

421 West Main Street  
Post Office Box 634  
Frankfort, KY 40602-0634  
[502] 223-3477  
[502] 223-4124 Fax  
www.stites.com

RECEIVED

JUN 30 2009

PUBLIC SERVICE  
COMMISSION

June 30, 2009

Mark R. Overstreet  
(502) 209-1219  
(502) 223-4387 FAX  
moverstreet@stites.com

**HAND DELIVERED**

Jeff R. Derouen  
Executive Director  
Public Service Commission  
211 Sower Boulevard  
P.O. Box 615  
Frankfort, KY 40602-0615


**RE: Application of Kentucky Power Company for an Order Approving a Pilot Real-Time Pricing Program for Large Commercial and Industrial Customers, P.S.C. Case No. 2007-00166**

Dear Mr. Derouen:

Enclosed please find the original and ten copies of Kentucky Power Company's June 30, 2009 Annual Report in the above matter. A copy is being served on the Attorney General and counsel for Kentucky Industrial Utility Customers, Inc.

Please do not hesitate to contact me if you have any questions.

Very truly yours,

  
Mark R. Overstreet

cc: Michael Kurtz  
Dennis G. Howard, II

COMMONWEALTH OF KENTUCKY

**RECEIVED**

JUN 30 2009

PUBLIC SERVICE  
COMMISSION

BEFORE THE

PUBLIC SERVICE COMMISSION OF KENTUCKY

IN THE MATTER OF:

APPLICATION OF KENTUCKY POWER COMPANY )  
FOR AN ORDER APPROVING A PILOT REAL-TIME )  
PRICING PROGRAM FOR LARGE COMMERCIAL ) CASE NO. 2007-00166  
AND INDUSTRIAL CUSTOMERS )

ANNUAL REPORT OF KENTUCKY POWER COMPANY

TO COMMISSION ORDER DATED FEBRUARY 1, 2008

June 30, 2009



**Kentucky Power Company**

**REQUEST**

Show the range and frequency of hourly integrated AEP-zone Locational Marginal Price (LMP) for a 12-month period.

**RESPONSE**

Attached as Page 2 of 2 is a summary of the AEP-zone Real-Time LMP for the twenty four month period ending May 31, 2009. This summary shows, for each month, the high, low and average price and the price range. The attachment also shows the number of hours during the month the Real-Time LMP price fell into the price ranges shown on the schedule.

**WITNESS:** Errol K Wagner/David M Roush

SUMMARY - REAL TIME LMP  
June 2007 through May 2009

Year - Month	High \$	Low \$	Range \$	Average \$	Frequency Distribution (Number of Hours Where LMP is):											Total
					< \$10	\$10 to \$20	\$20 to \$30	\$30 to \$40	\$40 to \$50	\$50 to \$60	\$60 to \$70	\$70 to \$80	\$80 to \$90	\$90 to \$100	> \$100	
Jun-07	154.98	(92.01)	246.98	40.40	54	62	198	119	70	75	41	39	31	27	14	720
Jul-07	161.15	(46.48)	207.63	43.66	37	37	213	104	77	86	64	59	33	20	14	744
Aug-07	243.69	(20.80)	264.48	60.28	10	18	117	134	92	53	59	68	67	44	92	744
Sep-07	198.56	(73.14)	271.70	42.49	36	39	212	130	77	86	95	44	22	11	28	720
Oct-07	478.99	(1.78)	480.77	52.19	1	4	163	124	127	86	80	68	40	27	24	744
Nov-07	173.02	3.09	169.93	46.14	5	20	213	149	95	80	45	44	35	19	16	721
Dec-07	216.07	(13.07)	229.15	46.32	11	11	233	149	87	72	65	36	30	15	35	744
Jan-08	258.12	(5.78)	263.90	49.13	11	15	184	165	94	64	62	61	40	25	33	696
Feb-08	233.30	(2.46)	235.76	55.41	4	6	77	184	94	76	73	62	37	37	69	743
Mar-08	194.10	(12.66)	196.96	59.81	3	0	35	184	131	85	74	74	66	32	69	720
Apr-08	258.48	(17.17)	275.65	55.43	14	0	90	172	81	83	82	65	38	38	61	744
May-08	200.30	(45.04)	245.35	46.05	52	25	127	162	102	60	52	32	32	17	53	720
Jun-08	464.10	(76.58)	640.70	71.80	28	25	67	123	77	60	51	33	35	32	189	744
Jul-08	225.67	(92.98)	318.65	65.71	42	24	77	126	65	55	47	38	45	46	178	744
Aug-08	279.43	(42.93)	322.36	56.33	40	18	54	140	110	91	57	63	54	50	67	720
Sep-08	218.25	(134.84)	352.89	48.89	35	20	77	149	146	98	89	27	32	25	42	744
Oct-08	103.61	(23.16)	126.67	44.04	6	10	81	264	172	101	52	33	20	3	2	721
Nov-08	148.89	(1.91)	150.80	44.26	5	8	68	316	166	65	30	38	13	5	17	744
Dec-08	127.94	(31.81)	159.76	44.48	11	11	81	280	149	74	50	28	22	10	16	744
Jan-09	147.15	(13.34)	160.50	47.23	1	3	7	283	260	76	42	30	19	7	8	672
Feb-09	155.07	(13.93)	169.00	39.81	5	3	94	378	102	32	26	11	6	7	8	743
Mar-09	174.06	(8.97)	183.03	36.47	10	11	204	350	82	40	19	9	6	8	4	720
Apr-09	86.24	2.79	83.45	31.68	6	15	320	293	62	13	8	1	2	0	0	744
May-09	91.69	(0.81)	92.58	31.94	22	25	322	263	67	28	13	2	1	1	0	744
Total	\$207.61	(\$31.91)	\$48.29	\$48.29	449	436	3,304	4,760	2,575	1,620	1,216	955	705	505	1,017	17,544
Average	\$478.99	-	-	-	19	18	138	198	107	68	51	40	29	21	42	731
Minimum	-	(\$134.64)	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Kentucky Power Company**

