Exhibit No.:	
Witness:	Maurice Brubaker
Type of Exhibit:	Direct Testimony
Issue:	Rate Design
Sponsoring Parties:	Ford Motor Company, Praxair, Inc. and Missouri Industrial Energy Consumers
Case No.:	ER-2007-0291

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Application of Kansas City Power & Light Company for Approval to Make Certain Changes in its Charges for Electric Service to Implement its Regulatory Plan	)))))))	**Case No. ER-2007-0291**

Direct Testimony and Schedule of

Maurice Brubaker
on Rate Design

On Behalf of

Ford Motor Company
Praxair, Inc. and
Missouri Industrial Energy Consumers

August 7, 2007
Project 8766

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

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Application of Kansas City Power & Light Company for Approval to Make Certain Changes in its Charges for Electric Service to Implement its Regulatory Plan	)	**Case No. ER-2007-0291**

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 Ford Motor Company, Praxair, Inc. and Missouri Industrial Energy Consumers in this proceeding on their behalf.

2. Attached hereto and made a part hereof for all purposes is my direct testimony on rate design which was prepared in written form for introduction into evidence in Missouri Public Service Commission Case No. ER-2007-0291.

3. I hereby swear and affirm that the testimony is true and correct and that it shows the matters and things that it purports to show.

M E Brubaker
Maurice Brubaker

Subscribed and sworn to before this 6th day of August 2007.

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

Tammy S Klossner
Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Application of Kansas City Power & Light Company for Approval to Make Certain Changes in its Charges for Electric Service to Implement its Regulatory Plan	)))))))	**Case No. ER-2007-0291**

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.

Q ON WHOSE BEHALF ARE YOU PRESENTING THIS DIRECT TESTIMONY ON RATE DESIGN ISSUES?

A This testimony is presented on behalf of Ford Motor Company, Praxair, Inc. and the Missouri Industrial Energy Consumers (MIEC).

Q WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A In my testimony, I address the design of the Large Power Service (LPS) rate schedule.

Q PLEASE SUMMARIZE YOUR FINDINGS AND RECOMMENDATIONS?

A I have analyzed Kansas City Power & Light Company's (KCPL) claimed level of variable expenses (primarily fuel and the variable portion of purchased power). I have found that all of the energy charges in the LPS rate are significantly in excess of KCPL's variable costs. While it is appropriate to include fixed cost recovery in the energy blocks to some extent, particularly in the blocks for lower load factor use, the high load factor block should be relatively free of fixed cost collection.

I recommend a rate realignment that is held within the LPS class to reduce the amount of revenues within that class collected through energy charges, and correspondingly to increase the amount of revenues collected through demand charges.

Q DOES YOUR PROPOSED RATE LPS REALIGNMENT AFFECT THE REVENUES TO BE COLLECTED FROM THE RESIDENTIAL CLASS OR ANY OTHER CLASS BESIDES THE LPS CLASS?

A No. My adjustments are only within the LPS class.

Analysis

Q WHAT IS THE STRUCTURE OF THE LPS TARIFF?

A The LPS tariff consists of a series of charges differentiated by voltage level. There are separate charges for service at secondary voltage, service at primary voltage,

service at substation voltage, and service at transmission voltage. The rates charged at the higher voltage levels are lower than the rates charged at the lower voltage levels to recognize differences in cost of service.

At each voltage level, the rate consists of customer charges, facilities charges, charges for reactive power, demand charges and energy charges. Demand charges and energy charges also are seasonally differentiated, with summer charges being applied during the four consecutive months beginning May 16 and ending September 15.

Q WHAT IS THE STRUCTURE OF THE DEMAND CHARGES?

A In addition to being seasonally differentiated, the demand charges at each voltage level consist of four separate block charges, with the first three blocks being approximately 2,500 kilowatt (kW) each and the fourth block being for demand in excess of 7,500 kW.

Q WHAT IS THE STRUCTURE OF THE ENERGY CHARGES?

A The energy charges are structured as three “hours use” blocks. The three blocks consist of the first 180 hours use of the billing demand, the next 180 hours use of the billing demand and the tail block is for consumption in excess of 360 hours use of the billing demand.

These are what are known as hours use, or load factor based charges. The rates decrease as the hours use increases to recognize the spreading of fixed costs over more kilowatthours (kWh) as the number of hours use, or load factor, increases. This structure also recognizes that energy consumed in the high load factor block

likely will be off-peak or at times when energy costs are lower than during on-peak periods.

