

A NiSource Company

Adam J. Lanier Director Rates & Regulatory Affairs

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June 30, 2016

**VIA E-FILING** 

Rosemary Chiavetta Secretary Pennsylvania Public Utility Commission Commonwealth Keystone Building 400 North Street Harrisburg, PA 17120-3265

# Re: Quarterly Purchased Gas Cost Filing of Columbia Gas of Pennsylvania, Inc. Supplement No. 246 to Tariff Gas Pa. P.U.C. No. 9. Docket No. R-2015-2469665

Secretary Chiavetta:

Enclosed for filing on behalf of Columbia Gas of Pennsylvania, Inc. ("Columbia") is Supplement No. 246 to Tariff Gas Pa. P.U.C. No. 9 ("Supplement No. 246"). Supplement No. 246 issued June 30, 2016, to be effective July 1, 2016, changes Columbia's rates for the cost of purchased gas supplies. This filing is made in compliance with the Commission's regulations that permit gas utilities to update their gas cost recovery rate on a quarterly basis.

Customers served under Columbia's residential, small general service, and large general service sales schedules will experience an increase of \$0.05431/Therm in their gas supply and pass-through charges, effective July 1, 2016. The gas cost changes are reflected in the attached tariff rate schedules and Purchased Gas Cost Rider.

Copies of the enclosed filing have been served on the parties designated on this letter.

Please direct any inquiry with regard to this filing to me at (724.416.6390) or to Columbia's Counsel, Theodore J. Gallagher (724.416.6355), at the address written above, or to Columbia's outside counsel, Michael W. Hassell, Post & Schell P.C., 17 North Second Street, 12th Floor, Harrisburg, Pennsylvania 17101, (717.612.6029).

Sincerely,

Adam J. Lanier Director, Rates & Regulatory Affairs

Enclosure

c: Theodore J. Gallagher, Esquire Andrew S. Tubbs, Esquire Michael W. Hassell, Esquire Todd Stewart, Esquire, Counsel for NGS Parties Bureau of Investigation and Enforcement Office of Consumer Advocate Office of Small Business Advocate

# COLUMBIA GAS OF PENNSYLVANIA, INC.

121 Champion Way, Suite 100

Canonsburg, Pennsylvania

# **RATES AND RULES**

# FOR

# FURNISHING GAS SERVICE

IN

# THE TERRITORY AS DESCRIBED HEREIN

ISSUED: June 30, 2016

EFFECTIVE: July 1, 2016

ISSUED BY: MARK KEMPIC, PRESIDENT 121 CHAMPION WAY, SUITE 100 CANONSBURG, PENNSYLVANIA 15317

# NOTICE

This Tariff Supplement Makes a Change to the Existing Tariff - See List of Changes Made by This Tariff Supplement on Pages No. 2 and 2a.

# LIST OF CHANGES MADE BY THIS TARIFF SUPPLEMENT

Page	Page Description	Revision Description
Cover	Tariff Cover Page	Supplement No., Issue and Effective Date.
2-2b	List of Changes	List of Changes.
16	Rate Summary	The "Gas Supply Charge" has increased. The "Pass-through Charge" has increased. The "Total Effective Rate" increased.
17	Rate Summary	The "Gas Supply Charge" has increased. The "Pass-through Charge" has increased. The "Total Effective Rate" has increased.
18	Rate Summary	The "Gas Supply Charge" has increased. The "Pass-through Charge" has increased. The "Total Effective Rate" has increased.
19	Rate Summary	The "Gas Supply Charge" has increased. The "Pass-through Charge" has increased. The "Total Effective Rate" has increased.
20	Rate Summary	The "Residential Price-to-Compare" has increased. The "Commercial Price-to-Compare" has increased. The "Standby Service" has increased.
21	Rider Summary	The "Merchant Function Charge – Rider MFC" has increased.
21a	Gas Supply Charge Summary	The "PGCC" has increased. The "Rider MFC" has increased. The "Total Gas Supply Charge" has increased.

# LIST OF CHANGES MADE BY THIS TARIFF SUPPLEMENT

Page	Page Description	Revision Description
21b	Pass-through Charge Summary	The "PGDC" has increased. The "Capacity Assignment Factor" has increased. The "Total Pass-through Charge" has increased.
21c	Price-to-Compare Summary	The "PGCC" has increased. The "Capacity Assignment Factor" has decreased. The "Rider MFC" has increased. The "Total Price-to-Compare" has increased.
151	Rider PGC	The Purchased Gas Commodity Cost, made up of the Commodity Cost and the Commodity "E" Factor has increased. The Commodity Cost has increased. The Demand Cost has increased. The Purchased Gas Demand Cost billed to Rate SGDS has increased. The Purchased Gas Demand Cost billed to Rate RDS and Rate SCD has increased. The Capacity Assignment Factor credited to Rate RDS and Rate SCD has increased.
154	Rider PGC	The Purchased Gas Demand Cost billed to Rate RDS and Rate SCD has increased. The Capacity Assignment Factor credited to Rate RDS and Rate SCD has decreased.

Tariff Gas - Pa. P.U.C. No. 9

One Hundred-fifth Revised Page No. 16

Canceling One Hundred-third Revised Page No. 16

	Rate Sun	nmary				
	Rate per	thm				
Residential Rate Schedules	 Distribution Charge	Gas Supply Charge	Gas Cost Adjustment	Pass-Through Charge	State Tax Adjustment Surcharge	Total Effective Rate
		1/		2/	3/	
Rate RSS - Residential Sales Service						
Customer Charge	\$ 16.75	-	-	-	0.00	16.7
Jsage Charge	\$ 0.47806	0.31678	(0.06811)	0.19309	0.00000	0.9198
Customer Transferring from Rate Schedule RDS - Usage Charge	\$ 0.47806	0.31678	- 4	/ 0.19309	0.00000	0.9879
Rate RDS - Residential Distribution Service						
Customer Charge Jsage Charge:	\$ 16.75	-	-		0.00	16.7
Customers Electing CHOICE - 1st Year	\$ 0.47806	_	(0.06811) 5	/ 0.16229	0.00000	0.5722
Customers Electing CHOICE - 2nd Year	\$ 0.47806	-	-	0.16229	0.00000	0.6403
1/ Please see Page No. 21a for rate components.						
2/ Please see Page No. 21b for rate components.		a and the Distribut	tion Change			
3/ The STAS percentage is reflected on Page No. 20 and is applied to 4/ If a customer transfers to RSS from RDS, the Gas Cost Adjustment	-		-			
			• •			

5/ If a customer transfers to RDS from RSS, the Gas Cost Adjustment shall be billed for up to twelve billing cycles.

Issued: June 30, 2016

Mark Kempic - President

Effective: July 1, 2016

Columbia Gas of Pennsylvania, Inc.

olumbia Gas of Pennsylvania, Inc.										
		Rate Sum	mary							
		Rate per t	hm							
Commercial / Industrial Rate Schedules <= 64,400 therms - 12 Months Ending October		Distribution Charge	Gas Supply Charge	Gas Cost Adjustment	Pass-through Charge	State Tax Adjustment Surcharge	Total Effective Rate			
			1/		2/	3/				
tate SGSS - Small General Sales Service Customer Charge:										
Annual Throughput <= 6,440 thm	\$	21.25	-	-	-	0.00	21.25			
Annual Throughput > 6,440 thm and <= 64,400 thm	\$	48.00	-	-	-	0.00	48.00			
Isage Charge										
Annual Throughput <= 6,440 thm	\$	0.35939	0.31344	(0.06811) 4/	0.12733	0.00000	0.73205			
Annual Throughput > 6,440 thm and <= 64,400 thm	\$	0.32246	0.31344	(0.06811) 4/	0.12733	0.00000	0.69512			
ate SCD - Small Commercial Distribution										
Sustomer Charge:										
Annual Throughput <= 6,440 thm	\$	21.25	-	-	-	0.00	21.2			
Annual Throughput > 6,440 thm and <= 64,400 thm	\$	48.00	-	-	-	0.00	48.0			
Isage Charge: Customers Electing CHOICE - 1st year										
Annual Throughput <=6,440 thm	\$	0.35939	-	(0.06811) 5/	0.09653	0.00000	0.3878			
Annual Throughput >6,440 and <=64,400 thm	\$	0.32246	-	(0.06811) 5/	0.09653	0.00000	0.3508			
Isage Charge: Customers Electing CHOICE - more than 1 year										
Annual Throughput <=6,440 thm	\$	0.35939	-	-	0.09653	0.00000	0.4559			
Annual Throughput >6,440 and <=64,400 thm	\$	0.32246	-	-	0.09653	0.00000	0.4189			
ate SGDS - Small General Distribution Service										
Customer Charge:										
Annual Throughput <= 6,440 thm	\$	21.25	-	-	-		21.2			
Annual Throughput > 6,440 thm and <= 64,400 thm	\$	48.00	-	-	-		48.0			
Isage Charge - Priority One										
Annual Throughput <= 6,440 thm	\$	0.33759	-	- 5/	0.12733	0.00000	0.4649			
Annual Throughput > 6,440 thm and <= 64,400 thm	\$	0.32062	-	- 5/	0.12733	0.00000	0.4479			
Isage Charge - Non-Priority One										
Annual Throughput <= 6,440 thm	\$	0.33759	-	- 5/	0.00010	-	0.3376			
Annual Throughput > 6,440 and <= 64,400 thm	\$	0.32062	-	- 5/	0.00010	-	0.3207			

1/ Please see Page No. 21a for rate components.

2/ Please see Page No. 21b for rate components.

3/ The STAS percentage is reflected on Page No. 20 and is applied to the Customer Charge and the Distribution Charge.

4/ If a customer transfers to SGSS from SCD or SGDS, the Gas Cost Adjustment shall not be billed for up to twelve billing cycles.

5/ If a customer transfers to SCD or SGDS from SGSS, the Gas Cost Adjustment shall be billed for up to twelve billing cycles.

6/ Plus Rider EBS Option 1 or 2 - See Page 21.

		Rate Sum	-				
		Rate per t	hm				
Commercial / Industrial Rate Schedules > 64,400 therms - 12 Months Ending October		Distribution Charge	Gas Supply Charge	Gas Cost Adjustment	Pass-through Charge	State Tax Adjustment Surcharge	Total Effective Rate
		Ű.	1/	· · · ·	2/	3/	
Pote L CSS - Large Concert Salas Samilas							
Rate LGSS - Large General Sales Service Customer Charge:							
Annual Throughput > 64,400 thm and <= 110,000 thm	\$	215.00				0.00	215.00
Annual Throughput > 110,000 thm and <= 540,000 thm	\$	685.00				0.00	685.00
Annual Throughput > 540,000 thm and <= 1,074,000 thm	\$	1,800.00				0.00	1,800.00
Annual Throughput > 1,074,000 thm and <= 3,400,000 thm	\$	2,800.00				0.00	2,800.00
Annual Throughput > 3,400,000 thm and <= 7,500,000 thm	\$	5,400.00				0.00	5,400.00
Annual Throughput > 7,500,000 thm	\$	8,000.00				0.00	8,000.00
Jsage Charge:							
Annual Throughput > 64,400 thm and <= 110,000 thm	\$	0.20774	0.31208	(0.06811) 4/	0.12723	0.00000	0.57894
Annual Throughput > 110,000 thm and <= 540,000 thm	\$	0.19422	0.31208	(0.06811) 4/		0.00000	0.56542
Annual Throughput > $540,000$ thm and <= $1,074,000$ thm	\$	0.12001	0.31208	(0.06811) 4/		0.00000	0.49121
Annual Throughput > 1,074,000 thm and <= 3,400,000 thm	\$	0.10645	0.31208	(0.06811) 4/		0.00000	0.47765
Annual Throughput > $3,400,000$ thm and <= $7,500,000$ thm	\$	0.09553	0.31208	(0.06811) 4/		0.00000	0.46673
Annual Throughput > 7,500,000 thm	\$	0.05684	0.31208	(0.06811) 4/		0.00000	0.42804
Customer Charge: Annual Throughput > 64,400 thm and <= 110,000 thm Annual Throughput > 110,000 thm and <= 540,000 thm Jsage Charge: Annual Throughput > 64,400 thm and <= 110,000 thm	\$ \$ \$	215.00 685.00 0.20774	- -	- - - 5/	-	0.00 0.00 0.00000	215.00 685.00 0.20774
Annual Throughput > 110,000 thm and <= 540,000 thm	\$	0.19422	-	- 5/	-	0.00000	0.19422
Rate LDS - Large Distribution Service							
Customer Charge:							
Annual Throughput > 540,000 thm and <= 1,074,000 thm	\$	1,800.00	-	-	-	0.00	1,800.00
Annual Throughput > 1,074,000 thm and <= 3,400,000 thm	\$	2,800.00	-	-	-	0.00	2,800.00
Annual Throughput > 3,400,000 thm and <= 7,500,000 thm	\$	5,400.00	-	-	-	0.00	5,400.00
Annual Throughput > 7,500,000 thm	\$	8,000.00	-	-	-	0.00	8,000.00
Jsage Charge:							
Annual Throughput > 540,000 thm and <= 1,074,000 thm	\$	0.12001	-	- 5/		0.00000	0.12001
Annual Throughput > 1,074,000 thm and <= 3,400,000 thm	\$	0.10645	-	- 5/		0.00000	0.10645
Annual Throughput > 3,400,000 thm and <= 7,500,000 thm	\$	0.09553	-	- 5/		0.00000	0.09553
Annual Throughput > 7,500,000 thm	\$	0.05684	-	- 5/	-	0.00000	0.05684
/ Please see Page No. 21a for rate components. / Please see Page No. 21b for rate components.							
7 The STAS percentage is reflected on Page No. 20 and is appli	ed to the	Customer Ch	arge and the Dis	stribution Charge			
/ If a customer transfers to LGSS from SDS or LDS, the Gas Cos			•	•			
/ If a customer transfers to SDS or LDS from LGSS, the Gas Cos							

#### Supplement No. 246 to Tariff Gas - Pa. P.U.C. No. 9 Twenty-sixth Revised Page No. 19 Canceling Twenty-fourth Revised Page No. 19

