

Exhibit No.:
Witness: Maurice Brubaker
Type of Exhibit: Direct Testimony
Issue: Rate Design
Sponsoring Parties: Industrials
Case No.: ER-2009-0089

**BEFORE THE PUBLIC SERVICE
COMMISSION OF THE STATE OF MISSOURI**

In the Matter of the Application of Kansas)
City Power and Light Company for)
Approval to Make Certain Changes in its)
Charges for Electric Service To Continue)
the Implementation of Its Regulatory Plan.)
_____)

Case No. ER-2009-0089

Direct Testimony and Schedules of

**Maurice Brubaker
on Rate Design**

On behalf of

**DOE/NNSA
Ford Motor Company
Midwest Energy Users Association
Missouri Industrial Energy Consumers
Praxair, Inc.**

February 25, 2009


BRUBAKER & ASSOCIATES, INC.
CHESTERFIELD, MO 63017

Project 9050

**PUBLIC
VERSION**

1 electricity from Kansas City Power & Light Company (KCPL) and the outcome of this
2 proceeding will have an impact on their cost of electricity.

3 **Q WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

4 A In my testimony, I address the allocation of any rate increase found to be appropriate
5 and the design of the Large Power Service (LPS) rate schedule.

6 **Q PLEASE SUMMARIZE YOUR FINDINGS AND RECOMMENDATIONS?**

7 A I support the proposal of Kansas City Power & Light Company (KCPL) to allocate any
8 increase that it may receive in this case as an equal percent to all customer classes.

9 I also have analyzed KCPL's claimed level of variable expenses (primarily fuel
10 and the variable portion of purchased power) and its avoided costs. All of the energy
11 charges in the LPS rate are significantly in excess of both of these measures of
12 variable costs. While it is appropriate to include some level of fixed cost recovery in
13 the energy blocks, particularly in the blocks for lower load factor use, the high load
14 factor block should be relatively free of fixed cost collection in order to avoid
15 over-charging high load factor customers.

16 Therefore, while I recommend that any rate increase be allocated to the
17 classes on an equal percentage basis, I recommend that any increase allocated to
18 the LPS rate schedule be spread in such a fashion as to not increase the collection of
19 fixed costs in the high load factor block. Specifically, I recommend that the LPS class
20 rate schedule be modified by: (1) maintaining the charges for energy consumption in
21 excess of 360 kWh per kW (the high load factor block) at their current levels,
22 (2) increasing the charges for the middle energy block (181-360 hours use) by
23 one-half of the average increase applicable to the LPS rate, and (3) obtaining the

Maurice Brubaker
Page 2

1 balance of the revenue increase by applying a uniform percentage increase to all of
2 the remaining charges in the rate schedule.

3 Finally, I recommend that the Commission direct KCPL to prepare and submit
4 in the next rate case a comprehensive class cost of service study and rate design
5 review. It is important that this evaluation take place in the next case so as to
6 incorporate its results into the rate design that puts later 2 into rates.

7 **Q DOES YOUR PROPOSED LPS RATE DESIGN AFFECT THE REVENUES TO BE**
8 **COLLECTED FROM THE RESIDENTIAL CLASS OR ANY OTHER CLASS**
9 **BESIDES THE LPS CLASS?**

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

11 **Increases by Customer Class**

12 **Q HOW HAS KCPL PROPOSED TO ALLOCATE ITS REQUESTED INCREASE**
13 **AMONG CUSTOMER CLASSES?**

14 A It is allocated as an essentially across-the-board (17.5%) increase to all customer
15 classes.

16 **Q DO YOU CONCUR WITH KCPL'S PROPOSED EQUAL PERCENTAGE**
17 **APPROACH TO DISTRIBUTING ANY RATE INCREASE AMONG CUSTOMER**
18 **CLASSES?**

19 A Yes. The across-the-board increase maintains the existing interclass rate
20 relationships, which is the appropriate approach when a current, reasonable class
21 cost of service study is not available.

1 Q **DID KCPL FILE A CLASS COST OF SERVICE STUDY?**

2 A Yes. Apparently, in response to the Commission's direction in Case
3 No. ER-2007-0291 to address all electric tariffs and separately metered space
4 heating rates (as discussed on page 2 of the testimony of witness Tim Rush), KCPL
5 filed a complete class cost of service study. This study is not limited just to the
6 general service all electric tariffs and separately metered space heating rates that the
7 Commission had directed be studied.

8 Therefore, in the event that the Commission should become interested in
9 looking at a full class cost of service study, I am including with this testimony the
10 summary results of two cost studies. The first is consistent with the Commission's
11 prior findings on the use of the four coincident peak method and on the method for
12 allocating margins on off-system sales, as expressed in the Order in Case
13 No. ER-2006-0314. These results are shown on Schedule 1. I have also included on
14 Schedule 2 the summary results of a study that was based on the average and
15 excess three non-coincident peak allocation method that I supported in the
16 ER-2006-0314 case. These studies were performed using the cost of service model
17 that KCPL provided and differ only as indicated.

18 As mentioned above, I provide these only in the event that the Commission
19 might become interested in looking at a full class cost of service study in this case. It
20 remains my recommendation that any increase in revenues awarded to KCPL in this
21 case be allocated across classes as an equal percentage. I will deal with KCPL's
22 class / seasonal cost of service study in my rebuttal testimony.

1 **Analysis of LPS Rate**

2 **Q WHAT IS THE STRUCTURE OF THE LPS TARIFF?**

3 A The LPS tariff consists of a series of charges differentiated by voltage level. There
4 are separate charges for service at secondary voltage, service at primary voltage,
5 service at substation voltage, and service at transmission voltage. The rates charged
6 at the higher voltage levels are lower than the rates charged at the lower voltage
7 levels in order to recognize differences in cost of service.

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

13 **Q WHAT IS THE STRUCTURE OF THE DEMAND CHARGES?**

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

18 **Q WHAT IS THE STRUCTURE OF THE ENERGY CHARGES?**

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

1 These are what are known as hours use, or load factor based charges. The
2 rates decrease as the hours use increases to recognize the spreading of fixed costs
3 over more kilowatthours (kWh) as the number of hours use, or load factor, increases.
4 This structure also recognizes that energy consumed in the high load factor block
5 likely will be off-peak or at times when energy costs are lower than during on-peak
6 periods.

7 **Q PLEASE EXPLAIN HOW THE HOURS USE FUNCTION WORKS.**

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

10 A large power customer operating basically one shift (eight hours a day for
11 five days a week) would have usage in the range of 180 kWh per kW of billing
12 demand.¹ A customer operating two shifts would utilize approximately twice that
13 much energy, and therefore use an additional 180 or so kWh per kW of demand,
14 thereby filling up both the first and second blocks.

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

¹8 hours/day x 5 days per week x 4.33 weeks per month = 173 hours

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

2 A Yes. Assume that a customer has a 1,000 kW billing demand, and uses 500,000
3 kWh in a month. This customer would be using 500 kWh per kW,² or 500 kWh for
4 each kW of demand. To apply the LPS rate, the 1,000 kW of demand would be
5 multiplied times 180 kWh per kW, which is the size of the first block, and would result
6 in 180,000 kWh being priced out at the first block. The customer would also fully
7 utilize the second block, so 180,000 kWh would go in it as well. The remaining
8 140,000 kWh³ would be billed in the third, or high load factor block.

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

11 A The charges vary slightly by voltage level and by season, but range from
12 approximately 2.4¢/kWh to 2.6¢/kWh.

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

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

17 **Q PLEASE EXPLAIN.**

18 A I have analyzed KCPL's current rate case filing and its claims for costs. KCPL's
19 claimed average variable costs (before being offset by the margin earned from
20 off-system sales) are approximately 1.9¢/kWh. Factoring in the off-system sales
21 margin as an offset, net variable costs would be reduced to a value significantly

²500,000 ÷ 1,000 kW = 500 kWh/kW

³500,000 - 180,000 - 180,000 = 140,000 kWh

1 lower. (This additional offset is equal to the Missouri retail jurisdictional share of the
2 off-system sales margin divided by Missouri retail sales of approximately 8,800,000
3 MWh.) The energy charges in the high load factor block of KCPL's current LPS tariff
4 are substantially higher, as previously noted. Since KCPL proposes an essentially
5 equal percentage increase to collect its requested revenue increase, these
6 relationships would be perpetuated.

7 **Q HAVE YOU EXAMINED KCPL'S LEVEL OF AVOIDED COSTS?**

8 A Yes, I have.

9 **Q WHAT ARE AVOIDED COSTS?**

10 A These are the costs that would be avoided by the purchase of energy from an
11 alternative source, such as a customer-owned generation facility, and are essentially
12 the same as the incremental costs of energy.

13 **Q DO YOU BELIEVE THAT THE AVOIDED ENERGY COSTS ARE RELEVANT TO**
14 **THE DESIGN OF EMBEDDED COST TARIFFS?**

15 A No, I do not. However, in the previous rate case, KCPL referred to its avoided costs
16 as one of the objections to my proposed LPS rate design in that case.

17 **Q WHAT IS THE LEVEL OF KCPL'S AVOIDED ENERGY COSTS?**

18 A For 2009, KCPL provided an estimate for off-peak energy charges during the summer
19 of approximately *****, and during the winter of approximately
20 *****. The estimates for 2010, were approximately ***** in both

1 seasons; for 2011, approximately ***** in both seasons; in 2012,
2 approximately ***** in both seasons; and in 2013 and 2014 approximately
3 ***** during the summer and ***** during the winter.

4 **Q WHAT DO YOU CONCLUDE FROM THIS REVIEW?**

5 A Based on the level of the average sharable costs and also the avoided energy costs,
6 it is clear that the off-peak energy charges are collecting more costs than appropriate.

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

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

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

19 **Q HOW DO YOU PROPOSE TO ADJUST THE LPS RATE IN THIS CASE?**

20 A In the interest of gradualism, my proposal is to maintain the energy charges for the
21 high load factor (over 360 hours use per month, or over a 50% load factor) block at

1 their current levels, increase the middle blocks (hours use from 181 to 360) by
2 one-half of the average percentage increase, and to collect the balance of the
3 revenue requirement for the tariff by applying a uniform percentage increase to the
4 remaining charges in the tariff. This includes the customer charge, the reactive
5 demand charge, the facilities charges, the demand charges and the initial block
6 energy charges.