**REQUEST**

Show the range and frequency of the customer's 15-minute usage profile.

**RESPONSE**

The Company can not respond as it does not and has not ever had any customers on the Experimental Real-Time Pricing (RTP) Tariff.

**WITNESS:** Errol K Wagner/David M Roush





**Kentucky Power Company**

**REQUEST**

Show the variance of day-ahead and real-time AEP-zone LMP.

**RESPONSE**

Attached as Page 2 of 2 is a schedule showing the difference between the AEP's Real-Time LMP versus the Day-Ahead LMP for each of the twenty four months for period ending May 31, 2009. The schedule shows the monthly high and low along with the average difference for the month. The schedule also shows the number of hours each month the variance fell into the indicated ranges. As shown on the schedule the average difference for the twenty four month periods was \$0.32 per MWh or \$0.00032 per kWh.

**WITNESS:** Errol K Wagner/David M Roush

**SUMMARY - DIFFERENCE BETWEEN REAL TIME LMP AND DAY-AHEAD LMP**  
 June 2007 through May 2009

Year - Month	Real Time LMP - Day Ahead LMP		Frequency Distribution (Number of Hours)											Total		
	High	Low	Range	Average	< -\$45	-\$45 to -\$35	-\$35 to -\$25	-\$25 to -\$15	-\$15 to -\$5	-\$5 to \$5	\$5 to \$15	\$15 to \$25	\$25 to \$35		\$35 to \$45	> \$45
Jun-07	83.07	(112.01)	175.08	(4.37)	13	15	48	69	145	270	105	34	15	5	1	720
Jul-07	100.03	(58.98)	159.01	1.78	4	11	20	34	103	312	172	55	17	8	7	744
Aug-07	116.84	(56.06)	172.90	2.79	1	3	27	53	126	277	135	66	26	8	22	744
Sep-07	123.12	(84.76)	207.88	3.36	4	3	8	39	117	299	154	45	19	12	20	720
Oct-07	384.24	(53.60)	417.83	2.95	1	3	16	58	128	291	121	79	22	10	15	744
Nov-07	104.08	(52.67)	156.76	0.72	2	6	13	64	153	287	96	47	26	16	11	721
Dec-07	132.80	(55.67)	188.47	0.99	2	8	27	66	137	312	71	58	29	17	17	744
Jan-08	171.80	(65.34)	237.14	(2.16)	16	18	40	87	128	274	86	41	21	14	19	744
Feb-08	127.17	(47.99)	175.17	0.64	1	11	34	64	147	247	75	50	21	18	28	696
Mar-08	113.91	(66.92)	182.84	1.41	6	16	43	70	135	244	86	41	42	28	32	743
Apr-08	178.46	(66.17)	234.63	(2.78)	4	18	49	108	162	214	67	37	31	15	33	744
May-08	145.81	(70.19)	216.11	0.10	7	20	25	88	183	226	79	45	36	26	54	720
Jun-08	324.92	(100.30)	425.12	2.27	30	24	42	56	112	182	113	45	29	13	20	744
Jul-08	138.11	(102.10)	240.21	(3.75)	29	31	48	86	138	195	114	41	29	10	13	744
Aug-08	208.58	(60.67)	267.24	0.25	7	17	22	67	141	238	145	52	32	10	20	720
Sep-08	119.04	(158.32)	277.36	0.32	17	13	22	46	126	258	133	43	27	15	20	744
Oct-08	41.77	(46.48)	90.25	0.77	1	1	3	10	167	385	110	47	13	7	0	744
Nov-08	62.12	(41.22)	103.34	(0.40)	0	2	14	36	142	397	75	26	13	8	8	721
Dec-08	82.46	(59.26)	121.72	0.89	1	1	4	30	150	393	87	35	24	13	6	744
Jan-09	89.19	(49.40)	118.59	(0.47)	1	1	10	46	156	393	68	40	13	9	7	744
Feb-09	95.25	(42.37)	137.61	0.86	0	1	0	10	110	432	74	25	10	4	6	672
Mar-09	96.15	(36.82)	132.95	0.54	0	1	9	18	106	481	86	23	9	7	3	743
Apr-09	49.50	(23.47)	73.07	0.22	0	0	0	11	74	552	63	14	4	0	2	720
May-09	55.39	(25.34)	81.74	0.42	0	0	1	13	91	533	73	22	9	0	2	744
Total					147	224	525	1,229	3,177	7,692	2,388	1,007	508	283	364	17,544
Average	\$127.62	(\$63.75)		\$0.32	6	8	22	61	132	321	100	42	21	12	15	731
Maximum	\$364.24															
Minimum		(\$158.32)														