· · · · · · · · · · · · · · · · · · ·	Rate Summary											
		Rate pe	er thm									
Main Line Service Rate Schedules Commercial / Industrial		Distribution Charge	Gas Supply Charge 1/	Gas Cost Adjustment	Pass-through Charge 2/	State Tax Adjustment Surcharge 3/	Total Effective Rate	_				
Rate MLSS - Main Line Sales Service												
Customer Charge:	•						100.04					
Annual Throughput > $274,000$ thm and <= $540,000$ thm	\$	469.34	-	-	-	0.00	469.34					
Annual Throughput > $540,000$ thm and <= $1,074,000$ thm	\$	1,149.00	-	-	-	0.00	1,149.00					
Annual Throughput > $1,074,000$ thm and $\leq 3,400,000$ thm	\$	2,050.00	-	-	-	0.00	2,050.00					
Annual Throughput > $3,400,000$ thm and <= $7,500,000$ thm	\$	4,096.00	-	-	-	0.00	4,096.00					
Annual Throughput > 7,500,000 thm	\$	7,322.00	-	-	-	0.00	7,322.00					
Usage Charge:												
MLS Class I Annual Throughput > 274,000 thm	\$	0.00937	0.31208	(0.06811) 4	0.12723	0.00000	0.38057					
MLS Class II:												
Annual Throughput > 2,146,000 thm and <= 3,400,000 thm	\$	0.04479	0.31208	(0.06811) 4	0.12723	0.00000	0.41599					
Annual Throughput > 3,400,000 thm and <= 7,500,000 thm	\$	0.03874	0.31208	(0.06811) 4	0.12723	0.00000	0.40994					
Annual Throughput > 7,500,000 thm	\$	0.03355	0.31208	(0.06811) 4	0.12723	0.00000	0.40475					
Rate MLDS - Main Line Distribution Service												
Customer Charge:												
Annual Throughput > 274,000 thm and <= 540,000 thm	\$	469.34	-	-	-	0.00	469.34					
Annual Throughput > 540,000 thm and <= 1,074,000 thm	\$	1,149.00	-	-	-	0.00	1,149.00					
Annual Throughput > 1,074,000 thm and <= 3,400,000 thm	\$	2,050.00	-	-	-	0.00	2,050.00					
Annual Throughput > 3,400,000 thm and <= 7,500,000 thm	\$	4,096.00	-	-	-	0.00	4,096.00					
Annual Throughput > 7,500,000 thm	\$	7,322.00	-	-	-	0.00	7,322.00					
Usage Charge:												
MLS Class I Annual Throughput > 274,000 thm	\$	0.00937	-	- 5	5/ -	0.00000	0.00937	6/				
MLS Class II:												
Annual Throughput > 2,146,000 thm and <= 3,400,000 thm	\$	0.04479	-	- 5	5/ -	0.00000	0.04479	6/				
Annual Throughput > 3,400,000 thm and <= 7,500,000 thm	\$	0.03874	-	- 5	5/ -	0.00000	0.03874	6/				
Annual Throughput > 7,500,000 thm	\$	0.03355	-	- 5	5/ -	0.00000	0.03355	6/				
1/ Please see Page No. 21a for rate components.												
2/ Please see Page No. 21b for rate components.												
3/ The STAS percentage is reflected on Page No. 20 and is applied	ed to th	e Customer C	harge and the Dis	stribution Charge								
4/ If a customer transfers to MLSS from MLDS, the Gas Cost Adju	stment	shall not be b	illed for up to twe	lve billing cycles.								
5/ If a customer transfers to MLDS from MLSS, the Gas Cost Adju	stment	shall be billed	for up to twelve I	billing cycles.								
6/ Plus Rider EBS Option 1 or 2 - See Page 21.												

Columbia Gas of Pennsylvania, Inc.

#### Columbia Gas of Pennsylvania, Inc. **Other Rates Summary** Rate per thm Applicable Rate Schedules Description Rate \$/ thm Price to Compare for Residential Gas Supply \$ 0.27947 1/ RSS SGSS (< = 64,400 thms) Price to Compare for Commercial Gas Supply \$ 0.27613 1/ State Tax Adjustment Surcharge Percentage Customer and Distribution Charges on all rates 0.00000% Per therm based on a customer's Maximum Daily Firm **Rate SS - Standby Service** \$ 0.75430 Requirement. See Pages 134 - 136 herein for detail. 1/ Please see Page No. 21c for rate components. Issued: June 30, 2016 Effective: July 1, 2016 Mark Kempic - President

Tariff Gas - Pa. P.U.C. No. 9

One Hundred-fourteenth Revised Page No. 21

umbia Gas of Pennsylvania, Inc.			Canceling One Hundred-twelfth Revised Page No	
		Rider S	ummary	
Riders		Rate	_	Applicable Rate Schedules
Customer Choice - Rider CC	\$	0.00010	/thm	RSS/RDS/SGSS/SGDS/SCD/DGDS
Universal Service Plan - Rider USP	\$	0.06576	/thm	RSS/RDS
Distribution System Improvement Charge - Rider DSIC		0.00000%	)	This percentage is applied to a portion of the Distribution Charge and the Customer Charge. See Pages 177-180 for Rider DSIC details.
Elective Balancing Service - Rider EBS:				5
Option 1 - Small Customer	\$	0.01677	/thm	SGDS/SDS
Option 1 - Large Customer	\$	0.00727	/thm	LDS/MLDS
Option 2 - Small Customer	\$	0.00697	/thm	SGDS/SDS
Option 2 - Large Customer	\$	0.00226	/thm	LDS/MLDS
Gas Procurement Charge - Rider GPC	\$	0.00695	/thm	RSS/SGSS/LGSS/MLSS
Merchant Function Charge - Rider MFC	\$	0.00470	/thm	RSS
Merchant Function Charge - Rider MFC	\$	0.00136	/thm	SGSS
Purchased Gas Cost - Rider PGC	P	g. 21a & 21b	)	Rate Schedules specified on Page 21a & 21b

Issued: June 30, 2016

Mark Kempic - President

Effective: July 1, 2016

# Tariff Gas - Pa. P.U.C. No. 9

Twentieth Revised Page No. 21a Canceling Seventeenth Revised Page No. 21a

# Columbia Gas of Pennsylvania, Inc.

,,,,,,,	Gas Supply Charg Rate per th				
Rate Schedule		PGCC	Rider GPC	Rider MFC	Total Gas Supply <u>Charge</u>
Rate CAP - Customer Assistance Plan	\$	-	-	-	-
Rate RSS - Residential Sales Service	\$	0.30513	0.00695	0.00470	0.31678
Rate SGSS - Small General Sales Service	\$	0.30513	0.00695	0.00136	0.31344
Rate LGSS - Large General Sales Service	\$	0.30513	0.00695	-	0.31208
Rate MLSS Main Line Sales Service	\$	0.30513	0.00695	-	0.31208
ssued: June 30, 2016				Effe	ctive: July 1, 2016

Mark Kempic - President

# Tariff Gas - Pa. P.U.C. No. 9

Thirty-second Revised Page No. 21b Canceling Thirtieth Revised Page No. 21b

ımbia Gas of Pennsylvania, Inc.							sed Page No. 21
·		ugh Charge Su Rate per thm	ummary		-		
Rate Schedule	 PGDC	PGDC <u>"E" Factor</u>	Capacity Assignment <u>Factor</u>	Pipeline <u>Refund</u>	Rider CC	Rider USP	Total Pass-through <u>Charge</u>
Rate CAP - Customer Assistance Plan	\$ 0.14145	(0.01422)	(0.03080)	-	-	-	0.09643
Rate RSS - Residential Sales Service	\$ 0.14145	(0.01422)	-	-	0.00010	0.06576	0.19309
Rate SGSS - Small General Sales Service	\$ 0.14145	(0.01422)	-	-	0.00010	-	0.12733
Rate LGSS - Large General Sales Service	\$ 0.14145	(0.01422)	-	-	-	-	0.12723
Rate MLSS Main Line Sales Service	\$ 0.14145	(0.01422)	-	-	-	-	0.12723
Rate RDS - Residential Distribution Service	\$ 0.14145	(0.01422)	(0.03080)	-	0.00010	0.06576	0.16229
Rate SCD - Small Commercial Distribution (Choice)	\$ 0.14145	(0.01422)	(0.03080)	-	0.00010	-	0.09653
Rate SGDS - Small General Distribution Service Priority One (P1) Non-Priority One (NP1)	\$ 0.14145 -	(0.01422) -	-	-	0.00010 0.00010	-	0.12733 0.00010
Rate SDS - Small Distribution Service	\$ -	-	-	-	-	-	-
Rate LDS - Large Distribution Service	\$ -	-	-	-	-	-	-
Rate MLDS - Main Line Distribution Service	\$ -	-	-	-	-	-	-

Issued: June 30, 2016

Mark Kempic - President

Effective: July 1, 2016

umbia Gas of Pennsylvania, Inc.			Canceling Seventeenth Revised Page No.					
	Price-to-	Compare ( Rate per	PTC) Summar	У				
Customer Class		PGCC	Gas Cost <u>Adjustment</u>	Capacity Assignment <u>Factor</u>	Rider GPC	Rider MFC	Total Price-to- <u>Compare</u>	
Residential	\$	0.30513	(0.06811)	0.03080	0.00695	0.00470	0.27947	
Commercial < = 64,400 thm/year	\$	0.30513	(0.06811)	0.03080	0.00695	0.00136	0.27613	
ued: June 30, 2016			Dracidant			Effect	ive: July 1,	

Mark Kempic - President

# **RIDER PGC - PURCHASED GAS COST**

## PROVISIONS FOR RECOVERY OF PURCHASED GAS COSTS

## RIDER PGC APPLICABLE TO SALES SERVICE CUSTOMERS

Rates for each thm of gas supplied to sales customers subject to this Rider under the Rate RSS, Rate SGSS, Rate LGSS, and Rate MLSS rate schedules shall include \$0.36425 per thm for recovery of purchased gas costs. (I) This rate includes the commodity cost component (CC) of \$0.30513 per thm, the commodity "E" Factor component (CE) of (\$0.06811) per thm, the demand cost component (DC) of \$0.14145 per thm, and the demand "E" Factor component of (\$0.01422) per thm.

#### RIDER PGC APPLICABLE TO SGDS PRIORITY ONE CUSTOMERS

Rates for each thm of gas distributed under the Rate SGDS rate schedules for Priority-One Service customers (I) shall include \$0.12723 per thm for recovery of Purchased Gas Demand Costs (PGDC). This rate includes the DC of \$0.14145 per thm and the demand "E" Factor component of (\$0.01422) per thm.

#### RIDER PGC CHARGED TO CHOICE DISTRIBUTION SERVICE CUSTOMERS

Rates for each thm of gas distributed under Rate RDS and Rate SCD shall include \$0.09643 per thm for (I) recovery of Purchased Gas Demand Costs. This rate includes the DC of \$0.14145 per thm, the Capacity Assignment Factor (CAF) of (\$0.03080) per thm and the DC "E" Factor component of (\$0.01422) per thm. The CAF represents costs not assignable to Choice Distribution Service customers.

Such rates shall be increased or decreased, from time to time, as provided by Section 1307(f) of the Public Utility Code and the Commission's Regulations, to reflect changes in the level of purchased gas costs, as calculated in the manner set forth below.

# PRESENTATION ON CUSTOMER BILLS

For sales service customers served under Rate RSS, Rate SGSS, Rate LGSS and Rate MLSS, the Pass-through (I) Charge includes the PGDC of \$0.14145 per thm plus the demand "E" Factor of (\$0.01422) per thm. The two factors total \$0.12723 per thm. The Gas Supply Charge includes the PGCC of \$0.30513 per thm. The Gas Cost Adjustment is the commodity "E" Factor of (\$0.06811) per thm.

For General Distribution Service customers served under Priority-One Rate SGDS, the Pass-through Charge includes the PGDC of \$0.14145 per thm and the demand "E" Factor component of (\$0.01422) per thm, totaling (I) \$0.12723 per thm.

For Choice Distribution Service customers served under Rate RDS or Rate SCD, the Pass-through Charge includes the PGDC of \$0.14145 per thm, the CAF of (\$0.03080) per thm and the demand "E" Factor component (I) of (\$0.01422) per thm, all of which total \$0.09643 per thm.

## QUARTERLY UPDATES

The Company's rates for recovery of purchased gas costs are also subject to quarterly adjustments under procedures set forth in the Commission's regulations at 52.Pa. Code § 53.64 (i) (5). Such updates shall reflect, in addition to the provisions of the regulation, adjustments to the projected commodity cost of purchased gas based upon more current versions of the same sources of data and using the same methods to project the commodity cost of purchased gas approved by the Commission in the Company's most recent annual proceeding for recovery of purchased gas costs under section 1307(f) of the Public Utility Code.

<sup>(</sup>D) Indicates Decrease (I) Indicates Increase

# RIDER PGC - PURCHASED GAS COST (Continued)

## COMPUTATION OF PURCHASED GAS DEMAND COSTS PER THM – Continued

Supplier refunds that are not included in "CE" will be included in the calculation of "DE" with interest added at the annual rate of six percent (6%) calculated from the month received to the effective month such refund is refunded. The period over which such refunds will be made shall be established by the Commission.

"S" - projected thms of gas to be billed to customers under the distribution charges of the Rate RSS, Rate SGSS, Rate LGSS, and Rate MLSS rate schedules plus the projected thm of gas to be distributed to customers under Rate RDS, Rate SCD and SGDS Priority One Distribution rate schedules of this Tariff during the period when rates will be in effect.

#### PROVISION OF PURCHASED GAS DEMAND COST CREDIT DUE TO CUSTOMERS ELECTING CHOICE (D)(I) DISTRIBUTION SERVICE – CAPACITY ASSIGNMENT FACTOR (CAF)

The Purchased Gas Demand Cost (PGDC) rate included in the Pass-through Charge billed to Choice Distribution Service customers served under Rate RDS or Rate SCD shall be \$0.09643 per thm. Such rate shall be equal to the PGDC component of \$0.12723 per thm as calculated above, less the CAF of \$0.03080 per thm. The CAF shall be equal to the projected annual cost of assigned Firm Capacity less estimated annual storage commodity costs (storage injection, withdrawal, shrinkage and commodity transportation cost) with the net divided by the estimated, normalized annual usage of customers electing Choice Distribution Service. The CAF of \$0.03080 per thm representing costs not assignable to CHOICE customers shall be included in the Price-to-Compare.