7 **Q HAVE YOU PREPARED AN ILLUSTRATION OF THIS RATE DESIGN?**

8 A Yes. This appears on Schedule 3 attached to my testimony.

9 **Q PLEASE EXPLAIN SCHEDULE 3.**

10 A The first column of this schedule shows the billing units for each block of each voltage
11 level of the LPS rate. The next two columns show the current rates and resulting
12 revenues by block. The middle two columns show KCPL's proposed rates and the
13 resulting revenues.

14 The final two columns show the rate based on KCPL's proposed increase to
15 the LPS class, but with my rate design proposal.

16 **Q HOW WOULD THE RATES BE DESIGNED TO MATCH WHATEVER AMOUNT OF**
17 **INCREASE THE COMMISSION AWARDS TO KCPL IN THIS CASE?**

18 A First, the amount of additional revenue to be collected from the LPS tariff would be
19 determined. (It is my recommendation that this amount be determined by applying an
20 equal percentage increase to all classes.) The increase for the middle block energy
21 charges would be equal to the overall percentage increase divided by two. The high
22 load factor energy blocks would not change. The balance of the increased revenue

1 from the LPS tariff would be collected by uniformly increasing all of the remaining
2 charges in the tariff.

3 **Q HAVE YOU ILLUSTRATED THE APPLICATION OF THESE TECHNIQUES TO**
4 **DEVELOP THE BLOCK CHARGES AT ANY DIFFERENT LEVEL OF RATE**
5 **INCREASE?**

6 A Yes. Schedule 4 shows how the rate values would be adjusted, and the result, if the
7 overall increase were found to be 10%, rather than 17.5%. This same approach
8 should be used regardless of the amount of increase awarded to KCPL.

9 **Q DO YOU HAVE ANY OTHER RECOMMENDATIONS?**

10 A Yes. I believe it is important that the Commission order KCPL to perform a class cost
11 of service / rate design study for inclusion in its next rate case. While class cost of
12 service revenue adjustments were included in the ER-2006-0314 case, no
13 comprehensive evaluation has been performed since then. In addition, any inequities
14 currently reflected in rates will likely be exaggerated by the addition of the large
15 capital items (Iatan 1 SCR and Iatan 2 generating station) to rate base in this and the
16 succeeding case. Therefore, it is important that a class cost of service / rate design
17 study be undertaken concurrent with the consideration of rates in the next case. As
18 such, I request that the Commission order KCPL to undertake and file such a study
19 for consideration in the next case.

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

21 A Yes, it does.

Qualifications of Maurice Brubaker

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

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

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. (BAI), 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.

20 In March of 1970, I joined the firm of Drazen Associates, Inc., of St. Louis,
21 Missouri. Since that time I have been engaged in the preparation of numerous

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

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

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

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

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

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

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PRODUCTION DEMAND ALLOCATORS
CHANGED TO 4CP ALLOCATOR AND
ENERGY-PROFIT ON SALES REVENUE ALLOCATED ON ENERGY1

KANSAS CITY POWER & LIGHT COMPANY
CASE NO. _____
CLASS COST OF SERVICE FOR MISSOURI CUSTOMERS
2006 TEST YR INCL KNOWN & MEAS TO 9-30-07 (SEPT TRUE-UP)

SCH LINE NO. NO.	DESCRIPTION	ALLOCATION BASIS	MISSOURI RETAIL COL. 601	RESIDENTIAL COL. 602	SMALL GEN. SERVICE COL. 603	MEDIUM GEN. SERVICE COL. 604	LARGE GEN. SERVICE COL. 605	LARGE PWR SERVICE COL. 606	OFF-PEAK LIGHTING COL. 607	OTHER LIGHTING COL. 608	
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	
1 0010	SCHEDULE 1 - SUMMARY OF OPERATING INC & RATE BASE										
1 0020											
1 0030	OPERATING REVENUE										
1 0040	RETAIL SALES REVENUE	TSFR 2 190	577,886,532	212,430,348	43,688,127	71,402,934	131,666,374	111,784,481	4,460,136	2,454,132	
1 0050	OTHER OPERATING REVENUE	TSFR 2 610	73,959,466	27,109,567	4,162,861	8,665,095	17,329,034	16,332,302	219,512	141,095	
1 0060	TOTAL OPERATING REVENUE		651,845,998	239,539,915	47,850,988	80,068,029	148,995,407	128,116,783	4,679,648	2,595,227	
1 0070											
1 0080	OPERATING EXPENSES										
1 0090	FUEL	TSFR 4 3940	104,927,671	31,209,448	5,721,401	12,363,265	26,914,029	27,719,263	764,753	235,513	
1 0100	PURCHASED POWER	TSFR 4 3950	25,786,590	8,212,866	1,414,639	3,028,780	6,467,063	6,462,707	150,955	49,581	
1 0110	OTHER OPERATION & MAINTENANCE EXPENSES	TSFR 4 3960	250,423,517	105,921,014	15,623,544	27,674,010	50,563,080	46,008,291	542,979	4,090,599	
1 0120	DEPRECIATION EXPENSES (AFTER CLEARINGS)	TSFR 5 1420	73,388,512	32,248,218	4,702,639	8,730,741	14,910,491	11,764,264	(3,228)	1,035,387	
1 0130	AMORTIZATION EXPENSES	TSFR 5 1650	26,906,520	9,399,559	1,574,937	3,020,993	6,320,979	6,362,767	167,240	60,045	
1 0140	INTEREST ON CUSTOMER DEPOSITS	CUST21	438,857	245,904	160,489	26,937	4,614	914	0	0	
1 0150	TAXES OTHER THAN INCOME TAXES	TSFR 6 360	39,632,232	17,120,544	2,538,143	4,707,044	8,200,309	6,746,443	43,635	276,115	
1 0160	FEDERAL AND STATE INCOME TAXES	TSFR 7 1280	31,270,139	5,904,771	5,093,615	5,604,536	9,485,023	5,127,099	1,111,145	(1,056,050)	
1 0170	GAINS ON DISPOSITION OF PLANT	NETPLANT	0	0	0	0	0	0	0	0	
1 0180	TOTAL ELECTRIC OPERATING EXPENSES		552,774,038	210,262,324	36,829,406	65,156,307	122,865,587	110,191,746	2,777,479	4,691,189	
1 0190											
1 0200	NET ELECTRIC OPERATING INCOME		99,071,960	29,277,591	11,021,582	14,911,722	26,129,820	17,925,038	1,902,169	(2,095,962)	
1 0210											
1 0220	RATE BASE										
1 0230	TOTAL ELECTRIC PLANT	TSFR 10 240	3,088,544,295	1,367,703,299	195,637,409	368,116,122	630,524,141	507,151,154	600,163	18,812,008	
1 0240	LESS: ACCUM. PROV. FOR DEPREC	TSFR 10 330	1,485,975,111	651,757,115	93,470,573	174,525,390	305,367,101	249,997,937	80,146	10,776,847	
1 0250	NET PLANT		1,602,569,185	715,946,183	102,166,836	193,590,732	325,157,039	257,153,217	520,017	8,035,160	
1 0260	PLUS:										
1 0270	WORKING CAPITAL	TSFR 15 380	47,586,165	15,362,052	2,378,172	5,473,607	11,934,399	12,153,031	220,484	64,420	
1 0280	PRIOR NET PREPAID PENSION ASSET	SALWAGES	9,492,881	3,748,092	584,736	1,058,989	2,007,306	1,895,712	35,210	162,836	
1 0290	PENSION REGULATORY ASSET	SALWAGES	14,616,226	5,770,952	900,321	1,630,530	3,090,657	2,918,836	54,213	250,719	
1 0300	REG ASSET - HOMELAND SECURITY	TOTPLANT	0	0	0	0	0	0	0	0	
1 0310	REG ASSET - DSM PROGRAMS	DEM1B	6,615,449	2,699,901	371,883	768,471	1,462,543	1,309,440	0	3,211	
1 0320	REG ASSET - REGULATORY EXPENSE	CLAIMEDREV	0	0	0	0	0	0	0	0	
1 0330	JANUARY 2002 ICE STORM	DISTPLANT	0	0	0	0	0	0	0	0	
1 0340	LESS:										
1 0350	ACCUM. DEFERRED TAXES	TSFR 8 560	310,088,409	137,927,703	19,471,687	37,241,983	63,532,587	50,409,391	(106,660)	1,611,718	
1 0360	DEFERRED GAIN ON EMISSION CR.	ENERGY1	37,225,452	10,982,024	2,028,956	4,384,944	9,625,586	9,843,345	275,007	85,591	
1 0370	DEFERRED GAIN ON SO2 ALLOWANCE	ENERGY1	(736,462)	(217,266)	(40,141)	(86,751)	(190,431)	(194,739)	(5,441)	(1,693)	
1 0380	CUST. ADVANCES FOR CONSTRUCTION	DISTPLANT	194,810	100,713	15,330	25,297	33,219	16,839	0	3,413	
1 0390	CUSTOMER DEPOSITS	CUST21	5,477,012	3,068,924	2,002,926	336,183	57,578	11,402	0	0	
1 0400	TOTAL RATE BASE		1,328,630,683	591,665,083	82,923,190	160,620,672	270,593,405	215,343,999	667,017	6,817,318	
1 0410											
1 0420	RATE OF RETURN		7.457%	4.948%	13.291%	9.284%	9.656%	8.324%	285.175%	-30.745%	
1 0430	RELATIVE RATE OF RETURN		1.00	0.66	1.78	1.25	1.30	1.12	38.24	(4.12)	

PRODUCTION DEMAND ALLOCATORS
 CHANGED TO AVERAGE & EXCESS-3NCP ALLOCATOR AND
 ENERGY-PROFIT ON SALES REVENUE ALLOCATED ON ENERGY1

