



Aquila

7101 Mercy Road  
Suite 400  
Omaha, NE 68106

**FILED<sup>3</sup>**

**FEB 18 2003**

**Missouri Public  
Service Commission**

February 17, 2003

Mr. Dale Hardy Roberts, Secretary, Chief Regulatory Law Judge  
Missouri Public Service Commission  
200 Madison Street  
Jefferson City, MO 65101

Dear Mr. Roberts:

Enclosed are an original and two copies of PSC MO. No. 5, 26<sup>th</sup> Revised Sheet No. 43, 29<sup>th</sup> Revised Sheet No. 44, and 19<sup>th</sup> Revised Sheet No. 44.1 reflecting changes in the Purchased Gas Adjustment of the Missouri Public Service Purchased Gas Adjustment Clause.

This Unscheduled PGA change will assist MPS more accurately reflect market conditions and prevent unnecessary under recoveries from occurring.

Enclosures 1, 2 and 3 reflect the Purchased Gas Adjustment calculations for the Southern System, Northern System and Eastern System. Each PGA has been developed using NYMEX pricing weighted for the months of April 2003 through October 2003, and the "Inside FERC's Gas Market Report" posted price for February 2003. March gas cost has been developed using the portfolio as filed in the winter filing with any incremental purchases priced at the March Nymex adjusted for basis. The tariff rate changes for the Southern System are based on the Williams Gas Pipelines Central, Inc. filings of their Federal Energy Regulatory Commission (FERC) Gas Tariffs, Twelfth Revised Sheet No. 6, Twenty Second Revised Sheet No. 6A and Fifth Revised Sheet No. 6B. The tariff rate changes for the Northern System and Eastern System are based on the Panhandle Eastern Pipe Line Company filings of their FERC Gas Tariffs, Sixty-Eighth Revised Sheet No. 5, Seventy-First Revised Sheet No. 7, Thirteenth Revised Sheet No. 9, Fifteenth Revised Sheet No. 11 and Twenty-Seventh Revised Sheet No. 19.

Enclosure 4 reflects the Weighted Average Cost of Gas (WACOG) for the last three years, March through October.

Enclosures 5, 6 and 7 reflect the estimated Deferred Carrying Cost Balance through August 2003 for the Southern, Northern, and Eastern Systems.

The seasonal revenue impact or comparison to the same period last year, for the gas cost recovery portion of the rates is a decrease in the amount of \$202,987 or .63% for the Southern System, an increase in the amount of \$657,411 or 37.89% for the Northern System and an increase in the amount of \$97,810 or 7.22% for the Eastern System as determined on Enclosure 8, 9 and 10 respectively.

Aquila Networks respectfully requests that the rates proposed in this unscheduled filing become effective with volumes taken on and after March 04, 2003.

Sincerely,

A handwritten signature in black ink, appearing to read "Amy Winkler". The signature is fluid and cursive, with the first name "Amy" being more prominent than the last name "Winkler".

Amy Winkler  
Regulatory Analyst

Enclosures

cc: Office of the Public Counsel (2)

## STATE OF MISSOURI, PUBLIC SERVICE COMMISSION

P.S.C. MO. No. 5 26th (Original) SHEET NO. 43(Revised)  
Cancelling P.S.C. MO. No. 5 25th (Original) SHEET NO. 43  
(Revised)**Aquila Networks - MISSOURI PUBLIC SERVICE  
KANSAS CITY, MO 64138**

FOR: Southern System

PURCHASED GAS ADJUSTMENT CLAUSE  
(CONTINUED)Adjustment Statement (Southern System)

As provided in this Purchased Gas Adjustment Clause, the following adjustment(s) will be made to the applicable rate schedules:

	Rate Schedule <u>GNG</u>	Rate Schedule <u>LVF</u>	Rate Schedule <u>LVI</u>
Regular PGA	\$ .59757	\$ .59757	\$ .5555
Actual Cost Adjustment	\$ .02458	\$ .02458	\$ (.00777)
Refunds	\$ -0-	\$ -0-	\$ -0-
TOP Factor	\$ -0-	\$ -0-	\$ -0-
TC Factor	\$ -0-	\$ -0-	\$ -0-
Total PGA Per Ccf	\$ .62215	\$ .62215	\$ .54773

The TOP and TC Factors, as provided in Sheets 39 through 40, shall also apply to all Ccf delivered to transportation customers on Missouri Public Service's Southern System except as provided for on Sheet No. 20.

## STATE OF MISSOURI, PUBLIC SERVICE COMMISSION

P.S.C. MO. No.	<u>5</u>	<u>29th</u>	(Original)	SHEET NO.	<u>44</u>
			(Revised)		
Cancelling P.S.C. MO. No.	<u>5</u>	<u>28th</u>	(Original)	SHEET NO.	<u>44</u>
			(Revised)		

**Aquila Networks - MISSOURI PUBLIC SERVICE  
KANSAS CITY, MO 64138**

FOR: Northern System

PURCHASED GAS ADJUSTMENT CLAUSE (CONTINUED)
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Adjustment Statement (Northern System)

As provided in this Purchased Gas Adjustment Clause, the following adjustment(s) will be made to the applicable rate schedules:

	Rate Schedule <u>GNG</u>	Rate Schedule <u>LVF</u>	Rate Schedule <u>LVI</u>
Regular PGA	\$ .66027	\$ .66027	\$ .54714
Actual Cost Adjustment	\$ (.00378)	\$ (.00378)	\$ -0-
Refunds	\$ .00084	\$ .00084	\$ -0-
TOP Factor	\$ -0-	\$ -0-	\$ -0-
TC Factor	\$ -0-	\$ -0-	\$ -0-
Total PGA Per Ccf	\$ .65733	\$ .65733	\$ .54714

The TOP and TC Factors, as provided in Sheets 39 through 40, shall also apply to all Ccf delivered to transportation customers on Missouri Public Service's Northern System except as provided for on Sheet No. 20.

## STATE OF MISSOURI, PUBLIC SERVICE COMMISSION

P.S.C. MO. No. 5 19th (Original) SHEET NO. 44.1Cancelling P.S.C. MO. No. 5 18th (Revised)  
(Original) SHEET NO. 44.1  
(Revised)**Aquila Networks - MISSOURI PUBLIC SERVICE  
KANSAS CITY, MO 64138**

FOR: Eastern System

PURCHASED GAS ADJUSTMENT CLAUSE  
(CONTINUED)Adjustment Statement (Eastern System)

As provided in this Purchased Gas Adjustment Clause, the following adjustment(s) will be made to the applicable rate schedules:

	Rate Schedule <u>GNG</u>	Rate Schedule <u>LVF</u>	Rate Schedule <u>LVI</u>
Regular PGA	\$ .977	\$ .977	\$ .81652
Actual Cost Adjustment	\$ (.00134)	\$ (.00134)	\$ -0-
Refunds	\$ -0-	\$ -0-	\$ -0-
TOP Factor	\$ -0-	\$ -0-	\$ -0-
TC Factor	\$ -0-	\$ -0-	\$ -0-
Total PGA Per Ccf	\$ .97566	\$ .97566	\$ .81652

The TOP and TC Factors, as provided in Sheets 39 through 40, shall also apply to all Ccf delivered to transportation customers on Missouri Public Service's Eastern System except as provided for on Sheet No. 20.

