Exhibit No.:
Witness: Maurice Brubaker
Type of Exhibit: Direct Testimony
Issue: Rate Design
Sponsoring Parties: Industrials
Case No.: ER-2009-0090

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of the Application of Aquila, Inc. d/b/a KCP&L Greater Missouri Operations Company for Approval to Make Certain Changes in its Charges for Electric Service.	)	**Case No. ER-2009-0090**

Direct Testimony and Schedules of

Maurice Brubaker
on Rate Design Issues

On behalf of

Ag Processing, Inc.
Sedalia Industrial Energy Users Association
Wal-Mart Stores, Inc.
Whiteman Air Force Base

February 27, 2009

BRUBAKER & ASSOCIATES, INC.
CHESTERFIELD, MO 63017

Project 9051

BEFORE THE PUBLIC SERVICE
COMMISSION OF THE STATE OF MISSOURI

In the Matter of the Application of Aquila, Inc. d/b/a KCP&L Greater Missouri Operations Company for Approval to Make Certain Changes in its Charges for Electric Service.	)	Case No. ER-2009-0090

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 16690 Swingley Ridge Road, Suite 140, Chesterfield, Missouri 63017. We have been retained by Ag Processing, Inc., the Sedalia Industrial Energy Users Association, Wal-Mart Stores, Inc., and Whiteman Air Force Base 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 the Missouri Public Service Commission Case No. ER-2009-0090.

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

Maurice Brubaker

Subscribed and sworn to before me this 26th day of February, 2009.

TAMMY S. KLOSSNER
Notary Public - Notary Seal
STATE OF MISSOURI
St. Charles County
My Commission Expires: Mar. 14, 2011
Commission # 07024862

Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of the Application of Aquila, Inc. d/b/a KCP&L Greater Missouri Operations Company for Approval to Make Certain Changes in its Charges for Electric Service.	)	**Case No. ER-2009-0090**

Direct Testimony of Maurice Brubaker

Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A Maurice Brubaker. My business address is 16690 Swingley Ridge Road, Suite 140, Chesterfield, MO 63017.

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 This testimony is presented on behalf of Ag Processing, Inc., the Sedalia Industrial Energy Users Association, Wal-Mart Stores, Inc., and Whiteman Air Force Base (collectively "Industrials").

Q WHAT IS THE SUBJECT OF YOUR TESTIMONY?

A My testimony addresses rate design issues. I discuss the rate design proposals of KCPL Greater Missouri Operations-L&P and KCPL Greater Missouri Operations-MPS (sometimes hereafter referred to as "Companies") and offer my recommendations as to how any re-basing of fuel adjustment charges (FAC) and any awarded increase in non-fuel costs should be apportioned to the various rate schedules and to charges within the rate schedules.

Summary

Q PLEASE SUMMARIZE YOUR TESTIMONY.

A My testimony may be summarized as follows:

1. Any changes in base rate fuel cost levels (re-basing) are appropriately allocated to customer classes and rate schedules, and to energy charges in rate schedules, on a per kWh basis, consistent with the operation of the FAC.

2. Any allowed increase in costs other than the fuel costs tracked through the FAC are non-fuel costs and should be allocated to customer classes, rate schedules and rate blocks within rate schedules, as a uniform percent applied to the portion of each rate that currently recovers non-fuel costs.

3. The methodology described above will maintain the proportionality of recovery of both fuel costs and non-fuel costs, which is appropriate given the existence of the FAC, and the absence of a current, comprehensive class cost of service study that would indicate a need for any change in the relationships.

4. The Aquila revenue allocation and rate design proposal should be rejected. Aquila's approach distorts rate design and over-allocates costs to high load factor customers, such as those served on the large power rates.

5. Aquila's rate design does not give appropriate recognition to the existence and operation of the FAC. In its approach, Aquila adds the proposed re-base amount of the FAC to the existing base rates. It then applies a percentage increase to that total to spread its claimed increase in non-fuel costs among rate schedules and rate components. This is inappropriate because it includes in the base used to spread the non-fuel costs a significant amount of fuel cost which is tracked and passed on to customers on a kWh basis.