# DETERMINATION OF OVER/UNDERCOLLECTION OF GAS COSTS

## Commodity E-factor

In computing the experienced over/under collection of purchased gas commodity costs for a period defined by the Commission, the following procedure shall be used:

(a) All experienced purchased gas commodity costs actually incurred by the Company to service customers pursuant to all rate schedules of this Tariff.

Experienced purchased gas commodity costs shall include, but not be limited to, the following:

- (1) payments to suppliers to accept assignment of capacity on interstate pipelines other than Columbia Gas Transmission Corporation to the extent permitted under the Rules Applicable to Distribution Service;
- (2) costs paid for employing futures, options and other risk management tools, including but not limited to, supplier related costs associated with the fixed price contracts or financial contracts utilized by the Company to lessen the impact of price volatility for PGC customers; and
- (3) the index price of gas purchased from distribution customers under the provisions of the Deliveries in Excess of Consumption section of Paragraph 3 of the Rules Applicable to Distribution Service.

<sup>(</sup>D) Indicates Decrease (I) Indicates Increase

#### COLUMBIA GAS OF PENNSYLVANIA, INC. COMPUTATION OF CHANGE IN RATE PURSUANT TO SECTION 1307(f) APPLICATION PERIOD: OCTOBER, 2015 THROUGH SEPTEMBER, 2016