Q PLEASE EXPLAIN HOW THE HOURS USE FUNCTION WORKS.

A The number of kWh to be billed in each hours use block is determined by the customer's billing demand and the amount of kWh purchased.

A customer operating basically one shift (eight hours a day for five days a week) would have usage in the range of 180 kWh for kW of billing demand.[1] A customer operating two shifts would utilize approximately twice that much energy, and therefore use an additional 180 or so kWh per kW of demand, filling up the second block.

Thus, it is reasonable to consider the first block as being primarily the daytime on-peak hours, the second block for early morning, evening and/or weekend hours, and the third block for additional use in weekend and off-peak hours. Given these considerations, it is appropriate that the charges for the initial hours use blocks be higher than for the third hours use block in order to collect more fixed costs during the on-peak and shoulder periods.

Q CAN YOU ILLUSTRATE WITH AN EXAMPLE OF HOW THE RATE WORKS?

A Yes. Assume that a customer has a 1,000 kW billing demand, and uses 500,000 kWh in a month. This customer would be using 500 kWh per kW,[2] or 500 kWh for each kW of demand. To apply the LPS rate, the 1,000 kW of demand would be multiplied times 180 kWh per kW, which is the size of the first block, and would result in 180,000 kWh being priced out at the first block. The customer would also fully

[1] 8 hours/day x 5 days per week x 4.33 weeks per month = 173 hours
[2] 500,000 ÷ 1,000 kW = 500 kWh/kW

utilize the second block, so 180,000 kWh would go in it as well. The remaining 140,000 kWh[3] would be billed in the third, or high load factor block.

Q WHAT IS THE LEVEL OF THE ENERGY CHARGES FOR THE HIGH LOAD FACTOR (OVER 360 HOURS USE) BLOCK UNDER CURRENT TARIFFS?

A The charges vary slightly by voltage level and by season, but range from approximately 2.3¢/kWh to 2.4¢/kWh.

Q DO YOU AGREE WITH THE LEVEL OF THE OFF-PEAK ENERGY CHARGE IN THE CURRENT LPS TARIFF?

A No, I do not. I believe the high load factor block energy charge collects more fixed costs than appropriate.

Q PLEASE EXPLAIN.

A I have analyzed KCPL's current rate case filing and its claims for costs. KCPL's claimed average variable costs (before being offset by the margin earned from off-system sales) are approximately 1.4¢/kWh. Factoring in the margin to off-system sales as an offset, net variable costs would be reduced to a value significantly lower. (This additional offset is equal to the Missouri retail jurisdictional share of the margin on off-system sales divided by sales of approximately 8,800,000 MWh.) The energy charges in the high load factor block of KCPL's current LPS tariff are substantially higher, as previously noted. Since KCPL proposes an essentially equal percentage increase to collect its requested revenue increase, these relationships would be perpetuated.

[3] 500,000 - 180,000 - 180,000 = 140,000 kWh

Q WHAT SHOULD BE THE LEVEL OF THE OFF-PEAK ENERGY CHARGE?

A Recognizing that most of the fixed costs should be collected from use during the on-peak period and that consumption in the high load factor block occurs mostly during evening and weekend periods when KCPL's energy costs would be lower than they are during the on-peak periods, it is reasonable that the high load factor energy block be at a level approximating the utility's average variable costs.

This structure will collect more costs through demand charges and provide better price signals to customers. It also will be a more equitable rate because it will charge high load factor and low load factor customers more appropriately. This structure also improves the stability of KCPL's earnings. Because customer demands are generally more stable than their energy purchases, this rate design makes KCPL's revenue collection and earnings less volatile.

Q HAVE YOU DEVELOPED A REALIGNED RATE?

A Yes. To accomplish this, the energy charges in the current LPS rate would be reduced by 1.0¢/kWh from their current level, which would put them in the vicinity of 1.4¢/kWh, still above variable costs. The revenue reduction from this modification to energy charges would be recovered by applying an equal percentage increase to the existing demand charges in the LPS tariff.

Q HAVE YOU PREPARED AN ILLUSTRATION OF THIS RATE DESIGN?

A Yes. This appears on Schedule 1 attached to my testimony.

Q PLEASE EXPLAIN SCHEDULE 1.

A The first column of this schedule shows the billing units for each block of each voltage level of the LPS rate. The next two columns show the current rates and resulting revenues by block.