6. Aquila's proposed methodology distorts rate relationships and unfairly burdens large, high load factor customers because it not only passes through additional fuel costs on a per kWh basis, but then uses the higher fuel cost to in turn allocate an even larger amount of the increase in non-fuel costs to these customers.

7. The Companies should prepare and file class cost of service studies in the rate case in which Iatan 2 costs are included in rates.

Revenue Allocations

Q WHAT IS THE NATURE OF THE INCREASES PROPOSED BY THE COMPANIES?

A Both Companies have proposed to increase their base rates in order to fold additional fuel costs recovery into them, and also have proposed to increase the rates to recover claimed increases in costs other than the cost of fuel (non-fuel costs).

Q PLEASE EXPLAIN WHAT IS MEANT BY THE TERM "BASE RATES."

A Base rates refers to the individual service schedules, or tariff sheets for service in various categories, established in the last Aquila rate case, Case No. ER-2007-0004. These base rates recovered the level of non-fuel costs, as well as a specified level of fuel costs. The specified level of fuel costs included in base rates is stated in the FAC of each utility. Subsequent to the rate case, base rates remain static, but any increases or decreases in fuel costs are reflected through an increase or decrease in the level of the FAC.

Q YOU USE THE TERM "FUEL COSTS." WHAT ARE YOU INCLUDING IN THAT TERM?

A In this testimony, I use that term to describe all of the categories of costs and revenues that are allowed to be tracked in the FAC. It includes the amounts in base

rates, as well as any additions to base rates because of re-basing, and any amounts collected thru the FAC.

Q WHAT WOULD BE AN APPROPRIATE WAY TO ADJUST RATES IN ORDER TO REFLECT A RE-BASING FOR A DIFFERENT LEVEL OF FUEL COSTS, AND ALSO TO RECOGNIZE CHANGES IN THE LEVEL OF NON-FUEL COSTS?

A In a typical rate case, rates may be increased on an across-the-board fashion. Such an approach is not appropriate where a utility operates under an FAC. There, increases in fuel costs are treated differently than increases in non-fuel costs.

FUEL COST INCREASES: As noted, fuel costs will deviate over time from the level of fuel costs collected in base rates. The FAC is designed to collect any differences between actual fuel costs and the level of fuel costs in base rates on a per kWh basis (with appropriate adjustments for voltage level related losses). Accordingly, when re-basing the rates for a different level of fuel costs, it is appropriate that such fuel costs be collected on a similar basis as the FAC (i.e., on a per kWh basis).

NON-FUEL COST INCREASES: In the absence of a current, reliable class cost of service study that would suggest a different approach, increases in non-fuel costs should be allocated as an equal percentage applied to the portion of each rate that currently recovers non-fuel costs. This will maintain the relationships among the rates with respect to the recovery of non-fuel costs, just as the per kWh approach to the re-basing of fuel costs maintains the fuel costs recovery relationships.

Q CAN YOU ILLUSTRATE THIS APPROACH GRAPHICALLY?

A Yes. This is shown on Schedule 1. The first bar on Schedule 1 shows that the current base rate consists of base rate fuel recovery and base rate non-fuel recovery.

The amount of base rate fuel costs recovery is set forth in the FAC. The second bar shows my recommended Step 1, which is to remove the base rate fuel recovery from each rate value. Step 2 is to apply a uniform percentage increase to the component of each rate that recovers non-fuel costs for the purpose of apportioning the increase in non-fuel costs. Step 3 adds the increase in fuel costs to the base rate fuel costs to determine the total re-based fuel component of the rate, and Step 4 combines the result with the escalated non-fuel costs determined in Step 2 in order to develop the new rate.

Q HAVE YOU DEVELOPED AN ALLOCATION FOR THE PROPOSED INCREASES USING YOUR METHODOLOGY?

A Yes. Schedule 2 shows the application of my methodology to the increases proposed by L&P, and Schedule 3 shows the application to the increases proposed by MPS.