$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Line									
1         Parkweit Gas Commonly Cont         5         1         0 </th <th></th> <th>Description</th> <th>Amount</th> <th></th> <th>Change in Rate</th> <th>Effective 1-1-16</th> <th>Change in Rate</th> <th>Effective 4-1-16</th> <th>Change in Rate</th> <th>Effective 7-1-16</th>		Description	Amount		Change in Rate	Effective 1-1-16	Change in Rate	Effective 4-1-16	Change in Rate	Effective 7-1-16
2         Commodity Coar of an Cabinit 1-B, Schook to 1         107,706,715           4         Docober, 2015 through September, 2016         342,023,945         0.03896         0.27554         0.0019         0.03199         0.03133           6         Commodity Charol Lane 4)         0.43222         (0.03896)         0.27554         0.00100         0.23534         0.00100         (2.561,754)         0.00000         (2.361,754)         0.00000         (2.361,754)         0.00000         (2.361,754)         0.00000         (2.361,754)         0.00000         (2.361,754)         0.00000         (2.361,754)         0.00000         (2.361,754)         0.00000         (2.361,754)         0.00000         (2.361,754)         0.00000         (2.361,754)         0.00000         (2.361,754)         0.00000         (2.361,754)         0.00000         (2.361,754)         0.00000         (2.361,754)         0.00000         (0.36811)         0.00000         (0.08811)         0.00000         (0.08811)         0.00000         (0.08811)         0.00000         (0.08811)         0.00000         (0.08811)         0.00000         (0.08811)         0.00000         (0.08811)         0.00000         (0.08811)         0.00000         (0.08811)         0.00000         (0.08811)         0.00000         (0.08811)         0.00000			(1)	-	(2=3-1)	(3)	(4=5-3)	(5)	(6=7-5)	(7)
3         Project and rules for the vector shifting period, of Octor, 215 for 02, 555 (specified, 2016)         344, 223 (specified, 2016)         0.31252         0.03888)         0.27754         0.03199         0.33153           4         Commodity Cherri Under Collection         0.4522, 2017)         0.4353, 754)         0.00000         0.2353, 754)         0.00000         0.2353, 754)         0.00000         0.23, 531, 754)         0.00000         0.23, 531, 754)         0.00000         0.23, 531, 754)         0.00000         0.23, 531, 754)         0.00000         0.23, 531, 754)         0.00000         0.23, 531, 754)         0.00000         0.23, 531, 754)         0.00000         0.23, 531, 754)         0.00000         0.23, 531, 754)         0.00000         0.23, 531, 754)         0.00000         0.23, 531, 754)         0.00000         0.23, 531, 754)         0.00000         0.23, 531, 754)         0.00000         0.00001         0.00000         0.00001         0.00001         0.00001         0.00000         0.00001         0.00000         0.00000         0.00001         0.00001         0.00001         0.00001         0.00001         0.00001         0.00001         0.00001         0.00001         0.00001         0.00001         0.00001         0.00001         0.00001         0.00001         0.00001         0.000001         0.00001         0.00001<	-									
4         October, 2015 through Spreaded. 2016         344.262.945 Through         0.27354         0.00000         0.27354         0.0000         0.27354         0.0000         0.27354         0.0000         0.27354         0.0000         0.27354         0.0000         0.27354         0.0000         0.27354         0.0000         0.27354         0.0000         0.27354         0.0000         0.27354         0.0000         0.27354         0.0000         0.27354         0.0000         0.27354         0.0000         0.27354         0.0000         0.2561759           7         Commedity E-Retor         116 and the to the web billing periods of         0.000777         0.00266         0.000011         0.00000         0.00001         0.00000         0.00001         0.00000         0.00001         0.00000         0.00001         0.00000         0.00001         0.00000         0.00001         0.00000         0.00001         0.00000         0.00001         0.00000         0.00001         0.00000         0.00001         0.00000         0.00001         0.00000         0.01286         0.00000         0.01286         0.00000         0.01286         0.00000         0.01286         0.00000         0.01286         0.00000         0.01286         0.00000         0.01286         0.000000         0.01286	-	•	107,704,715							
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $										
6         Commodity (DeryUnder Collection           7         Commodity (DeryUnder Collection         (23,631,754)         0.00000         (23,631,754)         0.00000         (23,631,754)           9         replaced alles for the revelve billing periods of         (34,552,2877)         921,053         (23,631,754)         0.00000         (23,631,754)         0.00000         (23,631,754)           10         Consocity F-fractor (Line & Line (1)         (34,061,450)         (34,061,450)         (0,06811)         0.00000         (0,0727)         0.11873         0.00000         (0,0128)         0.00000         (0,0128)         0.00000         (0,0	-	<b>U</b>		herms						
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	5	PGCC (Line 2/Line 4)	0.31252		(0.03898)	0.27354	0.00000	0.27354	0.03159	0.30513
		•								
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			(24,552,807)		921,053	(23,631,754)	0.00000	(23,631,754)	0.00000	(23,631,754)
11       Commodity E-Factor (Line 8/ Line 10) $(0.07077)$ $0.00266$ $(0.08811)$ $0.00000$ $(0.06811)$ $0.00000$ $(0.06811)$ 12       Parchand Gas Demand Loss $0.2,602,665$ $0.00001$ $(0.06811)$ $0.00000$ $(0.06811)$ 13       Demand cost of as (Edishi H. Schedule 1) $62,602,665$ $604,182$ $604,182$ 14       Lass: Purchaed Gas Demand Cost allocated to Rues LTS, STS, $506,1180$ $000000$ $0.13081$ $0.00000$ $0.13081$ $0.00000$ $0.01208$ , $0.00000$ <										
Dermited Gis Dermit Cost         Control         Control           13         Dermited Gis Dermit Cost of gas (Exhibit 1-B, Schoolle 1)         62,602,665           14         Lass: Produced Gis Dermited Gis Dermited Res (SS         604,182           15         Lass: Produced Gis Dermited Gis Dermited Res (SS         604,182           16         Lass: Produced Gis Dermited Cast Dermited Res (SS         604,182           17         SGS: TS and MLS Eah 1-A, Sch 2, Page 3)         0           18         School (Line 15 - Line 17)         61,998,483           19         Projected sales for the reserve bulk periods of Control (Line 18 / Line 20)         0.13027         0.000054         0.13081         0.00000         0.012080         0.00000         0.012080         0.00000         0.012080         0.00000         0.011873         0.02272         0.1445           14         Dermited Covery Under Collection         0         0.000054         0.012080         0.000000         (0.01280)         0.00000         (0.01282)         0.00000         (0.01282)         0.00000         (0.01282)         0.00000         (0.01282)         0.00000         (0.01282)         0.00000         (0.01282)         0.00000         (0.01282)         0.00000         (0.01422)         0.00000         (0.01422)         0.00000         (0.01				herms		,				,,
13       Dermand cost of gas (Bublish 1-B, Scholule 1)       62,402,665         14       Less: Prochased Gas Permand Eax (SS)       604,182         15       Gibbith 1-B, Scholule 2, Short 2)       604,182         16       Less: Prochased Gas Permand Cost allocated to Ranse LTS, STS,       61,998,483         19       Projected sales for the redveb billing periods of       00,0000       01,13081       0,002272       01,15353         20       October, 2015 frumps September, 2016       L/       475,518,191       Therms       00,00264       0.11873       0,00000       (0,01208)	11	Commodity E-Factor (Line 8/ Line 10)	(0.07077)		0.00266	(0.06811)	0.00000	(0.06811)	0.00000	(0.06811)
14       Less: Purchase Gas Demand recovered under Rate SS         15       (Eishie 1-A, Scheid 2, Sheet 2)       604,182         16       Less: Purchased Gas Demand Cost allocated to Rates LTS, STS,       0         17       SGS TS and MS (Field - A, Scheid 2, Page 3)       0         19       Projected sales for the twelve billing periods of       1/       475,918,191       Therms         20       October, 2015 funcipies September, 2016       1/       475,918,191       October, 2015 funcipies September, 2016       0.00000       (0.01208)       0.000000       (0.01208)       0.000000       (0.01208)       0.000000       (0.01208)       0.000000       (0.01208)       0.000000       (0.01208)       0.000000       (0.01208)       0.000000       (0.01208)       0.000000       (0.01208)       0.000000       (0.01208)       0.000000       (0.01208)       0.00000       (0.01208)       0.00000       (0.01208)       0.00000       (0.01208)       0.00000       (0.01208)       0.00000       (0.01208)       0.00000       (0.01208)       0.00000       (0.01208)       0.00000       (0.01208)       0.00000       (0.01208)       0.00000       (0.01208)       0.00000       (0.01208)       0.00000       (0.01208)       0.00000       (0.01208)       0.00000       (0.01208)       0.00000 <td></td>										
15       (Exhibi LA, Schuldz Z, Stee 2)       604,182         16       Lass: Protewade Gas Demand Coral located Rates LTS, STS,       0         17       SGS-TS and MLS (Exh. LA, Sch. 2, Page 3)       0         18       Subtrail (Lin 13 - Lin 17)       61,998,483         19       Projected siles for the twork billing periods of       0         20       October, 2015 through September, 2016       1       475,918,191         21       POIC: Rate       0.01208)       0.00000       (0.01208)       0.00000       (0.01208)         20       Demand CoveryUnder Collection       0       0.11819       0.00000       (6,769,180)       0.00000       (6,769,180)         21       Demand E-Factor       (6,509,238)       (259,942)       (6,769,180)       0.00000       (6,769,180)       0.00000       (6,769,180)         22       Demand E-Factor       (0,01368)       0.00004       (0,01422)       0.00000       (6,769,180)         23       Deriver, 2015 functions Speember, 2016       1./       475,918,191       Therms       475,918,191       475,918,191       475,918,191       475,918,191         24       Dermand E-Factor (Line 26)       0.31252       (0.03898)       0.27354       0.00000       0.031513         31		· · · · · · · · · · · · · · · · · · ·	62,602,665							
16       Less: Purchased Gas Demand Cost allocated to Rates LTS, STS,         17       SGS-TS and MLS (Esh.1-A, Sch.2, Page 3)       0         19       Projected sales for the twolve billing periods of       0         19       Octorer, 2015 frum, Specimber, 2016       1//         11       PDCC Rate prior to Capacity Release Credit (Line 18 / Line 20)       0.00024       0.13081       0.00000         20       Octorer, 2015 frum, Specimber, 2016       0.00000       0.01208)       0.00000       0.00000       0.00000       0.00000       0.00000       0.00000       0										
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			604,182							
Is         Subtrait (Line 13 - Line 17)         61.998,483           19         Projected alse for the twelve biling periods of October, 2015 fhrough September, 2016         L/         475.918,191         Therms           21         PCDC Rate prior to Capacity Release Credit (Line 18 / Line 20)         0.13027         0.00054         0.01208)         0.00000         (0.01208)         0.00000         (0.01208)         0.00000         (0.01208)         0.00000         (0.01208)         0.00000         (0.01208)         0.00000         (0.01208)         0.00000         (0.01208)         0.00000         (0.01208)         0.00000         (0.01208)         0.00000         (0.01208)         0.00000         (0.01208)         0.00000         (0.01208)         0.00000         (0.01208)         0.00000         (0.01208)         0.00272         0.14145           29         Dermand E - Factor         65.09,238)         (259.942)         (6.769.180)         0.00000         (0.01422)         0.00000         (0.01422)         0.00000         (0.01422)         0.00000         (0.01422)         0.00000         (0.01422)         0.00000         (0.01422)         0.00000         (0.01422)         0.00000         (0.01422)         0.00000         (0.01422)         0.00000         (0.01422)         0.00000         0.018133         0.02772 <td></td>										
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$ \begin{array}{c c c c c c c c c c c c c c c c c c c $			61,998,483							
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $										
22         Off System Sales and Capacity Release Credit $(0.01208)$ $0.00000$ $(6.769, 180)$ $0.00000$ $(6.769, 180)$ $0.00000$ $(6.769, 180)$ $0.00000$ $(6.769, 180)$ $0.00000$ $(6.769, 180)$ $0.00000$ $(0.01422)$ $0.00000$ $(0.01422)$ $0.00000$ $(0.01422)$ $0.00000$ $(0.01422)$ $0.00000$ $(0.01422)$ $0.00000$ $0.03227$		<b>U</b>		Therms						
23         PGDC Rate $0.11819$ $0.00054$ $0.11873$ $0.0000$ $0.11873$ $0.02272$ $0.1445$ 24         Demand C-Factor $(6509,238)$ $(259,942)$ $(6,769,180)$ $0.00000$ $(6,769,180)$ $0.00000$ $(6,769,180)$ $0.00000$ $(6,769,180)$ $0.00000$ $(6,769,180)$ 26         (Exhibit No. 1-E) $(6,509,238)$ $(259,942)$ $(6,769,180)$ $0.00000$ $(6,769,180)$ $0.00000$ $(6,769,180)$ $0.00000$ $(6,769,180)$ 27         October, 2015 through September, 2016 $1 /$ $475,918,191$ $475,918,191$ $475,918,191$ $475,918,191$ $475,918,191$ 29         Demand E-Factor (Line 26 / Line 28) $0.31252$ $(0.03898)$ $0.27354$ $0.00000$ $0.11873$ $0.00000$ $0.11873$ $0.00000$ $0.01422)$ $0.00000$ $0.01422)$ $0.00000$ $0.01422$ $0.00000$ $0.01422$ $0.00000$ $0.01422$ $0.00000$ $0.01422$ $0.00000$ $0.01422$ $0.00000$ $0.01422$ $0.00000$ $0.00000$ $0.01422$ <td></td>										
24         Demand (Dver)/Under Collection           25         Demand E- Factor           26         (Exhbit No. 1-E)         (6.509.238)         (259.942)         (6.769.180)         0.00000         (6.769,180)           27         Projected salss for the twelve billing periods of         475.918,191         475.918,191         475.918,191         475.918,191           28         October, 2015 through September, 2016         1_/         475.918,191         475.918,191         475.918,191         475.918,191           29         Demand E-Factor (Line 26 / Line 28)         0.01368)         (0.00054)         (0.01422)         0.00000         (0.01422)         0.00000         (0.01422)         0.00000         (0.01422)         0.00000         (0.01422)         0.00000         (0.01422)         0.00000         (0.01422)         0.00000         (0.01422)         0.00000         (0.01422)         0.00000         (0.01422)         0.00000         (0.01422)         0.00000         (0.01422)         0.00000         0.01422)         0.00000         0.01422)         0.00000         0.01422)         0.00000         0.01423         0.00000         0.01423         0.00000         0.01423         0.00000         0.01423         0.00000         0.01368         0.00001         0.01368         0.00001				-		· · · · · ·				
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	23	PGDC Rate	0.11819		0.00054	0.11873	0.00000	0.11873	0.02272	0.14145
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	24	Demand (Over)/Under Collection								
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$										
27       Projected sales for the twelve billing periods of October, 2015 through September, 2016 $1_{-/}$ $475,918,191$ (0.01368) $475,918,191$ (0.01422) $475,918,191$ 0.00000 $475,918,191$ 0.00000 $475,918,191$ 0.00122 $475,918,191$ 0.00000 $475,918,191$ 0.00122 $475,918,191$ 0.00000 $475,918,191$ 0.001123 $475,918,191$ 0.00000 $475,918,191$ 0.00272 $475,918,191$ 0.00272 $475,918,191$ 0.00000 $475,918,191$ 0.00272 $475,918,191$ 0.00000 $475,918,191$ 0.00272 $475,918,191$ 0.00272 $475,918,191$ 0.00272 $475,918,191$ 0.00272 $475,918,191$ 0.00272 $475,918,191$ 0.00000 $475,918,191$ 0.00272 $475,918,191$ 0.00000 $475,918,191$ 0.00272 $475,918,191$ 0.00000 $475,918,191$ 0.00272 $475,918,191$ 0.00000 $475,918,191$ 0.00272 $475,918,191$ 0.00000 $475,918,191$ 0.00272 $475,918,191$ 0.00000 $475,918,191$ 0.00000			(6 509 238)		(259.942)	(6 769 180)	0.0000	(6 769 180)	0.0000	(6 769 180)
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			(0,00),200)		(20),(12)	(0,703,100)	0.00000	(0,70),100)	0.00000	(0,70),100)
29         Demand E-Factor (Line 26 / Line 28) $(0.01368)$ $(0.00054)$ $(0.01422)$ $0.00000$ $(0.01422)$ $0.00000$ $(0.01422)$ 30         Total Purchased Gas Cost 31         PGC Rate (Line 5) $0.31252$ $(0.03898)$ $0.27354$ $0.03159$ $0.30513$ 32         PGD Rate (Line 23) $0.11819$ $0.00054$ $0.11873$ $0.00000$ $0.11873$ $0.02272$ $0.11445$ 34         Currently effective PGC $0.49565$ $0.43071$ $0.039227$ $0.05431$ $0.44658$ 4         Currently effective PGC $0.49565$ $0.43071$ $0.039227$ $0.39227$ $0.39227$ 35         Increase (Decrease) in PGC $(0.07077)$ $0.00266$ $(0.06811)$ $0.00000$ $(0.04821)$ 36         Net (Over) Under Collection $(0.07077)$ $0.00226$ $(0.06811)$ $0.00000$ $(0.04823)$ 37         Commodity E-Factor (Line 29) $(0.04845)$ $0.00212$ $(0.08233)$ $0.00000$ $(0.08233)$ 38         Demand E-Factor (Line 29) $(0.08445)$ $0.00212$ <td></td> <td></td> <td>475.918.191 T</td> <td>herms</td> <td></td> <td>475,918,191</td> <td></td> <td>475,918,191</td> <td></td> <td>475.918.191</td>			475.918.191 T	herms		475,918,191		475,918,191		475.918.191
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		<b>U</b>		-	(0.00054)		0.0000		0.0000	
31       PGCC Rate (Line 5)       0.31252       (0.03898)       0.27354       0.00000       0.27354       0.03159       0.30513         32       PGC Rate (Line 23)       0.11819       0.00054       0.11873       0.00000       0.11873       0.02272       0.14145         33       PGC Rate       0.43071       (0.03844)       0.39227       0.00000       0.39227       0.05431       0.43072         34       Currently effective PGC       0.49555       0.43071       (0.03844)       0.39227       0.00000       0.39227       0.05431       0.43927         35       Increase (Decrease) in PGC       (0.06494)       (0.03844)       0.00000       (0.06811)       0.00000       0.05431         36       Net (Over) Under Collection       (0.0777)       0.00266       (0.06811)       0.00000       (0.06811)       0.00000       (0.06811)         38       Demand E-Factor (Line 1)       (0.07077)       0.00266       (0.06811)       0.00000       (0.068233)       0.00000       (0.01422)         39       E-Factor       (0.08445)       0.00212       (0.08233)       0.00000       (0.08233)       0.00000       (0.08233)         40       Currently effective E-Factor       (0.05670)       0.00212       (0.08		Domand D Factor (Ente 207 Ente 20)	(0.01500)		(0.0000 1)	(0.01122)	0.00000	(0.01 122)	0.00000	(0.01 (22)
32       PGDC Rate (Line 23)       0.11819       0.00054       0.11873       0.0000       0.11873       0.02272       0.1445         33       PGC Rate       0.43071       (0.03844)       0.39227       0.00000       0.39227       0.05431       0.44658         34       Currently effective PGC       0.49565       0.43071       0.03844)       0.39227       0.00000       0.39227       0.05431       0.44658         35       Increase (Decrease) in PGC       (0.06494)       (0.03844)       0.00000       (0.03844)       0.39227       0.00000       (0.05431)         36       Net (Over) Under Collection       (0.06494)       (0.03844)       0.00000       (0.06811)       0.00000       (0.06811)       0.00000       (0.06811)         38       Demand E-Factor (Line 1)       (0.07077)       0.00266       (0.06811)       0.00000       (0.01422)       0.00000       (0.01422)         39       E-Factor       (0.08445)       0.00212       (0.08233)       0.00000       (0.08233)       (0.0000)       (0.08233)         40       Currently effective E-Factor       (0.05670)       0.00212       0.00000       (0.08233)       (0.08233)         41       Increase (Decrease) in E-Factor       (0.05670)       0.00212<										
33       PGC Rate       0.43071       (0.03844)       0.39227       0.00000       0.39227       0.05431       0.44658         34       Currently effective PGC       0.49565       0.49565       0.43071       0.39227       0.00000       0.39227         35       Increase (Decrease) in PGC       (0.06494)       (0.03844)       0.00000       0.00000       0.05431         36       Net (Over) Under Collection       (0.07077)       0.00266       (0.06811)       0.00000       (0.06811)       0.00000       (0.06811)         37       Commodity E-Factor (Line 1)       (0.07077)       0.00266       (0.06811)       0.00000       (0.06811)       0.00000       (0.06811)         38       Demand E-Factor (Line 29)       (0.01368)       (0.00054)       (0.01422)       0.00000       (0.01422)         39       E-Factor       (0.08445)       0.00212       (0.08233)       0.00000       (0.08233)         40       Currently effective E-Factor       (0.0570)       0.00212       0.00000       (0.08233)       (0.00000         41       Increase (Decrease) in E-Factor       (0.05670)       0.00212       0.00000       0.00000         42       PGC Rate       0.43071       (0.08445)       0.00212       0.00000					. ,					
34         Currently effective PGC         0.49565         0.43071         0.39227         0.39227           35         Increase (Decrease) in PGC         (0.06494)         (0.03844)         0.00000         0.05431           36         Net (Over) Under Collection         (0.0777)         0.00266         (0.06811)         0.00000         (0.06811)           37         Commodity E-Factor (Line 11)         (0.07077)         0.00266         (0.06811)         0.00000         (0.06811)           38         Demand E-Factor (Line 29)         (0.01368)         (0.00054)         (0.01422)         0.00000         (0.01422)           39         E-Factor         (0.08445)         0.00212         (0.08233)         0.00000         (0.08233)           40         Currently effective E-Factor         (0.02775)         (0.08445)         (0.08233)         (0.08233)           41         Increase (Decrease) in E-Factor         (0.05670)         0.00212         0.00000         0.00000           42         PGC Rate         0.43071         (0.03844)         0.39227         0.00000         0.08233)           43         E-Factor         (0.08445)         0.00212         (0.08233)         0.00000         0.08233)           44         Total Rate				_						
35         Increase (Decrease) in PGC         (0.06494)         (0.03844)         0.00000         0.05431           36         Net (Over) Under Collection         (0.07077)         0.00266         (0.06811)         0.00000         (0.06811)         0.00000         (0.06811)           37         Commodity E-Factor (Line 11)         (0.07077)         0.00266         (0.06811)         0.00000         (0.06811)         0.00000         (0.06811)           38         Demand E-Factor (Line 29)         (0.01368)         (0.00054)         (0.01422)         0.00000         (0.01422)         0.00000         (0.08233)           40         Currently effective E-Factor         (0.02775)         (0.08445)         (0.08233)         0.00000         (0.08233)           41         Increase (Decrease) in E-Factor         (0.05670)         0.00212         0.00000         0.00000           42         PGC Rate         0.43071         (0.03844)         0.39227         0.00000         0.00000           43         E-Factor         (0.08445)         0.00212         (0.08233)         0.00000         0.08233)           44         Total Rate         0.34626         (0.03632)         0.30994         0.00000         0.30994         0.30994           45					(0.03844)		0.00000		0.05431	
36         Net (Over) Under Collection           37         Commodity E-Factor (Line 11)         (0.07077)         0.00266         (0.06811)         0.00000         (0.06811)         0.00000         (0.06811)           38         Demand E-Factor (Line 29)         (0.01368)         (0.00054)         (0.01422)         0.00000         (0.01422)         0.00000         (0.01422)           39         E-Factor         (0.08445)         0.00212         (0.08233)         0.00000         (0.08233)         0.00000         (0.08233)           40         Currently effective E-Factor         (0.05670)         (0.05670)         0.00212         0.00000         (0.08233)           41         Increase (Decrease) in E-Factor         (0.05670)         0.00212         0.00000         0.00200         0.00000           42         PGC Rate         0.43071         (0.03844)         0.39227         0.00000         0.08233)         (0.08233)           43         E-Factor         (0.08445)         0.00212         (0.08233)         (0.08233)         (0.08233)           44         Total Rate         0.34626         (0.03632)         0.30994         0.00000         0.30994         0.30994           45         Curently effective Rate         0.46790         0.		•								
37       Commodity E-Factor (Line 11)       (0.07077)       0.00266       (0.06811)       0.00000       (0.06811)       0.00000       (0.06811)         38       Demand E-Factor (Line 29)       (0.01368)       (0.00054)       (0.01422)       0.00000       (0.01422)       0.00000       (0.01422)         39       E-Factor       (0.08445)       0.00212       (0.08233)       0.00000       (0.08233)       0.00000       (0.08233)         40       Currently effective E-Factor       (0.02775)       (0.08445)       (0.08212)       (0.08233)       (0.08233)         41       Increase (Decrease) in E-Factor       (0.05670)       0.00212       0.00000       (0.08233)       (0.00000)         42       PGC Rate       0.43071       (0.03844)       0.39227       0.00000       0.08233)       (0.08233)         43       E-Factor       (0.08445)       0.00212       (0.08233)       (0.08233)       (0.08233)         44       Total Rate       (0.34626       (0.03632)       0.30994       0.00000       0.30994         45       Currently effective Rate       0.46790       0.34626       0.30994       0.30994       0.30994	35	Increase (Decrease) in PGC	(0.06494)			(0.03844)		0.00000		0.05431
38         Demand E-Factor (Line 29)         (0.01368)         (0.00054)         (0.01422)         0.00000         (0.01422)           39         E-Factor         (0.03845)         0.00212         (0.08233)         0.00000         (0.01422)           40         Currently effective E-Factor         (0.02775)         (0.08445)         (0.08233)         0.00000         (0.08233)           41         Increase (Decrease) in E-Factor         (0.05670)         0.00212         0.00000         0.00000           42         PGC Rate         0.43071         (0.03844)         0.39227         0.00000         0.00000           43         E-Factor         (0.08445)         0.00212         (0.08233)         (0.08233)           44         Total Rate         0.34626         (0.03632)         0.30994         0.30994         0.30994           45         Currently effective Rate         0.46790         0.34626         0.30994         0.30994         0.30994										
39         E-Factor         (0.08445)         0.00212         (0.08233)         0.00000         (0.08233)         0.00000         (0.08233)         0.00000         (0.08233)         0.00000         (0.08233)         (0.08000)         (0.08233)         (0.08000)         (0.08233)			· ,			. ,		· · · · ·		· · · ·
40         Currently effective E-Factor         (0.02775)         (0.08445)         (0.08233)         (0.08233)           41         Increase (Decrease) in E-Factor         (0.05670)         0.00212         0.00000         0.00000           42         PGC Rate         0.43071         (0.03844)         0.39227         0.00000         0.39227         0.44658           43         E-Factor         (0.08445)         0.00212         (0.08233)         0.00000         0.08233)           44         Total Rate         0.34626         (0.03632)         0.30994         0.30994         0.30994           45         Currently effective Rate         0.46790         0.34626         0.30994         0.30994         0.30994				-						
41         Increase (Decrease) in E-Factor         (0.05670)         0.00212         0.00000         0.00000           42         PGC Rate         0.43071         (0.03844)         0.39227         0.00000         0.39227         0.44658           43         E-Factor         (0.08445)         0.00212         (0.08233)         0.00000         (0.8233)         (0.08233)           44         Total Rate         0.34626         (0.03632)         0.30994         0.30994         0.30994           45         Currently effective Rate         0.46790         0.34626         0.30994         0.30994         0.30994			· ,		0.00212	· ,	0.00000	, ,	0.00000	. ,
42       PGC Rate       0.43071       (0.03844)       0.39227       0.00000       0.39227       0.44658         43       E-Factor       (0.08445)       0.00212       (0.08233)       0.00000       (0.08233)       (0.08233)         44       Total Rate       0.34626       (0.03632)       0.30994       0.00000       0.30994       0.36425         45       Currently effective Rate       0.46790       0.34626       0.30994       0.30994		•				· · · · ·				
43         E-Factor         (0.08445)         0.00212         (0.08233)         0.00000         (0.08233)         (0.08233)           44         Total Rate         0.34626         (0.03632)         0.30994         0.00000         0.30994         0.36425           45         Currently effective Rate         0.46790         0.34626         0.30994         0.30994         0.30994	41	Increase (Decrease) in E-Factor	(0.05670)			0.00212		0.00000		0.00000
44         Total Rate         0.34626         (0.03632)         0.30994         0.00000         0.30994         0.36425           45         Currently effective Rate         0.46790         0.34626         0.30994         0.30994         0.30994					. ,					
45 Currently effective Rate 0.46790 0.34626 0.30994 0.30994				-						
					(0.03632)		0.00000			
46         Increase (Decrease) in Rate         (0.12164)         (0.03632)         0.00000         0.05431		5								
	46	Increase (Decrease) in Rate	(0.12164)			(0.03632)		0.00000		0.05431

