

Exhibit No.:
Witness: Maurice Brubaker
Type of Exhibit: Direct Testimony
Issue: Revenue Requirements
Sponsoring Party: Federal Executive Agencies
Sedalia Industrial Energy
Users' Association
St. Joe Industrial Group
Case No.: ER-2005-0436

**Before the Public Service Commission
of the State of Missouri**

In the Matter of the Tariff Filing of Aquila, Inc.,)
to Implement a General Rate Increase for)
Retail Electric Service Provided to Customers) Case No. ER-2005-0436
in its MPS and L&P Missouri Service Areas.)

Direct Testimony and Schedule of

Maurice Brubaker

On behalf of

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

Project 8415
October 14, 2005

**PUBLIC
VERSION**

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

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of the State of Missouri**


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

Affidavit of Maurice Brubaker

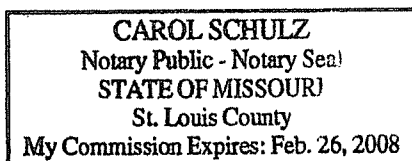
Maurice Brubaker, being first duly sworn, on his oath states:

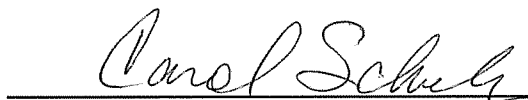
1. My name is Maurice Brubaker. I am a consultant with Brubaker & Associates, Inc., having its principal place of business at 1215 Fern Ridge Parkway, Suite 208, St. Louis, Missouri 63141-2000. We have been retained by the Federal Executive Agencies, the Sedalia Industrial Energy Users' Association and 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 schedule which were prepared in written form for introduction into evidence in Missouri Public Service Commission Case No. ER-2005-0436.
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 11th day of October 2005.





Notary Public

My Commission Expires February 26, 2008.

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Direct Testimony of Maurice Brubaker

1 **Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

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

4 **Q WHAT IS YOUR OCCUPATION?**

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

7 **Q PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.**

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

9 **Q ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?**

10 A I am appearing on behalf of the Federal Executive Agencies (FEA), Sedaila Industrial
11 Energy Users' Association (SIEUA) and the St. Joe Industrial Group (SJIG). The
12 FEA, and the SIEUA and SJIG memberships are large energy consumers with
13 facilities served by Aquila, Inc. (Aquila).

1 **Introduction**

2 **Q WHAT SUBJECTS ARE ADDRESSED IN YOUR TESTIMONY?**

3 A I address fuel cost levels and recovery, the South Harper combustion turbines,
4 Project "X" and coal issues.

5 **Q ARE ANY OTHER WITNESSES ALSO APPEARING FOR THE SAME PARTIES?**

6 A Yes. Mr. Michael Gorman presents evidence concerning an appropriate return on
7 equity, capital structure and overall rate of return for Aquila. Ms. Sharon Hennings
8 presents evidence with respect to problems associated with the acquisition of high
9 Btu coal at the Sibley and Lake Road generating stations, discusses alternatives
10 available to Aquila that were not pursued and discusses the effects of MISO Day 2 on
11 Aquila's electric dispatch.

12 Mr. Jim Selecky presents testimony with respect to depreciation rates and
13 expense levels associated with Aquila's generating stations.

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

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

1 **Natural Gas Prices**

2 **Q FOR PURPOSES OF ITS DIRECT TESTIMONY, WHAT LEVEL OF NATURAL GAS**
3 **PRICES DID AQUILA ASSUME?**

4 A As expressed in the testimony of Aquila witness Boehm, and shown on Schedule
5 JGB-2, Aquila used the average of 2006 NYMEX futures prices, measured over the
6 period October through December 2004. On an annual basis, the price proposed is
7 \$6.57 per MMBtu.

8 **Q HAVE YOU EXAMINED MORE RECENT NYMEX FUTURES PRICES?**

9 A Yes. Schedule 1 attached to my testimony presents a listing of more recent NYMEX
10 natural gas futures prices for one-, two- and three-year periods spanning April 2006
11 through March 2009. The prices displayed are mid-month values from January
12 through September 2005, and the prices as of October 5, 2005.

13 **Q HOW WOULD YOU CHARACTERIZE THE TREND IN THESE PRICES?**

14 A The prices were relatively stable, with a slight upward trend through the May data
15 point. Thereafter, as summer weather approached, and the Gulf Coast natural gas
16 gathering and processing facilities were severely damaged by the effects of
17 Hurricanes Katrina and Rita, the prices have escalated substantially.