**Kentucky Power Company**

**REQUEST**

Provide a spreadsheet designed to calculate estimated standard and real time pricing billings.

**RESPONSE**

Please see the attached electronic file.

**WITNESS:** Errol K. Wagner/David M. Roush



## Kentucky Power Company

### REQUEST

Provide any other reports that may be required.

### RESPONSE

Attached are four additional schedules supporting the Company's response to these data requests and explaining the operation of the Real -Time Pricing Program.

Attachment 1, is a summary of the AEP-zone Day-Ahead LMP for the twenty four month period ending May 31, 2009. This summary shows, for each month, the high and low Day-Ahead price. The attachment also shows the number of hours during the month the Day-Ahead LMP price fell into the price ranges shown on the schedule, the information contained on this schedule was used in the development of the Company's response to Item No. 3.

Attachment 2, is a comparison of a 10,000 kW demand customer taking service at the transmission voltage delivery on the CIP-TOD Tariff versus the same customer taking service under the RTP Tariff. This graph demonstrates that the cross over point is at approximately 150 hours per month, with the RTP Tariff being less costly for loads that operate up to 150 hours per month (up to 21% load factor). For the portion of the customer's load that operates more than 150 hours per month, the Company's standard CIP-TOD tariff is less costly.

Attachment 3, is a comparison of a 1,000 kW demand customer taking service at the primary voltage delivery on the QP Tariff versus the same customer taking service under the RTP Tariff. This graph demonstrates that the cross over point occurs at approximately 200 hours per month with the RTP Tariff being less costly for loads that operate up to 200 hours per month (up to 28% load factor). For the portion of the customer's load that operates more than 200 hours per month, the Company's standard QP tariff is less costly.

Attachment 4, is an analysis of the 2008 AEP-zone LMP hourly prices. This schedule demonstrates the number of hours throughout 2008 when the LMP hourly prices were greater than KPCo's average rate for both the CIP-TOD and the QP customers.

Attachments 2, 3 and 4 illustrate that the Company's RTP program design appropriately recognizes the relationship between the Company's standard tariffs and real time pricing. The Company's RTP program gives customers the flexibility to experiment with real-time pricing by allowing customers to designate a portion of their load as standard tariff load and any load in excess of the designated amount as RTP Tariff load. This approach allows customers to keep their higher load factor usage under standard tariff billing and still have the opportunity to place their lower load factor usage on real time pricing.