KANSAS CITY POWER & LIGHT COMPANY
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1 0040	RETAIL SALES REVENUE	TSFR 2 190	577,886,532	212,430,348	43,688,127	71,402,934	131,666,374	111,784,481	4,460,136	2,454,132	
1 0050	OTHER OPERATING REVENUE	TSFR 2 610	73,959,466	26,997,200	4,246,149	8,712,704	17,144,666	16,096,868	539,994	221,885	
1 0060	TOTAL OPERATING REVENUE		651,845,998	239,427,547	47,934,276	80,115,638	148,811,040	127,881,350	5,000,130	2,676,017	
1 0070											
1 0080	OPERATING EXPENSES										
1 0090	FUEL	TSFR 4 3940	104,927,671	31,208,214	5,722,316	12,363,788	26,912,004	27,716,676	768,273	236,400	
1 0100	PURCHASED POWER	TSFR 4 3950	25,786,590	8,198,407	1,425,355	3,034,906	6,443,340	6,432,414	192,191	59,976	
1 0110	OTHER OPERATION & MAINTENANCE EXPENSES	TSFR 4 3960	250,423,517	105,602,533	15,859,604	27,808,948	50,040,530	45,341,005	1,451,316	4,319,582	
1 0120	DEPRECIATION EXPENSES (AFTER CLEARINGS)	TSFR 5 1420	73,388,512	32,110,759	4,804,525	8,788,981	14,684,954	11,476,257	388,819	1,134,218	
1 0130	AMORTIZATION EXPENSES	TSFR 5 1650	26,906,520	9,395,008	1,578,310	3,022,921	6,313,513	6,353,232	180,219	63,317	
1 0140	INTEREST ON CUSTOMER DEPOSITS	CUST21	438,857	245,904	160,489	26,937	4,614	914	0	0	
1 0150	TAXES OTHER THAN INCOME TAXES	TSFR 6 360	39,632,232	17,058,066	2,584,452	4,733,515	8,097,798	6,615,539	221,827	321,036	
1 0160	FEDERAL AND STATE INCOME TAXES	TSFR 7 1280	31,270,139	6,091,064	4,955,534	5,525,606	9,790,683	5,517,421	579,823	(1,189,991)	
1 0170	GAINS ON DISPOSITION OF PLANT	NETPLANT	0	0	0	0	0	0	0	0	
1 0180	TOTAL ELECTRIC OPERATING EXPENSES		552,774,038	209,909,954	37,090,584	65,305,603	122,287,435	109,453,458	3,782,467	4,944,537	
1 0190											
1 0200	NET ELECTRIC OPERATING INCOME		99,071,960	29,517,593	10,843,691	14,810,035	26,523,605	18,427,892	1,217,663	(2,268,519)	
1 0210											
1 0220	RATE BASE										
1 0230	TOTAL ELECTRIC PLANT	TSFR 10 240	3,088,544,295	1,362,160,981	199,745,406	370,464,360	621,430,554	495,538,834	16,407,320	22,796,840	
1 0240	LESS: ACCUM. PROV. FOR DEPREC	TSFR 10 330	1,485,975,111	648,771,388	95,683,611	175,790,421	300,468,254	243,742,211	8,595,691	12,923,534	
1 0250	NET PLANT		1,602,569,185	713,389,593	104,061,795	194,673,940	320,962,300	251,796,623	7,811,628	9,873,305	
1 0260	PLUS:										
1 0270	WORKING CAPITAL	TSFR 15 380	47,586,165	15,312,437	2,414,947	5,494,628	11,852,992	12,049,077	361,991	100,092	
1 0280	PRIOR NET PREPAID PENSION ASSET	SALWAGES	9,492,881	3,741,084	589,930	1,061,958	1,995,809	1,881,031	55,195	167,874	
1 0290	PENSION REGULATORY ASSET	SALWAGES	14,616,226	5,760,163	908,318	1,635,101	3,072,955	2,896,230	84,984	258,476	
1 0300	REG ASSET - HOMELAND SECURITY	TOTPLANT	0	0	0	0	0	0	0	0	
1 0310	REG ASSET - DSM PROGRAMS	DEM1B	6,615,449	2,682,033	385,127	776,041	1,433,226	1,272,003	50,960	16,058	
1 0320	REG ASSET - REGULATORY EXPENSE	CLAIMEDREV	0	0	0	0	0	0	0	0	
1 0330	JANUARY 2002 ICE STORM	DISTPLANT	0	0	0	0	0	0	0	0	
1 0340	LESS:										
1 0350	ACCUM. DEFERRED TAXES	TSFR 8 560	310,088,409	137,295,772	19,940,077	37,509,727	62,495,744	49,085,364	1,695,659	2,066,066	
1 0360	DEFERRED GAIN ON EMISSION CR.	ENERGY1	37,225,452	10,982,024	2,028,956	4,384,944	9,625,586	9,843,345	275,007	85,591	
1 0370	DEFERRED GAIN ON SO2 ALLOWANCE	ENERGY1	(736,462)	(217,266)	(40,141)	(86,751)	(190,431)	(194,739)	(5,441)	(1,693)	
1 0380	CUST. ADVANCES FOR CONSTRUCTION	DISTPLANT	194,810	100,712	15,331	25,298	33,218	16,837	2	3,413	
1 0390	CUSTOMER DEPOSITS	CUST21	5,477,012	3,068,924	2,002,926	336,183	57,578	11,402	0	0	
1 0400	TOTAL RATE BASE		1,328,630,683	589,655,144	84,412,968	161,472,268	267,295,588	211,132,756	6,399,531	8,262,429	
1 0410											
1 0420	RATE OF RETURN		7.457%	5.006%	12.846%	9.172%	9.923%	8.728%	19.027%	-27.456%	
1 0430	RELATIVE RATE OF RETURN		1.00	0.67	1.72	1.23	1.33	1.17	2.55	(3.68)	

**MO LARGE POWER
SECONDARY VOLTAGE - LPGSS**

Rate Design at a 17.5% Increase

SUMMER

	BILLING UNITS	PRESENT RATES		RATES W/RATE DESIGN		PROPOSED RATES*	
		Rate	Revenue	Rate	Revenue	Rate	Revenue
A: CUSTOMER CHARGE							
	129.0	\$632.01	\$81,521	742.61	\$95,787	\$793.89	\$102,401
	-	\$0.00	\$0	-	\$0	\$0.00	\$0
	-	\$0.00	\$0	-	\$0	\$0.00	\$0
	<u>129</u>		<u>\$81,521</u>		<u>\$95,787</u>		<u>\$102,401</u>
B: FACILITIES CHARGE	249,495.1	\$2.116	\$527,932	\$2.486	\$620,245	\$2.658	\$663,158
C: DEMAND CHARGE							
First 2450 kw	228,214.5	\$8.212	\$1,874,098	\$9.649	\$2,202,042	\$10.315	\$2,354,033
Next 2450 kw	33,302.6	\$6.569	\$218,765	\$7.719	\$257,063	\$8.252	\$274,813
Next 2450 kw	10,854.6	\$5.502	\$59,722	\$6.465	\$70,175	\$6.911	\$75,016
Over 7350 kw	378.8	\$4.017	\$1,522	\$4.720	\$1,788	\$5.046	\$1,911
	<u>272,751</u>		<u>\$2,154,106</u>		<u>\$2,531,068</u>		<u>\$2,705,774</u>
D: ENERGY CHARGE							
0-180 hrs use per month	48,716,889.3	\$0.05142	\$2,505,022	\$0.06042	\$2,943,474	\$0.06459	\$3,146,624
181-360 hrs use per month	48,527,875.0	\$0.03576	\$1,735,357	\$0.04202	\$2,039,141	\$0.03889	\$1,887,249
361+ hrs use per month	46,863,965.3	\$0.02566	\$1,202,529	\$0.03015	\$1,412,949	\$0.02566	\$1,202,529
	<u>144,108,730</u>		<u>\$5,442,909</u>		<u>\$6,395,564</u>		<u>\$6,236,402</u>
E: MANUAL BILL USAGE/REVENUE	12,300,274		\$615,115		\$722,760		\$722,760
REVENUE			\$8,821,582		\$10,365,424		\$10,430,495
c/kwh			\$0.0564		\$0.0663		\$0.0667
OVERALL CHANGE (%)	2115				17.50%		18.24%
used to reference avg customer	1,212,598						

WINTER

	BILLING UNITS	PRESENT RATES		RATES W/RATE DESIGN		PROPOSED RATES*	
		Rate	Revenue	Rate	Revenue	Rate	Revenue
A: CUSTOMER CHARGE							
	299.2	\$632.01	\$189,106	742.61	\$222,199	\$793.89	\$237,543
	-	\$0.00	\$0	-	\$0	\$0.00	\$0
	-	\$0.00	\$0	-	\$0	\$0.00	\$0
	<u>299</u>		<u>\$189,106</u>		<u>\$222,199</u>		<u>\$237,543</u>
B: FACILITIES CHARGE	602,778.5	\$2.116	\$1,275,479	\$2.486	\$1,498,507	\$2.658	\$1,602,185
C: DEMAND CHARGE							
First 2450 kw	396,956.9	\$5.582	\$2,215,814	\$6.559	\$2,603,641	\$7.012	\$2,783,462
Next 2450 kw	60,135.6	\$4.356	\$261,951	\$5.118	\$307,774	\$5.472	\$329,062
Next 2450 kw	8,591.1	\$3.843	\$33,016	\$4.516	\$38,797	\$4.827	\$41,469
Over 7350 kw	932.5	\$2.958	\$2,758	\$3.476	\$3,241	\$3.716	\$3,465
	<u>466,616</u>		<u>\$2,513,538</u>		<u>\$2,953,453</u>		<u>\$3,157,458</u>
D: ENERGY CHARGE							
0-180 hrs use per month	82,000,838.8	\$0.04359	\$3,574,417	\$0.05122	\$4,200,083	\$0.05476	\$4,490,366
181-360 hrs use per month	80,621,931.9	\$0.03253	\$2,622,631	\$0.03822	\$3,081,370	\$0.03538	\$2,852,404
361+ hrs use per month	63,987,639.6	\$0.02541	\$1,625,926	\$0.02986	\$1,910,671	\$0.02541	\$1,625,926
	<u>226,610,410</u>		<u>\$7,822,974</u>		<u>\$9,192,124</u>		<u>\$8,968,696</u>
E: MANUAL BILL USAGE/REVENUE	15,121,702		\$688,416		\$808,888		\$808,888
REVENUE			\$12,489,513		\$14,675,172		\$14,774,771
c/kwh			\$0.0517		\$0.0607		\$0.0611
OVERALL CHANGE (%)	1559				17.50%		18.30%
used to reference avg customer	757,352						

ANNUAL	398,141,116		\$21,311,096		\$25,040,596		\$25,205,266
c/kwh			\$0.0535		\$0.0629		\$0.0633
OVERALL CHANGE (%)					17.50%		18.27%
Winter Price Below Summer (SUM-WIN)/SUM			8.4%		8.4%		8.3%

* Proposed Rates: Equal Percent Increase to All Rate Components except Energy 181-360 Hours Use -- use 8.75% Increase and Energy over 360 Hours Use -- use Current Rates Rates designed to achieve a 17.5% increase in revenues.