Q PLEASE EXPLAIN SCHEDULE 2.

A Column (1) shows base rate revenues at present rates, column (2) shows energy sales and column (3) shows the per MWh amount for fuel costs currently in base rates. It is $17.99 per MWh (or 17.99 mills per kWh or 1.799¢ per kWh). Column (4) shows the fuel cost recovered in present base rates and is determined by multiplying column (2) times column (3). Column (5) shows the non-fuel revenues at present rates and is determined by subtracting column (4) from column (1).

Q PLEASE CONTINUE WITH YOUR EXPLANATION.

A Columns (6) and (7) show the application of a uniform percentage increase to the non-fuel revenues at present rates in order to allocate the additional amount of non-fuel costs.

Column (8) shows the increase in fuel costs that are being requested by L&P and column (9) shows the amount of the proposed fuel cost increase.

Finally, column (10) shows the revenue after the increase, which is determined by adding the increased non-fuel costs from column (7) and the increased fuel costs in column (9) to the current base rate revenues that are shown in column (1).

Q WHAT IS SHOWN ON SCHEDULE 3?

A Schedule 3 is in the same format as Schedule 2, and shows the application of my recommended methodology to MPS.

Q CAN YOU CONTRAST YOUR RECOMMENDATION TO THE APPROACH TAKEN BY AQUILA?

A Yes. I have pictorially described Aquila's approach on Schedule 4. Note that the first step which Aquila takes is to add the re-base amount for the fuel adjustment on top of the current rate, which includes base rate fuel costs and base rate non-fuel costs. Aquila's second step is to apply a percentage increase to the <u>total</u> rate, which includes not only the base rate fuel component, but also the additional amount added on to the current base rates in order to re-base the FAC. The result of this approach is that the fuel already in base rates, and the increase in fuel, influence how the non-fuel cost increase is allocated.

Q IS AQUILA'S APPROACH REASONABLE?

A No, it is not. Aquila's approach totally fails to distinguish between fuel costs and non-fuel costs in applying its proposed rate increase. While it is appropriate to apply the increase in fuel cost on a per kW basis, consistent with the operation of the FAC, it is wholly inappropriate for the fuel cost component of rates to influence allocation of the increase in the non-fuel costs.

Q PLEASE EXPLAIN.

A Increasing the non-fuel cost recovery component of rates by a uniform percentage is consistent with allocating the increases in fuel costs on a per kWh basis, since both maintain the relative proportionality of the recovery of both kinds of costs.

Q DOES AQUILA'S APPROACH OF SPREADING THE INCREASE IN NON-FUEL COSTS AS A UNIFORM PERCENTAGE OF TOTAL REVENUE, INCLUDING NOT ONLY BASE RATE FUEL COSTS BUT RE-BASE FUEL COSTS INCREASES, DISTORT THE RATE STRUCTURE?

A Yes. For an illustration of how this occurs, please refer to my Schedule 5.

Q PLEASE EXPLAIN SCHEDULE 5.

A For a residential rate schedule, a large power rate schedule and for the total of all rates, Schedule 5 shows what percent of the rate recovers fuel costs and what percent recovers non-fuel costs. It also shows what percent of total utility fuel costs and what percent of total utility non-fuel costs are recovered in each rate schedule.

Column (1) shows non-fuel costs, and is taken from column (5) of Schedules 2 and 3. Column (2) shows fuel costs, and is the sum of the base fuel costs and the

increase in fuel costs shown in columns (3) and (9) of Schedules 2 and 3. Column (3) shows the total of the two. Columns (4) through (6) show fuel costs and non-fuel costs as a percent of rate schedule revenues at present rates.

Focusing first on L&P, note that for the residential class non-fuel costs are 72% of total current revenues, while fuel costs compose only 28%. The story is much different for the large power rate, wherein 52% of present revenues are recovering non-fuel costs, with 48% of current revenues devoted to the recovery of fuel costs. Both of these are in contrast to the system average composition of 63% for non-fuel costs and 37% for fuel costs. Obviously, if fuel is included in the base used to distribute the increase in non-fuel costs, the large power class would be allocated relatively more than other customers because the proportion of fuel to total revenue in the large power rate is substantially above the average.