18 **Q DO YOU BELIEVE THAT THESE MORE RECENT PRICES REPRESENT NEW**
19 **PERMANENT LEVELS OF PRICING FOR NATURAL GAS?**

20 A No, I do not. I believe they are, in large part, a reaction to the uncertainty surrounding
21 the condition of, and time to restore to normal, the offshore production platforms and
22 the associated delivery systems and processing facilities that have been damaged by

1 Hurricanes Katrina and Rita. However, I believe gas prices will stay high until there is
2 better visibility with respect to the restoration of these volumes to the market.

3 **Q DO YOU INTEND TO UPDATE THIS INFORMATION LATER IN THE CASE?**

4 **A** Yes, that is my present intent.

5 **Q IN LIGHT OF THE DIFFICULTY IN ESTIMATING PRICES OF NATURAL GAS, ARE**
6 **THERE ANY ALTERNATIVES TO BASE RATE TREATMENT THAT COULD BE**
7 **CONSIDERED FOR L&P AND MPS?**

8 **A** Yes. In several previous cases, parties have negotiated and presented to the
9 Commission for approval a mechanism known as the "Interim Energy Charge" (IEC).
10 The IEC has been formulated with a specified amount of fuel and purchase power
11 cost included in base rates and not subject to refund, supplemented by a refundable
12 IEC which is charged in addition to base rates.

13 Under the operations of the IEC, to the extent the fuel and purchase power
14 costs at the end of the term of the IEC are less than the sum of the amount in base
15 rates plus the IEC, the utility is required to make a refund down to the level included
16 in base rates. If the utility is successful in driving the cost below the level included in
17 base rates, it is allowed to benefit by retaining the difference. And, if the total cost at
18 the end of the term of the IEC exceeds the amount that is the sum of what is included
19 in base rates plus the IEC, the utility must absorb the overage, but is not required to
20 make any refunds. These features give Aquila an incentive to improve its energy
21 acquisition policies and procedures.

1 **Q DOES AQUILA HAVE A HEDGING PROGRAM FOR ITS PURCHASED ENERGY**
2 **REQUIREMENTS (FUEL AND PURCHASE POWER) ASSOCIATED WITH L&P**
3 **AND MPS?**

4 A Yes. This is discussed in the responses to several data requests, including Aquila's
5 responses to MPSC Data Request Nos. 266 and 269.

6 **Q WHAT IS THE PURPOSE OF A HEDGING PROGRAM?**

7 A The purpose of a hedging program is to moderate the effects of rising and falling
8 prices of the commodity being acquired. A hedging program may contain strategies
9 such as purchasing quantities and locking in fixed prices over a period of time,
10 purchasing call option contracts that cap the exposure to rising prices while permitting
11 the buyer to participate in price declines, and other strategies.

12 **Q DOES AQUILA PROPOSE TO REFLECT THE OPERATION OF ITS HEDGING**
13 **PROGRAM IN DETERMINING FUEL AND PURCHASE POWER COSTS TO**
14 **CHARGE TO ITS ELECTRIC AND STEAM CUSTOMERS?**

15 A No. Aquila has indicated in response to several data requests, including the
16 response to SIEUA Data Request No. 217 that it does not propose to reflect the
17 effects of the hedging program when determining the level of fuel and purchase
18 power expense to be borne by customers.

19 **Q IN YOUR VIEW, WOULD IT BE APPROPRIATE TO REFLECT THE EFFECTS OF**
20 **THE HEDGING PROGRAM?**

21 A Yes. As noted above, the main purpose of the hedging program is to dampen the
22 price swings in the market, and to otherwise protect consumers from increases in

1 price. Unless the results of the hedging program are reflected in determining the
2 prices to be charged to consumers, this objective will not be met. Rather, consumers
3 would continue to be exposed to the effects of market volatility, and the hedging
4 program would basically benefit stockholders, rather than consumers.

5 Especially in light of the high and volatile gas prices currently being faced, it is
6 appropriate for the effects of the hedging program to be reflected in determining the
7 fuel and purchase power costs properly chargeable to consumers.

8 **Q HOW SHOULD THE EFFECTS OF THE HEDGING PROGRAM BE**
9 **INCORPORATED?**

10 A The fuel and purchase power prices that are the result of the hedging program should
11 be used to determine the cost chargeable to customers, to the extent of the hedge. It
12 is only the unhedged volumes that should be subject to a market or any other level of
13 pricing.