**MO LARGE POWER
PRIMARY VOLTAGE - LPGSP**

Rate Design at a 17.5% Increase

SUMMER

	BILLING UNITS	PRESENT RATES		RATES W/RATE DESIGN		PROPOSED RATES*	
		Rate	Revenue	Rate	Revenue	Rate	Revenue
A: CUSTOMER CHARGE	151.1	\$632.01	\$95,518	742.61	\$112,233	793.89	\$119,983
	-	\$0.00	\$0	-	\$0	-	\$0
	-	\$0.00	\$0	-	\$0	-	\$0
	<u>151</u>		<u>\$95,518</u>		<u>\$112,233</u>		<u>\$119,983</u>
B: FACILITIES CHARGE	593,310.6	\$1.755	\$1,041,260	\$2.062	\$1,223,406	\$2.205	\$1,308,250
C: DEMAND CHARGE							
First 2500 kw	367,133.5	\$8.023	\$2,945,512	\$9.428	\$3,461,334	\$10.080	\$3,700,705
Next 2500 kw	121,507.5	\$6.419	\$779,957	\$7.542	\$916,410	\$8.063	\$979,715
Next 2500 kw	62,105.5	\$5.376	\$333,879	\$6.317	\$392,320	\$6.753	\$419,398
Over 7500 kw	85,116.1	\$3.925	\$334,081	\$4.612	\$392,555	\$4.931	\$419,708
	<u>635,863</u>		<u>\$4,393,428</u>		<u>\$5,162,620</u>		<u>\$5,519,526</u>
D: ENERGY CHARGE							
0-180 hrs use per month	113,284,444.3	\$0.05025	\$5,692,543	\$0.05904	\$6,688,314	\$0.06311	\$7,149,381
181-360 hrs use per month	112,924,579.8	\$0.03495	\$3,946,714	\$0.04106	\$4,636,683	\$0.03800	\$4,291,134
361+ hrs use per month	109,321,367.6	\$0.02507	\$2,740,687	\$0.02946	\$3,220,607	\$0.02507	\$2,740,687
	<u>335,530,392</u>		<u>\$12,379,944</u>		<u>\$14,545,604</u>		<u>\$14,181,202</u>
E: REACTIVE DEMAND ADJUSTMENT	74,271	\$0.531	\$39,468	\$0.624	\$46,345	\$0.668	\$49,613
E: MANUAL BILL USAGE/REVENUE	27,935,797		\$1,261,668		\$1,482,460		\$1,482,460
REVENUE			\$19,211,286		\$22,572,668		\$22,661,034
c/kwh			\$0.0529		\$0.0621		\$0.0623
OVERALL CHANGE (%)	4207			17.50%			17.96%
<i>used to reference avg customer</i>	2,404,940						

WINTER

	BILLING UNITS	PRESENT RATES		RATES W/RATE DESIGN		PROPOSED RATES*	
		Rate	Revenue	Rate	Revenue	Rate	Revenue
A: CUSTOMER CHARGE	373.7	\$632.01	\$236,158	742.61	\$277,485	\$793.89	\$296,647
	-	\$0.00	\$0	-	\$0	\$0.00	\$0
	-	\$0.00	\$0	-	\$0	\$0.00	\$0
	<u>374</u>		<u>\$236,158</u>		<u>\$277,485</u>		<u>\$296,647</u>
B: FACILITIES CHARGE	1,481,896.1	\$1.755	\$2,600,728	\$2.062	\$3,055,670	\$2.205	\$3,267,581
C: DEMAND CHARGE							
First 2500 kw	639,284.1	\$5.454	\$3,486,656	\$6.409	\$4,097,172	\$6.851	\$4,379,736
Next 2500 kw	234,574.9	\$4.257	\$998,585	\$5.001	\$1,173,109	\$5.347	\$1,254,272
Next 2500 kw	118,046.5	\$3.755	\$443,265	\$4.412	\$520,821	\$4.717	\$556,825
Over 7500 kw	158,482.7	\$2.890	\$458,015	\$3.396	\$538,207	\$3.631	\$575,451
	<u>1,150,388</u>		<u>\$5,386,520</u>		<u>\$6,329,309</u>		<u>\$6,766,283</u>
D: ENERGY CHARGE							
0-180 hrs use per month	205,229,336.8	\$0.04260	\$8,742,770	\$0.05005	\$10,271,728	\$0.05350	\$10,979,770
181-360 hrs use per month	202,134,638.1	\$0.03178	\$6,423,839	\$0.03735	\$7,549,729	\$0.03457	\$6,987,794
361+ hrs use per month	178,564,520.0	\$0.02484	\$4,435,543	\$0.02917	\$5,208,727	\$0.02484	\$4,435,543
	<u>585,928,495</u>		<u>\$19,602,151</u>		<u>\$23,030,184</u>		<u>\$22,403,107</u>
E: REACTIVE DEMAND ADJUSTMENT	125,562	\$0.531	\$66,724	\$0.624	\$78,351	\$0.668	\$83,875
E: MANUAL BILL USAGE/REVENUE	33,759,926		\$1,407,987		\$1,654,385		\$1,654,385
REVENUE			\$29,300,269		\$34,425,384		\$34,471,878
c/kwh			\$0.0473		\$0.0556		\$0.0556
OVERALL CHANGE (%)	3079			17.49%			17.65%
<i>used to reference avg customer</i>	1,568,070						
ANNUAL	983,154,610		\$48,511,554		\$56,998,053		\$57,132,912
c/kwh			\$0.0493		\$0.0580		\$0.0581
OVERALL CHANGE (%)				17.49%			17.77%
Winter Price Below Summer (SUM-WIN)/SUM			10.5%		10.5%		10.8%

**MO LARGE POWER
SUBSTATION VOLTAGE - LPGSSS**

Rate Design at a 17.5% Increase

SUMMER

	BILLING UNITS	PRESENT RATES		RATES W/RATE DESIGN		PROPOSED RATES*	
		Rate	Revenue	Rate	Revenue	Rate	Revenue
A: CUSTOMER CHARGE							
	14.2	\$632.01	\$8,993	742.61	\$10,567	\$793.89	\$11,296
	-	\$0.00	\$0	-	\$0	\$0.00	\$0
	-	\$0.00	\$0	-	\$0	\$0.00	\$0
	<u>14</u>		<u>\$8,993</u>		<u>\$10,567</u>		<u>\$11,296</u>
B: FACILITIES CHARGE	292,782.0	\$0.529	\$154,882	\$0.622	\$182,110	\$0.664	\$194,407
C: DEMAND CHARGE							
First 2520 kw	50,325.8	\$7.928	\$398,983	\$9.317	\$468,886	\$9.961	\$501,296
Next 2520 kw	45,356.1	\$6.342	\$287,649	\$7.453	\$338,039	\$7.968	\$361,398
Next 2520 kw	36,833.7	\$5.312	\$195,661	\$6.243	\$229,953	\$6.674	\$245,828
Over 7560 kw	195,220.7	\$3.879	\$757,261	\$4.558	\$889,816	\$4.872	\$951,115
	<u>327,736</u>		<u>\$1,639,554</u>		<u>\$1,926,694</u>		<u>\$2,059,637</u>
D: ENERGY CHARGE							
0-180 hrs use per month	58,992,556.6	\$0.04965	\$2,928,980	\$0.05834	\$3,441,626	\$0.06237	\$3,679,366
181-360 hrs use per month	58,992,556.6	\$0.03454	\$2,037,603	\$0.04057	\$2,393,328	\$0.03755	\$2,215,170
361+ hrs use per month	63,652,762.8	\$0.02477	\$1,576,679	\$0.02911	\$1,852,932	\$0.02477	\$1,576,679
	<u>181,637,876</u>		<u>\$6,543,262</u>		<u>\$7,687,886</u>		<u>\$7,471,215</u>
E: REACTIVE DEMAND ADJUSTMENT	3,241	\$0.531	\$1,722	\$0.624	\$2,022	\$0.668	\$2,165
REVENUE			\$8,348,413		\$9,809,279		\$9,738,721
c/kwh			\$0.0460		\$0.0540		\$0.0536
OVERALL CHANGE (%)	23033				17.50%		16.65%
<i>used to reference avg customer</i>	12,765,090						