Another way to look at this is to examine the percentage responsibility for non-fuel costs and for fuel costs that each rate bears of the total. This is shown in columns (7) through (9). Note in column (7) that the large power class is responsible for 24% of current non-fuel revenues, but pays 38% of fuel costs. On a combined basis, large power revenues are 29% of the total. Aquila's approach is to first distribute 38% of the additional fuel costs that it seeks (the re-basing) to the large power class, and then add that amount to current revenues to develop a base for allocating the non-fuel costs. As a result, large power customers are allocated 29% of the increase in non-fuel costs when they have already paid on a kWh basis the full amount of the escalation in fuel costs, and despite the fact that these customers are only responsible for 24% of non-fuel costs.

It is obvious that the method of rate design proposed by Aquila is inappropriate and places undue burdens on customers, like those on the large power

schedule, for whom fuel cost is a greater percentage of the total bill than is true for all customers taken together.

Q WHY IS FUEL A MUCH LARGER PERCENTAGE OF THE COST OF SERVING LARGE POWER CUSTOMERS THAN IT IS FOR RESIDENTIAL AND OTHER CUSTOMERS?

A There are two main reasons. First, large power customers are larger in size and take service at a higher voltage level than the much smaller residential customers who require substantially more distribution lines, poles and transformers to provide them service. These are all non-fuel costs, which are not required to serve large power customers.

Second, large power customers tend to use electricity on a more even basis, both across seasons and around-the-clock and through weekdays and weekends. This means that they have a higher load factor, and therefore the fixed cost of serving their peak demand is spread over a much greater number of kWh of output making the per unit cost lower. And, as a result, because they are taking power much more frequently, the amount of fuel cost as a percentage of total cost is higher.

Q HAVE YOU ALSO PRESENTED EXAMPLES FROM MPS?

A Yes. The lower half of Schedule 5 presents comparable information for MPS, and shows both a residential class and the large power primary class. While the specific numbers are different, the relative proportions are similar, and the implications of Aquila's rate design proposal are identical to those discussed above in connection with L&P.

Q FOLLOWING THIS APPROACH THAT YOU HAVE OUTLINED, HOW WOULD THE VALUES ON THE TARIFF SHEETS BE DEVELOPED?

A The same steps would be followed. First, base rate fuel costs would be removed from all energy charges. Second, a uniform percentage increase would be applied to the energy charges net of the base rate fuel costs, and to all other charges in the rate schedules. Third, the fuel costs removed in Step 1 would be added back to the rate. Finally, the amount of the re-basing of the fuel adjustment would be added to the energy charges developed in Step 3.

Class Cost of Service

Q DID THE COMPANIES FILE CLASS COST OF SERVICE STUDIES IN THIS CASE?

A No, they did not. It has been a number of years since a class cost of service study was filed for either Company. I recommend that the Commission direct the Companies to prepare and file class cost of service studies in the case in which Iatan 2 costs are reflected in rates, so that appropriate rate designs and rate levels can be developed.

Q DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A Yes, it does.

Qualifications of Maurice Brubaker

Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A Maurice Brubaker. My business address is 16690 Swingley Ridge Road, Suite 140, Chesterfield, MO 63017.

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. (BAI), 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.