14 **Q PLEASE PROVIDE AN EXAMPLE.**

15 A For example, assume that a utility has hedged 60% of its natural gas requirements at
16 a price of \$5.00 per MMBtu, and that the balance is exposed to market prices. In
17 looking forward, the Commission should consider the 60% of the volumes that have
18 been locked in at \$5.00 per MMBtu, and combine that with the expectation of market
19 prices only for the remaining 40% of the volumes that are not hedged.

20 Of course, a hedging program contains many aspects, and they should all be
21 considered to the extent that prices are defined either by locking them in at fixed
22 levels, or by constraining the impact of price escalations by means of such

1 instruments as call option contracts that allow a utility to purchase natural gas at a
2 specified strike price, in return for having paid a premium to the seller of the option.

3 **South Harper Project**

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

7 **A** Yes, it has.

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

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

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

17 **A** Based on the assumption that the South Harper turbines were the logical economic
18 choice for meeting the needs of MPS, and also making the assumption that Aquila
19 was prudent in the development of the site and the installation of the facilities, I would
20 recommend that the Commission calculate MPS's revenue requirement for, this and
21 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, 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 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, that the utility acted prudently 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, in this case and in future cases, the revenue requirement 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.

Project "X"

Q WHAT IS PROJECT "X"?

A This project represents 200 MW of capacity purchases beginning in September 2005.

Q WHAT REVENUE REQUIREMENT IMPACT DOES THIS HAVE?

A Aquila indicates in the testimony of witness Aprill (at page 5) that as a placeholder it has included a capacity charge of \$6.50 per kW-month, or a total of \$15.6 million per year for capacity charges.

1 **Q HAS AQUILA EXECUTED A CONTRACT FOR ITS CAPACITY?**

2 A No. As indicated in Aquila's response to MPSC Data Request No. 168, it has not.

3 **Q SHOULD THIS AMOUNT BE INCLUDED IN REVENUE REQUIREMENTS?**

4 A Certainly not until such time as an actual contract has been executed, and a
5 determination has been made as to the reasonableness of the price and the prudence
6 of the acquisition process.

7 **Q IN THE EVENT THAT THE CONDITIONS WHICH YOU JUST NOTED ARE NOT**
8 **FULFILLED BY THE TIME THE RECORD IN THIS PROCEEDING CLOSES, WHAT**
9 **WOULD YOU RECOMMEND?**

10 A I would recommend utilizing a substitute for the \$6.50 per kW-month charge. I would
11 propose to utilize the results of Aquila's RFP for 2006 resources. The results of this
12 RFP are summarized in Aquila's response to MPSC Data Request No. 413.

13 **Q WHAT SPECIFIC LEVEL OF CAPACITY CHARGES WOULD YOU PROPOSE?**

14 A I would use ***** per kW-month, based on the responses to the RFP that are
15 reported in Aquila's answer to MPSC Data Request No. 413.

16 **High Btu Coal**

17 **Q MS. SHARON HENNINGS DISCUSSES THE PROBLEMS THAT AQUILA HAS**
18 **ENCOUNTERED WITH RESPECT TO COAL DELIVERIES UNDER A CONTRACT**
19 **WITH C.W. MINING CO. ARE YOU ALSO OFFERING TESTIMONY ON THIS**
20 **SUBJECT?**

21 A Yes.

1 **Q WHAT IS THE NATURE OF THE PROBLEM WITH THE C.W. MINING**
2 **CONTRACT?**

3 A Aquila entered into this contract to secure a supply of high Btu coal for its Sibley and
4 Lake Road generating facilities. Unfortunately, it has not received the contracted
5 deliveries from C.W. Mining. As a result, it has replaced those supplies with higher
6 cost supplies acquired in the market.

7 **Q DOES AQUILA PROPOSE, IN THE FUEL PRICE ASSUMPTIONS CONTAINED**
8 **WITHIN ITS DIRECT TESTIMONY, TO PASS ON TO CUSTOMERS THE INITIAL**
9 **CONTRACTED FOR PRICE OR THE HIGHER REPLACEMENT PRICE?**

10 A It proposes to charge customers the higher replacement price.

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

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

15 **Q WHY SHOULD CUSTOMERS PAY THIS AMOUNT?**

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

20 Until the litigation process is complete, and until there is a full airing of Aquila's
21 actions surrounding the execution of the contract, its management of the contract,

1 and the legal proceedings, customers should not be required to pay anything more
2 than the initial contracted price.