**MISSOURI PUBLIC SERVICE**  
**Southern System Annualized Gas Cost Calculation**  
**To Reflect Current WNG & Spot Market Rates**

**Enclosure 1**

Page 1 of 4

	<u>Annual Volume</u>	<u>Monthly Capacity Reserved</u>	<u>No. of Mth Reserved</u>	<u>Tariff Rate</u>	<u>Annual Cost</u>
<b>FIRM</b>					
<u>Williams Natural Gas</u>					
TSS					
No-Notice Fee		39,618	12	\$0.0154	\$7,321
Reservation - FSS Deliverability		25,412	12	\$0.5001	\$152,502
Reservation - FTS-Production		13,841	12	\$5.6118	\$932,075
Reservation - FTS-Market		39,618	12	\$2.8014	\$1,331,830
GRI		39,618	12	\$0.0500	\$23,771
FTS					
Production - Reservation		11,845	12	\$5.6118	\$797,661
Production - Balancing		11,845	12	\$0.1604	\$22,799
Market - Reservation		10,491	12	\$2.8014	\$352,674
Market - Balancing		10,491	12	\$0.1604	\$20,193
Market - GRI		10,491	12	\$0.0500	\$6,295
GSR Costs					\$77,692
Spot Market Purchases	3,896,019			\$4.9079	\$19,121,199
Total Annual Cost					<u>\$22,846,012</u>
Sales Volume at Burnertip	3,823,123				
Cost per MCF at Burnertip					<u>\$5.9757</u>

Highest WACOG (Summer Period)	Mar 00 - Oct 00	Mar 01 - Oct 01	Mar 02 - Oct 02	Average WACOG
	\$3.6065	\$4.0628	\$3.2058	\$3.6250
Highest Avg WACOG-Summer Period (Avg of winter seasons with the highest of 3 averages)				\$3.8439
			March 2003 Gas Commodity Costs	\$5.3204

<b>INTERRUPTIBLE</b>				
<u>Williams Natural Gas</u>				
ITS-P			@150%	
Commodity	126,771		\$0.2492	\$31,585
ITS-M			@150%	
Commodity	125,491		\$0.1289	\$16,170
Spot Market Price Per MCF	129,650		\$4.9079	\$636,305
Total Annual Cost				<u>\$684,060</u>
Sales Volume at Burnertip	123,143			
Cost per MCF at Burnertip				<u>\$5.5550</u>

**MISSOURI PUBLIC SERVICE - SOUTHERN SYSTEM**
**Enclosure 1**
**Gas Cost Inputs**

Page 2 of 4

MPS Line Loss	1.871%
Annual Burnertip Sales	3,946,266

**WNG Rates**
**Firm Rates**

TSS	
No-Notice Fee	\$0.0154
Reservation - FSS Deliverability	\$0.5001
Reservation - FSS Capacity	\$0.0285
Reservation - FTS-P	\$5.6118
Reservation - FTS-M	\$2.8014
GRI	\$0.0500

FTS	
Production - Reservation	\$5.6118
Production - Balancing	\$0.1604
Market - Reservation	\$2.8014
Market - Balancing	\$0.1604
Market - GRI	\$0.0500

Production	
Commodity - FTS-P	\$0.0124
GRI Funding Unit - Commodity - Others	\$0.0040
FERC Annual Charge Adjustment	<u>\$0.0021</u>
Production Field Zone	<u>\$0.0185</u>

Commodity - FTS-M	\$0.0061
GRI Funding Unit - Commodity - Others	\$0.0040
FERC Annual Charge Adjustment	<u>\$0.0021</u>
Market Zone	<u>\$0.0122</u>

Injection/Withdrawal - FSS	\$0.0122
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**Interruptible Rates**

ITS-P	
Commodity-Summer	\$0.1600

ITS-M	
Commodity-Summer	\$0.0798
GRI Funding Unit - Commodity - Others	\$0.0040
FERC Annual Charge Adjustment	\$0.0021

WNG Production Area Loss	2.22%
WNG Market Area Loss	1.01%
WNG Storage Loss	5.91%

Note: From FERC Gas Tariff: Twelfth Revised Sheet No. 6 Effective 11/1/01, Twenty Second Revised Sheet No. 6A Effective 01/1/03, and Fifth Revised Sheet No. 6B Effective 1/1/03.

**Calculated Inputs**

	<u>Firm</u>	<u>Storage</u>	<u>Total Firm</u>	<u>Interruptible</u>	<u>Total System</u>
Annual Throughput at Burnertip Per GR-93-172	2,796,691	1,026,432	3,823,123	123,143	3,946,266
Annual Throughput at Citygate	2,850,016	1,046,003	3,896,019	125,491	4,021,508
Annual Throughput at Production Area	2,824,064	1,111,705	3,935,769	126,771	4,062,540
Annual Throughput at Wellhead	2,888,181	1,136,945	4,025,126	129,650	4,154,776

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\$ 4.9079



Missouri Public Service  
Division of Aquila Networks  
Southern System  
**Gas Commodity Cost Calculation**

**Enclosure 1**

Page 4 of 4

INSIDE FERC FEB 2003	\$	5.12	
WNG Market Area Loss		1.01%	
WNG Production Area Loss		<u>2.22%</u>	
WNG Index Adjusted for Fuel	\$	5.2897	
WNG Cost/Dth Field Zone		\$0.0185	
WNG Cost/Dth - Market Zone		<u>\$0.0122</u>	
		\$5.3204	
Total Gas Commodity Costs		<table border="1"><tr><td>\$5.3204</td></tr></table>	\$5.3204
\$5.3204			

**MISSOURI PUBLIC SERVICE**
**Northern System Annualized Gas Cost Calculation  
To Reflect Current PEPL & Spot Market Rates**
**Enclosure 2**