WITNESS: Errol K Wagner/David M Roush

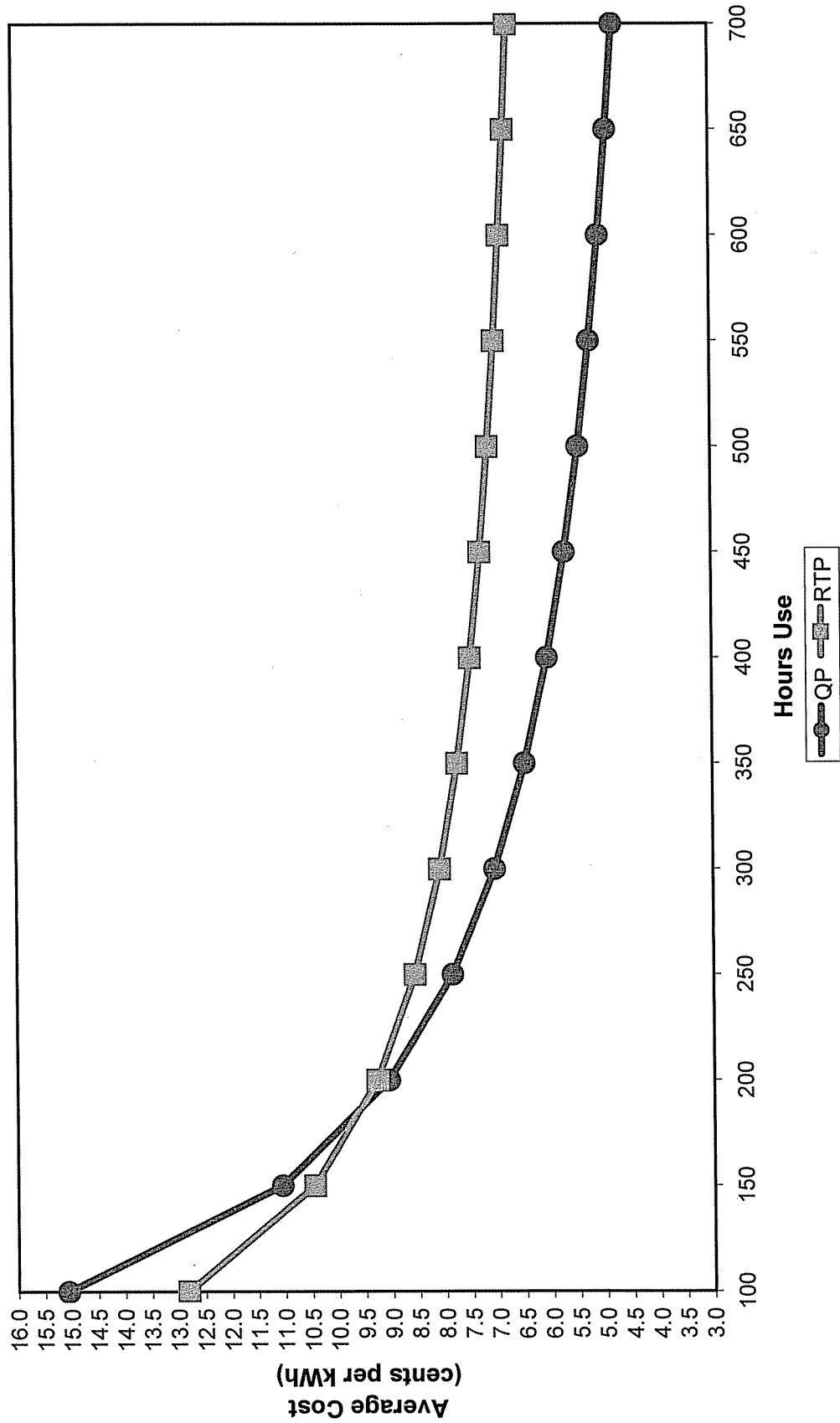
SUMMARY - DAY-AHEAD LMP  
June 2007 through May 2009

Frequency Distribution (Number of Hours Where LMP is:)