3 **Q HOW MANY TONS OF HIGH BTU COAL, AND AT WHAT PRICE, HAS AQUILA**
4 **PROPOSED FOR PURPOSES OF DEVELOPING ITS ELECTRIC AND STEAM**
5 **REVENUE REQUIREMENTS?**

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

TABLE 1			
High Btu Coal Purchases for the			
<u>Test Year (from Aquila's Direct Testimony)</u>			
<u>Utility System</u>	<u>Tons</u>	<u>Dollar Cost</u> <u>(000)</u>	<u>Cost per</u> <u>Ton</u>
MPS Electric	349,668	*****	*****
L&P Electric	84,665	*****	*****
L&P Steam	28,551	*****	*****

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

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

Q WHAT COST PER TON WOULD BE APPROPRIATE TO UTILIZE?

A Based on the contract price of \$19.40/ton plus rail delivery charges (based on actual costs incurred during 2005 of *****/ton at Sibley and *****/ton at Lake Road), the cost per ton delivered for high Btu coal at Sibley (for MPS) should be *****/ton and for deliveries at Lake Road (L&P) should be *****/ton.

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

A For MPS Electric, it is \$4.8 million; for L&P Electric, it is \$1.1 million; and for L&P Steam, it is \$373,000.

Q SHOULD ADJUSTMENTS BE MADE FOR ANY ADDITIONAL SO2 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 SO2 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.

Q MS. HENNINGS ALSO PRESENTS EVIDENCE WITH RESPECT TO THE POSSIBLE USE OF PETROLEUM COKE AS A SUBSTITUTE FOR HIGH BTU COAL. HOW SHOULD THIS INFORMATION BE CONSIDERED?

A To the extent that the Commission would consider allowing Aquila to charge prices in excess of the contracted for prices, the possibility of Aquila having acquired petroleum coke, rather than high Btu coal should be reflected in the revenue

1 requirement calculation, and Aquila should be required to pursue development of this
2 option.

3 **Q BASED ON THE DOLLAR PER MILLION BTU COST ESTIMATE PROVIDED BY**
4 **MS. HENNINGS, WHAT WOULD BE THE ADJUSTMENT TO AQUILA'S TEST**
5 **YEAR REVENUE REQUIREMENT PROPOSAL IF PETROLEUM COKE WERE**
6 **SUBSTITUTED FOR THE ACTUAL PURCHASES OF HIGH BTU COAL?**

7 A On the basis of a cost of \$1.50/MMBtu for petroleum coke and a heat content for the
8 high Btu coal of 12,000 Btu/lb., for MPS Electric the adjustment would be \$3.9 million;
9 for L&P Electric, it would be \$963,000; and for L&P Steam it would be \$325,000.

10 **Q DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

11 A Yes, it does.

Appendix A

Qualifications of Maurice Brubaker

1 **Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

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

4 **Q PLEASE STATE YOUR OCCUPATION.**

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

7 **Q PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND**
8 **EXPERIENCE.**

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

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

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

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

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

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

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

3 During the past ten years, Brubaker & Associates, Inc. and its predecessor
4 firm has participated in over 700 major utility rate and other cases and statewide
5 generic investigations before utility regulatory commissions in 40 states, involving
6 electric, gas, water, and steam rates and other issues. Cases in which the firm has
7 been involved have included more than 80 of the 100 largest electric utilities and over
8 30 gas distribution companies and pipelines.

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

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

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NYMEX NATURAL GAS FUTURES PRICES (\$/MMBTU)
(APRIL 2006 - MARCH 2009)