Page 1 of 4

<b>FIRM</b>	<b>Annual Volume</b>	<b>Monthly Capacity Reserved</b>	<b>No. Of Mth Reserved</b>	<b>Tariff/ Contracted Rate</b>	<b>Annual Cost</b>
<b>Panhandle Eastern Pipe Line</b>					
<b>Contract 17005</b>					
<b>EFT Reservation Rates</b>					
Field Zone Reservation		18,000	5	\$4.1683	\$375,147
Market Zone Access		18,000	5	\$2.9081	\$261,731
Market Zone Mileage		18,000	5	\$1.5862	\$142,762
Field Zone Reservation		10,000	7	\$4.1683	\$291,781
Market Zone Access		10,000	7	\$2.9081	\$203,568
Market Zone Mileage		10,000	7	\$1.5862	\$111,037
					\$0
					\$0
<b>Contract 17004</b>					
FS Storage	800,000			\$0.4028	\$322,240
					\$234,500
					\$204,015
Spot Market Purchases	1,521,875			\$4.9617	\$7,551,101
Total Annual Cost					<u>\$9,697,882</u>
Sales Volume at Burnertip	1,468,777				
<b>Cost per MCF at Burnertip</b>					<u><b>\$6.6027</b></u>

Highest WACOG (Summer Period)	Mar 00 - Oct 00	Mar 01 - Oct 01	Mar 02 - Oct 02	<b>Average WACOG</b>
	\$3.9119	\$4.9517	\$3.0651	<b>\$3.9762</b>
<b>Highest Avg WACOG-Summer Period (Avg of winter seasons with the highest 3 averages)</b>				<b>\$4.4640</b>
<b>Marach 2003 Gas Commodity Costs</b>				<b>\$5.2666</b>

**INTERRUPTIBLE**
**Panhandle Eastern Pipe Line**
**IT Interruptible Rates**

		<b>@150%</b>	
Field Zone		\$0.2625	\$0.2625
Market Zone Access		\$0.1386	\$0.1386
Market Zone Mileage		\$0.0999	\$0.0999
GRI Funding Unit		\$0.0060	\$0.0060
ACA Unit Charge		\$0.0032	\$0.0032
TOP Volumetric Surcharge		\$0.0000	\$0.0000
Settlement Surcharges		(\$0.0005)	(\$0.0005)
Canadian Resolution Surcharges		\$0.0000	\$0.0000
Stranded Transportation Cost Surcharge		\$0.0000	\$0.0000
Miscellaneous Stranded Costs Surcharge		\$0.0000	(\$0.0000)
Spot Market Price Per MCF	\$4.9617		\$4.9617
Total Annual Cost			<u>\$5.4714</u>
Sales Volume at Burnertip			
<b>Cost per MCF at Burnertip</b>			<u><b>\$5.4714</b></u>

**MISSOURI PUBLIC SERVICE - NORTHERN SYSTEM**
**Gas Cost Inputs**
**Enclosure 2**

Page 2 of 4

MPS Line Loss 3.489%  
Annual Burnertip Sales 1,468,777

Contract  
17005

<u>PEPL Rates</u>	<u>Tariff</u>	<u>Discount Rate</u>
<u>PEPL EFT Reservation Rates</u>	<u>Rate</u>	
Field Zone Reservation	\$4.7300	\$4.1683
Market Zone Access	\$3.3000	\$2.9081
Market Zone Mileage 201-300 Block	\$1.8000	\$1.5862
GRI Funding Unit	\$0.0500	
Settlement Surcharges	(\$0.0100)	
Canadian Resolution Surcharges	\$0.0000	
GSR Surcharge	\$0.0000	
Stranded Transportation Cost Surcharge	\$0.0000	
Miscellaneous Stranded Costs Surcharge	\$0.0000	
<u>PEPL EFT Commodity Rates</u>		
Field Zone Commodity	\$0.0195	
Market Zone Access	\$0.0006	
Market Zone Mileage 201-300 Block	\$0.0075	
GRI Funding Unit	\$0.0040	
ACA Unit Charge	\$0.0021	
TOP Volumetric Surcharge	\$0.0000	
Settlement Surcharges	(\$0.0003)	
Total Market Zone Commodity	\$0.0139	

<u>PEPL IT Interruptible Rates</u>		<u>Seasonal Sales Volume @ Burnertip</u>
Field Zone	\$0.1750	Jan 288,860
Market Zone Access	\$0.0924	Feb 265,604
Market Zone Mileage 201-300 Block	\$0.0666	Mar 194,613
GRI Funding Unit	\$0.0040	Apr 117,502
ACA Unit Charge	\$0.0021	May 64,871
TOP Volumetric Surcharge	\$0.0000	Jun 44,063
Settlement Surcharges	(\$0.0003)	Jul 34,272
Canadian Resolution Surcharges	\$0.0000	Aug 33,047
Stranded Transportation Cost Surcharge	\$0.0000	Sep 36,719
Miscellaneous Stranded Costs Surcharge	\$0.0000	Oct 51,407
<u>PEPL Storage Rates</u>		Nov 118,726
Deliverability Charge Field Area	\$3.3500	Dec 219,093
Capacity Charge Field Area	\$0.4028	1,468,777

PEPL Gathering Loss 0.70%  
PEPL Field Zone Loss 1.22%  
PEPL Market Zone Loss 1.23%  
PEPL Storage Injection Loss (Field Area) 1.56%  
PEPL Storage Withdrawal Loss (Field Area) 0.53%

Note: From FERC Gas Tariff: PEPL Sixth-Eighth Revised Sheet No. 5 Effective 01/1/03 , Seventy-First Revised Sheet No. 7 Effective 01/1/03, Fifteenth Revised Sheet No. 11 Effective 11/01/02 and Twenty-Seventh Revised Sheet No. 19 Effective 10/01/01.

<u>Calculated Inputs</u>	<u>Firm</u>	<u>Storage</u>	<u>Total Firm</u>	<u>Interruptible</u>	<u>Total</u>
Annual Throughput at Burnertip Per GR-93-172	890,213	578,564	1,468,777	0	1,468,777
Annual Throughput at Citygate	922,396	599,479	1,521,875	0	1,521,875
Annual Throughput at Havenpool	933,882	610,179	1,544,061	0	1,544,061
Annual Throughput at Wellhead	945,416	627,504	1,572,920	0	1,572,920

Missouri Public Service  
Division of Aquila Networks  
Northern System  
Current Gas Cost Calculation

