



DUKE ENERGY CORPORATION  
139 East Fourth Street  
P.O. Box 960  
Cincinnati, OH 45201-0960

**VIA OVERNIGHT MAIL**

April 3, 2006

Ms. Elizabeth O'Donnell  
Executive Director  
Kentucky Public Service Commission  
211 Sower Boulevard  
P.O. Box 615  
Frankfort, Kentucky 40602-0615

**RECEIVED**

**APR 04 2006**

**PUBLIC SERVICE  
COMMISSION**


Re: In the Matter of the Application of The Union Light, Heat and Power Company  
d/b/a Duke Energy Kentucky for Authority to Continue Making Monthly  
Adjustments to the Expected Gas Cost Component of its Gas Cost Adjustment  
Rate Case No. 2006- 00144

Dear Ms. O'Donnell:

Enclosed is an original and twelve copies of The Union Light, Heat and Power Company  
d/b/a Duke Energy Kentucky Application in the above-referenced case.

Please file stamp and return the two extra copies in the enclosed envelope. If you have  
questions, please do not hesitate to contact me at 513-287-3601.

Sincerely,

  
John J. Finnigan, Jr.  
Senior Counsel

JJF/sew

cc: Hon. Elizabeth E. Blackford (with enclosure)

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

**RECEIVED**

**APR 04 2006**

**PUBLIC SERVICE  
COMMISSION**

In the Matter of the Application of )  
The Union Light, Heat and Power )  
Company d/b/a Duke Energy )  
Kentucky for Authority to Continue )  
Making Monthly Adjustments to )  
the Expected Gas Cost Component )  
of its Gas Cost Adjustment Rate )

Case No. 2006- 00144

---

APPLICATION

---

Pursuant to the Commission's November 6, 2003 Order in Case No. 2003-00386, now comes The Union Light, Heat and Power Company d/b/a Duke Energy Kentucky ("Duke Energy Kentucky") and respectfully requests that the Public Service Commission grant Duke Energy Kentucky authority to allow Duke Energy Kentucky to continue making the following changes to its Gas Cost Adjustment ("GCA") rate:

- monthly adjustments to the Expected Gas Cost ("EGC") Component of its GCA;
- such monthly EGC adjustments, consistent with the NYMEX price for the prompt month, to be made no later than 20 days prior to the effective date of the new rates; and
- the quarterly adjustments (Actual Adjustment ("AA"), Refund Adjustment ("RA") and Balance Adjustment ("BA")) to be calculated on the basis of projected 12-month weather-normalized sales rather than the past 12 months' actual sales.

In support of this Application, Duke Energy Kentucky states as follows:

1. Duke Energy Kentucky is a Kentucky corporation providing natural gas and electric service to approximately 88,000 customers in Northern Kentucky and, as such, is a

public utility pursuant to KRS 278.010.

2. Duke Energy Kentucky's principal office and principal place of business is 1697 A Monmouth Street, Newport Shopping Center, Newport, Kentucky 41071, and its mailing address is P. O. Box 960, Cincinnati, Ohio 45201. Pursuant to 807 KAR 5:001, Section 8(3), Duke Energy Kentucky states that a certified copy of its Articles of Incorporation, as amended, is on file with the Commission in Case No. 2005-00042.

3. In Case No. 2003-00386, the Commission granted approval for Duke Energy Kentucky to conduct a 30-month trial program of monthly GCA filings, ending in June 2006. Duke Energy Kentucky sought the Commission's approval for this 30-month trial program to counteract the significant increase in wholesale natural gas prices which began during the winter of 2000-2001. One of Duke Energy Kentucky's principal objectives was to reduce the large over- and under-recoveries realized by local distribution companies ("LDCs") in their GCA filings. The Commission had previously ordered LDCs to make monthly GCA filings during 2001, in *In the Matter of an Investigation of Increasing Wholesale Natural Gas Prices and the Impacts of Such Increases on the Retail Customers Served by Kentucky's Jurisdictional Natural Gas Distribution Companies*, Administrative Case No. 384 (Order)(July 17, 2001).

4. Duke Energy Kentucky's 30-month program began in December 2003 and is scheduled to run through June 2006. Duke Energy Kentucky has analyzed the impacts of the monthly GCAs versus the amounts it would have calculated for quarterly GCAs from December 2003 through February 2006. Duke Energy Kentucky's report is at Attachment A. The report clearly demonstrates that, during this time period, the monthly GCAs

effectively mitigated the magnitude of the AA changes, and the volatility of the AAs. This is the result that Duke Energy Kentucky had expected to achieve when it began using monthly GCAs. This reduced volatility shielded customers from extreme price swings.

