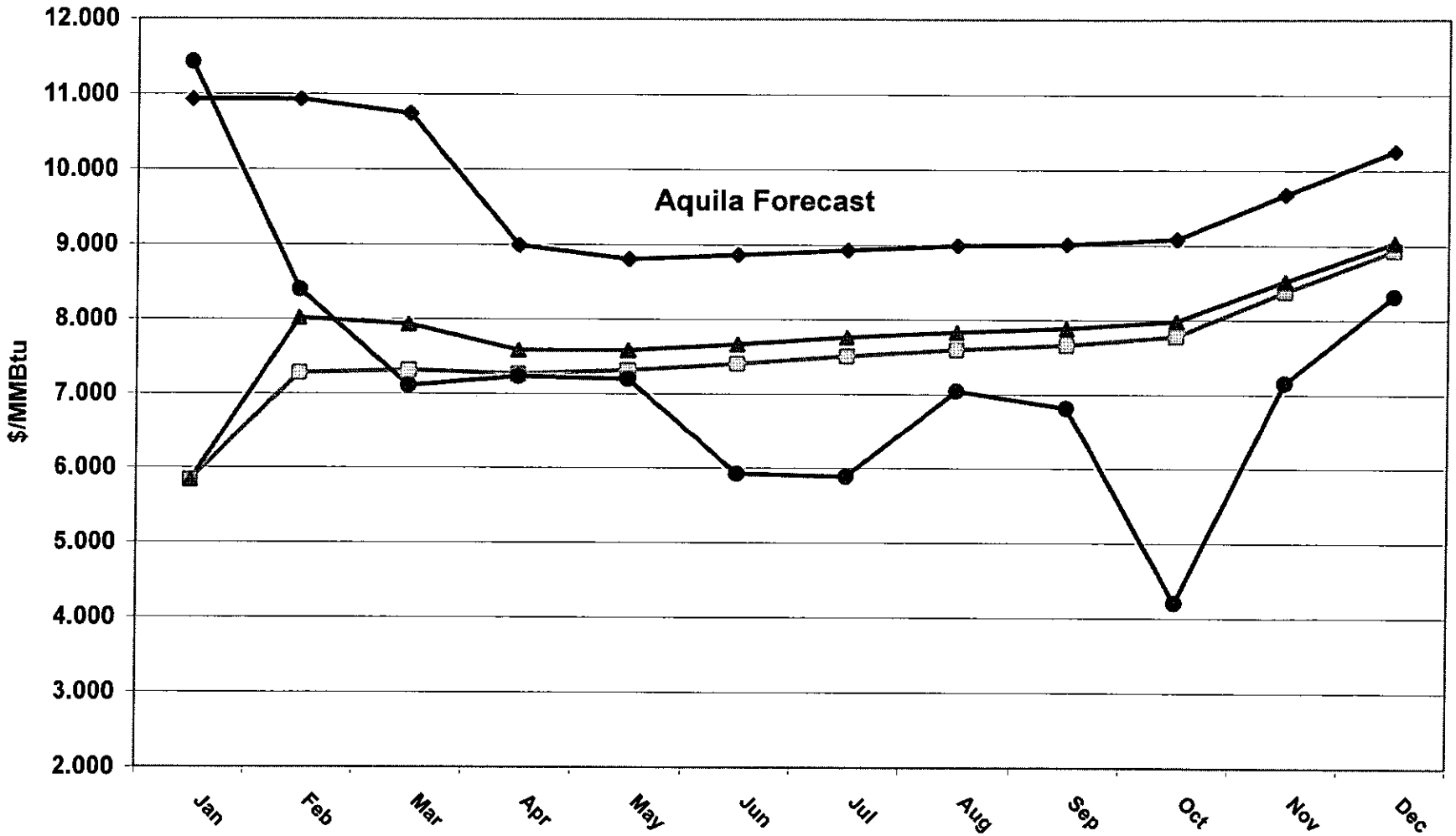
with backgrounds in accounting, engineering, economics, mathematics, computer science and business.

During the past ten years, Brubaker & Associates, Inc. and its predecessor firm has participated in over 700 major utility rate and other cases and statewide generic investigations before utility regulatory commissions in 40 states, involving electric, gas, water, and steam rates and other issues. Cases in which the firm has been involved have included more than 80 of the 100 largest electric utilities and over 30 gas distribution companies and pipelines.

An increasing portion of the firm's activities is concentrated in the areas of competitive procurement. While the firm has always assisted its clients in negotiating contracts for utility services in the regulated environment, increasingly there are opportunities for certain customers to acquire power on a competitive basis from a supplier other than its traditional electric utility. The firm assists clients in identifying and evaluating purchased power options, conducts RFPs and negotiates with suppliers for the acquisition and delivery of supplies. We have prepared option studies and/or conducted RFPs for competitive acquisition of power supply for industrial and other end-use customers throughout the Unites States and in Canada, involving total needs in excess of 3,000 megawatts. The firm is also an associate member of the Electric Reliability Council of Texas and a licensed electricity aggregator in the State of Texas.