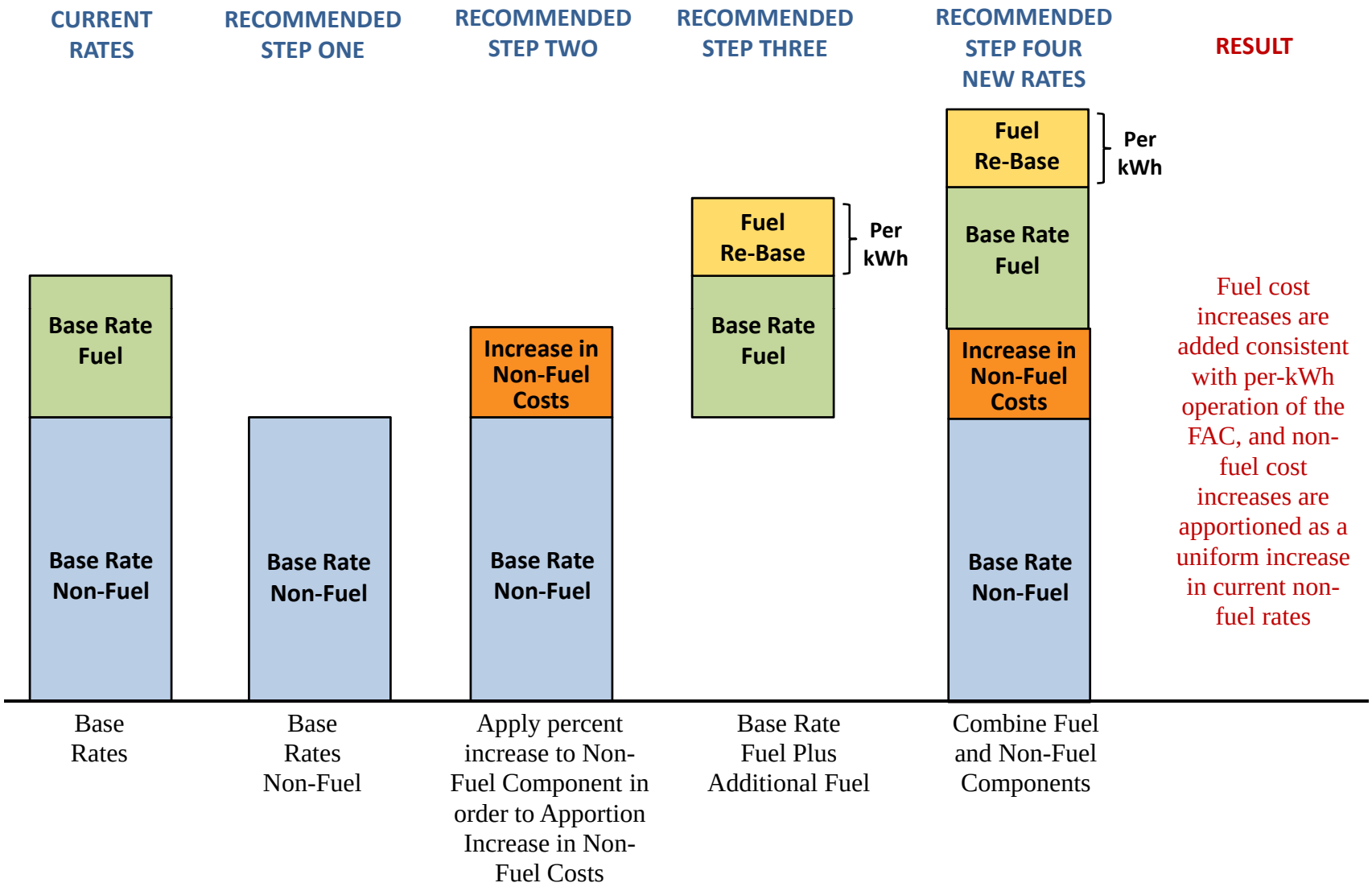
The firm of Drazen-Brubaker & Associates, Inc. was incorporated in 1972 and assumed the utility rate and economic consulting activities of Drazen Associates, Inc., founded in 1937. In April, 1995 the firm of Brubaker & Associates, Inc. was formed. It includes most of the former DBA principals and staff.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

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 and Corpus Christi, Texas.