5. Based on the foregoing, Duke Energy Kentucky requests permission to continue filing monthly GCAs until such time as the Commission may order some other timetable. This would allow Duke Energy Kentucky to continue providing GCA pricing which mitigates the impact of volatile gas prices. Additionally, customers have had 30 months to become acclimated to monthly changes in the GCAs.

6. Duke Energy Kentucky will use the same methodology for calculating and filing the monthly GCAs as the Commission approved in Case No. 2003-00386, *to wit*:

- Duke Energy Kentucky will make a filing at least 20 days in advance of the next month's calculation, with the adjustments (AA, RA, BA) for the quarter using forecasted 12-month weather normalized sales;
- the natural gas commodity and storage prices in Duke Energy Kentucky's quarterly EGC filing will reflect then-current NYMEX prices;
- Duke Energy Kentucky will then update its EGC, as proposed above, based on the current NYMEX price no later than 20 days prior to the upcoming month, for each month during such quarter;
- in making such updates, Duke Energy Kentucky will place substantial weight on the prompt month NYMEX price, but may make appropriate adjustments if the NYMEX price does not appear to be representative of prices for the upcoming month (*e.g.*, where a hurricane in the Gulf of Mexico causes a spike in the NYMEX

price on the day that Duke Energy Kentucky is establishing prices for the upcoming month).

- Duke Energy Kentucky will make this revised monthly filing to reflect such NYMEX price, which will adjust the EGC's natural gas commodity and storage components. Duke Energy Kentucky will provide each month's revised monthly filing to the Commission Staff at least 20 days prior to the effective date.
- the revised filing will include the GCA rate calculation as performed by Duke Energy Kentucky during the 30-month trial period, and as shown on Attachment B, and any other relevant supporting documentation.
- Duke Energy Kentucky will calculate the quarterly adjustments (AA, RA and BA) on the basis of projected 12-month weather-normalized sales,

9. The benefits of this proposal are:

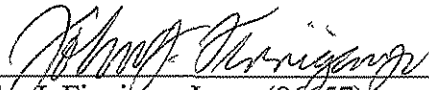
- the EGC will be more reflective of the then-current monthly market price, which should reduce future over-recoveries and under-recoveries;
- the use of projected weather-normalized sales to calculate the adjustments to the future GCA rates should have less volatile swings because it will be calculated based on a more consistent and representative variable; and
- on balance, the resulting monthly prices will more closely reflect current wholesale natural gas prices.

10. Pursuant to KRS 278.180, Duke Energy Kentucky requests that the Commission allow Duke Energy Kentucky to use a 20-day notice period, for the monthly adjustments for which approval is sought herein.

WHEREFORE, Duke Energy Kentucky respectfully requests approval of this Application to authorize it to make monthly adjustments to the EGC component of its GCA rate as requested herein.

Respectfully submitted,

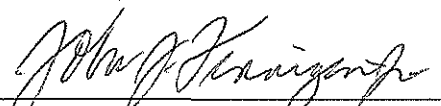
DUKE ENERGY KENTUCKY

  
\_\_\_\_\_  
John J. Finnigan, Jr. (86657)  
Senior Counsel  
Duke Energy Services, Inc.  
2500 AT II  
139 East Fourth Street  
Cincinnati, Ohio 45201  
(513) 287-3601  
e-mail: [jfinnigan@cinergy.com](mailto:jfinnigan@cinergy.com)

CERTIFICATE OF SERVICE

This is to certify that a copy of the foregoing Application has been served by hand delivery to the following parties on this 3rd day of April, 2006:

Hon. Elizabeth E. Blackford  
Office of Attorney General  
Utility Intervention and Rate Division  
1024 Capital Center Drive  
Frankfort, Kentucky 40601

  
\_\_\_\_\_  
John J. Finnigan, Jr.

**BEFORE THE  
KENTUCKY PUBLIC SERVICE COMMISSION**

**Report on Monthly GCA Pilot Program  
December 1, 2003 – February 28, 2006**

**By  
Duke Energy Kentucky**

March, 2006

**Introduction**

On October 2, 2003, Duke Energy Kentucky filed an application to change the frequency of its Gas Cost Adjustment (GCA) filings. On November 6, 2003 the Commission approved a 30 month pilot program from December 2003 through June 2006. Although the pilot program is not yet over, this report examines the effect of a monthly GCA versus a quarterly GCA through February 2006.

Although the Expected Gas Cost (EGC) portion of the GCA was recalculated and filed on a monthly basis during this time, the Actual Adjustment (AA) continued to be calculated and filed on a quarterly basis. During this pilot program, Gas Commercial Operations continued to calculate a quarterly EGC so that it would be possible to analyze what the AA's would have been under a quarterly system to compare to what the monthly AA's actually were under the monthly system.