Enclosure 2

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	<u>Mar-03</u>	<u>Apr-03</u>	<u>May-03</u>	<u>Jun-03</u>	<u>Jul-03</u>	<u>Aug-03</u>	<u>Sep-03</u>	<u>Oct-03</u>	<u>Totals</u>
<b>SUMMARY OF COMMODITY COSTS</b>									
Sales Requirements	165,656	117,502	64,871	44,063	34,272	33,047	36,719	51,407	547,537
PEPL Market Zone Fuel Loss	1.23%	1.23%	1.23%	1.23%	1.23%	1.23%	1.23%	1.23%	
PEPL Field Zone Fuel Loss	1.22%	1.22%	1.22%	1.22%	1.22%	1.22%	1.22%	1.22%	
Gathering Fuel Loss	0.70%	0.70%	0.70%	0.70%	0.70%	0.70%	0.70%	0.70%	
Total Supply - Fuel Loss	170,987	121,284	66,959	45,481	35,375	34,111	37,901	53,061	
Storage Injection	0	84,000	124,000	120,000	124,000	124,000	120,000	86,800	782,800
Storage Injection Loss	1.56%	1.56%	1.56%	1.56%	1.56%	1.56%	1.56%	1.56%	
Total Storage - Fuel Loss	0	85,331	125,965	121,902	125,965	125,965	121,902	88,176	
(Storage injection is noted on spreadsheet but not included in commodity cost calculation because MPS does not pay for storage until it is withdrawn in the winter months.)									
Purchase Requirements	170,987	121,284	66,959	45,481	35,375	34,111	37,901	53,061	565,159
Total Supply	80,987	121,284	66,959	45,481	35,375	34,111	37,901	53,061	475,159
Forecasted Price (NYMEX-PEPL Basis)	\$ 5.5910	\$ 5.3840	\$ 5.1790	\$ 5.0840	\$ 5.0640	\$ 5.024	\$ 4.984	\$ 4.999	
Total Cost	\$ 452,798	\$ 652,993	\$ 346,781	\$ 231,225	\$ 179,139	\$ 171,374	\$ 188,899	\$ 265,252	2,488,461
Storage Withdrawal (17007)	90,000	0	0	0	0	0	0	0	90,000
Storage WACOG (17007)	\$ 3.3600	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Total Cost	\$ 302,400	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 302,400
Forecasted Gas Commodity Cost	755,198	652,993	346,781	231,225	179,139	171,374	188,899	265,252	2,790,861
Forecasted Sales Gas Quantity	170,987	121,284	66,959	45,481	35,375	34,111	37,901	53,061	565,159
Gas Cost (Commodity) Dth									\$4.9382
<b>SUMMARY OF UPSTREAM COSTS</b>									
Panhandle Eastern Pipeline - Firm									
FT Commodity (Field Zone)	169,790	120,435	66,490	45,163	35,127	33,872	37,635	52,690	
FT Commodity (Market Zone)	167,719	118,965	65,679	44,612	34,699	33,459	37,176	52,047	
Total Units	337,509	239,400	132,169	89,775	69,826	67,331	74,811	104,737	1,115,558
Cost/Dth - Field Zone	\$0.0195	\$0.0195	\$0.0195	\$0.0195	\$0.0195	\$0.0195	\$0.0195	\$0.0195	
Cost/Dth - Market Zone	\$0.0139	\$0.0139	\$0.0139	\$0.0139	\$0.0139	\$0.0139	\$0.0139	\$0.0139	
Total Panhandle Commodity Costs	\$5,642	\$4,002	\$2,209	\$1,501	\$1,167	\$1,126	\$1,251	\$1,751	18,649
Forecasted Northern Upstream Costs	5,642	4,002	2,209	1,501	1,167	1,126	1,251	1,751	18,649
Forecasted Firm Sales Quantity	170,987	121,284	66,959	45,481	35,375	34,111	37,901	53,061	565,159
Upstream Cost/Dth									\$0.0330
Put/Call 99/00 & 00/01 Settlement Adj.									(5,364) (0.0095)

Wellhead Cost of Gas

\$ 4.9617

Missouri Public Service  
Division of Aquila Networks  
Northern System  
**Gas Commodity Cost Calculation**

**Enclosure 2**

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INSIDE FERC FEBRUARY 03	\$5.07	
PEPL Market Zone Fuel Loss	1.23%	
PEPL Field Zone Fuel Loss	1.22%	
Gathering Fuel Loss	<u>0.70%</u>	
PEPL Index Adjusted for Fuel	\$ 5.2332	
PEPL Cost/Dth Field Zone	\$0.0195	
PEPL Cost/Dth - Market Zone	<u>\$0.0139</u>	
	\$5.2666	
Total Gas Commodity Costs	<table border="1"><tr><td>\$5.2666</td></tr></table>	\$5.2666
\$5.2666		

**MISSOURI PUBLIC SERVICE**
**Eastern System Annualized Gas Cost Calculation  
To Reflect Current PEPL & Spot Market Rates**
**Enclosure 3**

Page 1 of 4

<b>FIRM</b>	<b>Annual/ Seasonal Volume</b>	<b>Monthly Capacity Reserved</b>	<b>No. of Mths Reserved</b>	<b>Tariff Rate</b>	<b>Annual Cost</b>
<b><u>Panhandle Eastern Pipe Line</u></b>					
Winter (Nov-Mar)					
FT Reservation (Field Zone)		5,200	1	\$4.7300	\$24,596
FT Reservation (Market Zone)		5,200	1	\$5.7500	\$29,900
					<u>\$54,496</u>
Winter Sales Volume at Burnertip	53,242				
Winter Cost per MCF at Burnertip					<u>\$1.0236</u>
Summer (Apr-Oct) Volumetric Rate					
100% LF of Max Rate (Fld-4 Blks)	105,766				\$0.3445
Summer Cost per MCF at Burnertip					<u>\$0.5719</u>
<b><u>Missouri Pipeline Company</u></b>					
Rolla					
FT Reservation		2,939	12	\$4.3181	\$152,291
Salem					
FT Reservation		2,500	12	\$1.5000	\$45,000
Owensville					
FT Reservation		1,900	12	\$4.3181	\$98,453
<b><u>Missouri Gas Company</u></b>					
Rolla					
FT Reservation		2,939	12	\$8.0000	\$282,144
Salem					
FT Reservation		2,500	12	\$13.1700	\$395,100
Owensville					
FT Reservation		1,900	12	\$13.1766	\$300,426
Total Eastern System MoPipe & MoGas Costs					<u>\$1,273,414</u>
Spot Market Purchases	380,336			\$5.3691	\$2,042,053
Total Eastern System Costs					<u>\$3,315,467</u>
Sales Volume at Burnertip	<u>379,066</u>				
Cost per MCF at Burnertip					<u>\$8.7464</u>
Summer PGA					
Total Cost per MCF at Burnertip					<u>\$9.7700</u>
Highest WACOG (Summer Period)		Mar 00 - Oct 00	Mar 01 - Oct 01	Mar 02 - Oct 02	Average WACOG
		\$3.4296	\$4.1170	\$3.0833	\$3.5433
Highest Avg WACOG-Summer Period (Avg of winter seasons with the highest of 3 averages)					\$3.8302
				March 2003 Gas Commodity Costs	\$5.9138
<b><u>INTERRUPTIBLE</u></b>					
<b><u>Panhandle Eastern Pipe Line</u></b>					
IT (Field Zone)	\$0.1750		@ 150%		\$0.2625
IT (Market Zone)	\$0.1870		@ 150%		\$0.2805
<b><u>Missouri Pipeline Company</u></b>					
Commodity	\$0.3898				\$0.3898
<b><u>Missouri Gas Company</u></b>					
Commodity	\$1.8633				\$1.8633
Spot Market Price Per MCF	\$5.3691				\$5.3691
Cost per MCF at Burnertip					<u>\$8.1652</u>