The final two columns show the rate as realigned to reflect a reduction of 1.0¢/kWh to all energy blocks, which is then compensated for by increasing all of the demand charges. As shown on the last page, the total revenues from the realigned rate are the same as from the current effective rate.

Q HOW WOULD ANY RATE INCREASE AWARDED TO KCPL IN THIS CASE BE APPLIED TO THE REALIGNED RATES?

A The realigned rates would be increased by whatever overall average percentage increase is assigned to the LPS class.

Q DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A Yes, it does.

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.

KANSAS CITY POWER & LIGHT COMPANY

Realignment of Charges
within the LPS Rate
(Calendar Year 2006 Billing Determinants)

MO - Large Power
LPGSS - Secondary Voltage

	Annual Billing Units	Tariff Rates Effec. 1-1-07 Rates	Tariff Rates Effec. 1-1-07 Revenue	1-1-07 Rates Realigned Rates	1-1-07 Rates Realigned Revenue
Summer = 4 months					
May 16 thru Sep 15					
Customer Charge	151	$ 593.43	$ 89,608	$ 593.43	$ 89,608
Facilities Charge	249,790	$ 1.987	$ 496,333	$ 1.987	$ 496,333
Demand Charge					
First 2443 kW	199,994	$ 7.711	$ 1,542,154	$ 16.143	$ 3,228,503
Next 2443 kW	30,263	$ 6.168	$ 186,662	$ 12.913	$ 390,786
Next 2443 kW	3,198	$ 5.166	$ 16,521	$ 10.815	$ 34,586
Over 7329 kW	-	$ 3.772	$ -	$ 7.897	$ -
	233,455		**$ 1,745,337**		**$ 3,653,876**
Energy Charge					
First 180 hrs use per mth	41,484,700	$ 0.04828	$ 2,002,881	$ 0.03828	$ 1,588,034
181-360 hrs use per mth	40,514,987	$ 0.03358	$ 1,360,493	$ 0.02358	$ 955,343
361+ hrs use per mth	37,271,142	$ 0.02409	$ 897,862	$ 0.01409	$ 525,150
	119,270,829		**$ 4,261,236**		**$ 3,068,528**
Reactive Demand Adj		$ 0.4990	-	$ 0.4990	-
Total Cost			**$ 6,592,514**		**$ 7,308,344**
Cost per kWh			$ 0.055		$ 0.061
Winter = 8 months					
Sep 16 thru May 15					
Customer Charge	207	$ 593.43	$ 122,840	$ 593.43	$ 122,840
Facilities Charge	477,487	$ 1.987	$ 948,767	$ 1.987	$ 948,767
Demand Charge					
First 2443 kW	346,897	$ 5.241	$ 1,818,087	$ 10.972	$ 3,806,154
Next 2443 kW	45,172	$ 4.090	$ 184,753	$ 8.563	$ 386,808
Next 2443 kW	454	$ 3.608	$ 1,638	$ 7.553	$ 3,429
Over 7329 kW	-	$ 2.777	$ -	$ 5.814	$ -
	392,523		**$ 2,004,479**		**$ 4,196,391**
Energy Charge					
First 180 hrs use per mth	68,716,940	$ 0.04093	$ 2,812,584	$ 0.03093	$ 2,125,415
181-360 hrs use per mth	66,334,593	$ 0.03054	$ 2,025,858	$ 0.02054	$ 1,362,513
361+ hrs use per mth	51,260,094	$ 0.02386	$ 1,223,066	$ 0.01386	$ 710,465
	186,311,627		**$ 6,061,509**		**$ 4,198,392**
Reactive Demand Adj		$ 0.4990	$ -	$ 0.4990	-
Total Cost			**$ 9,137,594**		**$ 9,466,390**
Cost per kWh			$ 0.049		$ 0.051
Annual	**305,582,456**		**$ 15,730,108**		**$ 16,774,734**
Cost per kWh			$ 0.051		$ 0.055

KANSAS CITY POWER & LIGHT COMPANY

Realignment of Charges
within the LPS Rate
(Calendar Year 2006 Billing Determinants)