Simple arithmetic calculations show that the average AA under the monthly system was \$0.065 compared to -\$0.135 that would have resulted from a quarterly filed GCA. Statistical hypothesis testing at the 90% confidence level verifies that the difference is significant, and that filing the GCA monthly reduces the volatility of the AA and also the magnitude.

**Monthly vs Quarterly Comparison**

Schedule III of the GCA filings shows the calculation of the AA based on the difference between the per unit booked cost of gas and the EGC in effect for that month. This difference is multiplied by the monthly jurisdictional sales to get the dollar amount that was over or under collected. The three months of each quarter are added together and divided by 12 month projected normalized sales to arrive at an AA rate per mcf. The Schedules III calculations for each quarter of the pilot program to date were revised utilizing the calculated quarterly EGC to determine the AA rates that would have resulted from a quarterly filed GCA. This calculation is shown in Attachment A-1, and is summarized below.

<b>Quarter</b>	<b>Actual Adjustment (AA)</b>	
	<b>Monthly</b>	<b>Quarterly</b>
2004 Q1 (D,J,F)	\$0.144	\$0.206
2004 Q2 (M,A,M)	(\$0.320)	(\$0.373)
2004 Q3 (J,J,A)	(\$0.045)	(\$0.053)
2004 Q4 (S,O,N)	\$0.362	\$0.342
2005 Q1(D,J,F)	\$0.070	(\$1.023)
2005 Q2 (M,A,M)	(\$0.420)	(\$0.370)
2005 Q3 (J,J,A)	(\$0.013)	(\$0.011)
2005 Q4 (S,O,N)	\$0.873	\$1.161
2006 Q1(D,J,F)	(\$0.072)	(\$1.094)
<b>Average</b>	<b>\$0.065</b>	<b>(\$0.135)</b>



In six of the nine quarters, the AA under the monthly system was closer to zero than the AA than would have occurred under a quarterly system. The average over the nine quarters is also closer to zero under the monthly system. While this appears to indicate that the monthly system reduces the volatility and magnitude of adjustments, hypothesis testing was used to determine whether the apparent difference is statistically significant.

### Variance of Actual Adjustments

The sample variance of the AA under a quarterly system from December 2003 through February 2006 would have been \$0.484. This is higher than the actual variance under the monthly system of \$0.146. Assuming that the AA would have a normal distribution, the hypothesis that the variances under both systems are equal was tested against the alternative hypothesis that the monthly GCA would result in a lower variance. Testing was done at the 90% confidence level.

$\sigma^2_1$  = Variance of AA from a quarterly GCA. ( $S^2_1$  = Sample Variance)

$\sigma^2_2$  = Variance of AA resulting from a monthly GCA. ( $S^2_1$  = Sample Variance)

$H_0$  (Null Hypotheses):  $\sigma^2_1 = \sigma^2_2$

$H_a$  (Alternative Hypotheses):  $\sigma^2_1 > \sigma^2_2$

Test Statistic:  $F = S^2_1 / S^2_2$

Degrees of Freedom:  $n - 1 = 9 - 1 = 8$  (both numerator and denominator)

Reject null hypotheses if F is greater than 2.59 ( $\alpha = .10$ , 90% confidence)

$S^2_1 = 0.48337$

$S^2_2 = 0.14599$

$F = 3.311$  **Therefore the Null Hypotheses can be rejected.**

Based on this analysis, at a 90% confidence level, the Actual Adjustments from a monthly GCA will have a lower variance than a GCA filed on a quarterly basis. In other words, the monthly filed GCA reduces the volatility in the AA. However, a system that results in large adjustments on a consistent basis could have a lower variance, but would not necessarily be better than a system that results in lower adjustments. An additional test was utilized to determine if the monthly GCA results in a lower magnitude of adjustments.

### Magnitude of Actual Adjustments

In order to test the magnitude of the Actual Adjustment, the calculated AA under each system was first converted to absolute values, since large over collections are equally undesirable as large under collections. The average of the absolute value of the AA under a quarterly system would have been \$0.5148 and the actual average under the monthly system was \$0.2577. The hypothesis that the difference between the two averages would be zero was tested against the alternative hypothesis that the average under the quarterly system would be higher than the average under the monthly. This test was also done at the 90% confidence level.