## Gas Cost Inputs

MPS Line Loss	0.334%
MoGas/MoPipe Line Loss	0.43%

**PEPL RATES**PEPL EFT Reservation Rates

Field Zone Reservation	\$4.73
Market Zone Access	\$3.30
Market Zone Mileage 301-400 Block	\$2.40
GRI Funding Unit	\$0.0500
Settlement Surcharges	\$0.0000
Canadian Resolution Surcharges	\$0.0000
GSR Surcharge	\$0.0000
Stranded Transportation Cost Surcharge	\$0.0000
Miscellaneous Stranded Costs Surcharge	\$0.0000

PEPL Interruptible Rates

Field Zone	\$0.1750
Market Zone Access	\$0.0924
Market Zone Mileage	\$0.0888
GRI Funding Unit	\$0.0040
ACA Unit Charge	\$0.0021
TOP Volumetric Surcharge	\$0.0000
Settlement Surcharges	(\$0.0003)
Canadian Resolution Surcharges	\$0.0000
Stranded Transportation Cost Surcharge	\$0.0000
Miscellaneous Stranded Costs Surcharge	\$0.0000

PEPL Gathering Loss	0.70%
PEPL Field Zone Loss	1.22%
PEPL Market Zone Loss	1.23%

PEPL EFT Commodity Rates

Market Zone Access	\$0.0006
Market Zone Mileage 301-400	\$0.0100
GRI Funding Unit	\$0.0040
ACA Unit Charge	\$0.0021
TOP	\$0.0000
Settlement Charges	(\$0.0003)

EFT Commodity Rates	\$0.0164
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Field Zone Commodity	\$0.0195
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Total EFT Commodity Rates	\$0.0359
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Note: From FERC Gas Tariff: PEPL Sixty-Eighth Revised Sheet No. 5 Effective 01/01/03, Seventy-First Revised Sheet No. 7 Effective 01/01/03, and Twenty-Seventh Revised Sheet No. 19 Effective 10/01/01.

Annual Throughput at Burnertip	379,066
Annual Throughput at Citygate	380,336
MOGAS & MPC	381,979
Annual Throughput at Wellhead	391,512

## Seasonal Sales Volume @ Burnertip

Jan	73,216
Feb	65,424
Mar	53,242
Apr	37,244
May	20,814
Jun	10,209
Jul	7,438
Aug	7,242
Sep	8,048
Oct	14,772
Nov	29,297
Dec	52,121
<b>TOTAL</b>	<b>379,066</b>





Missouri Public Service  
Division of UtiliCorp United Inc.  
Eastern System  
**Gas Commodity Cost Calculation**

**Enclosure 3**

Page 4 of 4

INSIDE FERC FEB 03	\$ 5.07
MoGas/MoPipe Fuel Loss	0.43%
PEPL Market Zone Fuel Loss	1.23%
PEPL Field Zone Fuel Loss	1.22%
Gathering Fuel Loss	<u>0.70%</u>

PEPL Index Adjusted for Fuel \$ 5.2558

PEPL Cost/Dth Field Zone	\$0.0195
PEPL Cost/Dth - Market Zone	<u>\$0.0164</u>
Total PEPL Commodity Cost	\$5.2917

PEPL Cost	\$5.2917
MoPipe Cost/Dth - Rolla	\$0.1699
MoGas Cost/Dth - Rolla	\$0.4000
<b>Rolla</b>	<b>\$5.8616</b>

PEPL Cost	\$5.2917
MoPipe Cost/Dth - Salem	\$0.0500
MoGas Cost/Dth - Salem	\$0.5200
<b>Total Salem</b>	<b>\$5.8617</b>

PEPL Cost	\$5.2917
MoPipe Cost/Dth - Owensville	\$0.1699
MoGas Cost/Dth - Owensville	\$0.9433
<b>Total Owensville</b>	<b>\$6.4049</b>

		Percent Split		
Rolla	\$5.8616	70.06%	\$	4.1066
Salem	\$5.8617	20.33%	\$	1.1917
Owensville	\$6.4049	9.61%	\$	0.6155

\$ 5.9138

Total Gas Commodity Costs

**\$ 5.9138**

**Enclosure 4**

	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPT	OCTOBER		
SOUTHERN SYSTEM (00):										
Purchase Volumes	3,457	176,842	101,708	82,348	71,958	70,172	25,548	56,974	589,007	
Commodity Cost (Highest)	\$2.7109	\$2.7900	\$2.9567	\$4.1302	\$4.2167	\$3.7400	\$4.5500	\$5.2400		
Total Commodity Costs	\$9,372	\$493,389	\$300,720	\$340,114	\$303,425	\$262,443	\$116,243	\$298,544	\$2,124,250	
										\$3.6065
SOUTHERN SYSTEM (01):										
Purchase Volumes	24,258	172,537	30,963	13,102	13,565	55,581	88,348	4,752	403,106	
Commodity Cost (Highest)	5.0968	\$5.2396	\$4.5996	\$3.7867	\$3.0147	\$2.8691	\$2.1988	\$4.9300		
Total Commodity Costs	\$123,638	\$904,025	\$142,417	\$49,613	\$40,894	\$159,467	\$194,260	\$23,427	\$1,637,741	
										\$4.0628
SOUTHERN SYSTEM (02):										
Purchase Volumes	136,710	182,591	117,856	110,155	65,333	66,273	65,010	115,646	859,574	
Commodity Cost (Highest)	\$3.6519	\$3.2056	\$3.0367	\$2.8754	\$2.7316	\$2.6173	\$2.6298	\$4.0948		
Total Commodity Costs	\$499,251	\$585,314	\$357,893	\$316,740	\$178,464	\$173,456	\$170,963	\$473,547	\$2,755,628	
										\$3.2058
										Average of 3 Periods \$3.6250
										Highest Avg WACOG-Summer Period (avg of summer seasons with the highest of 3 averages) \$3.4154
										April 2002 Gas Commodity Cost \$3.4018
NORTHERN SYSTEM (00):										
Purchase Volumes	10,490	32,684	29,715	24,570	23,035	23,026	21,025	45,247	209,792	
Commodity Cost (Highest)	\$2.6216	\$2.7925	\$2.9400	\$4.2075	\$4.2000	\$3.7000	\$4.4900	\$5.1900		
Total Commodity Costs	\$27,500	\$91,270	\$87,362	\$103,378	\$96,747	\$85,196	\$94,402	\$234,832	\$820,687	
										\$3.9119
NORTHERN SYSTEM (01):										
Purchase Volumes	18,689	42,901	29,258	3,175	5,611	449	21,879	21,675	143,637	
Commodity Cost (Highest)	\$5.1246	\$5.3075	\$4.8100	\$4.6800	\$4.6800	\$4.6800	\$4.6800	\$4.6800		
Total Commodity Costs	\$95,774	\$227,697	\$140,731	\$14,859	\$26,259	\$2,101	\$102,394	\$101,439	\$711,254	
										\$4.9517
NORTHERN SYSTEM (02):										
Purchase Volumes	676	1,720	39,115	26,246	28,661	24,271	23,075	65,334	209,098	
Commodity Cost (Highest)	\$4.4550	\$3.2750	\$3.1400	\$2.9500	\$2.9475	\$2.6550	\$2.9250	\$3.3000		
Total Commodity Costs	\$3,012	\$5,633	\$122,821	\$77,426	\$84,478	\$64,440	\$67,494	\$215,602	\$640,906	
										\$3.0651
										Average of 3 Periods \$3.9762
										Highest Avg WACOG-Summer Period (avg of summer seasons with the highest of 3 averages) \$3.9441
										April 2002 Gas Commodity Cost \$3.4277