1\_/ Includes 131,289,246 Therm Transportation Quantities for the Company's Choice Program

#### COLUMBIA GAS OF PENNSYLVANIA, INC. QUARTERLY PURCHASED GAS ADJUSTMENT INCREMENTAL CHANGE EFFECTIVE JULY 1, 2016

		Projected Over/(Under) Collection (1) \$	Actual Over/(Under) Collection (2) \$	Difference (3)	Projected Sales (4)	Change In Rate (5=3/4) (\$/Therm)
C-FA	ACTOR	¢	¢	\$	(Therms)	(\$/1 herm)
	Commodity Cost of Gas					
1	October, 2015	(1,291,519)	(2,625,974)	1,334,455		
2	November, 2015	(4,402,601)	<u>(993,833)</u>	(3,408,769)		
3	Change in PGCC January 1	(5,694,120)	(3,619,807)	(2,074,314)	344,628,945	(0.00602)
4	December, 2015	(4,136,070)	1,348,674	(5,484,744)		
5	January, 2016	(1,240,504)	(8,203,925)	6,963,421		
6	February, 2016	(1,201,138)	1,361,137	(2,562,275)		
7	Change in PGCC July 1	(6,577,712)	(5,494,114)	(1,083,598)	344,628,945	(0.00314)
8	March, 2016	616,092	2,804,505	(2,188,413)		
9	April, 2016	4,987,759	5,531,850	(544,091)		
10	May, 2016	2,577,941	2,330,117	247,824		
11	Change in PGCC July 1	8,181,792	10,666,472	(2,484,680)	344,628,945	(0.00721)
	Demand Cost of Gas					
12	October, 2015	(4,170,076)	(3,919,054)	(251,021)		
13	November, 2015	(1,667,426)	(2,367,699)	700,273		
14	Change in PGDC January 1	(5,837,501)	(6,286,753)	449,252	475,918,191	0.00094
15	December, 2015	2,674,465	309,488	2,364,978		
16	January, 2016	5,768,439	3,490,668	2,277,771		
17	February, 2016	5,763,294	4,886,295	876,999		
18	Change in PGDC July 1	14,206,198	8,686,451	5,519,747	475,918,191	0.01160
19	March, 2016	4,228,976	2,090,774	2,138,202		
20	April, 2016	1,919,582	786,300	1,133,282		
21	May, 2016	(1,324,274)	(1,376,419)	52,145		
22	Change in PGDC July 1	4,824,283	1,500,655	3,323,628	475,918,191	0.00698
<u>E-FA</u>	CTOR					
23	Commodity E Factor	24,552,807	23,631,754	921,053	346,961,450	0.00266
24	Demand E Factor	6,509,238	6,769,180	(259,942)	475,918,191	(0.00054)
25	Change in PGCC (line 3 + line 7 + line	11 + line 23)				(0.01371)
26	Change in PGDC (line 14 + line 18 + li	ne 22 + line 24)				0.01898

Exhibit 1-A Schedule 1 Sheet 3 of 6

#### **INCREMENTAL CHANGE EFFECTIVE JULY 1, 2016** Updated for 1/1/16 **Original Projected** Difference Updated for 4/1/16 Difference Updated for 7/1/16 Difference Exhibit 1-B Exhibit 1-B Exhibit 1-B Exhibit 1-B Included in Included in Included in Schedule 1 Schedule 1 1/1/16 GCR Schedule 1 4/1/16 GCR Schedule 1 7/1/16 GCR (1)(2)(3=2-1)(4) (5=4-2)(6) (7=6-4) \$ \$ \$ \$ \$ \$ \$ C-FACTOR Commodity Cost of Gas December, 2015 19,177,272 19,177,272 0 1 23,403,029 2 January, 2016 20,454,854 (2,948,175)February 21,155,448 19,112,792 3 (2,042,656)4 March 15,767,428 14,948,955 (818,473) 14,948,955 0 5 April 6,321,180 4,628,910 (1,692,270)4,628,910 0 0 6 May 2,603,248 2,001,018 (602, 230)2,001,018 7 932,984 743,840 (189, 144)743,840 0 743,840 0 June 8 839,932 662,055 (177, 877)662,055 0 1,005,705 343,649 July 0 915,919 9 August 841,957 739,335 (102, 622)739,335 176,584 1,132,150 969,097 (163,053) 969,097 0 1,132,922 10 September 163,825 92,174,627 83,438,128 24,693,210 0 3,798,385 Total (8,736,499) 684,058 11 16,308,659 12 **Projected Sales**

COLUMBIA GAS OF PENNSYLVANIA, INC. QUARTERLY PURCHASED GAS ADJUSTMENT - COMMODITY

13 Change in PGCC Rate per Therm

0.04194

Exhibit 1-A Schedule 1 Sheet 4 of 6

## COLUMBIA GAS OF PENNSYLVANIA, INC. QUARTERLY PURCHASED GAS ADJUSTMENT - DEMAND INCREMENTAL CHANGE EFFECTIVE JULY 1, 2016

D-FACTOR Demand Cost of Gas		Original Projected Exhibit 1-B Schedule 1 (1) \$	Updated for 1/1/16 Exhibit 1-B Schedule 1 (2) \$	Difference Included in 1/1/16 GCR (3=2-1) \$	Updated for 4/1/16 Exhibit 1-B Schedule 1 (4) \$	Difference Included in 4/1/16 GCR (5=4-2) \$	Updated for 7/1/16 Exhibit 1-B Schedule 1 (6) \$	Difference Included in 7/1/16 GCR (7=6-4) \$
<u>L</u>	Demand Cost of Gas							
1	December, 2015	5,971,403	5,971,403	0				
2	January, 2016	5,971,403	5,949,833	(21,570)				
3	February	5,971,403	5,949,833	(21,570)				
4	March	5,971,403	5,949,833	(21,570)	5,949,833	0		
5	April	4,488,514	4,475,101	(13,413)	4,475,101	0		
6	May	4,488,514	4,475,101	(13,413)	4,475,101	0		
7	June	4,488,514	4,475,101	(13,413)	4,475,101	0	4,475,101	0
8	July	4,488,514	4,475,101	(13,413)	4,475,101	0	4,508,414	33,313
9	August	4,488,514	4,475,101	(13,413)	4,475,101	0	4,508,414	33,313
10	September	4,488,514	4,475,101	(13,413)	4,475,101	0	4,508,414	33,313
11	Total	50,816,696	50,671,508	(145,188)	32,800,439	0	18,000,343	99,939
12	Projected Sales							24,157,861

13 Change in PGDC Rate per Therm

0.00414

# COLUMBIA GAS OF PENNSYLVANIA, INC. ACTUAL OVER/(UNDER)COLLECTION FOR THE PERIOD OCTOBER, 2015 THROUGH SEPTEMBER, 2016

	[		Commodity			Demand	
Line No.		Actual Recoveries	Actual Gas Costs	Over/ (Under)Collection	Actual Recoveries	Actual Gas Costs	Over/ (Under)Collection
		(1)	(2)	(3=1-2)	(4)	(5)	(6=4-5)
	Actuals through May 201	\$ 6	\$	\$	\$	\$	\$
1	October, 2015	3,070,964	5,696,938	(2,625,974)	1,608,216	5,527,271	(3,919,054)
2	November	5,819,580	6,813,412	(993,833)	3,219,052	5,586,751	(2,367,699)
3	December	10,845,777	9,497,103	1,348,674	5,927,072	5,617,585	309,488
4	January, 2016	15,373,219	23,577,143	(8,203,925)	9,107,459	5,616,791	3,490,668
5	February	17,245,069	15,883,932	1,361,137	10,682,018	5,795,723	4,886,295
6	March	12,696,997	9,892,492	2,804,505	7,887,367	5,796,593	2,090,774
7	April	8,055,403	2,523,553	5,531,850	5,088,022	4,301,722	786,300
8	May	4,317,267	1,987,150	2,330,117	2,742,242	4,118,661	(1,376,419)
9	June			0			0
10	July			0			0
11	August			0			0
12	September			0			0
13	Total	77,424,275	75,871,723	1,552,552	46,261,449	42,361,096	3,900,353

## COLUMBIA GAS OF PENNSYLVANIA, INC. PURCHASED GAS COST RECOVERED UNDER RATES SS AND COMPUTATION OF DAILY PURCHASED GAS DEMAND APPLICATION PERIOD: OCTOBER, 2015 THROUGH SEPTEMBER, 2016

Line No.	Description	Detail (1)	Total (2)
1 2	Total estimated demand charges for the period October, 2015 through September, 2016	62,557,416	
3	Estimated Demand Quantity (Therms) 1_/	82,934,160	
4	Daily purchased gas demand rate (Line 2 / line 3)	\$0.75430 pe	r Therm
5 6	Daily purchased gas demand (Therms) Daily purchased gas demand rate per Therm	800,400 Th \$0.75430	terms
7 8	Total rate SS Daily Demand Cost to be Recovered (Line 5 x Line 6)		\$603,742
9	Total Rate SS Daily Demand Cost to be		
10	Recovered (Effective January 1, 2016)		\$602,781
11	Difference (Lin	e 8 minus Line 10)	\$961
12	Projected Sales for the Period October 2015 throug	gh September 2016	475,918,191
13		Rate Differential	\$ -

1\_/ Monthly Demand Billing Determinants x 12

Exhibit 1-A Schedule 2 Sheet 1 of 4

# COLUMBIA GAS OF PENNSYLVANIA, INC. SUMMARY OF PROJECTED SALES QUANTITIES AND REVENUES FOR THE PERIOD SALES AT PGCC AND PGDC RATES OCTOBER, 2015 THROUGH SEPTEMBER, 2016

Line No.	Month	Sales Subject To PGCC	PGCC Rate 1_/	PGCC Revenue	Sales Subject To PGDC	PGDC Rate 1_/	PGDC Revenue	Purchased Gas Cost Revenue
		(1) Therms	(2) \$/Therm	(3=1x2) \$	(4) Therms	(5) \$/Therm	(6=4x5) \$	(7=3+6) \$
1	October - 2015	8,585,485	0.31252	2,683,136	12,615,965	0.13027	1,643,482	4,326,618
2	November	22,887,597	0.31252	7,152,832	32,273,653	0.13027	4,204,289	11,357,121
3	December	48,128,766	0.31252	15,041,202	65,982,344	0.13027	8,595,520	23,636,722
4	January - 2016	65,571,273	0.29303	19,214,350	89,382,868	0.13054	11,668,040	30,882,390
5	February	65,480,932	0.27354	17,911,654	89,159,046	0.13081	11,662,895	29,574,549
6	March	56,902,270	0.27354	15,565,047	77,429,688	0.13081	10,128,577	25,693,624
7	April	35,156,355	0.27354	9,616,669	48,501,272	0.13081	6,344,451	15,961,120
8	May	16,739,634	0.27354	4,578,959	23,703,039	0.13081	3,100,595	7,679,554
9	June	8,867,974	0.27354	2,425,746	12,712,455	0.13081	1,662,916	4,088,662
10	July	5,718,059	0.28934	1,654,435	8,327,457	0.14217	1,183,915	2,838,350
11	August	5,097,869	0.30513	1,555,513	7,654,204	0.15353	1,175,150	2,730,663
12	September	5,492,731	0.30513	1,675,997	8,176,200	0.15353	1,255,292	2,931,289
13	Total	344,628,945		99,075,540	475,918,191		62,625,122	161,700,662

1\_/ Excludes refunds and experienced over/undercollections

# COLUMBIA GAS OF PENNSYLVANIA, INC. SUMMARY OF PROJECTED SALES QUANTITIES AND REVENUES FOR THE PERIOD SALES AT STANDBY RATE OCTOBER, 2015 THROUGH SEPTEMBER, 2016