$\mu_1$  = Mean of the absolute value of the AA resulting from quarterly GCA. ( $Y_1$  = Sample Mean)

$\mu_2$  = Mean of the absolute value of the AA resulting from monthly GCA. ( $Y_2$  = Sample Mean)

$\sigma^2_1$  = Variance of the absolute value of the AA resulting from a quarterly GCA. ( $S^2_1$  = Sample Variance)

$\sigma^2_2$  = Variance of the absolute value of the AA resulting from a monthly GCA. ( $S^2_2$  = Sample Variance)

$n_1$  = Sample size of data from quarterly GCA (9)

$n_2$  = Sample size of data from monthly GCA (9)

$H_0$  (Null Hypotheses):  $\mu_1 - \mu_2 = 0$

$H_a$  (Alternative Hypotheses):  $\mu_1 - \mu_2 > 0$

Test Statistic T =

$$\frac{Y_1 - Y_2}{\sqrt{\frac{(n_1 - 1)S^2_1 + (n_2 - 1)S^2_2}{n_1 + n_2 - 2}}} * \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}$$

Degrees of Freedom:  $n_1 + n_2 - 2 = 9 + 9 - 2 = 16$

Reject null hypotheses if T is greater than 1.34 ( $\alpha = .10$ , 90% confidence)

$Y_1 = 0.5148$

$Y_2 = 0.2577$

$S^2_1 = 0.2056$

$S^2_2 = 0.0760$

T = 1.4537

**Therefore the Null Hypotheses can be rejected.**

Based on this analysis, at the 90% confidence level, the average of the absolute value of the Actual Adjustments under the monthly GCA will be lower than the average under a quarterly system. In other words, the adjustments resulting from the monthly GCA are of a lower magnitude than what would occur under a quarterly system.

**Conclusion**

The monthly filed GCA resulted in a lower magnitude of adjustments than would have occurred under a quarterly filed GCA, and also decreased volatility in the AA. This in turn decreases the volatility of the GCA rate paid by Duke Energy Kentucky's customers, and also results in a GCA that more closely represents the true market price of natural gas for customers.

**Duke Energy Kentucky  
Gas Commercial Operations  
Analysis of Monthly GCA vs Quarterly GCA**

	<u>Monthly GCA (Actual)</u>			<u>Quarterly GCA (Estimated)</u>		
	<u>Dec-03</u>	<u>Jan-04</u>	<u>Feb-04</u>	<u>Dec-03</u>	<u>Jan-04</u>	<u>Feb-04</u>
<b>2004 Q1</b>						
Unit Book Cost of Gas	\$8.435	\$7.710	\$5.128	\$8.435	\$7.710	\$5.128
EGC in Effect	\$5.879	\$7.230	\$6.563	\$6.517	\$6.517	\$6.517
Difference	\$2.556	\$0.480	(\$1.435)	\$1.918	\$1.193	(\$1.389)
Jurisdictional Sales	1,546,212.4	2,241,035.3	2,341,673.5	1,546,212.4	2,241,035.3	2,341,673.5
Monthly Cost Difference	\$3,952,119	\$1,075,697	(\$3,360,301)	\$2,965,635	\$2,673,555	(\$3,252,584)
Prior Period Adjustment						
Quarterly Cost Difference			\$1,667,514.37			\$2,386,606
12 Month Jurisdictional Sales			11,560,184			11,560,184
Actual Adjustment			\$0.144			\$0.206
<b>2004 Q2</b>						
Unit Book Cost of Gas	\$5.325	\$4.136	\$5.031	\$5.325	\$4.136	\$5.031
Quarterly EGC	\$6.388	\$6.397	\$6.833	\$6.664	\$6.664	\$6.664
Difference	(\$1.063)	(\$2.261)	(\$1.802)	(\$1.339)	(\$2.528)	(\$1.633)
Jurisdictional Sales	1,487,385.2	997,231.4	430,448.4	1,487,385.2	997,231.4	430,448.4
Monthly Cost Difference	(\$1,581,090)	(\$2,254,740)	(\$775,668)	(\$1,991,609)	(\$2,521,001)	(\$702,922)
Prior Period Adjustment			\$948,532.62			\$948,532.62
Quarterly Cost Difference			(\$3,662,966.06)			(\$4,266,999)
12 Month Jurisdictional Sales			11,436,364			11,436,364
Actual Adjustment			(\$0.320)			(\$0.373)
<b>2004 Q3</b>						
Unit Book Cost of Gas	\$6.226	\$6.887	\$5.948	\$6.226	\$6.887	\$5.948
Quarterly EGC	\$7.140	\$6.956	\$7.068	\$7.192	\$7.192	\$7.192
Difference	(\$0.914)	(\$0.069)	(\$1.120)	(\$0.966)	(\$0.305)	(\$1.244)
Jurisdictional Sales	247,971.7	218,269.0	239,470.6	247,971.7	218,269.0	239,470.6
Monthly Cost Difference	(\$226,646)	(\$15,061)	(\$268,207)	(\$239,541)	(\$66,572)	(\$297,901)
Prior Period Adjustment						
Quarterly Cost Difference			(\$509,913.77)			(\$604,014)
12 Month Jurisdictional Sales			11,431,506			11,431,506
Actual Adjustment			(\$0.045)			(\$0.053)
<b>2004 Q4</b>						
Unit Book Cost of Gas	\$6.182	\$9.115	\$13.584	\$6.182	\$9.115	\$13.584
Quarterly EGC	\$6.672	\$5.970	\$7.985	\$7.371	\$7.371	\$7.371
Difference	(\$0.490)	\$3.145	\$5.599	(\$1.189)	\$1.744	\$6.213
Jurisdictional Sales	230,736.9	309,036.0	586,421.3	230,736.9	309,036.0	586,421.3
Monthly Cost Difference	(\$113,061)	\$971,918	\$3,283,373	(\$274,346)	\$538,959	\$3,643,436
Prior Period Adjustment						
Quarterly Cost Difference			\$4,142,230.00			\$3,908,048
12 Month Jurisdictional Sales			11,431,095			11,431,095
Actual Adjustment			\$0.362			\$0.342