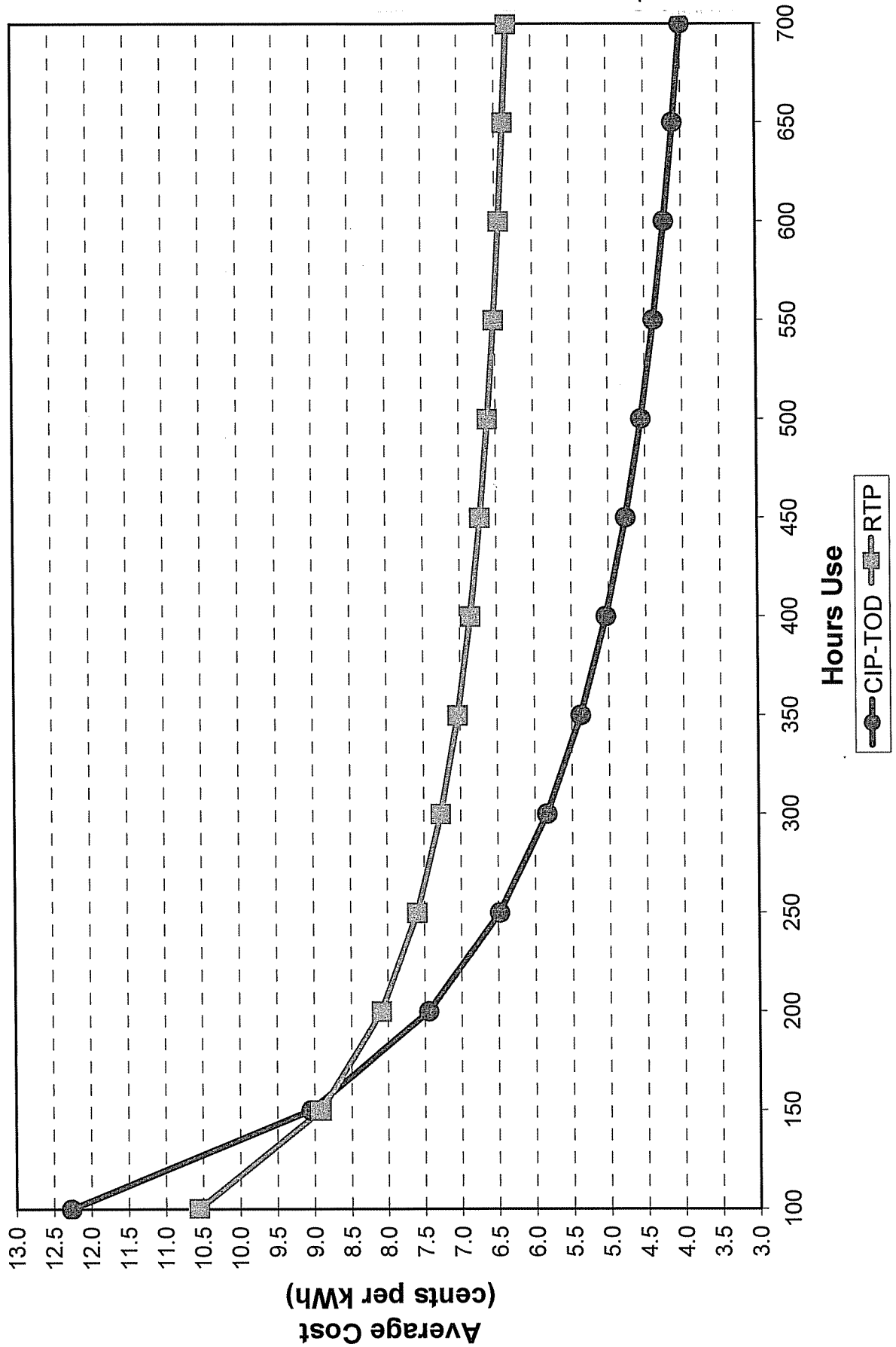
Year - Month	High \$	Low \$	Range \$	Average \$	≤ \$10	\$10 to \$20	\$20 to \$30	\$30 to \$40	\$40 to \$50	\$50 to \$60	\$60 to \$70	\$70 to \$80	\$80 to \$90	\$90 to \$100	> \$100	Total
Jun-07	120.37	4.72	115.65	44.77	17	93	172	72	64	72	111	59	28	20	12	720
Jul-07	142.66	6.56	136.10	41.89	5	109	194	71	100	112	71	42	19	9	12	744
Aug-07	167.61	14.82	152.79	57.49	0	14	165	86	73	81	79	65	72	44	65	744
Sep-07	95.31	6.89	88.42	39.13	5	88	186	120	125	84	68	32	8	3	0	720
Oct-07	125.30	21.04	104.26	49.24	0	0	180	101	87	160	124	41	22	16	13	744
Nov-07	89.86	19.10	70.76	44.42	0	3	201	117	124	130	89	44	13	0	0	721
Dec-07	114.26	20.81	93.45	45.33	0	0	231	144	99	100	66	45	38	17	6	744
Jan-08	124.99	18.74	106.24	51.29	0	3	160	131	105	103	88	57	53	19	25	744
Feb-08	110.09	25.83	84.26	54.57	0	0	51	171	127	98	68	78	55	31	17	698
Mar-08	122.40	29.34	93.06	68.39	0	4	4	202	112	92	99	96	83	42	13	743
Apr-08	113.38	21.28	92.08	58.20	0	0	63	148	89	88	94	132	83	34	9	720
May-08	96.68	12.59	84.10	45.94	0	60	148	96	118	162	66	45	36	13	0	744
Jun-08	237.27	8.12	229.15	69.53	2	19	93	121	77	62	44	43	42	39	188	720
Jul-08	188.57	(1.41)	189.97	69.47	19	30	101	112	59	40	37	44	44	58	200	744
Aug-08	137.20	5.70	130.50	56.08	4	31	76	154	77	62	107	95	65	39	34	744
Sep-08	119.12	8.66	110.47	48.57	3	21	101	144	128	121	100	66	21	10	5	720
Oct-08	78.99	22.28	56.71	43.28	0	0	81	221	261	123	47	11	0	0	0	744
Nov-08	94.47	23.81	70.66	44.67	0	0	37	297	201	78	59	28	18	3	0	721
Dec-08	109.46	13.99	95.47	43.58	0	5	69	276	213	91	57	24	6	2	1	744
Jan-09	94.98	28.18	66.49	47.68	0	0	4	220	267	136	78	28	9	2	0	744
Feb-09	83.70	24.74	58.96	36.93	0	0	76	368	158	44	12	12	2	0	0	672
Mar-09	119.85	14.25	105.60	35.93	0	9	232	318	116	29	22	6	4	4	2	743
Apr-09	58.35	19.20	39.15	31.44	0	4	336	334	40	6	0	0	0	0	0	720
May-09	47.14	9.84	37.30	31.51	2	22	288	384	68	0	0	0	0	0	0	744
Total	-	-	-	\$47.97	57	512	3,229	4,409	2,868	2,064	1,586	1,083	719	405	602	17,544
Average	\$116.32	\$15.84	-	-	2	21	135	184	120	86	66	46	30	17	25	731
Maximum	\$237.27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Minimum	-	(\$1.41)	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Kentucky Power Company  
Comparison of QP vs. RTP  
1,000 kW Demand - Primary Voltage