Recommended Design of Rates



Schedule 1

KCPL GMO - L&P

Recommended Allocation of Fuel and Non-Fuel Increases
Illustrated Using L&P Filed Proposed Increases

Line	Rate Schedule	Base Rate Revenue at Present Rates	Energy Sales (MWh)	Base Fuel Cost per MWh	Fuel Cost Recovery in Present Base Rates	Non-Fuel Revenue at Present Rates	Allocation of Increase in Non-Fuel Costs		Allocation of Increase in Fuel Costs		Total Revenue After Increase
							Percent Increase	Amount of Increase	Increase per MWh	Amount of Increase	
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
								$16,394,590		$13,408,201	
1	MO910-Residential General Use	$30,690,595	386,326	$17.99	$6,950,005	$23,740,590	18.82%	$4,469,121	$6.30	$2,433,854	$37,593,570
2	MO911- Residential General Use	$178,848	1,965	$17.99	$35,350	$143,498	18.82%	$27,013	$6.30	$12,380	$218,241
3	MO915- Residential Other Use	$848,055	7,037	$17.99	$126,596	$721,459	18.82%	$135,813	$6.30	$44,333	$1,028,201
4	MO920- Residential Electric Space Heating	$22,630,496	383,930	$17.99	$6,906,901	$15,723,595	18.82%	$2,959,937	$6.30	$2,418,759	$28,009,192
5	MO921- Residential Electric Space Heat-Multi.	$475,139	7,106	$17.99	$127,837	$347,302	18.82%	$65,379	$6.30	$44,768	$585,286
6	MO922-Res. Space/Water Heating-Separate Met.	$31,578	510	$17.99	$9,175	$22,403	18.82%	$4,217	$6.30	$3,213	$39,008
7	MO966- Residential Net Metering	$775	10	$17.99	$180	$595	18.82%	$112	$6.30	$63	$950
8	MOSJXX-Street & Private Area Lighting	$2,760,637	20,679	$17.99	$372,015	$2,388,622	18.82%	$449,654	$6.30	$130,278	$3,340,568
9	MO931- General Service-General Use	$5,869,967	73,562	$17.99	$1,323,380	$4,546,587	18.82%	$855,886	$6.30	$463,441	$7,189,294
10	MO940- Large General Service	$22,596,691	402,666	$17.99	$7,243,961	$15,352,730	18.82%	$2,890,122	$6.30	$2,536,796	$28,023,609
11	MO944- Large Power Service	$35,806,356	809,924	$17.99	$14,570,533	$21,235,823	18.82%	$3,997,603	$6.30	$5,102,521	$44,906,481
12	MO928- General Service-Temporary Service	$103,583	1,074	$17.99	$19,321	$84,262	18.82%	$15,862	$6.30	$6,766	$126,211
13	MO930- General Service-Limited Demand	$3,178,922	30,593	$17.99	$550,368	$2,628,554	18.82%	$494,820	$6.30	$192,736	$3,866,478
14	MO941-Non-Res Space/Water Heat-Separate	$105,837	1,743	$17.99	$31,357	$74,480	18.82%	$14,021	$6.30	$10,981	$130,839
15	MO971- Outdoor Night Lighting	$49,102	573	$17.99	$10,308	$38,794	18.82%	$7,303	$6.30	$3,610	$60,015
16	MO973-Steet Lighting & Traffic Signals	$24,786	431	$17.99	$7,754	$17,032	18.82%	$3,206	$6.30	$2,715	$30,708
17	MO972-Steet Lighting & Traffic Signals	$38,797	822	$17.99	$14,788	$24,009	18.82%	$4,520	$6.30	$5,179	$48,495
18	**Total Revenues**	$125,390,164	$2,128,951		$38,299,828	$87,090,336		$16,394,590		$13,412,391	$155,197,145