WINTER

	BILLING UNITS	PRESENT RATES		RATES W/RATE DESIGN		PROPOSED RATES*	
		Rate	Revenue	Rate	Revenue	Rate	Revenue
A: CUSTOMER CHARGE							
	35.2	\$632.01	\$22,252	742.61	\$26,147	\$793.89	\$27,952
	-	\$0.00	\$0	-	\$0	\$0.00	\$0
	-	\$0.00	\$0	-	\$0	\$0.00	\$0
	<u>35</u>		<u>\$22,252</u>		<u>\$26,147</u>		<u>\$27,952</u>
B: FACILITIES CHARGE	745,342.4	\$0.529	\$394,286	\$0.622	\$463,603	\$0.664	\$494,907
C: DEMAND CHARGE							
First 2520 kw	74,715.0	\$5.389	\$402,639	\$6.333	\$473,170	\$6.771	\$505,896
Next 2520 kw	67,231.5	\$4.206	\$282,776	\$4.942	\$332,258	\$5.284	\$355,251
Next 2520 kw	57,006.9	\$3.711	\$211,553	\$4.360	\$248,550	\$4.661	\$265,709
Over 7560 kw	391,736.9	\$2.856	\$1,118,801	\$3.356	\$1,314,669	\$3.588	\$1,405,552
	<u>590,690</u>		<u>\$2,015,769</u>		<u>\$2,368,648</u>		<u>\$2,532,409</u>
D: ENERGY CHARGE							
0-180 hrs use per month	106,324,284.7	\$0.04210	\$4,476,252	\$0.04946	\$5,258,799	\$0.05287	\$5,621,365
181-360 hrs use per month	106,324,284.7	\$0.03141	\$3,339,646	\$0.03691	\$3,924,429	\$0.03416	\$3,632,038
361+ hrs use per month	92,616,301.1	\$0.02454	\$2,272,804	\$0.02883	\$2,670,128	\$0.02454	\$2,272,804
	<u>305,264,870</u>		<u>\$10,088,702</u>		<u>\$11,853,356</u>		<u>\$11,526,207</u>
E: REACTIVE DEMAND ADJUSTMENT	6,766	\$0.531	\$3,595	\$0.624	\$4,222	\$0.668	\$4,520
REVENUE			\$12,524,605		\$14,715,976		\$14,585,994
c/kwh			\$0.0410		\$0.0482		\$0.0478
OVERALL CHANGE (%)	16777				17.50%		16.46%
<i>used to reference avg customer</i>	8,670,084						

ANNUAL	486,902,746		\$20,873,018		\$24,525,255		\$24,324,715
c/kwh			\$0.0429		\$0.0504		\$0.0500
OVERALL CHANGE (%)					17.50%		16.54%
Winter Price Below Summer (SUM-WIN)/SUM			10.7%		10.7%		10.9%

**MO LARGE POWER
TRANSMISSION VOLTAGE - LPGSTR**

Rate Design at a 17.5% Increase

SUMMER

	BILLING UNITS	PRESENT RATES		RATES W/RATE DESIGN		PROPOSED RATES*	
		Rate	Revenue	Rate	Revenue	Rate	Revenue
A: CUSTOMER CHARGE							
	3.5	\$632.01	\$2,188	742.61	\$2,571	\$793.89	\$2,748
	-	\$0.00	\$0	-	\$0	\$0.00	\$0
	-	\$0.00	\$0	-	\$0	\$0.00	\$0
	<u>3</u>		<u>\$2,188</u>		<u>\$2,571</u>		<u>\$2,748</u>
B: FACILITIES CHARGE	-	\$0.000	\$0	\$0.000	\$0	\$0.000	\$0
C: DEMAND CHARGE							
First 2541 kw	13,054.0	\$7.859	\$102,591	\$9.234	\$120,541	\$9.872	\$128,869
Next 2541 kw	13,054.0	\$6.286	\$82,058	\$7.386	\$96,417	\$7.896	\$103,074
Next 2541 kw	12,329.0	\$5.264	\$64,900	\$6.187	\$76,280	\$6.614	\$81,544
Over 7623 kw	23,240.5	\$3.844	\$89,337	\$4.517	\$104,977	\$4.829	\$112,229
	<u>61,678</u>		<u>\$338,886</u>		<u>\$398,215</u>		<u>\$425,716</u>
D: ENERGY CHARGE							
0-180 hrs use per month	11,101,961.4	\$0.04921	\$546,328	\$0.05782	\$641,915	\$0.06181	\$686,212
181-360 hrs use per month	11,101,961.4	\$0.03423	\$380,020	\$0.04021	\$446,410	\$0.03722	\$413,215
361+ hrs use per month	8,527,321.1	\$0.02456	\$209,431	\$0.02885	\$246,013	\$0.02456	\$209,431
	<u>30,731,244</u>		<u>\$1,135,779</u>		<u>\$1,334,338</u>		<u>\$1,308,858</u>
E: REACTIVE DEMAND ADJUSTMENT	9,232	\$0.531	\$4,906	\$0.624	\$5,761	\$0.668	\$6,167
REVENUE			\$1,481,758		\$1,740,885		\$1,743,490
c/kwh			\$0.0482		\$0.0566		\$0.0567
OVERALL CHANGE (%)	17817				17.49%		17.66%
used to reference avg customer	8,877,478						

WINTER

	BILLING UNITS	PRESENT RATES		RATES W/RATE DESIGN		PROPOSED RATES*	
		Rate	Revenue	Rate	Revenue	Rate	Revenue
A: CUSTOMER CHARGE							
	8.9	\$632.01	\$5,624	742.61	\$6,608	\$793.89	\$7,064
	-	\$0.00	\$0	-	\$0	\$0.00	\$0
	-	\$0.00	\$0	-	\$0	\$0.00	\$0
	<u>9</u>		<u>\$5,624</u>		<u>\$6,608</u>		<u>\$7,064</u>
B: FACILITIES CHARGE	-	\$0.000	\$0	\$0.000	\$0	\$0.000	\$0
C: DEMAND CHARGE							
First 2541 kw	18,488.4	\$5.341	\$98,746	\$6.277	\$116,052	\$6.710	\$124,057
Next 2541 kw	18,487.3	\$4.168	\$77,055	\$4.898	\$90,551	\$5.236	\$96,800
Next 2541 kw	19,212.3	\$3.677	\$70,644	\$4.321	\$83,016	\$4.620	\$88,761
Over 7623 kw	69,174.0	\$2.831	\$195,832	\$3.326	\$230,073	\$3.556	\$245,983
	<u>125,362</u>		<u>\$442,277</u>		<u>\$519,692</u>		<u>\$555,600</u>
D: ENERGY CHARGE							
0-180 hrs use per month	21,716,949.3	\$0.04172	\$906,031	\$0.04901	\$1,064,348	\$0.05240	\$1,137,968
181-360 hrs use per month	20,350,778.7	\$0.03113	\$633,520	\$0.03658	\$744,431	\$0.03385	\$688,874
361+ hrs use per month	15,083,056.1	\$0.02431	\$366,669	\$0.02857	\$430,923	\$0.02431	\$366,669
	<u>57,150,784</u>		<u>\$1,906,220</u>		<u>\$2,239,702</u>		<u>\$2,193,511</u>
E: REACTIVE DEMAND ADJUSTMENT	23,244	\$0.531	\$12,352	\$0.624	\$14,504	\$0.668	\$15,527
REVENUE			\$2,366,472		\$2,780,506		\$2,771,702
c/kwh			\$0.0414		\$0.0487		\$0.0485
OVERALL CHANGE (%)	14089				17.50%		17.12%
used to reference avg customer	6,422,985						
ANNUAL	87,882,028		\$3,848,230		\$4,521,390		\$4,515,192
c/kwh			\$0.0438		\$0.0514		\$0.0514
OVERALL CHANGE (%)					17.49%		17.33%
Winter Price Below Summer (SUM-WIN)/SUM			14.1%		14.1%		14.5%

**MO LARGE POWER
PRIMARY VOLTAGE, OFF PEAK - LPGSPO**

Rate Design at a 17.5% Increase

SUMMER

	BILLING UNITS	PRESENT RATES		RATES W/RATE DESIGN		PROPOSED RATES*	
		Rate	Revenue	Rate	Revenue	Rate	Revenue
A: CUSTOMER CHARGE							
	35.8	\$632.01	\$22,595	\$742.61	\$26,549	\$793.89	\$28,382
	-	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0
	-	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0
	<u>36</u>		<u>\$22,595</u>		<u>\$26,549</u>		<u>\$28,382</u>
B: FACILITIES CHARGE	210,657.2	\$1.755	\$369,703	\$2.062	\$434,375	\$2.205	\$464,499
C: DEMAND CHARGE							
First 2500 kw	92,105.8	\$8.023	\$738,964	\$9.428	\$868,373	\$10.080	\$928,426
Next 2500 kw	48,675.9	\$6.419	\$312,451	\$7.542	\$367,114	\$8.063	\$392,474
Next 2500 kw	24,894.9	\$5.376	\$133,835	\$6.317	\$157,261	\$6.753	\$168,115
Over 7500 kw	62,502.9	\$3.925	\$245,324	\$4.612	\$288,263	\$4.931	\$308,202
	<u>228,179</u>		<u>\$1,430,574</u>		<u>\$1,681,011</u>		<u>\$1,797,217</u>
D: ENERGY CHARGE							
0-180 hrs use per month	40,927,916.4	\$0.05025	\$2,056,628	\$0.05904	\$2,416,384	\$0.06311	\$2,582,961
181-360 hrs use per month	40,594,026.8	\$0.03495	\$1,418,761	\$0.04106	\$1,666,791	\$0.03800	\$1,542,573
361+ hrs use per month	49,429,533.9	\$0.02507	\$1,239,198	\$0.02946	\$1,456,194	\$0.02507	\$1,239,198
	<u>130,951,477</u>		<u>\$4,714,587</u>		<u>\$5,539,369</u>		<u>\$5,364,732</u>
E: REACTIVE DEMAND ADJUSTMENT	-	\$0.531	\$0	\$0.624	\$0	\$0.668	\$0
F: MANUAL BILL USAGE/REVENUE	22,907,013		\$1,037,182		\$1,218,688		\$1,218,688
REVENUE			\$7,574,641		\$8,899,992		\$8,873,519
c/kwh			0.0492		0.0578		0.0577
OVERALL CHANGE (%)	6383				17.50%		17.15%
<i>used to reference avg customer</i>	3,662,903						