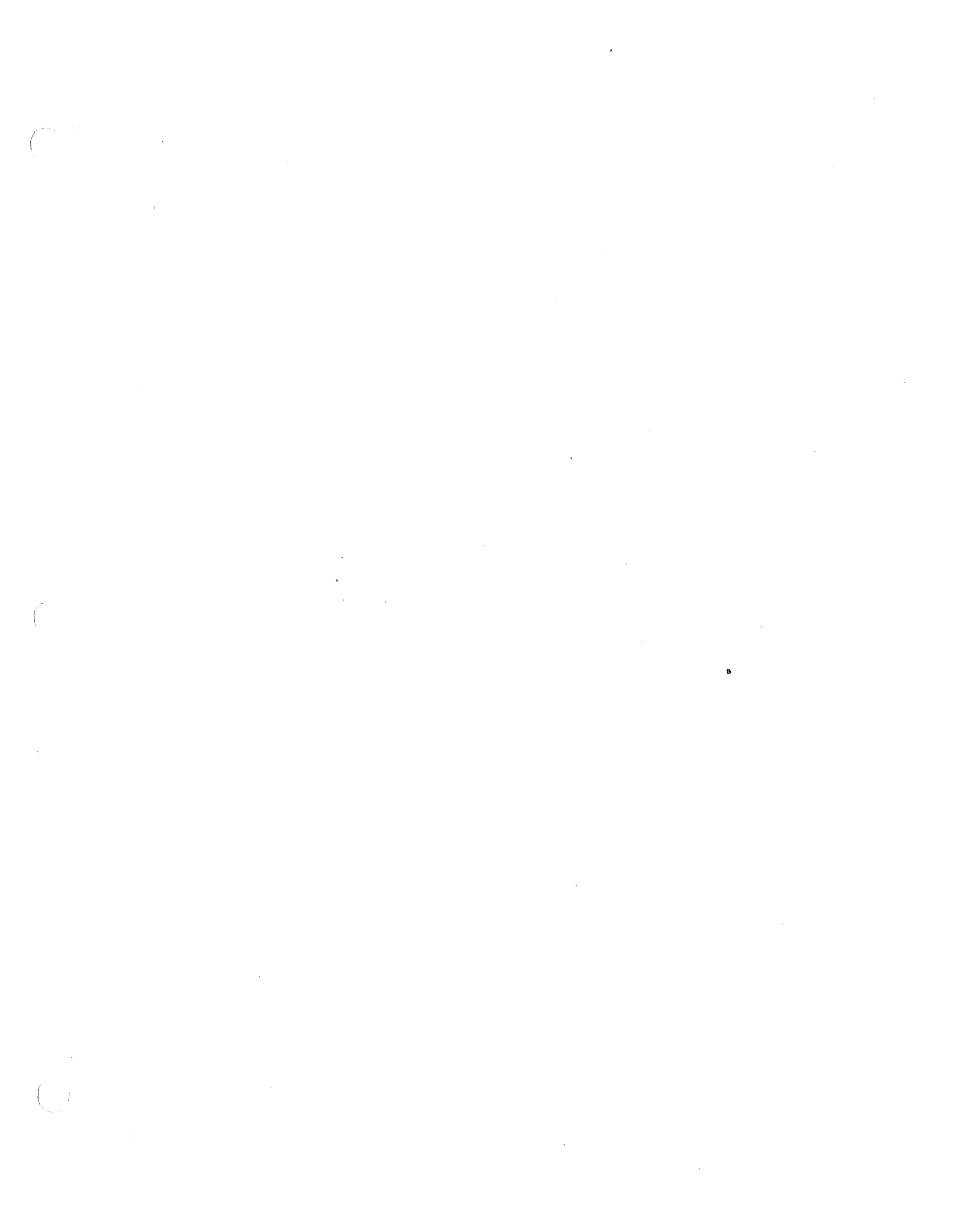


Kentucky Power Company  
 Comparison of CIP-TOD vs. RTP  
 10,000 kW Demand - Transmission Voltage