MO - Large Power
LPGSP - Primary Voltage

	Annual Billing Units	Tariff Rates Effec. 1-1-07 Rates	Tariff Rates Effec. 1-1-07 Revenue	1-1-07 Rates Realigned Rates	1-1-07 Rates Realigned Revenue
Summer = 4 months					
May 16 thru Sep 15					
Customer Charge	212	$ 593.43	$ 125,807	$ 593.43	$ 125,807
Facilities Charge	678,428	$ 1.648	$ 1,118,049	$ 1.648	$ 1,118,049
Demand Charge					
First 2500 kW	356,831	$ 7.534	$ 2,688,365	$ 15.773	$ 5,628,295
Next 2500 kW	119,359	$ 6.027	$ 719,377	$ 12.618	$ 1,506,072
Next 2500 kW	65,376	$ 5.048	$ 330,018	$ 10.568	$ 690,894
Over 7500 kW	78,460	$ 3.685	$ 289,125	$ 7.715	$ 605,319
	620,026		**$ 4,026,885**		**$ 8,430,580**
Energy Charge					
First 180 hrs use per mth	113,869,080	$ 0.04718	$ 5,372,343	$ 0.03718	$ 4,233,652
181-360 hrs use per mth	113,179,272	$ 0.03282	$ 3,714,544	$ 0.02282	$ 2,582,751
361+ hrs use per mth	112,704,120	$ 0.02354	$ 2,653,055	$ 0.01354	$ 1,526,014
	339,752,472		**$ 11,739,942**		**$ 8,342,417**
Reactive Demand Adj		$ 0.4990	-	$ 0.4990	-
Total Cost			**$ 17,010,683**		**$ 18,016,853**
Cost per kWh			$ 0.050		$ 0.053
Winter = 8 months					
Sep 16 thru May 15					
Customer Charge	293	$ 593.43	$ 173,875	$ 593.43	$ 173,875
Facilities Charge	1,340,923	$ 1.648	$ 2,209,841	$ 1.648	$ 2,209,841
Demand Charge					
First 2500 kW	616,821	$ 5.121	$ 3,158,740	$ 10.721	$ 6,612,938
Next 2500 kW	213,546	$ 3.997	$ 853,543	$ 8.368	$ 1,786,953
Next 2500 kW	104,976	$ 3.526	$ 370,145	$ 7.382	$ 774,933
Over 7500 kW	203,565	$ 2.714	$ 552,475	$ 5.682	$ 1,156,656
	1,138,908		**$ 4,934,904**		**$ 10,331,480**
Energy Charge					
First 180 hrs use per mth	203,874,480	$ 0.04000	$ 8,154,979	$ 0.03000	$ 6,116,234
181-360 hrs use per mth	200,396,316	$ 0.02984	$ 5,979,826	$ 0.01984	$ 3,975,863
361+ hrs use per mth	174,865,595	$ 0.02332	$ 4,077,866	$ 0.01332	$ 2,329,210
	579,136,391		**$ 18,212,671**		**$ 12,421,307**
Reactive Demand Adj		$ 0.4990	$ -	$ 0.4990	-
Total Cost			**$ 25,531,292**		**$ 25,136,503**
Cost per kWh			$ 0.044		$ 0.043
Annual	**918,888,863**		**$ 42,541,975**		**$ 43,153,357**
Cost per kWh			$ 0.046		$ 0.047

KANSAS CITY POWER & LIGHT COMPANY

Realignment of Charges
within the LPS Rate
(Calendar Year 2006 Billing Determinants)