**Duke Energy Kentucky  
Gas Commercial Operations  
Analysis of Monthly GCA vs Quarterly GCA**

	<u>Monthly GCA (Actual)</u>			<u>Quarterly GCA (Estimated)</u>		
	<u>Dec-04</u>	<u>Jan-05</u>	<u>Feb-05</u>	<u>Dec-04</u>	<u>Jan-05</u>	<u>Feb-05</u>
<b>2005 Q1</b>						
Unit Book Cost of Gas	\$11.572	\$7.259	\$5.902	\$11.572	\$7.259	\$5.902
EGC in Effect	\$8.398	\$7.617	\$7.288	\$10.014	\$10.014	\$10.014
Difference	\$3.174	(\$0.358)	(\$1.386)	\$1.558	(\$2.755)	(\$4.112)
Jurisdictional Sales	1,344,384.5	2,087,616.4	1,957,984.4	1,344,384.5	2,087,616.4	1,957,984.4
Monthly Cost Difference	\$4,267,076	(\$747,367)	(\$2,713,766)	\$2,094,551	(\$5,751,383)	(\$8,051,232)
Quarterly Cost Difference			\$805,943.35			(\$11,708,064)
12 Month Jurisdictional Sales			11,448,229			11,448,229
Actual Adjustment			\$0.070			(\$1.023)
<b>2005 Q2</b>						
Unit Book Cost of Gas	\$6.840	\$5.255	\$5.941	\$6.840	\$5.255	\$5.941
Quarterly EGC	\$7.312	\$7.907	\$8.133	\$7.459	\$7.459	\$7.459
Difference	(\$0.472)	(\$2.652)	(\$2.192)	(\$0.619)	(\$2.204)	(\$1.518)
Jurisdictional Sales	1,770,452.9	981,743.9	558,890.7	1,770,452.9	981,743.9	558,890.7
Monthly Cost Difference	(\$835,654)	(\$2,603,585)	(\$1,225,088)	(\$1,095,910)	(\$2,163,764)	(\$848,396)
Quarterly Cost Difference			(\$4,664,327.01)			(\$4,108,070)
12 Month Jurisdictional Sales			11,113,102			11,113,102
Actual Adjustment			(\$0.420)			(\$0.370)
<b>2005 Q3</b>						
Unit Book Cost of Gas	\$5.682	\$8.267	\$10.227	\$5.682	\$8.267	\$10.227
Quarterly EGC	\$7.754	\$7.957	\$8.267	\$7.936	\$7.936	\$7.936
Difference	(\$2.072)	\$0.310	\$1.960	(\$2.254)	\$0.331	\$2.291
Jurisdictional Sales	297,851.7	241,057.8	204,008.5	297,851.7	241,057.8	204,008.5
Monthly Cost Difference	(\$617,149)	\$74,728	\$399,857	(\$671,358)	\$79,790	\$467,383
Quarterly Cost Difference			(\$142,564.14)			(\$124,184)
12 Month Jurisdictional Sales			11,121,902			11,121,902
Actual Adjustment			(\$0.013)			(\$0.011)
<b>2005 Q4</b>						
Unit Book Cost of Gas	\$11.249	\$26.754	\$20.700	\$11.249	\$26.754	\$20.700
Quarterly EGC	\$9.181	\$11.291	\$12.879	\$8.983	\$8.983	\$8.983
Difference	\$2.068	\$15.463	\$7.821	\$2.266	\$17.771	\$11.717
Jurisdictional Sales	230,965.5	266,462.4	652,856.2	230,965.5	266,462.4	652,856.2
Monthly Cost Difference	\$477,637	\$4,120,308	\$5,105,988	\$523,368	\$4,735,303	\$7,649,516
Quarterly Cost Difference			\$9,703,933.09			\$12,908,187
12 Month Jurisdictional Sales			11,114,697			11,114,697
Actual Adjustment			\$0.873			\$1.161