**Kentucky Power Company  
 Analysis of 2008 AEP Zone LMP Hourly Prices**

	<u>Real Time LMP</u> <u>\$ / MWH</u>	<u>Hours</u>	<u>% of</u> <u>Annual</u> <u>Hours</u>
Yearly Simple Average of AEP Zone LMP	\$53.41		
Hours >= \$75		1,743	19.84%
Hours >= \$50		3,666	41.73%
Maximum	\$464.10		
Off-peak hours		5,130	58.40%
<b>Total Company</b>			
Total Company Average Rate	\$46.24		
Hours < \$46.24		4,702	53.53%
Hours >= \$46.24		4,083	46.48%
<b>Industrial Classes</b>			
QP Average Rate	\$45.10		
Hours >= \$45.10		4,215	47.98%
CIP - TOD Average Rate	\$41.60		
Hours >= \$41.60		4,759	54.18%
<b>Industrial Classes</b>			
Energy Only Charge			
KP CIP-TOD - Transm. Energy Charge Average	\$26.10		
Hours >= \$26.10		7,956	90.57%
Energy Only Charge			
KP QP - Transm. Energy Charge Average	\$29.25		
Hours >= \$29.25		7,474	85.09%



**Kentucky Power Company**

**REQUEST**

Provide the current number of program participants.

**RESPONSE**

The Company does not have and has never had any customers on the RTP Tariff.

**WITNESS:** Errol K Wagner/David M Roush



## Kentucky Power Company

### REQUEST

Provide the type of industry or primary business activity of each participant.

### RESPONSE

Please see the Company's response to Item No. 6. While the Real-Time Pricing Tariff is not targeted to a particular industry or business activity, the analyses provided in this report indicate that customer's having a portion of their existing load that is low load factor could benefit from the RTP Tariff. In addition, customers that can temporarily increase production to take advantage of opportunities in their product market or advantageous conditions in the energy market may also benefit from the RTP Tariff.

WITNESS: Errol K Wagner/David M Roush





**Kentucky Power Company**

**REQUEST**

Provide the number of participants that have withdrawn from the program and the reason for such withdrawal.

**RESPONSE**

Please see the Company's response to Item No. 6.

**WITNESS:** Errol K Wagner/David M Roush



**Kentucky Power Company**

**REQUEST**

Provide the average, minimum and maximum monthly electrical usage and cost for program participants during each 12-month reporting period and the 12-month period immediately preceding enrollment into the program.

**RESPONSE**

Please see the Company's response to Item No. 6.

**WITNESS:** Errol K Wagner/David M Roush



## Kentucky Power Company

### REQUEST

Provide all comments and suggestions solicited from program participants.

### RESPONSE

The Company does not have any RTP Tariff program participants at this time. However, the Company had discussions with the eligible customers in the Ashland, Hazard and Pikeville districts for the 2008 program year. Many of the eligible customers expressed initial interest in the concept of the RTP Tariff. However, following detailed reviews of the sample billing spreadsheet, the customers believed the market risk and the potential increase in their electricity costs made participation inadvisable. Other comments the Company received were that the estimated customer savings, based upon the sample bill spreadsheet calculations, were limited and did not seem to offset the potential risk of market pricing. In addition, RTP rate savings which may have been available with customer load modification were limited by the customer's process or plant operation. Some of the customers did not believe their plant operation gave them the flexibility to change their use of electricity hourly and still maintain the same level of output.

The Company again had discussions with many of the same customers for the 2009 program year. The economic downturn was the foremost issue of concern. The customers were most interested in how the downturn would affect the level of production. Some customers also were interested in their utility cost under the Tariffs CIP-TOD or QP off-peak provision rather than the RTP Tariff.

**WITNESS:** Errol K Wagner/David M Roush



## Kentucky Power Company

### REQUEST

An evaluation of the program's effect on Kentucky Power's peak and/or base demand as compared to its historical data for the 12-month period immediately preceding implementation of the program.

### RESPONSE

The Company does not have any customers on the RTP Tariff. Therefore, the RTP Tariff has not had any effect on the Company's peak and/or base demand.