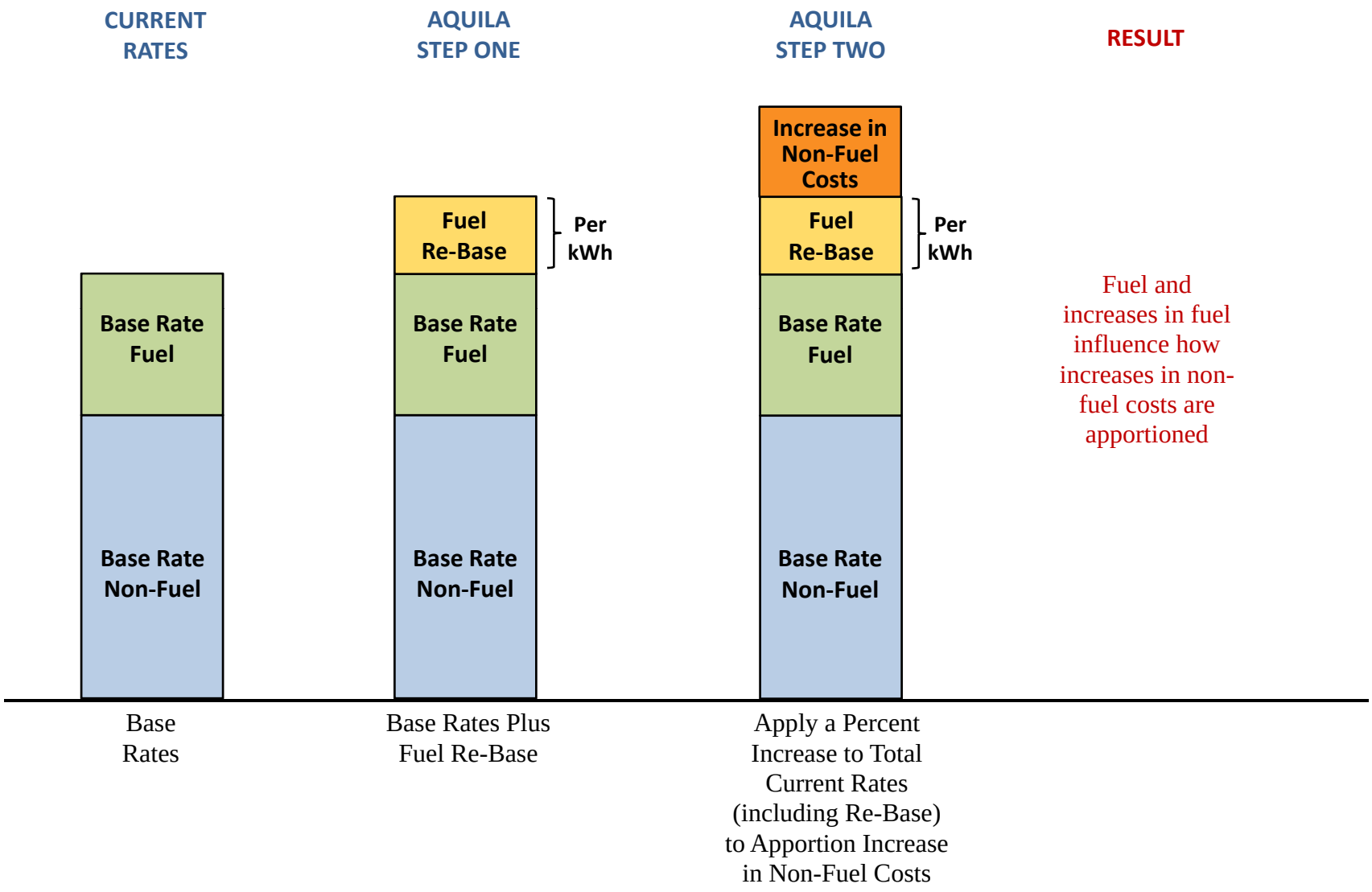
Schedule 2

KCPL GMO - MPS

Recommended Allocation of Fuel and Non-Fuel Increases
Illustrated Using MPS Filed Proposed Increases