In addition to our main office in St. Louis, the firm has branch offices in Phoenix, Arizona; Corpus Christi, Texas; and Plano, Texas.

NYMEX NATURAL GAS PRICE COMPARISON



Schedule MEB-RR-DIR-1

The Information on This Sheet is Highly Confidential

AQUILA NETWORKS

ADJUSTMENT FPP-10 - BAI MODEL
NATURAL GAS AND PURCHASED POWER ENERGY
2007 PRICE OUTLOOK - (OCTOBER 2006 - DECEMBER 2006)

LINE	DESCRIPTION	PRO FORMA RATE CASE	PER BOOKS TYE 12/31/05 [3]	ADJUSTMENT TO PER BOOKS	AQUILA'S FILING IN DIRECT TESTIMONY [3]	ADJUSTMENT TO AQUILA
1	Annualized Fuel & Purchase Power (Energy Only)					
2	Impact of Hedge Program					
3	Total Annualized Fuel and Purchase Power					
	MPS Analysis					
4	Percent Allocation to MPS					
5	Total Annualized Fuel and Purchase Power					
6	Annualized TDF & Propane (Fixed)					
7	Annualized Fuel Adders (Fixed)					
8	Total Fuel & Purchased Power Costs					
9	Juris Factor (Energy)					
10	Adjustment (Elec-Juris)					
	L&P Analysis					
11	Percent Allocation to L&P					
12	Total Annualized Fuel and Purchase Power					
13	Annualized TDF & Propane (Fixed)					
14	Annualized Fuel Adders (Fixed)					
15	Total Fuel & Purchased Power Costs					
16	Juris Factor (Energy)					
17	Adjustment (Elec-Juris)					
18	Total Adjustment					

AQUILA NETWORKS

ADJUSTMENT FPP-10 - BAI MODEL
NATURAL GAS AND PURCHASED POWER ENERGY
2007 PRICE OUTLOOK - DECEMBER 2006

LINE	DESCRIPTION	PRO FORMA RATE CASE	PER BOOKS TYE 12/31/05 [3]	ADJUSTMENT TO PER BOOKS	AQUILA'S FILING IN DIRECT TESTIMONY [3]	ADJUSTMENT TO AQUILA
1	Annualized Fuel & Purchase Power (Energy Only)					
2	Impact of Hedge Program					
3	Total Annualized Fuel and Purchase Power					
	MPS Analysis					
4	Percent Allocation to MPS					
5	Total Annualized Fuel and Purchase Power					
6	Annualized TDF & Propane (Fixed)					
7	Annualized Fuel Adders (Fixed)					
8	Total Fuel & Purchased Power Costs					
9	Juris Factor (Energy)					
10	Adjustment (Elec-Juris)					
	L&P Analysis					
11	Percent Allocation to L&P					
12	Total Annualized Fuel and Purchase Power					
13	Annualized TDF & Propane (Fixed)					
14	Annualized Fuel Adders (Fixed)					
15	Total Fuel & Purchased Power Costs					
16	Juris Factor (Energy)					
17	Adjustment (Elec-Juris)					
18	Total Adjustment					

The Information on This Sheet is Highly Confidential

AQUILA NETWORKS

ADJUSTMENT FPP-10 - BAI MODEL
NATURAL GAS AND PURCHASED POWER ENERGY
2006 ACTUAL PRICES

LINE	DESCRIPTION	PRO FORMA RATE CASE	PER BOOKS TYE 12/31/05 [3]	ADJUSTMENT TO PER BOOKS	AQUILA'S FILING IN DIRECT TESTIMONY [3]	ADJUSTMENT TO AQUILA
1	Annualized Fuel & Purchase Power (Energy Only)					
2	Impact of Hedge Program					
3	Total Annualized Fuel and Purchase Power					
	MPS Analysis					
4	Percent Allocation to MPS					
5	Total Annualized Fuel and Purchase Power					
6	Annualized TDF & Propane (Fixed)					
7	Annualized Fuel Adders (Fixed)					
8	Total Fuel & Purchased Power Costs					
9	Juris Factor (Energy)					
10	Adjustment (Elec-Juris)					
	L&P Analysis					
11	Percent Allocation to L&P					
12	Total Annualized Fuel and Purchase Power					
13	Annualized TDF & Propane (Fixed)					
14	Annualized Fuel Adders (Fixed)					
15	Total Fuel & Purchased Power Costs					
16	Juris Factor (Energy)					
17	Adjustment (Elec-Juris)					
18	Total Adjustment					