**Duke Energy Kentucky  
Gas Commercial Operations  
Analysis of Monthly GCA vs Quarterly GCA**

	<u>Monthly GCA (Actual)</u>			<u>Quarterly GCA (Estimated)</u>		
	<u>Dec-05</u>	<u>Jan-06</u>	<u>Feb-06</u>	<u>Dec-05</u>	<u>Jan-06</u>	<u>Feb-06</u>
<b><u>2006 Q1</u></b>						
Unit Book Cost of Gas	\$15.252	\$9.223	\$9.848	\$15.252	\$9.223	\$9.848
EGC in Effect	\$12.219	\$12.163	\$10.308	\$13.832	\$13.832	\$13.832
Difference	\$3.033	(\$2.940)	(\$0.460)	\$1.420	(\$4.609)	(\$3.984)
Jurisdictional Sales	1,744,147.0	1,826,256.0	1,562,261.0	1,744,147.0	1,826,256.0	1,562,261.0
Monthly Cost Difference	\$5,289,998	(\$5,369,193)	(\$718,640)	\$2,476,689	(\$8,417,214)	(\$6,224,048)
Quarterly Cost Difference			(\$797,834.85)			(\$12,164,573)
12 Month Jurisdictional Sales			11,114,697			11,114,697
Actual Adjustment			<b>(\$0.072)</b>			<b>(\$1.094)</b>

**Attachment 1**

**The Union Light, Heat and Power Company  
Application for Monthly GCA**

**Proposed Monthly Filing Schedules**

----- EXAMPLE ONLY-----

Attachment 1  
 Page 1 of 5

THE UNION LIGHT, HEAT AND POWER COMPANY  
 GAS COST ADJUSTMENT CLAUSE

SUPPLEMENTAL MONTHLY REPORT

GAS COST RECOVERY RATES EFFECTIVE FROM

MAY 31, 200 THROUGH AUGUST 28, 2003

DESCRIPTION	UNIT	AMOUNT
EXPECTED GAS COST (EGC)	\$/MCF	6.835
SUPPLIER REFUND ADJUSTMENT (RA)	\$/MCF	(0.005)
TUENTIAL ADJUSTMENT (AA)	\$/MCF	0.639
BALANCE ADJUSTMENT (BA)	\$/MCF	0.062
GAS COST RECOVERY RATE (GCR) = EGC + RA + AA + BA	\$/MCF	<u>7.531</u>

EXPECTED GAS COST CALCULATION

DESCRIPTION	UNIT	AMOUNT
TOTAL EXPECTED GAS COST COMPONENT (EGC)	\$/MCF	6.835

SUPPLIER REFUND ADJUSTMENT CALCULATION

DESCRIPTION	UNIT	AMOUNT
CURRENT QUARTER SUPPLIER REFUND ADJ.	\$/MCF	0.000
PREVIOUS QUARTER REPORTED SUPPLIER REFUND ADJ.	\$/MCF	0.000
COND PREVIOUS QUARTER REPORTED SUPPLIER REFUND ADJ.	\$/MCF	(0.001)
IRD PREVIOUS QUARTER REPORTED SUPPLIER REFUND ADJ.	\$/MCF	(0.004)
SUPPLIER REFUND ADJUSTMENT (RA)	\$/MCF	(0.005)

ACTUAL ADJUSTMENT CALCULATION

DESCRIPTION	UNIT	AMOUNT
CURRENT QUARTER ACTUAL ADJUSTMENT	\$/MCF	0.437
PREVIOUS QUARTER REPORTED ACTUAL ADJUSTMENT	\$/MCF	0.313
COND PREVIOUS QUARTER REPORTED ACTUAL ADJUSTMENT	\$/MCF	(0.090)
IRD PREVIOUS QUARTER REPORTED ACTUAL ADJUSTMENT	\$/MCF	(0.021)
TUENTIAL ADJUSTMENT (AA)	\$/MCF	0.639

BALANCE ADJUSTMENT CALCULATION

DESCRIPTION	UNIT	AMOUNT
CURRENT QUARTER BALANCE ADJUSTMENT	\$/MCF	0.004
PREVIOUS QUARTER REPORTED BALANCE ADJUSTMENT	\$/MCF	0.008
COND PREVIOUS QUARTER REPORTED BALANCE ADJUSTMENT	\$/MCF	(0.088)
IRD PREVIOUS QUARTER REPORTED BALANCE ADJUSTMENT	\$/MCF	0.138
BALANCE ADJUSTMENT (BA)	\$/MCF	0.062

THIS QUARTERLY REPORT FILED PURSUANT TO ORDER NO. 8373 OF THE KENTUCKY PUBLIC SERVICE  
 COMMISSION DATED APRIL 16, 1982.