MO - Large Power
LPGSPO - Primary Voltage

	Annual Billing Units	Tariff Rates Effec. 1-1-07 Rates	Tariff Rates Effec. 1-1-07 Revenue	1-1-07 Rates Realigned Rates	1-1-07 Rates Realigned Revenue
Summer = 4 months					
May 16 thru Sep 15					
Customer Charge	50	$ 593.43	$ 29,672	$ 593.43	$ 29,672
Facilities Charge	257,955	$ 1.648	$ 425,110	$ 1.648	$ 425,110
Demand Charge					
First 2500 kW	91,449	$ 7.534	$ 688,977	$ 15.773	$ 1,442,425
Next 2500 kW	51,951	$ 6.027	$ 313,109	$ 12.618	$ 655,518
Next 2500 kW	24,594	$ 5.048	$ 124,151	$ 10.568	$ 259,909
Over 7500 kW	74,112	$ 3.685	$ 273,103	$ 7.715	$ 571,774
	242,106		**$ 1,399,339**		**$ 2,929,626**
Energy Charge					
First 180 hrs use per mth	43,452,180	$ 0.04718	$ 2,050,074	$ 0.03718	$ 1,615,552
181-360 hrs use per mth	43,316,911	$ 0.03282	$ 1,421,661	$ 0.02282	$ 988,492
361+ hrs use per mth	55,451,280	$ 0.02354	$ 1,305,323	$ 0.01354	$ 750,810
	142,220,371		**$ 4,777,058**		**$ 3,354,854**
Reactive Demand Adj		$ 0.4990	-	$ 0.4990	-
Total Cost			**$ 6,631,178**		**$ 6,739,262**
Cost per kWh			$ 0.047		$ 0.047
Winter = 8 months					
Sep 16 thru May 15					
Customer Charge	69	$ 593.43	$ 40,947	$ 593.43	$ 40,947
Facilities Charge	429,301	$ 1.648	$ 707,488	$ 1.648	$ 707,488
Demand Charge					
First 2500 kW	144,720	$ 5.121	$ 741,111	$ 10.721	$ 1,551,543
Next 2500 kW	54,539	$ 3.997	$ 217,992	$ 8.368	$ 456,382
Next 2500 kW	35,711	$ 3.526	$ 125,917	$ 7.382	$ 263,619
Over 7500 kW	122,783	$ 2.714	$ 333,233	$ 5.682	$ 697,653
	357,753		**$ 1,418,254**		**$ 2,969,197**
Energy Charge					
First 180 hrs use per mth	63,982,980	$ 0.04000	$ 2,559,319	$ 0.03000	$ 1,919,489
181-360 hrs use per mth	63,028,529	$ 0.02984	$ 1,880,771	$ 0.01984	$ 1,250,486
361+ hrs use per mth	78,053,853	$ 0.02332	$ 1,820,216	$ 0.01332	$ 1,039,677
	205,065,362		**$ 6,260,306**		**$ 4,209,653**
Reactive Demand Adj		$ 0.4990	$ -	$ 0.4990	-
Total Cost			**$ 8,426,995**		**$ 7,927,285**
Cost per kWh			$ 0.041		$ 0.039
Annual	**347,285,733**		**$ 15,058,173**		**$ 14,666,546**
Cost per kWh			$ 0.043		$ 0.042

KANSAS CITY POWER & LIGHT COMPANY

Realignment of Charges
within the LPS Rate
(Calendar Year 2006 Billing Determinants)

MO - Large Power
LPGSSS - Substation Voltage

	Annual Billing Units	Tariff Rates Effec. 1-1-07 Rates	Tariff Rates Effec. 1-1-07 Revenue	1-1-07 Rates Realigned Rates	1-1-07 Rates Realigned Revenue
Summer = 4 months					
May 16 thru Sep 15					
Customer Charge	20	$ 593.43	$ 11,869	$ 593.43	$ 11,869
Facilities Charge	376,940	$ 0.497	$ 187,339	$ 0.497	$ 187,339
Demand Charge					
First 2530 kW	49,086	$ 7.445	$ 365,445	$ 15.586	$ 765,054
Next 2530 kW	44,258	$ 5.955	$ 263,556	$ 12.467	$ 551,764
Next 2530 kW	37,302	$ 4.988	$ 186,062	$ 10.443	$ 389,545
Over 7590 kW	229,524	$ 3.642	$ 835,926	$ 7.625	$ 1,750,121
	360,170		**$ 1,650,990**		**$ 3,456,484**
Energy Charge					
First 180 hrs use per mth	64,830,600	$ 0.04662	$ 3,022,403	$ 0.03662	$ 2,374,097
181-360 hrs use per mth	64,830,600	$ 0.03243	$ 2,102,456	$ 0.02243	$ 1,454,150
361+ hrs use per mth	67,210,901	$ 0.02326	$ 1,563,326	$ 0.01326	$ 891,217
	196,872,101		**$ 6,688,184**		**$ 4,719,463**
Reactive Demand Adj		$ 0.4990	-	$ 0.4990	-
Total Cost			**$ 8,538,383**		**$ 8,375,155**
Cost per kWh			$ 0.043		$ 0.043
Winter = 8 months					
Sep 16 thru May 15					
Customer Charge	28	$ 593.43	$ 16,616	$ 593.43	$ 16,616
Facilities Charge	631,607	$ 0.497	$ 313,909	$ 0.497	$ 313,909
Demand Charge					
First 2530 kW	71,922	$ 5.060	$ 363,925	$ 10.593	$ 761,870
Next 2530 kW	62,081	$ 3.949	$ 245,158	$ 8.267	$ 513,224
Next 2530 kW	54,138	$ 3.484	$ 188,617	$ 7.294	$ 394,883
Over 7590 kW	350,811	$ 2.682	$ 940,875	$ 5.615	$ 1,969,804
	538,952		**$ 1,738,575**		**$ 3,639,780**
Energy Charge					
First 180 hrs use per mth	97,011,360	$ 0.03953	$ 3,834,859	$ 0.02953	$ 2,864,745
181-360 hrs use per mth	97,011,360	$ 0.02949	$ 2,860,865	$ 0.01949	$ 1,890,751
361+ hrs use per mth	94,110,289	$ 0.02304	$ 2,168,301	$ 0.01304	$ 1,227,198
	288,133,009		**$ 8,864,025**		**$ 5,982,695**
Reactive Demand Adj		$ 0.4990	$ -	$ 0.4990	-
Total Cost			**$ 10,933,125**		**$ 9,952,999**
Cost per kWh			$ 0.038		$ 0.035
Annual	**485,005,110**		**$ 19,471,508**		**$ 18,328,155**
Cost per kWh			$ 0.040		$ 0.038