Line No.	Month	Daily Purchased Gas Demand Quantity (1) Therms	Daily Gas Demand Rate (2) \$/Therm	Daily Purchased Gas Demand Revenue (3=1x2) \$
1	October - 2015	66,700	0.75485	50,348
2	November	66,700	0.75485	50,348
3	December	66,700	0.75485	50,348
4	January - 2016	66,700	0.75310	50,232
5	February	66,700	0.75310	50,232
6	March	66,700	0.75310	50,232
7	April	66,700	0.75310	50,232
8	May	66,700	0.75310	50,232
9	June	66,700	0.75310	50,232
10	July	66,700	0.75430	50,312
11	August	66,700	0.75430	50,312
12	September	66,700	0.75430	50,312
13	Total	800,400		603,372

# COLUMBIA GAS OF PENNSYLVANIA, INC. SUMMARY OF PROJECTED SALES QUANTITIES AND REVENUES FOR THE PERIOD SALES AT BANKING AND BALANCING RATES OCTOBER, 2015 THROUGH SEPTEMBER, 2016

Line		Lg. Quantity GDS			Sm. Quantity GDS			Total Trans.
No.	Month	Deliveries	Rate	Revenue	Deliveries	Rate	Revenue	Revenue
		(1)	(2)	(3=1x2)	(4)	(5)	(6=4x5)	(7=3+6)
		Therms	\$/Therm	\$	Therms	\$/Therm	\$	\$
1	October 2015	0	0.00226	0	0	0.00697	0	0
2	November	0	0.00226	0	0	0.00697	0	0
3	December	0	0.00226	0	0	0.00697	0	0
4	January 2016	0	0.00226	0	0	0.00697	0	0
5	February	0	0.00226	0	0	0.00697	0	0
6	March	0	0.00226	0	0	0.00697	0	0
_								
7	April	0	0.00226	0	0	0.00697	0	0
0		0	0.0000	0	0	0.00.007	0	0
8	May	0	0.00226	0	0	0.00697	0	0
0	T	0	0.0000	0	0	0.00007	0	0
9	June	0	0.00226	0	0	0.00697	0	0
10	July	0	0.00226	0	0	0.00697	0	0
10	July	0	0.00220	0	0	0.00097	0	0
11	August	0	0.00226	0	0	0.00697	0	0
11	August	0	0.00220	0	0	0.00097	0	0
12	September	0	0.00226	0	0	0.00697	0	0
12	September	0	0.00220	0	0	0.00077		0
13	Total	0		0	0		0	0
10	1 Ottal	0		0	0		0	0

# COLUMBIA GAS OF PENNSYLVANIA, INC. SUMMARY OF PROJECTED TOTAL OVER/UNDERCOLLECTION FOR THE 2015 1307(f) PERIOD OCTOBER, 2015 THROUGH SEPTEMBER, 2016

Line No.	Month	Commodity Recoveries PGCC Revenue	Total Commodity Cost of Gas 1_/	Commodity Over/ Undercollection	Demand Recoveries PGDC Revenue	Total Demand Cost of Gas 1_/	Demand Over/ Undercollection	Total Over/ Undercollection
110.	Wolten	(1)	(2)	(3=1-2)	(4)	(5)	(6=4-5)	(7=3+6)
		\$	\$	\$	\$	\$	\$	\$
1	October 2015	2,683,136	3,974,655	(1,291,519)	1,693,830	5,863,906	(4,170,076)	(5,461,595)
2	November	7,152,832	11,555,433	(4,402,601)	4,254,637	5,922,063	(1,667,426)	(6,070,027)
3	December	15,041,202	19,177,272	(4,136,070)	8,645,868	5,971,403	2,674,465	(1,461,605)
4	January 2016	19,214,350	20,454,854	(1,240,504)	11,718,272	5,949,833	5,768,439	4,527,935
5	February	17,911,654	19,112,792	(1,201,138)	11,713,127	5,949,833	5,763,294	4,562,155
6	March	15,565,047	14,948,955	616,092	10,178,809	5,949,833	4,228,976	4,845,068
7	April	9,616,669	4,628,910	4,987,759	6,394,683	4,475,101	1,919,582	6,907,341
8	May	4,578,959	2,001,018	2,577,941	3,150,827	4,475,101	(1,324,274)	1,253,666
9	June	2,425,746	743,840	1,681,906	1,713,148	4,475,101	(2,761,953)	(1,080,047)
10	July	1,654,435	1,005,705	648,730	1,234,227	4,508,414	(3,274,187)	(2,625,457)
11	August	1,555,513	915,919	639,594	1,225,462	4,508,414	(3,282,952)	(2,643,358)
12	September	1,675,997	1,132,922	543,075	1,305,604	4,508,414	(3,202,810)	(2,659,735)
13	Total	99,075,540	99,652,275	(576,735)	63,228,494	62,557,416	671,078	94,343

1\_/ Refer to Exhibit 1-B, Schedule No. 1.

#### Columbia Gas of Pennsylvania, Inc. Capacity Assignment Factor Assignment of FT Only

#### Purchased Gas Demand Charge (PGDC) Paid By the CHOICE Customer Rates Based on Projected Costs For 12 Months Ending September, 2016

\$62,602,665		. Projected Demand Costs Oct. 2015 through Sept. 2016 (Exh. 1-B, Sch. 1 from Oct. 2015 PGC	5)
(604,182)		a. Less Purchased Gas Demand Costs Recovered Under Rate SS	
		(Exhibit 1-A, Schedule 1, Sheet 2)	
0		b. Less Purchased Gas Demand Allocated to Rates LTS, STS, SGS-TS, and MLS	
(6,769,180)		c. Experienced Demand Net Over Collection (Exhibit No. 1-E)	
\$55,229,303	-	2. Total Adjusted Demand Costs per 1307(f) Filing $(1) + (1a) + (1b) + (1c)$	
\$126.12	per Dth	3. Unit FT Demand Charge Per Dth of Gulf/TCO capacity	
		the marketer would pay Gulf and TCO. (Exhibit 1-A, Schedule 3, Sheet 2)	
47,592	MMDth	<ol> <li>Projected Sales &amp; Choice Requirements for 12 billing periods of October, 2015 through September, 2016</li> </ol>	
47,925	MMDth	5. Projected Sales & Choice Requirements 12 months ended September 2016, including Unaccounted For @ 0.7%	
21,755	MMDth	5. Annual Injections and Withdrawals, Normal Weather	
1	Dth	7a. Quantity Delivered to the Customer	
0.7%		7b. Unaccounted-for & Co. Use Factor from Volume Balancing System	
1.0070	Dth	7c. Quantity Delivered to the City Gate. (7a)/(1-7b)	
\$1.1605	ner Dth	B. Unit Demand Charge: (2) / (4)	
\$0.0094		Pa. Quarterly Purchased Gas Demand Adjustment (Jan. 1, 2016 Filing, Schedule 1, Sheet 2)	
		2b. Quarterly Purchased Gas Demand Adjustment (Jan. 1, 2016 Filing, Schedule 1, Sheet 2)	
(\$0.0040)			
\$0.0000		Dc. Quarterly Purchased Gas Demand Adjustment (Apr. 1, 2016 Filing, Schedule 1, Sheet 2)	
\$0.0000		Dd. Quarterly Purchased Gas Demand Adjustment (Apr. 1, 2016 Filing, Schedule 1, Sheet 4)	
\$0.1858		De. Quarterly Purchased Gas Demand Adjustment (July 1, 2016 Filing, Schedule 1, Sheet 2)	
\$0.0414		of. Quarterly Purchased Gas Demand Adjustment (July 1, 2016 Filing, Schedule 1, Sheet 4)	
\$1.3931		10. Net Unit Demand Charge $(8) + (9a) + (9b) + (9c) + (9d) + (9e) + (9f)$	
(\$0.1208)	per Dth	1. OSS and Capacity Release Credit	
0.0028	Dth	2. Average Daily FT Delivery: (7c) / 365 days	
\$0.3531	per Dth	3. Annual Demand Charge for the Assigned FT Capacity payable to the pipeline(s): (3) X (12)	
\$1.0400	per Dth	4. Annual Demand Charge for other capacity that CPA retains (10) - (13)	
0.4571	Dth	5. Quantity Injected and Withdrawn to Deliver 1 Dth to the Customer: $(6) / (4)$	
\$0.0070		6a. Injection Charge @ \$0.0153/Dth	
\$0.0015		16b. FSS Shrinkage @ 0.15 percent for gas at \$2.2311/Dth	
\$0.0070		16c. Withdrawal Charge @ \$0.0153/Dth	
\$0.0088		16d. SST Commodity Charge @ \$0.0193/Dth	
\$0.0208		6e. SST retention @ 2.0420% for gas at \$2.2311/Dth	
\$0.0451	per Dth	6f. Total Annual Variable Storage Costs	
		7. Credit to Purchased Gas Demand Charge for the CHOICE Customer:	
\$0.3531		7a. For Demand Cost Paid to Pipelines: $=(13)$	
(\$0.0451)		17b. Less Storage Costs: = (16f)	
\$0.3080		17c. Net Credit: $(17a) + (17b)$	
		17d. Per Therm: (17c)/10 - Capacity Assignment Factor	
\$0.9643	per Dth	8. Purchased Gas Demand Charge Paid By the CHOICE Customer: (10)+(11) - (17c)	
\$0.09643	per Therm	17. Per Therm: (18)/10	
	•	July 1, 2016 Q	iart

# Columbia Gas of Pennsylvania, Inc. (CPA) CPA Capacity Assignment (PCA): Assignment of FT Capacity Only CPA Capacity on TCO and Gulf. Cost of the Capacity Allocated to Marketers.

	TCO FT Capacity	CGT FTS-1 Capacity	Total: TCO and Gulf
1 CPA FT Capacity on TCO and Columbia Gulf			
2 CPA Contract: Dth/d	127,373	43,632	
3 Projected Demand Costs			
4. Annual Demand Cost 1/	\$9,366,117	\$2,247,060	
4a. Monthly Billing Determinants	127,373	43,632	
4b. Annual Demand Charge (4/4a)	\$73.53	\$51.50	
4c. Monthly Demand Charge (4b / number of months)	\$6.128	\$4.292	
Transportation Pilot: Allocation Capacity and Costs.			
5. Capacity Allocation:	1.0000	1.0208 2/	
6. Number of Months	12	12	
<ul><li>7. Unit Annual Cost of City Gate Capacity: (4c) x (5) x (6) \$/Dth</li></ul>	\$73.54	\$52.58	\$126.12

Notes:

1/ Projected demand costs for the period 12 months ended September, 2016.
2/ 1.020 Dth/day = 1.000 / (1-retention) = 1.000 / (1-0.02042)

Retention Factor on TCO FTS

#### Exhibit No. 1-B Schedule 1 Sheet 1 of 4

#### COLUMBIA GAS OF PENNSYLVANIA, INC.

#### Summary of Total Estimated Purchased Gas Costs For the Period October 2015 Through September 2016

Line			2015						2016					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
1	Total Quantity													
2	DTH	1,532,000	3,780,000	6,266,000	7,505,000	6,830,000	5,083,000	2,290,000	901,000	295,000	271,000	234,000	343,000	35,330,000
3	Total Demand Costs	5,863,906	5,922,063	5,971,403	5,949,833	5,949,833	5,949,833	4,475,101	4,475,101	4,475,101	4,508,414	4,508,414	4,508,414	62,557,416
4	Total Commodity Costs	3,974,655	11,555,433	19,177,272	20,454,854	19,112,792	14,948,955	4,628,910	2,001,018	743,840	1,005,705	915,919	1,132,922	99,652,275
5	Total Estimated Gas Costs	9,838,561	17,477,496	25,148,675	26,404,687	25,062,625	20,898,788	9,104,011	6,476,119	5,218,941	5,514,119	5,424,333	5,641,336	162,209,691
5	(Line $5 = \text{Line } 3 + \text{Line } 4$ )	9,050,501	17,477,490	23,140,075	20,404,007	25,002,025	20,070,700	9,104,011	0,470,117	5,210,741	5,514,117	5,424,555	5,041,550	102,209,091
	(Line J = Line J + Line 4)													

#### Exhibit 1-B Schedule 1 Sheet 2 of 4

#### COLUMBIA GAS OF PENNSYLVANIA, INC.

# Summary of Total Estimated Purchased Gas Costs <u>Demand Costs</u>

Line			2016											
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
1	Columbia Gas Transmission	4,919,957	4,919,957	4,919,957	4,898,923	4,898,923	4,898,923	3,545,428	3,545,428	3,545,428	3,579,231	3,579,231	3,579,231	50,830,617
2	Columbia Gulf Transmission	187,255	187,255	187,255	187,255	187,255	187,255	187,255	187,255	187,255	187,255	187,255	187,255	2,247,060
3	Texas Eastern Transmission	237,612	237,612	286,952	287,002	287,002	287,002	237,642	237,642	237,642	237,477	237,477	237,477	3,048,539
4	Dominion Transmission	166,253	201,416	201,416	201,570	201,570	201,570	165,371	165,371	165,371	165,371	165,371	165,371	2,166,021
5	Tennessee Gas	355,330	344,713	344,713	343,973	343,973	343,973	343,973	343,973	343,973	343,973	343,973	343,973	4,140,513
6	National Fuel Gas	16,271	16,271	16,271	16,271	16,271	16,271	16,271	16,271	16,271	15,946	15,946	15,946	194,277
7	Equitrans	6,228	39,839	39,839	39,839	39,839	39,839	4,161	4,161	4,161	4,161	4,161	4,161	230,389
8	LT-FTS Contract Demand	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Less Elective Balancing Svc. Credit	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	300,000
10	Total Demand Cost	5,863,906	5,922,063	5,971,403	5,949,833	5,949,833	5,949,833	4,475,101	4,475,101	4,475,101	4,508,414	4,508,414	4,508,414	62,557,416

#### Exhibit No. 1-B Schedule 1 Sheet 3 of 4

#### COLUMBIA GAS OF PENNSYLVANIA, INC.

#### Summary of Total Estimated Purchased Gas Costs Commodity Costs

Line			2015						2016					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
1	Term	2,219,122	1,897,682	6,345,375	2,434,560	2,481,320	1,243,651	1,460,702	1,842,172	1,956,029	2,188,949	2,237,719	2,115,134	28,422,415
2	Spot	4,299,862	810,811	1,804,594	2,327,929	1,637,658	793,807	7,310,117	6,518,888	5,133,588	5,039,887	5,365,932	5,823,438	46,866,511
3	Local	55,286	53,655	59,224	36,784	34,720	39,600	39,081	42,438	41,769	49,082	50,666	49,182	551,487
4	Storage	(2,599,615)	8,793,285	10,968,079	15,655,581	14,959,094	12,871,897	(4,180,990)	(6,402,480)	(6,387,546)	(6,272,213)	(6,738,398)	(6,854,832)	23,811,862
5	Financial Hedges	0	0	0	0	0	0	0	0	0	0	0	0	0
6	Less LT-FTS Contract Demand	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Total Commodity Cost	3,974,655	11,555,433	19,177,272	20,454,854	19,112,792	14,948,955	4,628,910	2,001,018	743,840	1,005,705	915,919	1,132,922	99,652,275