**Missouri Public Service  
Eastern System  
2002-2003 ACA Year PGA Estimate  
(Based on Monthly Actuals and Estimates)**

Commodity	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Fixed Costs	\$3,8506	\$4,5986	\$5,7762	\$1,7666	\$1,2380	\$1,4280	\$1,8040	\$2,4426	\$4,3706	\$8,9110	\$12,2311	\$12,5618
Estimated Sales Volume	7,686	8,634	27,530	43,806	68,075	66,387	52,552	38,813	21,691	10,639	7,751	7,547
ACA Factor in Effect	\$2,8861	\$2,8862	\$2,5183	\$0,0611	\$0,0216	(\$0,0134)	(\$0,0134)	(\$0,0134)	(\$0,0134)	(\$0,0134)	(\$0,0134)	(\$0,0134)
PGA Factor in Effect	\$10,1742	\$11,8964	\$7,4040	\$8,7894	\$8,8050	\$8,6234	\$9,7700	\$9,7700	\$9,7700	\$9,7700	\$9,7700	\$9,7700
PGA/ACA Factor - Required	\$20,2015	\$9,2402	\$8,1994	\$7,1064	\$5,9658	\$4,9693	\$7,4017	\$8,0665	\$10,1208	\$15,4035	\$19,3044	\$19,6678
Over/Under Recovery	(\$7,1412)	\$5,5424	\$1,7229	\$1,7241	\$2,8609	\$3,8407	\$2,3549	\$1,6901	(\$0,3642)	(\$5,6469)	(\$9,5478)	(\$9,9112)

Gas Supply Purchased (in Dth)	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Total
Sales Volumes (in Mcf)	6,317	22,253	43,791	60,070	85,715	74,310	58,824	43,445	24,280	11,909	8,676	8,448	448,037
Cost of Gas Purchased and Produced	127,613	205,621	359,061	426,882	405,244	369,265	435,393	350,451	245,730	183,436	167,485	166,147	3,442,329
ACA Factor in Effect	22,184	24,919	69,329	2,677	1,483	(890)	(704)	(520)	(291)	(143)	(104)	(101)	117,840
PGA Factor in Effect	78,202	102,711	203,835	384,151	599,400	585,759	513,433	379,203	211,921	103,943	75,727	73,734	3,312,019
PGA Factor - Required	127,613	205,621	359,061	426,882	511,362	369,265	435,393	350,451	245,730	183,436	167,485	166,147	3,548,447
Over/(Under) Recovery	(27,227)	(77,991)	(85,897)	(40,054)	89,521	215,604	77,336	28,232	(34,100)	(79,635)	(91,662)	(92,514)	(118,587)
Prior ACA Yr Over/(Under) Recovery Balance	8,917												
Monthly ACA Over/(Under) Recovery	22,164	24,919	69,329	2,677	1,483	(890)	52,419	(520)	(291)	(143)	(104)	(101)	170,963
Monthly PGA Over/(Under) Recovery	(49,411)	(102,910)	(155,227)	(42,731)	88,038	216,494	78,040	28,752	(33,809)	(79,493)	(91,758)	(92,413)	(236,428)
Total Monthly PGA/ACA Over/(Under) Recovery	(27,227)	(77,991)	(85,897)	(40,054)	89,521	215,604	130,459	28,232	(34,100)	(79,635)	(91,662)	(92,514)	(65,465)
2002-2003 PGA/ACA Yr to Date Over/(Under) Recovery	(27,227)	(105,219)	(191,116)	(231,170)	(141,649)	73,956	204,414	232,647	198,547	118,911	27,050	(65,465)	
Inception to Date PGA/ACA Over/(Under) Recovery	(18,311)	(96,302)	(182,199)	(222,253)	(132,732)	82,873	213,331	241,563	207,464	127,828	35,966	(56,548)	
Firm Mfcs													379,066
Forecasted ACA 11/02													0.1492

Note: Shaded areas indicate estimate.  
Note: Prior months may change from previous spreadsheets entered in appropriate month on this schedule.

Forecasted ACA 11/02 0.1492

Note: Shaded areas indicate estimate.  
Note: Prior months may change from previous spreadsheets due to prior period adjustments entered in appropriate month on this schedule.