KANSAS CITY POWER & LIGHT COMPANY

Realignment of Charges within the LPS Rate (Calendar Year 2006 Billing Determinants)

MO - Large Power
LPGSTR - Transmission

	Annual Billing Units	Tariff Rates Effec. 1-1-07 Rates	Tariff Rates Effec. 1-1-07 Revenue	1-1-07 Rates Realigned Rates	1-1-07 Rates Realigned Revenue
Summer = 4 months					
May 16 thru Sep 15					
Customer Charge	5	$ 593.43	$ 2,967	$ 593.43	$ 2,967
Facilities Charge	-	$ -	$ -	$ -	$ -
Demand Charge					
First 2553 kW	12,710	$ 7.379	$ 93,787	$ 15.448	$ 196,344
Next 2553 kW	12,705	$ 5.902	$ 74,985	$ 12.356	$ 156,983
Next 2553 kW	11,556	$ 4.943	$ 57,121	$ 10.348	$ 119,581
Over 7659 kW	25,624	$ 3.609	$ 92,477	$ 7.556	$ 193,615
	62,595		**$ 318,370**		**$ 666,523**
Energy Charge					
First 180 hrs use per mth	11,267,100	$ 0.04621	$ 520,653	$ 0.03621	$ 407,982
181-360 hrs use per mth	11,267,100	$ 0.03214	$ 362,125	$ 0.02214	$ 249,454
361+ hrs use per mth	10,576,718	$ 0.02306	$ 243,899	$ 0.01306	$ 138,132
	33,110,918		**$ 1,126,676**		**$ 795,567**
Reactive Demand Adj		$ 0.4990	-	$ 0.4990	-
Total Cost			**$ 1,448,014**		**$ 1,465,058**
Cost per kWh			$ 0.044		$ 0.044
Winter = 8 months					
Sep 16 thru May 15					
Customer Charge	7	$ 593.43	$ 4,154	$ 593.43	$ 4,154
Facilities Charge	-	$ -	$ -	$ -	$ -
Demand Charge					
First 2553 kW	17,794	$ 5.015	$ 89,237	$ 10.499	$ 186,819
Next 2553 kW	17,787	$ 3.914	$ 69,618	$ 8.194	$ 145,747
Next 2553 kW	18,936	$ 3.453	$ 65,386	$ 7.229	$ 136,888
Over 7659 kW	44,519	$ 2.658	$ 118,332	$ 5.565	$ 247,748
	99,036		**$ 342,573**		**$ 717,202**
Energy Charge					
First 180 hrs use per mth	17,826,480	$ 0.03917	$ 698,263	$ 0.02917	$ 519,998
181-360 hrs use per mth	17,826,480	$ 0.02923	$ 521,068	$ 0.01923	$ 342,803
361+ hrs use per mth	15,614,122	$ 0.02283	$ 356,470	$ 0.01283	$ 200,329
	51,267,082		**$ 1,575,802**		**$ 1,063,131**
Reactive Demand Adj		$ 0.4990	$ -	$ 0.4990	-
Total Cost			**$ 1,922,528**		**$ 1,784,487**
Cost per kWh			$ 0.038		$ 0.035
Annual	**84,378,000**		**$ 3,370,542**		**$ 3,249,545**
Cost per kWh			$ 0.040		$ 0.039
Total LPS	**2,141,140,162**		**$ 96,172,305**		**$ 96,172,337**