#### Exhibit No. 1-B Schedule 1 Sheet 4 of 4

#### COLUMBIA GAS OF PENNSYLVANIA, INC.

#### Summary of Total Estimated Purchased Gas Costs Commodity Quantities

Line			2015						2016					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
	Tour													
1	<u>Term</u> Total-DTH	783,000	670,000	2,142,000	1,431,000	1,373,000	673,000	676,000	796,000	815,000	833,000	833,000	783,000	11,808,000
2	<u>Spot</u> Total-DTH	1,797,000	290,000	666,000	1,317,000	891,000	399,000	3,818,000	3,275,000	2,514,000	2,204,000	2,332,000	2,423,000	21,926,000
3	<u>Local</u> Total-DTH	22,000	21,000	22,000	22,000	20,000	22,000	21,000	22,000	21,000	22,000	22,000	21,000	258,000
4	<u>Storage</u> Total-DTH	(1,070,000)	2,799,000	3,436,000	4,735,000	4,546,000	3,989,000	(2,225,000)	(3,192,000)	(3,055,000)	(2,788,000)	(2,953,000)	(2,884,000)	1,338,000
5	<u>Total - All Sources</u> Total-DTH	1,532,000	3,780,000	6,266,000	7,505,000	6,830,000	5,083,000	2,290,000	901,000	295,000	271,000	234,000	343,000	35,330,000

#### COLUMBIA GAS OF PENNSYLVANIA, INC.

#### Summary of Total Estimated Purchased Gas Demand Costs <u>Columbia Gas Transmission Corporation</u>

Line			2015						2016					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
	Columbia Gas Transmission													
	FTS													
1	Billing Determinant-Dth	132,588	132,588	132,588	132,588	132,588	132,588	132,588	132,588	132,588	132,588	132,588	132,588	
2	Less Capacity Release (1)	5,215	5,215	5,215	5,215	5,215	5,215	5,215	5,215	5,215	5,215	5,215	5,215	
3	Net Billing Determinant - Dth	127,373	127,373	127,373	127,373	127,373	127,373	127,373	127,373	127,373	127,373	127,373	127,373	
4	Demand Rate	6.1310	6.1310	6.1310	6.0950	6.0950	6.0950	6.0950	6.0950	6.0950	6.1900	6.1900	6.1900	
5	Demand Cost	780,924	780,924	780,924	776,338	776,338	776,338	776,338	776,338	776,338	788,439	788,439	788,439	9,366,117
	FSS-Reservation													
6	Billing Determinant-Dth	456,876	456,876	456,876	456,876	456,876	456,876	456,876	456,876	456,876	456,876	456,876	456,876	
7	Demand Rate	1.5010	1.5010	1.5010	1.5010	1.5010	1.5010	1.5010	1.5010	1.5010	1.5010	1.5010	1.5010	
8	Demand Cost	685,771	685,771	685,771	685,771	685,771	685,771	685,771	685,771	685,771	685,771	685,771	685,771	8,229,252
	FSS-Capacity													
9	Total-DTH	25,341,126	25,341,126	25,341,126	25,341,126	25,341,126	25,341,126	25,341,126	25,341,126	25,341,126	25,341,126	25,341,126	25,341,126	
10	Demand Rate	0.0288	0.0288	0.0288	0.0288	0.0288	0.0288	0.0288	0.0288	0.0288	0.0288	0.0288	0.0288	
11	Demand Cost	729,824	729,824	729,824	729,824	729,824	729,824	729,824	729,824	729,824	729,824	729,824	729,824	8,757,888
	SST													
12	Billing Determinant-Dth	456,876	456,876	456,876	456,876	456,876	456,876	228,438	228,438	228,438	228,438	228,438	228,438	
13	Demand Rate	5.9610	5.9610	5.9610	5.9250	5.9250	5.9250	5.9250	5.9250	5.9250	6.0200	6.0200	6.0200	
14	Demand Cost	2,723,438	2,723,438	2,723,438	2,706,990	2,706,990	2,706,990	1,353,495	1,353,495	1,353,495	1,375,197	1,375,197	1,375,197	24,477,360
15	Total TCO Demand Cost	4,919,957	4,919,957	4,919,957	4,898,923	4,898,923	4,898,923	3,545,428	3,545,428	3,545,428	3,579,231	3,579,231	3,579,231	50,830,617

(1) Columbia has included in the application period a projection for the release of 5,215 Dth of capacity to be released at the applicable maximum rate to a large industrial customer on Columbia's system and not subject to recall.

Exhibit 1-B Schedule 2 Sheet 1 of 2

#### Exhibit 1-B Schedule 2 Sheet 2 of 2

#### COLUMBIA GAS OF PENNSYLVANIA, INC.

#### Summary of Total Estimated Purchased Gas Demand Costs <u>Columbia Gulf Transmission Company</u>

Line			2015						2016					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
	Columbia Gulf Transmission													
	FTS-1													
1	Billing Determinant-Dth	43,632	43,632	43,632	43,632	43,632	43,632	43,632	43,632	43,632	43,632	43,632	43,632	
2	Demand Rate	4.2917	4.2917	4.2917	4.2917	4.2917	4.2917	4.2917	4.2917	4.2917	4.2917	4.2917	4.2917	
3	Demand Cost	187,255	187,255	187,255	187,255	187,255	187,255	187,255	187,255	187,255	187,255	187,255	187,255	2,247,060
4	Total Columbia Gulf Demand Cost	187,255	187,255	187,255	187,255	187,255	187,255	187,255	187,255	187,255	187,255	187,255	187,255	2,247,060

## COLUMBIA GAS OF PENNSYLVANIA, INC.

#### Summary of Total Estimated Purchased Gas Demand Costs <u>Texas Eastern Transmission Corporation</u>

Line			2015						2016					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
	FT1-TCO Delmont													
1	Billing Determinant-Dth	3,082	3,082	3,082	3,082	3,082	3,082	3,082	3,082	3,082	3,082	3,082	3,082	
2	Demand Rate	9.1250	9.1250	9.1250	9.1250	9.1250	9.1250	9.1250	9.1250	9.1250	9.1250	9.1250	9.1250	
3	Demand Cost	28,123	28,123	28,123	28,123	28,123	28,123	28,123	28,123	28,123	28,123	28,123	28,123	337,476
	FT1-Uniontown													
4	Billing Determinant-Dth	11,753	11,753	11,753	11,753	11,753	11,753	11,753	11,753	11,753	11,753	11,753	11,753	
5	Demand Rate	9.1250	9.1250	9.1250	9.1250	9.1250	9.1250	9.1250	9.1250	9.1250	9.1250	9.1250	9.1250	
6	Demand Cost	107,246	107,246	107,246	107,246	107,246	107,246	107,246	107,246	107,246	107,246	107,246	107,246	1,286,952
	CDS - Eagle/Rockwood													
7	Billing Determinant-Dth	2,342	2,342	2,342	2,342	2,342	2,342	2,342	2,342	2,342	2,342	2,342	2,342	
8	Demand Rate	15.0013	15.0013	15.0013	15.0053	15.0053	15.0053	15.0053	15.0053	15.0053	14.9833	14.9833	14.9833	
9	Demand Cost	35,133	35,133	35,133	35,142	35,142	35,142	35,142	35,142	35,142	35,091	35,091	35,091	421,524
	CDS - Rockwood													
10	Billing Determinant-Dth	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	
11	Demand Rate	12.9477	12.9477	12.9477	12.9517	12.9517	12.9517	12.9517	12.9517	12.9517	12.9297	12.9297	12.9297	
12	Demand Cost	64,739	64,739	64,739	64,759	64,759	64,759	64,759	64,759	64,759	64,649	64,649	64,649	776,718
	CDS - Chambersburg													
13	Billing Determinant-Dth	158	158	158	158	158	158	158	158	158	158	158	158	
14	Demand Rate	15.0080	15.0080	15.0080	15.0120	15.0120	15.0120	15.0120	15.0120	15.0120	14.9900	14.9900	14.9900	
15	Demand Cost	2,371	2,371	2,371	2,372	2,372	2,372	2,372	2,372	2,372	2,368	2,368	2,368	28,449
	FT1-TCO @ Eagle Zone 3 Zone 3													
16	Billing Determinant-Dth	0	0	10,000	10,000	10,000	10,000	0	0	0	0	0	0	
17	Demand Rate	0.0000	0.0000	4.9340	4.9360	4.9360	4.9360	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
18	Demand Cost	0	0	49,340	49,360	49,360	49,360	0	0	0	0	0	0	197,420
10	Total TETCO Demand Cost	227 612	227 612	286.052	287.002	287.002	287.002	227 642	227 642	227 642	227 477	227 477	227 477	2 049 520
19	Total TETCO Demand Cost	237,612	237,612	286,952	287,002	287,002	287,002	237,642	237,642	237,642	237,477	237,477	237,477	3,048,539

#### Exhibit 1-B Schedule 3 Sheet 1 of 1

July 1, 2016 Quarterly Filing

#### Exhibit 1-B Schedule 4 Sheet 1 of 1

#### COLUMBIA GAS OF PENNSYLVANIA, INC.

# Summary of Total Estimated Purchased Gas Demand Costs <u>Dominion Transmission</u>

Line			2015						2016					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
	Dominion Transmission													
	GSS - Reservation													
1	Billing Determinant-Dth	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	
2	Demand Rate	1.8625	1.8625	1.8625	1.8618	1.8618	1.8618	1.8618	1.8618	1.8618	1.8618	1.8618	1.8618	
3	Demand Cost	44,700	44,700	44,700	44,683	44,683	44,683	44,683	44,683	44,683	44,683	44,683	44,683	536,247
	GSS - Capacity													
4	Billing Determinant-Dth	1,871,176	1,871,176	1,871,176	1,871,176	1,871,176	1,871,176	1,871,176	1,871,176	1,871,176	1,871,176	1,871,176	1,871,176	
5	Demand Rate	0.0145	0.0145	0.0145	0.0145	0.0145	0.0145	0.0145	0.0145	0.0145	0.0145	0.0145	0.0145	
6	Demand Cost	27,132	27,132	27,132	27,132	27,132	27,132	27,132	27,132	27,132	27,132	27,132	27,132	325,584
	FTNN													
7	Billing Determinant-Dth	0	6,000	6,000	6,000	6,000	6,000	0	0	0	0	0	0	
8	Total-DTH	0.0000	4.1564	4.1564	4.1619	4.1619	4.1619	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
9	Demand Cost	0	24,938	24,938	24,971	24,971	24,971	0	0	0	0	0	0	124,789
	<u>FT</u>													
10	Billing Determinant-Dth	22,717	25,177	25,177	25,177	25,177	25,177	22,479	22,479	22,479	22,479	22,479	22,479	
11	Total-DTH	4.1564	4.1564	4.1564	4.1619	4.1619	4.1619	4.1619	4.1619	4.1619	4.1619	4.1619	4.1619	
12	Demand Cost	94,421	104,646	104,646	104,784	104,784	104,784	93,556	93,556	93,556	93,556	93,556	93,556	1,179,401
13	Total DTI Demand Cost	166,253	201,416	201,416	201,570	201,570	201,570	165,371	165,371	165,371	165,371	165,371	165,371	2,166,021

#### Exhibit 1-B Schedule 5 Sheet 1 of 1

## COLUMBIA GAS OF PENNSYLVANIA, INC.

#### Summary of Total Estimated Purchased Gas Demand Costs <u>Tennessee Gas Pipeline Company</u>

Line			2015						2016					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
	Tennessee Gas FT-A (Direct) New Castle -	500 Line												
1	Billing Determinant-Dth	7,600	7,600	7,600	7,600	7,600	7,600	7,600	7,600	7,600	7,600	7,600	7,600	
2	Demand Rate	15.3455	14.8863	14.8863	14.8658	14.8658	14.8658	14.8658	14.8658	14.8658	14.8658	14.8658	14.8658	
3	Demand Cost	116,626	113,136	113,136	112,980	112,980	112,980	112,980	112,980	112,980	112,980	112,980	112,980	1,359,718
	Tennessee Gas FT-A (Direct) New Castle -	800 Line												
4	Billing Determinant-Dth	8,400	8,400	8,400	8,400	8,400	8,400	8,400	8,400	8,400	8,400	8,400	8,400	
5	Demand Rate	15.3455	14.8863	14.8863	14.8658	14.8658	14.8658	14.8658	14.8658	14.8658	14.8658	14.8658	14.8658	
6	Demand Cost	128,902	125,045	125,045	124,873	124,873	124,873	124,873	124,873	124,873	124,873	124,873	124,873	1,502,849
	Tennessee Gas FT-A (Direct) Pitt Teminal	- 500 Line												
7	Billing Determinant-Dth	7,600	7,600	7,600	7,600	7,600	7,600	7,600	7,600	7,600	7,600	7,600	7,600	
8	Demand Rate	5.4628	5.3001	5.3001	5.2796	5.2796	5.2796	5.2796	5.2796	5.2796	5.2796	5.2796	5.2796	
9	Demand Cost	41,517	40,281	40,281	40,125	40,125	40,125	40,125	40,125	40,125	40,125	40,125	40,125	483,204
	Tennessee Gas FT-A (Direct) TCO - 500 L	ine												
10	Billing Determinant-Dth	12,500	12,500	12,500	12,500	12,500	12,500	12,500	12,500	12,500	12,500	12,500	12,500	
11	Demand Rate	5.4628	5.3001	5.3001	5.2796	5.2796	5.2796	5.2796	5.2796	5.2796	5.2796	5.2796	5.2796	
12	Total-DTH	68,285	66,251	66,251	65,995	65,995	65,995	65,995	65,995	65,995	65,995	65,995	65,995	794,742
13	Total Tennessee Gas Demand Cost	355,330	344,713	344,713	343,973	343,973	343,973	343,973	343,973	343,973	343,973	343,973	343,973	4,140,513