DATE FILED:

April 30, 2003

BY: JOHN P. STEFFEN

TITLE: VICE-PRESIDENT, RATES

**GAS COST ADJUSTMENT  
THE UNION LIGHT, HEAT & POWER COMPANY  
EXPECTED GAS COST RATE CALCULATION (EGC)**

KyPSC Case No. 2006-\_\_\_\_\_  
Attachment B  
Page 3 of 6

**"SUMMARY" FOR THE EGC RATE IN EFFECT AS OF JUNE 1, 2003  
SUPPLEMENTAL MONTHLY REPORT**

**DEMAND (FIXED) COSTS:**

	\$
Columbia Gas Transmission Corp.	3,286,421
Tennessee Gas Pipeline	1,121,867
Columbia Gulf Transmission Corp.	916,803
K O Transmission Company	158,064
Gas Marketers	<u>67,590</u>
TOTAL DEMAND COST:	5,550,745

TOTAL GAS SALES LESS SPECIAL CONTRACT IT PURCHASES: 11,611,321 MCF

DEMAND (FIXED) COMPONENT OF EGC RATE: \$5,550,745 / 11,611,321 MCF **\$0.478 /MCF**

**COMMODITY COSTS:**

Gas Marketers	\$6.357 /MCF
Gas Storage	
Columbia Gas Transmission	\$0.000 /MCF
Tennessee Gas Pipeline	\$0.000 /MCF
Propane	<u>\$0.000 /MCF</u>
COMMODITY COMPONENT OF EGC RATE:	<b>\$6.357 /MCF</b>

TOTAL EXPECTED GAS COST: **\$6.835 /MCF**



**GAS COST ADJUSTMENT  
THE UNION LIGHT, HEAT & POWER COMPANY  
SUPPLEMENTAL MONTHLY REPORT**

KyPSC Case No. 2006-\_\_\_\_\_  
Attachment B  
Page 4 of 6

DETAILS FOR THE EGC RATE IN EFFECT AS OF :           JUNE 1, 2003          

	RATE (\$ DTH)	CONTRACT VOLUME (DTH)	NUMBER OF DAYS/MTHS	EXPECTED GAS COST (\$)
<b>INTERSTATE PIPELINE : COLUMBIA GAS TRANSMISSION CORP.</b>				
TARIFF RATE EFFECTIVE DATE : FSS: 2/1/2003				
SST: 4/1/2003				
<b><u>BILLING DEMAND - TARIFF RATE - FSS</u></b>				
Max. Daily Withdrawl Quan.	1.5080	46,656	12	844,287
Seasonal Contract Quantity	0.0290	1,610,276	12	560,376
<b><u>BILLING DEMAND - TARIFF RATE - SST</u></b>				
Maximum Daily Quantity	4.4814	46,656	6	1,254,505
Maximum Daily Quantity	4.4814	23,328	6	627,253
CAPACITY RELEASE CREDIT				<u>0</u>
<b>TOTAL COLUMBIA GAS TRANSMISSION CORP. DEMAND CHARGES</b>				<b>3,286,421</b>

INTERSTATE PIPELINE : **TENNESSEE GAS PIPELINE**  
TARIFF RATE EFFECTIVE DATE : NOT APPLICABLE

<b><u>BILLING DEMAND - TARIFF RATE - FT</u></b>				
Max. Daily Quantity Zone 1-2	3.9300	43,500	5	854,775
CAPACITY RELEASE CREDIT				0
<b><u>BILLING DEMAND - TARIFF RATE - IS</u></b>				
Monthly Storage Balance	0.0300	741,921 *	12	<u>267,092</u>
<b>TOTAL TENNESSEE GAS PIPELINE DEMAND CHARGES</b>				<b>1,121,867</b>

\* Average monthly Interruptible Storage balance.