WINTER

	BILLING UNITS	PRESENT RATES		RATES W/RATE DESIGN		PROPOSED RATES*	
		Rate	Revenue	Rate	Revenue	Rate	Revenue
A: CUSTOMER CHARGE							
	86.5	\$632.01	\$54,641	\$742.61	\$64,203	\$793.89	\$68,636
	-	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0
	-	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0
	<u>86</u>		<u>\$54,641</u>		<u>\$64,203</u>		<u>\$68,636</u>
B: FACILITIES CHARGE	514,330.1	\$1.755	\$902,649	\$2.062	\$1,060,549	\$2.205	\$1,134,098
C: DEMAND CHARGE							
First 2500 kw	146,088.0	\$5.454	\$796,764	\$6.409	\$936,278	\$6.851	\$1,000,849
Next 2500 kw	68,294.1	\$4.257	\$290,728	\$5.001	\$341,539	\$5.347	\$365,168
Next 2500 kw	39,424.4	\$3.755	\$148,039	\$4.412	\$173,940	\$4.717	\$185,965
Over 7500 kw	148,685.8	\$2.890	\$429,702	\$3.396	\$504,937	\$3.631	\$539,878
	<u>402,492</u>		<u>\$1,665,232</u>		<u>\$1,956,694</u>		<u>\$2,091,860</u>
D: ENERGY CHARGE							
0-180 hrs use per month	71,918,421.2	\$0.04260	\$3,063,725	\$0.05005	\$3,599,517	\$0.05350	\$3,847,636
181-360 hrs use per month	70,451,395.4	\$0.03178	\$2,238,945	\$0.03735	\$2,631,360	\$0.03457	\$2,435,505
361+ hrs use per month	76,630,755.7	\$0.02484	\$1,903,508	\$0.02917	\$2,235,319	\$0.02484	\$1,903,508
	<u>219,000,572</u>		<u>\$7,206,178</u>		<u>\$8,466,196</u>		<u>\$8,186,648</u>
E: REACTIVE DEMAND ADJUSTMENT	-	\$0.531	\$0	\$0.624	\$0	\$0.668	\$0
F: MANUAL BILL USAGE/REVENUE	37,299,525		\$1,584,032		\$1,861,238		\$1,861,238
REVENUE			\$11,412,732		\$13,408,879		\$13,342,480
c/kwh			\$0.0445		\$0.0523		\$0.0521
OVERALL CHANGE (%)	4655				17.49%		16.91%
<i>used to reference avg customer</i>	2,533,107						

ANNUAL	410,158,588		\$18,987,373		\$22,308,871		\$22,215,999
c/kwh			\$0.0463		\$0.0544		\$0.0542
OVERALL CHANGE (%)					17.49%		17.00%
Winter Price Below Summer (SUM-WIN)/SUM			9.6%		9.6%		9.7%

SUMMER TOTAL (ALL RATES)	822,959,718		\$45,437,680		\$53,388,249		\$53,447,258
WINTER TOTAL (ALL RATES)	1,393,955,132		\$68,093,591		\$80,005,917		\$79,946,825
GRAND TOTAL (ANNUAL - ALL RATES)	2,216,914,850		\$113,531,271		\$133,394,166		\$133,394,084
c/kwh Summer			\$0.0552		\$0.0649		\$0.0649
c/kwh Winter			\$0.0488		\$0.0574		\$0.0574
c/kwh Annual			\$0.0512		\$0.0602		\$0.0602
Winter Price Below Summer (SUM-WIN)/SUM			11.5%		11.5%		11.7%
OVERALL CHANGE (%)					17.50%		17.50%

**MO LARGE POWER
SECONDARY VOLTAGE - LPGSS**

Rate Design at a 10.0% Increase

SUMMER

	BILLING UNITS	PRESENT RATES		RATES W/RATE DESIGN		PROPOSED RATES*	
		Rate	Revenue	Rate	Revenue	Rate	Revenue
A: CUSTOMER CHARGE							
	129.0	\$632.01	\$81,521	742.61	\$95,787	\$719.70	\$92,832
	-	\$0.00	\$0	-	\$0	\$0.00	\$0
	-	\$0.00	\$0	-	\$0	\$0.00	\$0
	<u>129</u>		<u>\$81,521</u>		<u>\$95,787</u>		<u>\$92,832</u>
B: FACILITIES CHARGE	249,495.1	\$2.116	\$527,932	\$2.486	\$620,245	\$2.410	\$601,283
C: DEMAND CHARGE							
First 2450 kw	228,214.5	\$8.212	\$1,874,098	\$9.649	\$2,202,042	\$9.351	\$2,134,034
Next 2450 kw	33,302.6	\$6.569	\$218,765	\$7.719	\$257,063	\$7.480	\$249,103
Next 2450 kw	10,854.6	\$5.502	\$59,722	\$6.465	\$70,175	\$6.265	\$68,004
Over 7350 kw	378.8	\$4.017	\$1,522	\$4.720	\$1,788	\$4.574	\$1,733
	<u>272,751</u>		<u>\$2,154,106</u>		<u>\$2,531,068</u>		<u>\$2,452,874</u>
D: ENERGY CHARGE							
0-180 hrs use per month	48,716,889.3	\$0.05142	\$2,505,022	\$0.06042	\$2,943,474	\$0.05855	\$2,852,374
181-360 hrs use per month	48,527,875.0	\$0.03576	\$1,735,357	\$0.04202	\$2,039,141	\$0.03755	\$1,822,222
361+ hrs use per month	46,863,965.3	\$0.02566	\$1,202,529	\$0.03015	\$1,412,949	\$0.02566	\$1,202,529
	<u>144,108,730</u>		<u>\$5,442,909</u>		<u>\$6,395,564</u>		<u>\$5,877,125</u>
E: MANUAL BILL USAGE/REVENUE	12,300,274		\$615,115		\$722,760		\$722,760
REVENUE			\$8,821,582		\$10,365,424		\$9,746,874
c/kwh			\$0.0564		\$0.0663		\$0.0623
OVERALL CHANGE (%)	2115				17.50%		10.49%
used to reference avg customer	1,212,598						

WINTER

	BILLING UNITS	PRESENT RATES		RATES W/RATE DESIGN		PROPOSED RATES*	
		Rate	Revenue	Rate	Revenue	Rate	Revenue
A: CUSTOMER CHARGE							
	299.2	\$632.01	\$189,106	742.61	\$222,199	\$719.70	\$215,344
	-	\$0.00	\$0	-	\$0	\$0.00	\$0
	-	\$0.00	\$0	-	\$0	\$0.00	\$0
	<u>299</u>		<u>\$189,106</u>		<u>\$222,199</u>		<u>\$215,344</u>
B: FACILITIES CHARGE	602,778.5	\$2.116	\$1,275,479	\$2.486	\$1,498,507	\$2.410	\$1,452,696
C: DEMAND CHARGE							
First 2450 kw	396,956.9	\$5.582	\$2,215,814	\$6.559	\$2,603,641	\$6.357	\$2,523,455
Next 2450 kw	60,135.6	\$4.356	\$261,951	\$5.118	\$307,774	\$4.960	\$298,272
Next 2450 kw	8,591.1	\$3.843	\$33,016	\$4.516	\$38,797	\$4.376	\$37,595
Over 7350 kw	932.5	\$2.958	\$2,758	\$3.476	\$3,241	\$3.368	\$3,141
	<u>466,616</u>		<u>\$2,513,538</u>		<u>\$2,953,453</u>		<u>\$2,862,463</u>
D: ENERGY CHARGE							
0-180 hrs use per month	82,000,838.8	\$0.04359	\$3,574,417	\$0.05122	\$4,200,083	\$0.04964	\$4,070,522
181-360 hrs use per month	80,621,931.9	\$0.03253	\$2,622,631	\$0.03822	\$3,081,370	\$0.03416	\$2,754,045
361+ hrs use per month	63,987,639.6	\$0.02541	\$1,625,926	\$0.02986	\$1,910,671	\$0.02541	\$1,625,926
	<u>226,610,410</u>		<u>\$7,822,974</u>		<u>\$9,192,124</u>		<u>\$8,450,493</u>
E: MANUAL BILL USAGE/REVENUE	15,121,702		\$688,416		\$808,888		\$808,888
REVENUE			\$12,489,513		\$14,675,172		\$13,789,885
c/kwh			\$0.0517		\$0.0607		\$0.0570
OVERALL CHANGE (%)	1559				17.50%		10.41%
used to reference avg customer	757,352						

ANNUAL	398,141,116		\$21,311,096		\$25,040,596		\$23,536,759
c/kwh			\$0.0535		\$0.0629		\$0.0591
OVERALL CHANGE (%)					17.50%		10.44%
Winter Price Below Summer (SUM-WIN)/SUM			8.4%		8.4%		8.5%

* Proposed Rates: Equal Percent Increase to All Rate Components except Energy 181-360 Hours Use -- use 5.00% Increase and Energy over 360 Hours Use -- use Current Rates Rates designed to achieve a 10.0% increase in revenues.

**MO LARGE POWER
PRIMARY VOLTAGE - LPGSP**

Rate Design at a 10.0% Increase

SUMMER

	BILLING UNITS	PRESENT RATES		RATES W/RATE DESIGN		PROPOSED RATES*	
		Rate	Revenue	Rate	Revenue	Rate	Revenue
A: CUSTOMER CHARGE	151.1	\$632.01	\$95,518	742.61	\$112,233	719.70	\$108,771
	-	\$0.00	\$0	-	\$0	-	\$0
	-	\$0.00	\$0	-	\$0	-	\$0
	<u>151</u>		<u>\$95,518</u>		<u>\$112,233</u>		<u>\$108,771</u>
B: FACILITIES CHARGE	593,310.6	\$1.755	\$1,041,260	\$2.062	\$1,223,406	\$1.999	\$1,186,028
C: DEMAND CHARGE							
First 2500 kw	367,133.5	\$8.023	\$2,945,512	\$9.428	\$3,461,334	\$9.138	\$3,354,866
Next 2500 kw	121,507.5	\$6.419	\$779,957	\$7.542	\$916,410	\$7.309	\$888,098
Next 2500 kw	62,105.5	\$5.376	\$333,879	\$6.317	\$392,320	\$6.122	\$380,210
Over 7500 kw	85,116.1	\$3.925	\$334,081	\$4.612	\$392,555	\$4.470	\$380,469
	<u>635,863</u>		<u>\$4,393,428</u>		<u>\$5,162,620</u>		<u>\$5,003,643</u>
D: ENERGY CHARGE							
0-180 hrs use per month	113,284,444.3	\$0.05025	\$5,692,543	\$0.05904	\$6,688,314	\$0.05722	\$6,482,136
181-360 hrs use per month	112,924,579.8	\$0.03495	\$3,946,714	\$0.04106	\$4,636,683	\$0.03669	\$4,143,203
361+ hrs use per month	109,321,367.6	\$0.02507	\$2,740,687	\$0.02946	\$3,220,607	\$0.02507	\$2,740,687
	<u>335,530,392</u>		<u>\$12,379,944</u>		<u>\$14,545,604</u>		<u>\$13,366,025</u>
E: REACTIVE DEMAND ADJUSTMENT	74,271	\$0.531	\$39,468	\$0.624	\$46,345	\$0.605	\$44,934
E: MANUAL BILL USAGE/REVENUE	27,935,797		\$1,261,668		\$1,482,460		\$1,482,460
REVENUE			\$19,211,286		\$22,572,668		\$21,191,860
c/kwh			\$0.0529		\$0.0621		\$0.0583
OVERALL CHANGE (%)	4207			17.50%			10.31%
<i>used to reference avg customer</i>	2,404,940						