**Missouri Public Service  
Northern System  
2002-2003 ACA Year PGA Analysis  
(Based on Monthly Actuals & Estimates)**

	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	
Commodity	\$0.9078	\$3.5690	\$3.9577	\$3.7614	\$4.0928	\$3.3926	\$5.2550	\$5.1600	\$4.9200	\$4.8000	\$4.7500	\$4.7200	
Fixed Costs	\$5.4287	\$1.1954	\$0.8382	\$0.6833	\$0.4817	\$0.7101	\$0.6244	\$0.8803	\$1.5946	\$2.3476	\$3.0183	\$3.1301	
Estimated Sales Volume	28,483	20,235	101,276	160,338	219,251	150,371	170,987	121,284	66,959	45,481	35,375	34,111	-
ACA Factor in Effect	\$0.5273	\$0.5273	\$0.3650	\$0.0076	(\$0.0378)	(\$0.0378)	(\$0.0378)	(\$0.0378)	(\$0.0378)	(\$0.0378)	(\$0.0378)	(\$0.0378)	
PGA Factor in Effect	\$4.2391	\$4.2388	\$4.4750	\$5.0289	\$5.0592	\$5.0302	\$6.6027	\$6.6027	\$6.6027	\$6.6027	\$6.6027	\$6.6027	
PGA/ACA Factor - Required	\$6.3365	\$4.7644	\$4.7959	\$4.4447	\$4.5745	\$4.1027	\$5.8794	\$6.0403	\$6.5146	\$7.1476	\$7.7683	\$7.8501	
Over/Under Recovery	(\$1.5701)	\$0.0017	\$0.0440	\$0.5918	\$0.4469	\$0.8897	\$0.6855	\$0.5246	\$0.0503	(\$0.5827)	(\$1.2034)	(\$1.2852)	
	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Total</u>
Gas Supply Purchased (in Dth)	18,089	82,147	151,653	189,810	269,250	182,654	207,696	147,322	81,334	55,245	42,970	41,434	1,469,603
Sales Volumes (in Mcf)	28,483	20,235	101,276	160,338	219,251	150,371	170,987	121,284	66,959	45,481	35,375	34,111	1,154,152
Cost of Gas Purchased and Produced	114,621	391,382	727,316	843,651	1,101,980	749,371	1,221,134	889,876	529,858	394,871	333,799	325,263	7,623,123
ACA Factor in Effect	15,020	10,671	36,964	1,215	(8,296)	(5,684)	(6,463)	(4,585)	(2,531)	(1,719)	(1,337)	(1,289)	31,965
PGA Factor in Effect	120,743	85,773	453,207	806,324	1,109,241	756,396	1,128,976	800,802	442,110	300,297	233,571	225,225	6,462,665
PGA Factor - Required	114,621	391,382	727,316	843,651	1,231,674	749,371	1,221,134	889,876	529,858	394,871	333,799	325,263	7,752,817
Over/(Under) Recovery	21,142	(294,939)	(237,144)	(36,112)	(130,729)	1,341	(98,622)	(93,658)	(90,279)	(96,292)	(101,566)	(101,328)	(1,258,187)
Prior ACA Yr Over/(Under) Recovery Balance-Firm	55,532												
Monthly ACA Over/(Under) Recovery	15,020	10,671	36,964	1,215	(8,296)	(5,684)	(6,399)	(4,585)	(2,531)	(1,719)	(1,337)	(1,289)	32,029
Monthly PGA Over/(Under) Recovery	6,121	(305,610)	(274,109)	(37,327)	(122,433)	7,025	(92,158)	(89,074)	(87,748)	(94,573)	(100,229)	(100,039)	(1,290,152)
Total Monthly PGA/ACA Over/(Under) Recovery	21,142	(294,939)	(237,144)	(36,112)	(130,729)	1,341	(98,558)	(93,658)	(90,279)	(96,292)	(101,566)	(101,328)	(1,258,123)
2002-2003 PGA/ACA Yr to Date Over/(Under) Recovery	21,142	(273,797)	(510,942)	(547,054)	(677,783)	(676,441)	(774,999)	(868,657)	(958,936)	(1,055,229)	(1,156,795)	(1,258,123)	
Inception to Date PGA/ACA Over/(Under) Recovery	76,674	(218,265)	(455,410)	(491,522)	(622,250)	(620,909)	(719,467)	(813,125)	(903,404)	(999,697)	(1,101,262)	(1,202,590)	

Firm Mcfs 1,468,777

Note: Shaded areas are estimated amounts. Light gray shaded area is estimated based on information obtained from accountants.

Note: Prior months may change from previous spreadsheets due to prior period adjustments entered in appropriate month on this schedule.

Forecasted ACA 11/02 0.8188

Enclosure 6

**Missouri Public Service  
Southern System  
2002-2003 ACA Year PGA Estimate  
(Based on Monthly Actuals and Estimates)**

	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	
Commodity	\$2.3893	\$3.7763	\$4.0545	\$3.7935	\$3.9411	\$3.6655	\$5.3150	\$5.2100	\$4.9700	\$4.8500	\$4.8000	\$4.7700	
Fixed Costs	\$1.7535	\$1.3872	\$0.9194	\$0.6697	\$0.5128	\$0.6074	\$0.6624	\$0.9841	\$2.1927	\$3.1157	\$3.8474	\$4.3414	
Estimated Sales Volume	72,232	94,944	278,603	470,638	631,494	530,036	485,978	327,128	146,822	103,328	83,677	74,154	3,299,034
ACA Factor in Effect	\$1.6038	\$1.6001	\$1.1952	\$0.3116	\$0.2474	\$0.2458	\$0.2458	\$0.2458	\$0.2458	\$0.2458	\$0.2458	\$0.2458	
PGA Factor in Effect	\$4.5857	\$4.5994	\$4.6555	\$4.7779	\$4.7865	\$4.7867	\$5.9757	\$5.9757	\$5.9757	\$5.9757	\$5.9757	\$5.9757	
PGA/ACA Factor - Required	\$4.1428	\$5.1635	\$4.9739	\$4.4632	\$4.4538	\$4.2729	\$5.9774	\$6.1941	\$7.1627	\$7.9657	\$8.6474	\$9.1114	
Over/Under Recovery	\$2.0467	\$1.0360	\$0.8767	\$0.6264	\$0.5801	\$0.7596	\$0.2441	\$0.0274	-\$0.9412	-\$1.7442	-\$2.4259	-\$2.8899	
	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Total</u>
Gas Supply Purchased (in Dth)	65,142	229,494	414,831	571,307	746,193	629,933	577,571	388,783	174,494	122,802	99,448	88,130	4,108,128
Sales Volumes (in Mcf)	72,232	94,944	278,603	470,638	631,494	530,036	485,978	327,128	146,822	103,328	83,677	74,154	3,299,034
Cost of Gas Purchased and Produced	269,869	1,184,989	2,063,343	2,549,838	2,940,812	2,691,628	3,452,403	2,408,168	1,249,846	978,203	859,960	802,991	21,452,050
ACA Factor in Effect	115,843	151,920	332,979	146,672	156,212	130,283	119,453	80,408	36,089	25,398	20,568	18,227	1,334,052
PGA Factor in Effect	331,235	436,681	1,297,034	2,248,666	3,022,677	2,537,123	2,904,059	1,954,819	877,364	617,457	500,029	443,122	17,170,266
PGA Factor - Required	269,869	1,184,989	2,063,343	2,549,838	3,323,423	2,691,628	3,452,403	2,408,168	1,249,846	978,203	859,960	802,991	21,834,661
Over/(Under) Recovery	177,209	(596,389)	(433,330)	(154,500)	(144,534)	(24,222)	(428,891)	(372,941)	(336,393)	(335,348)	(339,364)	(341,642)	(3,330,344)
Prior ACA Yr Over/(Under) Recovery Balance-Firm	(939,834)												
Monthly ACA Over/(Under) Recovery	115,843	151,920	332,979	146,672	156,212	130,283	119,453	80,408	36,089	25,398	20,568	18,227	1,334,052
Monthly PGA Over/(Under) Recovery	61,366	(748,308)	(766,309)	(301,172)	(300,746)	(154,505)	(548,344)	(453,349)	(372,481)	(360,746)	(359,932)	(359,869)	(4,664,395)
Total Monthly PGA/ACA Over/(Under) Recovery	177,209	(596,389)	(433,330)	(154,500)	(144,534)	(24,222)	(428,891)	(372,941)	(336,393)	(335,348)	(339,364)	(341,642)	(3,330,344)
2002-2003 PGA/ACA Yr to Date Over/(Under) Recovery	177,209	(419,179)	(852,509)	(1,007,009)	(1,151,543)	(1,175,765)	(1,604,656)	(1,977,598)	(2,313,990)	(2,649,338)	(2,988,702)	(3,330,344)	
Inception to Date PGA/ACA Over/(Under) Recovery	(762,625)	(1,359,013)	(1,792,343)	(1,946,843)	(2,091,377)	(2,115,599)	(2,544,490)	(2,917,431)	(3,253,824)	(3,589,172)	(3,928,536)	(4,270,178)	

Firm Mcfs 3,823,123

Note: Shaded areas indicate estimates.