**GAS COST ADJUSTMENT  
THE UNION LIGHT, HEAT & POWER COMPANY  
SUPPLEMENTAL MONTHLY REPORT**

KyPSC Case No. 2006-\_\_\_\_\_  
Attachment B  
Page 5 of 6

DETAILS FOR THE EGC RATE IN EFFECT AS OF :           JUNE 1, 2003          

	RATE (\$ DTH)	CONTRACT VOLUME (DTH)	NUMBER OF DAYS/MTHS	EXPECTED GAS COST (\$)
<b>INTERSTATE PIPELINE : COLUMBIA GULF TRANSMISSION CORP.</b>				
TARIFF RATE EFFECTIVE DATE :	FTS-1: 4/1/2003			
	FTS-2: 4/1/2003			
<b><u>BILLING DEMAND - TARIFF RATE - FTS-1</u></b>				
Maximum Daily Quantity	3.1450	22,782	5	358,247
Maximum Daily Quantity	3.1450	17,598	7	387,420
<b><u>BILLING DEMAND - TARIFF RATE - FTS-2</u></b>				
Maximum Daily Quantity	0.9995	16,453	5	82,224
Maximum Daily Quantity	0.9995	12,708	7	88,912
CAPACITY RELEASE CREDIT FOR FTS-1				0
CAPACITY RELEASE CREDIT FOR FTS-2				0
<b>TOTAL COLUMBIA GULF TRANSMISSION CORP. DEMAND CHARGES</b>				<b>916,803</b>
<b>INTERSTATE PIPELINE : KO TRANSMISSION COMPANY</b>				
TARIFF RATE EFFECTIVE DATE :	4/1/2003			
<b><u>BILLING DEMAND - TARIFF RATE - FT</u></b>				
Maximum Daily Quantity	0.3560	37,000	12	158,064
CAPACITY RELEASE CREDIT				0
<b>TOTAL KO TRANSMISSION CO. DEMAND CHARGES</b>				<b>158,064</b>
<b>VARIOUS GAS MARKETERS FIXED (RESERVATION) CHARGES :</b>				
November - March	0.0045	9,110,787		41,152
December - February	0.045	587,500		26,438
<b>TOTAL GAS MARKETERS FIXED CHARGES</b>				<b>67,590</b>

**GAS COST ADJUSTMENT  
THE UNION LIGHT, HEAT & POWER COMPANY  
SUPPLEMENTAL MONTHLY REPORT**

KyPSC Case No. 2006-  
Attachment B  
Page 6 of 6

DETAILS FOR THE EGC RATE IN EFFECT AS OF :           JUNE 1, 2003          

**GAS COMMODITY RATE FOR JUNE, 2003 THROUGH AUGUST, 2003:**

**GAS MARKETERS :**

WEIGHTED AVERAGE GAS COST @ CITY GATE (\$/Dth) (1):				\$5.9766	\$/Dth
ULH&P FUEL	3.100%	\$0.1853		\$6.1619	\$/Dth
DTH TO MCF CONVERSION	1.0316	\$0.1947		\$6.3566	\$/Mcf
ESTIMATED WEIGHTING FACTOR	1.0000			\$6.3566	\$/Mcf
<b>GAS MARKETERS COMMODITY RATE</b>				<b>\$6.357</b>	<b>\$/Mcf</b>

**GAS STORAGE :**

COLUMBIA GAS TRANS. - STORAGE INVENTORY RATE				\$3.4158	\$/Dth
COLUMBIA GAS TRANS. FSS WITHDRAWAL FEE				\$0.0153	\$/Dth
COLUMBIA GAS TRANS. SST FUEL	2.554%	\$0.0876		\$3.5187	\$/Dth
COLUMBIA GAS TRANS SST COMMODITY RATE				\$0.0178	\$/Dth
KO TRANS, COMMODITY RATE				\$0.0138	\$/Dth
ULH&P FUEL	3.100%	\$0.1101		\$3.6604	\$/Dth
DTH TO MCF CONVERSION	1.0316	\$0.1157		\$3.7761	\$/Mcf
ESTIMATED WEIGHTING FACTOR	0.0000			\$0.0000	\$/Mcf
<b>GAS STORAGE COMMODITY RATE - COLUMBIA GAS</b>				<b>\$0.000</b>	<b>\$/Mcf</b>
TENNESSEE GAS PIPELINE - STORAGE INVENTORY RATE				\$0.0000	\$/Dth
TENNESSEE GAS PIPELINE IS WITHDRAWAL FEE				\$0.0053	\$/Dth
TENNESSEE GAS PIPELINE FT FUEL	4.280%	\$0.0002		\$0.0055	\$/Dth
TENNESSEE GAS PIPELINE FT COMMODITY RATE				\$0.0797	\$/Dth
KO TRANS, FT FUEL	1.050%	\$0.0009		\$0.0861	\$/Dth
KO TRANS, COMMODITY RATE				\$0.0021	\$/Dth
ULH&P FUEL	3.100%	\$0.0027		\$0.0909	\$/Dth
DTH TO MCF CONVERSION	1.0316	\$0.0029		\$0.0938	\$/Mcf
ESTIMATED WEIGHTING FACTOR	0.0000			\$0.0000	\$/Mcf
<b>GAS STORAGE COMMODITY RATE - TENNESSEE</b>				<b>\$0.000</b>	<b>\$/Mcf</b>

**PROPANE :**

ERLANGER PROPANE INVENTORY RATE				\$0.34268	\$/Gallon
GALLON TO MCF CONVERSION	14.84	\$4.7427		\$5.0854	\$/Mcf
ESTIMATED WEIGHTING FACTOR	0.0000			\$0.0000	\$/Mcf
<b>PROPANE COMMODITY RATE</b>				<b>\$0.000</b>	<b>\$/Mcf</b>

(1) Weighted average cost of gas based on NYMEX prices on 4/21/03 and contracted hedging prices.