WINTER

	BILLING UNITS	PRESENT RATES		RATES W/RATE DESIGN		PROPOSED RATES*	
		Rate	Revenue	Rate	Revenue	Rate	Revenue
A: CUSTOMER CHARGE	373.7	\$632.01	\$236,158	742.61	\$277,485	\$719.70	\$268,925
	-	\$0.00	\$0	-	\$0	\$0.00	\$0
	-	\$0.00	\$0	-	\$0	\$0.00	\$0
	<u>374</u>		<u>\$236,158</u>		<u>\$277,485</u>		<u>\$268,925</u>
B: FACILITIES CHARGE	1,481,896.1	\$1.755	\$2,600,728	\$2.062	\$3,055,670	\$1.999	\$2,962,310
C: DEMAND CHARGE							
First 2500 kw	639,284.1	\$5.454	\$3,486,656	\$6.409	\$4,097,172	\$6.211	\$3,970,594
Next 2500 kw	234,574.9	\$4.257	\$998,585	\$5.001	\$1,173,109	\$4.847	\$1,136,984
Next 2500 kw	118,046.5	\$3.755	\$443,265	\$4.412	\$520,821	\$4.276	\$504,767
Over 7500 kw	158,482.7	\$2.890	\$458,015	\$3.396	\$538,207	\$3.291	\$521,567
	<u>1,150,388</u>		<u>\$5,386,520</u>		<u>\$6,329,309</u>		<u>\$6,133,912</u>
D: ENERGY CHARGE							
0-180 hrs use per month	205,229,336.8	\$0.04260	\$8,742,770	\$0.05005	\$10,271,728	\$0.04850	\$9,953,623
181-360 hrs use per month	202,134,638.1	\$0.03178	\$6,423,839	\$0.03735	\$7,549,729	\$0.03338	\$6,747,254
361+ hrs use per month	178,564,520.0	\$0.02484	\$4,435,543	\$0.02917	\$5,208,727	\$0.02484	\$4,435,543
	<u>585,928,495</u>		<u>\$19,602,151</u>		<u>\$23,030,184</u>		<u>\$21,136,420</u>
E: REACTIVE DEMAND ADJUSTMENT	125,562	\$0.531	\$66,724	\$0.624	\$78,351	\$0.605	\$75,965
E: MANUAL BILL USAGE/REVENUE	33,759,926		\$1,407,987		\$1,654,385		\$1,654,385
REVENUE			\$29,300,269		\$34,425,384		\$32,231,916
c/kwh			\$0.0473		\$0.0556		\$0.0520
OVERALL CHANGE (%)	3079			17.49%			10.01%
<i>used to reference avg customer</i>	1,568,070						
ANNUAL	983,154,610		\$48,511,554		\$56,998,053		\$53,423,777
c/kwh			\$0.0493		\$0.0580		\$0.0543
OVERALL CHANGE (%)				17.49%			10.13%
Winter Price Below Summer (SUM-WIN)/SUM			10.5%		10.5%		10.8%

**MO LARGE POWER
SUBSTATION VOLTAGE - LPGSSS**

Rate Design at a 10.0% Increase

SUMMER

	BILLING UNITS	PRESENT RATES		RATES W/RATE DESIGN		PROPOSED RATES*	
		Rate	Revenue	Rate	Revenue	Rate	Revenue
A: CUSTOMER CHARGE							
	14.2	\$632.01	\$8,993	742.61	\$10,567	\$719.70	\$10,241
	-	\$0.00	\$0	-	\$0	\$0.00	\$0
	-	\$0.00	\$0	-	\$0	\$0.00	\$0
	<u>14</u>		<u>\$8,993</u>		<u>\$10,567</u>		<u>\$10,241</u>
B: FACILITIES CHARGE	292,782.0	\$0.529	\$154,882	\$0.622	\$182,110	\$0.602	\$176,255
C: DEMAND CHARGE							
First 2520 kw	50,325.8	\$7.928	\$398,983	\$9.317	\$468,886	\$9.030	\$454,442
Next 2520 kw	45,356.1	\$6.342	\$287,649	\$7.453	\$338,039	\$7.223	\$327,607
Next 2520 kw	36,833.7	\$5.312	\$195,661	\$6.243	\$229,953	\$6.050	\$222,844
Over 7560 kw	195,220.7	\$3.879	\$757,261	\$4.558	\$889,816	\$4.417	\$862,290
	<u>327,736</u>		<u>\$1,639,554</u>		<u>\$1,926,694</u>		<u>\$1,867,184</u>
D: ENERGY CHARGE							
0-180 hrs use per month	58,992,556.6	\$0.04965	\$2,928,980	\$0.05834	\$3,441,626	\$0.05654	\$3,335,439
181-360 hrs use per month	58,992,556.6	\$0.03454	\$2,037,603	\$0.04057	\$2,393,328	\$0.03626	\$2,139,070
361+ hrs use per month	63,652,762.8	\$0.02477	\$1,576,679	\$0.02911	\$1,852,932	\$0.02477	\$1,576,679
	<u>181,637,876</u>		<u>\$6,543,262</u>		<u>\$7,687,886</u>		<u>\$7,051,188</u>
E: REACTIVE DEMAND ADJUSTMENT	3,241	\$0.531	\$1,722	\$0.624	\$2,022	\$0.605	\$1,961
REVENUE			\$8,348,413		\$9,809,279		\$9,106,828
c/kwh			\$0.0460		\$0.0540		\$0.0501
OVERALL CHANGE (%)	23033				17.50%		9.08%
used to reference avg customer	12,765,090						

WINTER

	BILLING UNITS	PRESENT RATES		RATES W/RATE DESIGN		PROPOSED RATES*	
		Rate	Revenue	Rate	Revenue	Rate	Revenue
A: CUSTOMER CHARGE							
	35.2	\$632.01	\$22,252	742.61	\$26,147	\$719.70	\$25,340
	-	\$0.00	\$0	-	\$0	\$0.00	\$0
	-	\$0.00	\$0	-	\$0	\$0.00	\$0
	<u>35</u>		<u>\$22,252</u>		<u>\$26,147</u>		<u>\$25,340</u>
B: FACILITIES CHARGE	745,342.4	\$0.529	\$394,286	\$0.622	\$463,603	\$0.602	\$448,696
C: DEMAND CHARGE							
First 2520 kw	74,715.0	\$5.389	\$402,639	\$6.333	\$473,170	\$6.138	\$458,601
Next 2520 kw	67,231.5	\$4.206	\$282,776	\$4.942	\$332,258	\$4.790	\$322,039
Next 2520 kw	57,006.9	\$3.711	\$211,553	\$4.360	\$248,550	\$4.226	\$240,911
Over 7560 kw	391,736.9	\$2.856	\$1,118,801	\$3.356	\$1,314,669	\$3.253	\$1,274,320
	<u>590,690</u>		<u>\$2,015,769</u>		<u>\$2,368,648</u>		<u>\$2,295,872</u>
D: ENERGY CHARGE							
0-180 hrs use per month	106,324,284.7	\$0.04210	\$4,476,252	\$0.04946	\$5,258,799	\$0.04793	\$5,096,123
181-360 hrs use per month	106,324,284.7	\$0.03141	\$3,339,646	\$0.03691	\$3,924,429	\$0.03298	\$3,506,575
361+ hrs use per month	92,616,301.1	\$0.02454	\$2,272,804	\$0.02883	\$2,670,128	\$0.02454	\$2,272,804
	<u>305,264,870</u>		<u>\$10,088,702</u>		<u>\$11,853,356</u>		<u>\$10,875,502</u>
E: REACTIVE DEMAND ADJUSTMENT	6,766	\$0.531	\$3,595	\$0.624	\$4,222	\$0.605	\$4,093
REVENUE			\$12,524,605		\$14,715,976		\$13,649,503
c/kwh			\$0.0410		\$0.0482		\$0.0447
OVERALL CHANGE (%)	16777				17.50%		8.98%
used to reference avg customer	8,670,084						
ANNUAL	486,902,746		\$20,873,018		\$24,525,255		\$22,756,331
c/kwh			\$0.0429		\$0.0504		\$0.0467
OVERALL CHANGE (%)					17.50%		9.02%
Winter Price Below Summer (SUM-WIN)/SUM			10.7%		10.7%		10.8%