Note: Prior months may change from previous spreadsheets due to prior period adjustments entered in appropriate month on this schedule.

Forecasted ACA 11/02 1.1169

Enclosure 7

**Aquila Networks  
Southern System  
2002-2003 Summer Season Revenue Impact**

**Original Calculation Filed**

Month	PGA Factor	Month	PGA Factor	PGA Change (03/03)	Revenue Impact (Summer Season)
Mar-02	6.5449	Mar-03	6.2215	(0.3234)	(163,823)
Apr-02	6.2609	Apr-03	6.2215	(0.0394)	(12,050)
May-02	6.2609	May-03	6.2215	(0.0394)	(6,653)
Jun-02	6.2609	Jun-03	6.2215	(0.0394)	(4,519)
Jul-02	6.2609	Jul-03	6.2215	(0.0394)	(3,515)
Aug-02	6.2609	Aug-03	6.2215	(0.0394)	(3,389)
Sep-02	6.2609	Sep-03	6.2215	(0.0394)	(3,766)
Oct-02	6.2609	Oct-03	6.2215	(0.0394)	(5,272)

**Estimated Summer Season Change in Revenue (202,987)**

**Percent Change Between PGA Factors -0.63%**

Firm Sales Volume @ Burnertip

3,823,123

Month	Estimated Customer Usage Mcf/Mnth	Estimated % Mcf/Yr	Estimated Company Sales Mcf/Mnth
Jan	23.6	19.67%	751,881
Feb	21.7	18.08%	691,348
Mar	15.9	13.25%	506,564
Apr	9.6	8.00%	305,850
May	5.3	4.42%	168,855
Jun	3.6	3.00%	114,694
Jul	2.8	2.33%	89,206
Aug	2.7	2.25%	86,020
Sep	3	2.50%	95,578
Oct	4.2	3.50%	133,809
Nov	9.7	8.08%	309,036
Dec	17.9	14.92%	570,283
<b>TOTAL</b>	<b>120</b>	<b>100%</b>	<b>3,823,123</b>

Note: Estimated Customer Usage Obtained from Missouri Public Service Commission.

# Enclosure 9

## Aquila Networks Northern System 2002-2003 Summer Season Revenue Impact

### Original Calculation Filed

Month	PGA Factor	Month	PGA Factor	PGA Change (03/03)	Revenue Impact (Summer Season)
Mar-02	6.7395	Mar-03	6.5733	(0.1662)	(32,345)
Apr-02	4.7671	Apr-03	6.5733	1.8062	212,232
May-02	4.7671	May-03	6.5733	1.8062	117,170
Jun-02	4.7671	Jun-03	6.5733	1.8062	79,587
Jul-02	4.7671	Jul-03	6.5733	1.8062	61,901
Aug-02	4.7671	Aug-03	6.5733	1.8062	59,690
Sep-02	4.7671	Sep-03	6.5733	1.8062	66,323
Oct-02	4.7671	Oct-03	6.5733	1.8062	92,852

**Estimated Summer Season Change in Revenue** **657,411**

**Percent Change Between PGA Factors** **37.89%**

Firm Sales Volume @ Burnertip 1,468,777

Month	Estimated Customer Usage Mcf/Mnth	Estimated % Mcf/Yr	Estimated Company Sales Mcf/Mnth
Jan	23.6	19.67%	288,859
Feb	21.7	18.08%	265,604
Mar	15.9	13.25%	194,613
Apr	9.6	8.00%	117,502
May	5.3	4.42%	64,871
Jun	3.6	3.00%	44,063
Jul	2.8	2.33%	34,271
Aug	2.7	2.25%	33,047
Sep	3	2.50%	36,719
Oct	4.2	3.50%	51,407
Nov	9.7	8.08%	118,726
Dec	17.9	14.92%	219,093
<b>TOTAL</b>	<b>120</b>	<b>100%</b>	<b>1,468,777</b>

Note: Estimated Customer Usage Obtained from Missouri Public Service Commission.

**Aquila Networks  
Eastern System  
2002-2003 Summer Season Revenue Impact**

**Original Calculation Filed**

Month	PGA Factor	Month	PGA Factor	PGA Change (03/02)	Revenue Impact (Summer Season)
Mar-02	9.0992	Mar-03	9.7566	0.6574	33,019
Apr-02	9.0992	Apr-03	9.7566	0.6574	19,936
May-02	9.0992	May-03	9.7566	0.6574	11,006
Jun-02	9.0992	Jun-03	9.7566	0.6574	7,476
Jul-02	9.0992	Jul-03	9.7566	0.6574	5,815
Aug-02	9.0992	Aug-03	9.7566	0.6574	5,607
Sep-02	9.0992	Sep-03	9.7566	0.6574	6,230
Oct-02	9.0992	Oct-03	9.7566	0.6574	8,722

**Estimated Summer Season Change in Revenue                      97,810**

**Percent Change Between PGA Factors                      7.22%**

Firm Sales Volume @ Burnertip 379,066

Month	Estimated Customer Usage Mcf/Mnth	Estimated % Mcf/Yr	Estimated Company Sales Mcf/Mnth
Jan	23.6	19.67%	74,550
Feb	21.7	18.08%	68,548
Mar	15.9	13.25%	50,226
Apr	9.6	8.00%	30,325
May	5.3	4.42%	16,742
Jun	3.6	3.00%	11,372
Jul	2.8	2.33%	8,845
Aug	2.7	2.25%	8,529
Sep	3	2.50%	9,477
Oct	4.2	3.50%	13,267
Nov	9.7	8.08%	30,641
Dec	<u>17.9</u>	<u>14.92%</u>	<u>56,544</u>
<b>TOTAL</b>	<b>120</b>	<b>100%</b>	<b>379,066</b>

Note: Estimated Customer Usage Obtained from Missouri Public Service Commission.