Line	Rate Schedule	Base Rate Revenue at Present Rates	Energy Sales (MWh)	Base Fuel Cost per MWh	Fuel Cost Recovery in Present Base Rates	Non-Fuel Revenue at Present Rates	Allocation of Increase in Non-Fuel Costs		Allocation of Increase in Fuel Costs		Total Revenue After Increase
							Percent Increase	Amount of Increase	Increase per MWh	Amount of Increase	
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
								$62,887,568		$63,153,886	
1	MO815-Residential Other	$108,675	716	$25.38	$18,172	$90,503	20.59%	$18,631	$10.439	$7,474	$134,780
2	MO860- Residential General Service	$153,977,062	1,596,955	$25.38	$40,530,718	$113,446,344	20.59%	$23,353,733	$10.439	$16,670,251	$194,001,046
3	MO870- Residential Electric Space Heating	$97,714,836	1,228,840	$25.38	$31,187,959	$66,526,877	20.59%	$13,695,028	$10.439	$12,827,582	$124,237,446
4	MONXX-Street & Public Area Lighting	$7,261,696	46,983	$25.38	$1,192,429	$6,069,267	20.59%	$1,249,402	$10.439	$490,445	$9,001,543
5	MO710- Small General Service-No Demand	$6,601,675	66,041	$25.38	$1,676,121	$4,925,554	20.59%	$1,013,960	$10.439	$689,387	$8,305,022
6	MO711-Small General Service-Secondary	$60,573,399	761,061	$25.38	$19,315,728	$41,257,671	20.59%	$8,493,184	$10.439	$7,944,543	$77,011,126
7	MO720- Large General Service-Secondary	$56,184,022	909,366	$25.38	$23,079,709	$33,104,313	20.59%	$6,814,757	$10.439	$9,492,665	$72,491,444
8	MO725- Large General Service-Primary	$1,433,847	25,725	$25.38	$652,901	$780,947	20.59%	$160,763	$10.123	$260,424	$1,855,034
9	MO730- Large Power Service- Secondary	$37,924,886	681,721	$25.38	$17,302,079	$20,622,807	20.59%	$4,245,351	$10.439	$7,116,331	$49,286,568
10	MO735- Large Power Service- Primary	$35,560,827	720,403	$25.38	$18,283,828	$17,276,999	20.59%	$3,556,593	$10.123	$7,292,909	$46,410,329
11	MO737- Real Time Pricing Primary LPS	$1,244,036	19,926	$25.38	$505,722	$738,314	20.59%	$151,987	$10.123	$201,718	$1,597,742
12	MO650-Thermal Energy Storage	$423,782	7,983	$25.38	$202,609	$221,173	20.59%	$45,530	$10.439	$83,333	$552,645
13	MO716-Small General Service-Primary	$10,599	152	$25.38	$3,858	$6,741	20.59%	$1,388	$10.439	$1,587	$13,573
14	MO728- General Temporary Service	$381,644	2,111	$25.38	$53,577	$328,067	20.59%	$67,535	$10.439	$22,036	$471,215
15	MO731- Real Time Pricing Secondary LPS	$162,399	2,623	$25.38	$66,572	$95,827	20.59%	$19,727	$10.439	$27,381	$209,507
16	**Total Revenues**	$459,563,385	6,070,606		$154,071,980	$305,491,405		$62,887,568		$63,128,066	$585,579,019

Aquila's Proposed Design of Rates



Schedule 4

Aquila, Inc.
Case No. ER-2009-0090

Illustration of Differences in Fuel and Non-Fuel Components in
Rates that Cause Distortions in Rate Design with Aquila's Approach

Line	Rate Schedule	Non-Fuel Costs (000)	Fuel Costs* (000)	Total (000)	As a Percent of the Rate			As a Percent of Total Utility		
					Non-Fuel	Fuel	Total	Non-Fuel	Fuel	Total
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
				L&P						
1	910 Residential	$ 23,741	$ 9,384	$ 33,125	72%	28%	100%	27%	18%	24%
2	944 Large Power	$ 21,236	$ 19,672	$ 40,908	52%	48%	100%	24%	38%	29%
3	Total L&P	$ 87,090	$ 51,712	$138,802	63%	37%	100%	100%	100%	100%
				MPS						
4	860 Residential	$113,446	$ 57,201	$170,647	66%	34%	100%	37%	26%	33%
5	735 Large Power Primary	$ 17,277	$ 25,576	$ 42,853	40%	60%	100%	6%	12%	8%
6	Total MPS	$305,491	$217,200	$522,691	58%	42%	100%	100%	100%	100%

*Including re-base amounts.