**MO LARGE POWER
TRANSMISSION VOLTAGE - LPGSTR**

Rate Design at a 10.0% Increase

SUMMER

	BILLING UNITS	PRESENT RATES		RATES W/RATE DESIGN		PROPOSED RATES*	
		Rate	Revenue	Rate	Revenue	Rate	Revenue
A: CUSTOMER CHARGE							
	3.5	\$632.01	\$2,188	742.61	\$2,571	\$719.70	\$2,491
	-	\$0.00	\$0	-	\$0	\$0.00	\$0
	-	\$0.00	\$0	-	\$0	\$0.00	\$0
	<u>3</u>		<u>\$2,188</u>		<u>\$2,571</u>		<u>\$2,491</u>
B: FACILITIES CHARGE	-	\$0.000	\$0	\$0.000	\$0	\$0.000	\$0
C: DEMAND CHARGE							
First 2541 kw	13,054.0	\$7.859	\$102,591	\$9.234	\$120,541	\$8.949	\$116,820
Next 2541 kw	13,054.0	\$6.286	\$82,058	\$7.386	\$96,417	\$7.159	\$93,454
Next 2541 kw	12,329.0	\$5.264	\$64,900	\$6.187	\$76,280	\$5.996	\$73,925
Over 7623 kw	23,240.5	\$3.844	\$89,337	\$4.517	\$104,977	\$4.378	\$101,747
	<u>61,678</u>		<u>\$338,886</u>		<u>\$398,215</u>		<u>\$385,946</u>
D: ENERGY CHARGE							
0-180 hrs use per month	11,101,961.4	\$0.04921	\$546,328	\$0.05782	\$641,915	\$0.05603	\$622,043
181-360 hrs use per month	11,101,961.4	\$0.03423	\$380,020	\$0.04021	\$446,410	\$0.03593	\$398,893
361+ hrs use per month	8,527,321.1	\$0.02456	\$209,431	\$0.02885	\$246,013	\$0.02456	\$209,431
	<u>30,731,244</u>		<u>\$1,135,779</u>		<u>\$1,334,338</u>		<u>\$1,230,367</u>
E: REACTIVE DEMAND ADJUSTMENT	9,232	\$0.531	\$4,906	\$0.624	\$5,761	\$0.605	\$5,585
REVENUE			\$1,481,758		\$1,740,885		\$1,624,390
c/kwh			\$0.0482		\$0.0566		\$0.0529
OVERALL CHANGE (%)	17817				17.49%		9.63%
used to reference avg customer	8,877,478						

WINTER

	BILLING UNITS	PRESENT RATES		RATES W/RATE DESIGN		PROPOSED RATES*	
		Rate	Revenue	Rate	Revenue	Rate	Revenue
A: CUSTOMER CHARGE							
	8.9	\$632.01	\$5,624	742.61	\$6,608	\$719.70	\$6,404
	-	\$0.00	\$0	-	\$0	\$0.00	\$0
	-	\$0.00	\$0	-	\$0	\$0.00	\$0
	<u>9</u>		<u>\$5,624</u>		<u>\$6,608</u>		<u>\$6,404</u>
B: FACILITIES CHARGE	-	\$0.000	\$0	\$0.000	\$0	\$0.000	\$0
C: DEMAND CHARGE							
First 2541 kw	18,488.4	\$5.341	\$98,746	\$6.277	\$116,052	\$6.083	\$112,465
Next 2541 kw	18,487.3	\$4.168	\$77,055	\$4.898	\$90,551	\$4.747	\$87,759
Next 2541 kw	19,212.3	\$3.677	\$70,644	\$4.321	\$83,016	\$4.188	\$80,461
Over 7623 kw	69,174.0	\$2.831	\$195,832	\$3.326	\$230,073	\$3.223	\$222,948
	<u>125,362</u>		<u>\$442,277</u>		<u>\$519,692</u>		<u>\$503,633</u>
D: ENERGY CHARGE							
0-180 hrs use per month	21,716,949.3	\$0.04172	\$906,031	\$0.04901	\$1,064,348	\$0.04750	\$1,031,555
181-360 hrs use per month	20,350,778.7	\$0.03113	\$633,520	\$0.03658	\$744,431	\$0.03269	\$665,267
361+ hrs use per month	15,083,056.1	\$0.02431	\$366,669	\$0.02857	\$430,923	\$0.02431	\$366,669
	<u>57,150,784</u>		<u>\$1,906,220</u>		<u>\$2,239,702</u>		<u>\$2,063,491</u>
E: REACTIVE DEMAND ADJUSTMENT	23,244	\$0.531	\$12,352	\$0.624	\$14,504	\$0.605	\$14,063
REVENUE			\$2,366,472		\$2,780,506		\$2,587,591
c/kwh			\$0.0414		\$0.0487		\$0.0453
OVERALL CHANGE (%)	14089				17.50%		9.34%
used to reference avg customer	6,422,985						
ANNUAL	87,882,028		\$3,848,230		\$4,521,390		\$4,211,981
c/kwh			\$0.0438		\$0.0514		\$0.0479
OVERALL CHANGE (%)					17.49%		9.45%
Winter Price Below Summer (SUM-WIN)/SUM			14.1%		14.1%		14.3%

**MO LARGE POWER
PRIMARY VOLTAGE, OFF PEAK - LPGSPO**

Rate Design at a 10.0% Increase

SUMMER

	BILLING UNITS	PRESENT RATES		RATES W/RATE DESIGN		PROPOSED RATES*	
		Rate	Revenue	Rate	Revenue	Rate	Revenue
A: CUSTOMER CHARGE							
	35.8	\$632.01	\$22,595	\$742.61	\$26,549	\$719.70	\$25,730
	-	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0
	-	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0
	<u>36</u>		<u>\$22,595</u>		<u>\$26,549</u>		<u>\$25,730</u>
B: FACILITIES CHARGE	210,657.2	\$1.755	\$369,703	\$2.062	\$434,375	\$1.999	\$421,104
C: DEMAND CHARGE							
First 2500 kw	92,105.8	\$8.023	\$738,964	\$9.428	\$868,373	\$9.138	\$841,662
Next 2500 kw	48,675.9	\$6.419	\$312,451	\$7.542	\$367,114	\$7.309	\$355,772
Next 2500 kw	24,894.9	\$5.376	\$133,835	\$6.317	\$157,261	\$6.122	\$152,406
Over 7500 kw	62,502.9	\$3.925	\$245,324	\$4.612	\$288,263	\$4.470	\$279,388
	<u>228,179</u>		<u>\$1,430,574</u>		<u>\$1,681,011</u>		<u>\$1,629,229</u>
D: ENERGY CHARGE							
0-180 hrs use per month	40,927,916.4	\$0.05025	\$2,056,628	\$0.05904	\$2,416,384	\$0.05722	\$2,341,895
181-360 hrs use per month	40,594,026.8	\$0.03495	\$1,418,761	\$0.04106	\$1,666,791	\$0.03669	\$1,489,395
361+ hrs use per month	49,429,533.9	\$0.02507	\$1,239,198	\$0.02946	\$1,456,194	\$0.02507	\$1,239,198
	<u>130,951,477</u>		<u>\$4,714,587</u>		<u>\$5,539,369</u>		<u>\$5,070,489</u>
E: REACTIVE DEMAND ADJUSTMENT	-	\$0.531	\$0	\$0.624	\$0	\$0.605	\$0
F: MANUAL BILL USAGE/REVENUE	22,907,013		\$1,037,182		\$1,218,688		\$1,218,688
REVENUE			\$7,574,641		\$8,899,992		\$8,365,240
c/kwh			0.0492		0.0578		0.0544
OVERALL CHANGE (%)	6383				17.50%		10.44%
<i>used to reference avg customer</i>	3,662,903						

WINTER

	BILLING UNITS	PRESENT RATES		RATES W/RATE DESIGN		PROPOSED RATES*	
		Rate	Revenue	Rate	Revenue	Rate	Revenue
A: CUSTOMER CHARGE							
	86.5	\$632.01	\$54,641	\$742.61	\$64,203	\$719.70	\$62,222
	-	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0
	-	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0
	<u>86</u>		<u>\$54,641</u>		<u>\$64,203</u>		<u>\$62,222</u>
B: FACILITIES CHARGE	514,330.1	\$1.755	\$902,649	\$2.062	\$1,060,549	\$1.999	\$1,028,146
C: DEMAND CHARGE							
First 2500 kw	146,088.0	\$5.454	\$796,764	\$6.409	\$936,278	\$6.211	\$907,352
Next 2500 kw	68,294.1	\$4.257	\$290,728	\$5.001	\$341,539	\$4.847	\$331,021
Next 2500 kw	39,424.4	\$3.755	\$148,039	\$4.412	\$173,940	\$4.276	\$168,579
Over 7500 kw	148,685.8	\$2.890	\$429,702	\$3.396	\$504,937	\$3.291	\$489,325
	<u>402,492</u>		<u>\$1,665,232</u>		<u>\$1,956,694</u>		<u>\$1,896,277</u>
D: ENERGY CHARGE							
0-180 hrs use per month	71,918,421.2	\$0.04260	\$3,063,725	\$0.05005	\$3,599,517	\$0.04850	\$3,488,043
181-360 hrs use per month	70,451,395.4	\$0.03178	\$2,238,945	\$0.03735	\$2,631,360	\$0.03338	\$2,351,668
361+ hrs use per month	76,630,755.7	\$0.02484	\$1,903,508	\$0.02917	\$2,235,319	\$0.02484	\$1,903,508
	<u>219,000,572</u>		<u>\$7,206,178</u>		<u>\$8,466,196</u>		<u>\$7,743,219</u>
E: REACTIVE DEMAND ADJUSTMENT	-	\$0.531	\$0	\$0.624	\$0	\$0.605	\$0
F: MANUAL BILL USAGE/REVENUE	37,299,525		\$1,584,032		\$1,861,238		\$1,861,238
REVENUE			\$11,412,732		\$13,408,879		\$12,591,102
c/kwh			\$0.0445		\$0.0523		\$0.0491
OVERALL CHANGE (%)	4655				17.49%		10.33%
<i>used to reference avg customer</i>	2,533,107						

ANNUAL	410,158,588		\$18,987,373		\$22,308,871		\$20,956,341
c/kwh			\$0.0463		\$0.0544		\$0.0511
OVERALL CHANGE (%)					17.49%		10.37%
Winter Price Below Summer (SUM-WIN)/SUM			9.6%		9.6%		9.6%

SUMMER TOTAL (ALL RATES)	822,959,718		\$45,437,680		\$53,388,249		\$50,035,192
WINTER TOTAL (ALL RATES)	1,393,955,132		\$68,093,591		\$80,005,917		\$74,849,997
GRAND TOTAL (ANNUAL - ALL RATES)	2,216,914,850		\$113,531,271		\$133,394,166		\$124,885,189
c/kwh Summer			\$0.0552		\$0.0649		\$0.0608
c/kwh Winter			\$0.0488		\$0.0574		\$0.0537
c/kwh Annual			\$0.0512		\$0.0563		\$0.0563
Winter Price Below Summer (SUM-WIN)/SUM			11.5%		11.5%		11.7%
OVERALL CHANGE (%)					17.50%		10.00%