		1/14/2005	2/15/2005	3/15/2005	4/15/2005	5/16/2005	6/15/2005	7/15/2005	8/15/2005	9/15/2005	10/5/2005
<u>Line</u>	<u>Contract Month</u>	<u>Futures Prices</u>	<u>Futures Prices</u>	<u>Futures Prices</u>	<u>Futures Prices</u>	<u>Futures Prices</u>	<u>Futures Prices</u>	<u>Futures Prices</u>	<u>Futures Prices</u>	<u>Futures Prices</u>	<u>Futures Prices</u>
1	Apr-06	6.049	6.264	6.878	7.063	6.829	7.559	7.870	8.772	10.007	10.981
2	May-06	5.914	6.129	6.733	6.913	6.714	7.411	7.710	8.547	9.627	10.441
3	Jun-06	5.924	6.154	6.758	6.950	6.758	7.451	7.752	8.578	9.652	10.436
4	Jul-06	5.944	6.184	6.783	6.985	6.804	7.498	7.802	8.623	9.693	10.461
5	Aug-06	5.964	6.209	6.808	7.005	6.840	7.533	7.847	8.662	9.736	10.486
6	Sep-06	5.959	6.194	6.787	6.985	6.837	7.522	7.835	8.640	9.712	10.456
7	Oct-06	5.989	6.219	6.812	7.018	6.877	7.554	7.870	8.667	9.741	10.481
8	Nov-06	6.299	6.514	7.107	7.338	7.202	7.909	8.215	9.027	10.131	10.906
9	Dec-06	6.574	6.794	7.392	7.648	7.502	8.224	8.545	9.362	10.511	11.306
10	Jan-07	6.779	7.019	7.603	7.858	7.712	8.451	8.780	9.607	10.796	11.616
11	Feb-07	6.759	6.984	7.568	7.838	7.697	8.441	8.770	9.592	10.771	11.511
12	Mar-07	6.564	6.784	7.387	7.693	7.552	8.281	8.620	9.407	10.536	11.211
13	Apr-07	5.674	5.899	6.357	6.573	6.512	7.116	7.465	8.082	8.826	9.051
14	May-07	5.534	5.759	6.222	6.418	6.389	6.986	7.300	7.912	8.551	8.661
15	Jun-07	5.556	5.789	6.232	6.438	6.427	7.026	7.348	7.947	8.586	8.697
16	Jul-07	5.579	5.809	6.242	6.463	6.464	7.058	7.389	7.982	8.616	8.732
17	Aug-07	5.594	5.829	6.257	6.498	6.494	7.830	7.426	8.022	8.649	8.767
18	Sep-07	5.569	5.814	6.237	6.473	6.480	7.068	7.420	8.012	8.634	8.747
19	Oct-07	5.579	5.827	6.257	6.508	6.500	7.101	7.455	8.047	8.666	8.781
20	Nov-07	5.869	6.112	6.544	6.823	6.830	7.421	7.795	8.407	9.051	9.241
21	Dec-07	6.159	6.377	6.832	7.118	7.150	7.731	8.115	8.742	9.436	9.691
22	Jan-08	6.394	6.612	7.062	7.343	7.370	7.946	8.320	8.972	9.726	10.036
23	Feb-08	6.374	6.592	7.032	7.323	7.355	7.931	8.310	8.957	9.701	9.966
24	Mar-08	6.167	6.392	6.832	7.153	7.205	7.779	8.165	8.777	9.466	9.706
25	Apr-08	5.337	5.552	5.912	6.143	6.185	6.679	7.065	7.557	8.031	7.981
26	May-08	5.217	5.432	5.792	5.998	6.050	6.564	6.920	7.387	7.811	7.671
27	Jun-08	5.242	5.457	5.812	6.028	6.080	6.594	6.955	7.422	7.856	7.716
28	Jul-08	5.272	5.482	5.832	6.058	6.110	6.624	6.990	7.462	7.896	7.756
29	Aug-08	5.297	5.507	5.852	6.093	6.145	6.659	7.020	7.502	7.941	7.801
30	Sep-08	5.277	5.487	5.837	6.073	6.130	6.639	7.010	7.497	7.931	7.791
31	Oct-08	5.292	5.497	5.852	6.093	6.150	6.669	7.045	7.537	7.961	7.821
32	Nov-08	5.567	5.772	6.127	6.378	6.465	6.999	7.395	7.892	8.356	8.271
33	Dec-08	5.842	6.047	6.387	6.653	6.760	7.304	7.715	8.227	8.741	8.721
34	Jan-09	6.067	6.287	6.622	6.893	6.980	7.524	7.940	8.447	9.031	9.051
35	Feb-09	6.067	6.272	6.592	6.873	6.965	7.512	7.935	8.432	9.006	8.996
36	Mar-09	5.897	6.077	6.387	6.683	6.815	7.372	7.795	8.258	8.776	8.731
37	1st Year Avg ¹	6.227	6.454	7.051	7.275	7.110	7.820	8.135	8.957	10.076	10.858
38	2nd Year Avg ²	5.837	6.068	6.509	6.761	6.765	7.416	7.709	8.322	8.992	9.173
39	3rd Year Avg ³	5.531	5.739	6.084	6.331	6.403	6.928	7.315	7.802	8.278	8.192
40	Total 3-Year Avg	5.865	6.087	6.548	6.789	6.759	7.388	7.720	8.360	9.116	9.408

Notes:

¹ 1st year time frame is from April 2006 through March 2007

² 2nd year time frame is from April 2007 through March 2008

³ 3rd year time frame is from April 2008 through March 2009

NYMEX NATURAL GAS FUTURES PRICES (\$/MMBTU) **APRIL 2006 - MARCH 2009**