WITNESS: Errol K Wagner/David M Roush

C

C

C



## Kentucky Power Company

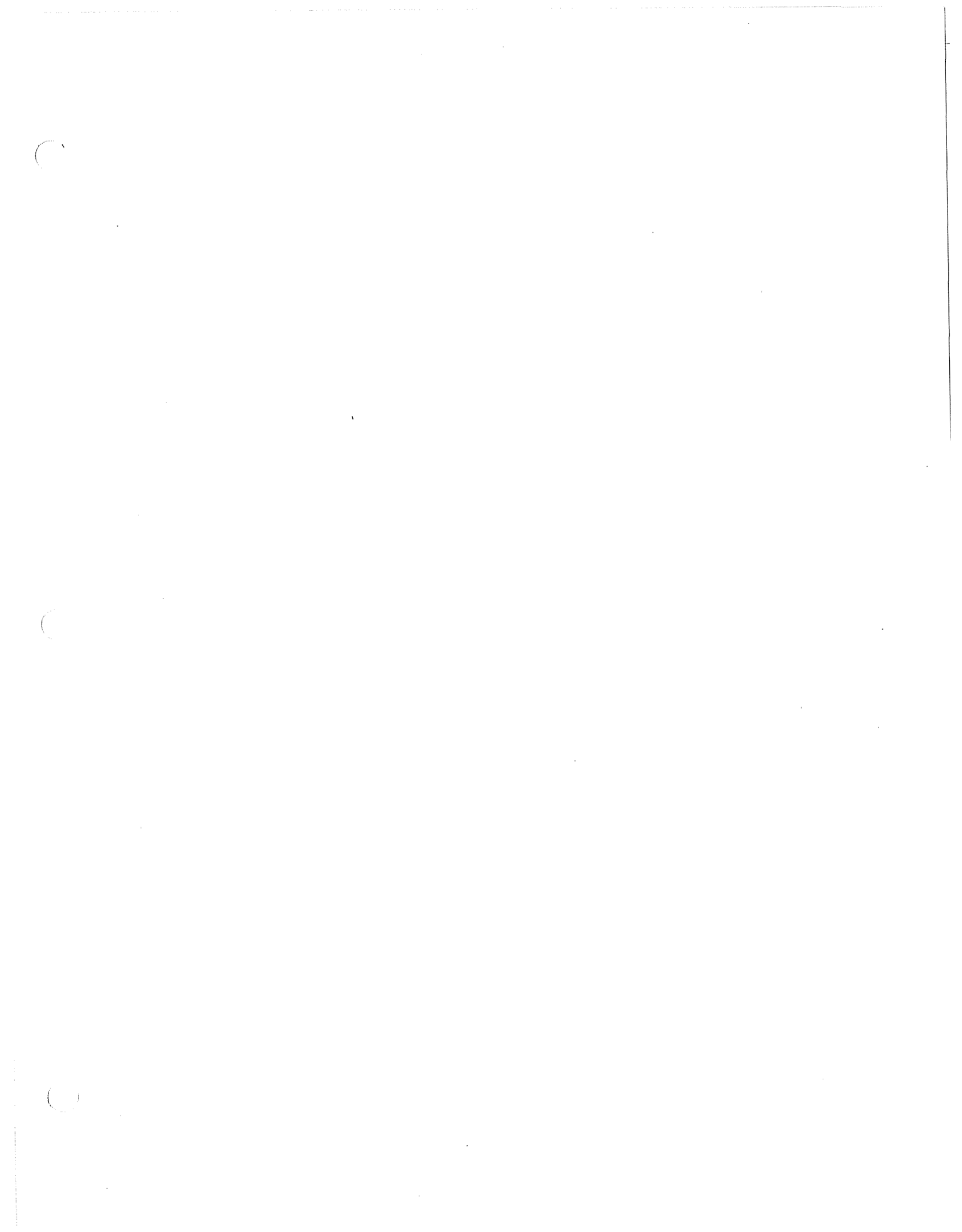
### REQUEST

Provide a statement of whether the program is achieving the stated objectives and an evaluation of the comments and suggestions of the program participants.

### RESPONSE

The RTP Tariff program has helped the Company educate its largest customers concerning the market value of the electricity they consume. In addition, it has also helped educate the customers concerning the type of equipment and changes in operations that would be necessary to take advantage of any hourly pricing product. So even though no customers have elected to take part or all of their service under Tariff RTP, the discussions that have been generated have increased customer understanding and awareness and initiated customer analyses of their operations and the potential under all KPCo service offerings and provisions.

**WITNESS:** Errol K Wagner/David M Roush



## Kentucky Power Company

### REQUEST

Provide the program costs to the date of the report, along with the details of any deviations from the program budget contained in the Company's application.

### RESPONSE

The total RTP programming administrative costs as of May 31, 2009 were \$934,006, of which KPCo's share is \$284,788. The total programming costs were allocated based upon the number of retail customers between I&M and KPCo, the only AEP East Companies who have a RTP Tariff.

At the August 9, 2007 Informal Conference in this proceeding the Company stated its estimated cost for the system will be at least \$100,000.

The Company's application did not contain specific budgeted program costs. Therefore, the Company is unable to detail any deviations.

**WITNESS:** Errol K Wagner/David M Roush



**Kentucky Power Company**

**REQUEST**

Provide a cumulative comparison of the information furnished in Item No. 9 of this filing to allow year-to-year comparison of program results.

**RESPONSE**

See the Company's response to Item No. 9.

**WITNESS:** Errol K. Wagner/David M. Roush