## Exhibit 1-B Schedule 6 Sheet 1 of 1

## COLUMBIA GAS OF PENNSYLVANIA, INC.

# Summary of Total Estimated Purchased Gas Demand Costs National Fuel Gas Supply

Line			2015						2016					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
	National													
1	Billing Determinant-Dth	4,304	4,304	4,304	4,304	4,304	4,304	4,304	4,304	4,304	4,304	4,304	4,304	
2	Demand Rate	3.7805	3.7805	3.7805	3.7805	3.7805	3.7805	3.7805	3.7805	3.7805	3.7049	3.7049	3.7049	
3	Demand Cost	16,271	16,271	16,271	16,271	16,271	16,271	16,271	16,271	16,271	15,946	15,946	15,946	194,277
4	Total National Fuel Demand Cost	16,271	16,271	16,271	16,271	16,271	16,271	16,271	16,271	16,271	15,946	15,946	15,946	194,277

#### Exhibit 1-B Schedule 7 Sheet 1 of 1

#### COLUMBIA GAS OF PENNSYLVANIA, INC.

# Summary of Total Estimated Purchased Gas Demand Costs <u>Equitrans</u>

Line			2015						2016					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
	Equitrans FTS													
1	Billing Determinant-Dth	1,121	6,509	6,509	6,509	6,509	6,509	749	749	749	749	749	749	
2	Demand Rate	5.5559	6.1206	6.1206	6.1206	6.1206	6.1206	5.5559	5.5559	5.5559	5.5559	5.5559	5.5559	
3	Demand Cost	6,228	39,839	39,839	39,839	39,839	39,839	4,161	4,161	4,161	4,161	4,161	4,161	230,389
4	Total Equitrans Demand Cost	6,228	39,839	39,839	39,839	39,839	39,839	4,161	4,161	4,161	4,161	4,161	4,161	230,389

Exhibit No. 1-B Schedule 8 Sheet 1 of 1

#### COLUMBIA GAS OF PENNSYLVANIA, INC.

#### Summary of Total Estimated Purchased Gas Commodity Costs <u>Term Contracts</u>

Line			2015						2016					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
	TERM													
	COLUMBIA GULF - TCO													
1	Quantity - DTH	0	0	0	0	0	0	0	0	0	0	0	0	0
2	Rate-\$/DTH	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
3	Cost-\$	0	0	0	0	0	0	0	0	0	0	0	0	0
	COLUMBIA TRANSMISSION													
4	Quantity - DTH	0	0	514,000	414,000	387,000	106,000	0	0	0	0	0	0	1,421,000
5	Rate-\$/DTH	0.0000	0.0000	2.7631	1.7233	1.7886	1.8538	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-,,
6	Cost-\$	0	0	1,420,233	713,446	692,188	196,503	0	0	0	0	0	0	3,022,370
				, ,	,		,							, ,
	TEXAS EASTERN													
7	Quantity - DTH	703,000	705,000	691,000	660,000	618,000	660,000	638,000	657,000	631,000	652,000	652,000	633,000	7,900,000
8	Rate-\$/DTH	2.7806	2.8558	2.9764	1.8651	1.9315	1.9980	2.1156	2.1862	2.2485	2.4615	2.5363	2.5768	
9	Cost-\$	1,954,762	2,013,339	2,056,692	1,230,966	1,193,667	1,318,680	1,349,753	1,436,333	1,418,804	1,604,898	1,653,668	1,631,114	18,862,676
	TENNESSEE GAS PIPELINE													
10	Quantity - DTH	0	0	1,111,000	608,000	569,000	0	0	0	0	0	0	0	2,288,000
11	Rate-\$/DTH	0.0000	0.0000	3.0994	2.0115	2.0779	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
12	Cost-\$	0	0	3,443,433	1,222,992	1,182,325	0	0	0	0	0	0	0	5,848,750
12	<u>CAP</u>	242,000	225.000	242.000	225 000	220.000	225 000	220 000	225.000	220,000	220.000	220.000	212.000	2 755 000
13 14	Quantity - DTH Rate-\$/DTH	243,000 3.3045	235,000 3.3045	243,000 3.3045	235,000 2.9197	220,000 2.9197	235,000	228,000 2.9197	235,000 2.9197	228,000 2.9197	220,000 3.2268	220,000	213,000	2,755,000
14	Cost-\$	802,994	776,558	802,994	686,130	642,334	2.9197 686,130	665,692	686,130	665,692	709,896	3.2268 709,896	3.2268 687,308	8,521,754
15	Cost-\$	802,994	//0,558	802,994	080,150	042,334	080,130	005,092	080,130	005,092	709,896	709,890	087,508	8,521,754
	LESS CAP BILLING													
16	Quantity - DTH	(163,000)	(270,000)	(417,000)	(486,000)	(421,000)	(328,000)	(190,000)	(96,000)	(44,000)	(39,000)	(39,000)	(63,000)	(2,556,000)
17	Rate-\$/DTH	3.3045	3.3045	3.3045	2.9197	2.9197	2.9197	2.9197	2.9197	2.9197	3.2268	3.2268	3.2268	
18	Cost-\$	(538,634)	(892,215)	(1,377,977)	(1,418,974)	(1,229,194)	(957,662)	(554,743)	(280,291)	(128,467)	(125,845)	(125,845)	(203,288)	(7,833,135)
19	Total - DTH	783,000	670,000	2,142,000	1,431,000	1,373,000	673,000	676,000	796,000	815,000	833,000	833,000	783,000	11,808,000
20	Total Term Commodity													
21	Cost-\$	2,219,122	1,897,682	6,345,375	2,434,560	2,481,320	1,243,651	1,460,702	1,842,172	1,956,029	2,188,949	2,237,719	2,115,134	28,422,415
											·			

Exhibit No. 1-B Schedule 9 Sheet 1 of 1

#### COLUMBIA GAS OF PENNSYLVANIA, INC.

## Summary of Total Estimated Purchased Gas Commodity Costs Spot and Local Purchases

Line			2015						2016					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
	<u>SPOT</u>													
	Base													
1	Quantity - DTH	1,797,000	290,000	666,000	1,317,000	891,000	392,000	3,772,000	3,275,000	2,514,000	2,204,000	2,332,000	2,423,000	21,873,000
2	Rate-\$/DTH	2.3928	2.7959	2.7096	1.7676	1.8380	1.9913	1.9142	1.9905	2.0420	2.2867	2.3010	2.4034	
3	Cost-\$	4,299,862	810,811	1,804,594	2,327,929	1,637,658	780,590	7,220,362	6,518,888	5,133,588	5,039,887	5,365,932	5,823,438	46,763,539
	Swing													
4	Quantity - DTH	0	0	0	0	0	7,000	46,000	0	0	0	0	0	53,000
5	Rate-\$/DTH	0.0000	0.0000	0.0000	0.0000	0.0000	1.8881	1.9512	0.0000	0.0000	0.0000	0.0000	0.0000	
6	Cost-\$	0	0	0	0	0	13,217	89,755	0	0	0	0	0	102,972
-		1 505 000				004 000	200.000	2 040 000						<b>a</b> 4 o <b>a</b> 6 ooo
7	Total - DTH	1,797,000	290,000	666,000	1,317,000	891,000	399,000	3,818,000	3,275,000	2,514,000	2,204,000	2,332,000	2,423,000	21,926,000
8	Total Spot													
9	Commodity Cost - \$	4,299,862	810,811	1,804,594	2,327,929	1,637,658	793,807	7,310,117	6,518,888	5,133,588	5,039,887	5,365,932	5,823,438	46,866,511
	commounty cost o	1,277,002	010,011	1,001,091	2,021,020	1,007,000	175,007	,,510,117	0,010,000	5,155,566	2,007,007	5,565,552	0,020,100	10,000,011
	Local Direct													
10	Quantity - DTH	22,000	21,000	22,000	22,000	20,000	22,000	21,000	22,000	21,000	22,000	22,000	21,000	258,000
11	Rate-\$/DTH	2.5130	2.5550	2.6920	1.6720	1.7360	1.8000	1.8610	1.9290	1.9890	2.2310	2.3030	2.3420	,
12	Cost-\$	55,286	53,655	59,224	36,784	34,720	39,600	39,081	42,438	41,769	49,082	50,666	49,182	551,487
13	Total - DTH	22,000	21,000	22,000	22,000	20,000	22,000	21,000	22,000	21,000	22,000	22,000	21,000	258,000
14	Total Local													
15	Commodity Cost - \$	55,286	53,655	59,224	36,784	34,720	39,600	39,081	42,438	41,769	49,082	50,666	49,182	551,487

Exhibit No. 1-B Schedule 10 Sheet 1 of 2

#### COLUMBIA GAS OF PENNSYLVANIA, INC.

#### Summary of Total Estimated Purchased Gas Commodity Costs

Storage

Line			2015						2016					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
	DOMINION TRANSMISSION	I - GSS												
1	Injections - DTH	(293,000)	0	0	0	0	0	(286,000)	(211,000)	(211,000)	(120,000)	(286,000)	(94,000)	(1,501,000)
2	Injection Rate - \$/Dth	2.5266	2.8156	2.9008	1.7323	1.8183	1.8983	1.9513	2.0533	2.1290	2.3791	2.4017	2.4753	
3	Withdrawals - DTH	0	106,000	380,000	528,000	317,000	148,000	75,000	0	0	0	0	0	1,554,000
4	Withdrawl Rate - \$/Dth	3.0773	3.0773	3.0773	3.0615	3.0615	3.0571	2.8071	2.6125	2.5133	2.4917	2.4786	2.4782	
5	Cost-\$	(740,294)	326,194	1,169,374	1,616,472	970,496	452,451	(347,539)	(433,246)	(449,219)	(285,492)	(686,886)	(232,678)	1,359,633
6	Injection Rate \$/Dth	0.0318	0.0318	0.0318	0.0262	0.0262	0.0262	0.0262	0.0262	0.0262	0.0262	0.0262	0.0262	
7	Withdrawl Rate \$/Dth	0.0220	0.0220	0.0220	0.0180	0.0180	0.0180	0.0180	0.0180	0.0180	0.0180	0.0180	0.0180	
8	Cost - \$	9,317	2,332	8,360	9,504	5,706	2,664	8,843	5,528	5,528	3,144	7,493	2,463	70,882
	EQUITRANS - SS													
9	Injections - DTH	(161,000)	0	0	0	0	0	(161,000)	(161,000)	(161,000)	(228,000)	(228,000)	(221,000)	(1,321,000)
10	Injection Rate - \$/Dth	2.5266	2.8156	2.9008	1.7323	1.8183	1.8983	1.9513	2.0533	2.1290	2.3791	(228,000) 2.4017	2.4753	(1,521,000)
10	Withdrawals - DTH	2.5200	75,000	375,000	375,000	300,000	0	0	2.0535	2.1290	2.3791	2.4017	2.4733	1,125,000
12	Withdrawl Rate - \$/Dth	3.0773	3.0773	3.0773	3.0615	3.0615	3.0571	2.8071	2.6125	2.5133	2.4917	2.4786	2.4782	1,125,000
12	Cost-\$	(406,783)	230,798	1,153,988	1,148,063	918,450	0	(314,159)	(330,581)	(342,769)	(542,435)	(547,588)	(547,041)	419,943
10	00010	(100,703)	250,770	1,155,566	1,1 10,005	,10,100	0	(511,105))	(550,501)	(512,707)	(512,155)	(511,500)	(011,011)	119,910
14	Inject/With. Rate \$/DTH	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
15	Cost - \$	0	0	0	0	0	0	0	0	0	0	0	0	0
	TCO - FSS													
16	Injections - DTH	(887,000)	0	(11,000)	0	0	(48,000)	(1,934,000)	(3,264,000)	(3,264,000)	(3,061,000)	(3,059,000)	(3,130,000)	(18,658,000)
17	Injection Rate - \$/Dth	2.5266	2.8156	2.9008	1.7323	1.8183	1.8983	1.9513	2.0533	2.1290	2.3791	2.4017	2.4753	
18	Withdrawals - DTH	0	2,846,000	3,454,000	4,865,000	4,845,000	4,383,000	0	0	0	0	0	0	20,393,000
19	Withdrawl Rate - \$/Dth	3.0773	3.0773	3.0773	3.0615	3.0615	3.0571	2.8071	2.6125	2.5133	2.4917	2.4786	2.4782	
20	Cost-\$	(2,241,094)	8,757,996	10,597,085	14,894,198	14,832,968	13,308,151	(3,773,814)	(6,701,971)	(6,949,056)	(7,282,425)	(7,346,800)	(7,747,689)	20,347,549
21	Inject/With. Rate \$/DTH	0.0153	0.0153	0.0153	0.0153	0.0153	0.0153	0.0153	0.0153	0.0153	0.0153	0.0153	0.0153	
22	Cost - \$	13,571	43,544	53,015	74,435	74,129	67,794	29,590	49,939	49,939	46,833	46,803	47,889	597,481
		- ,- · -	- ,		.,			- , *		- ,	-,*	-,	.,	
23	Quantity - DTH	(1,341,000)	3,027,000	4,198,000	5,768,000	5,462,000	4,483,000	(2,306,000)	(3,636,000)	(3,636,000)	(3,409,000)	(3,573,000)	(3,445,000)	1,592,000
24	Total Purchase Cost	(3,388,171)	9,314,988	12,920,447	17,658,733	16,721,914	13,760,602	(4,435,512)	(7,465,798)	(7,741,044)	(8,110,352)	(8,581,274)	(8,527,408)	22,127,125
25	Total Inject/With. Cost	22,888	45,876	61,375	83,939	79,835	70,458	38,433	55,467	55,467	49,977	54,296	50,352	668,363
		,0			,,-	.,,	,	,	,	,	,	,_, 0		

Exhibit No. 1-B Schedule 10 Sheet 2 of 2

#### COLUMBIA GAS OF PENNSYLVANIA, INC.

#### Summary of Total Estimated Purchased Gas Commodity Costs Storage Transportation Charges

Line			2015						2016					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
	TCO - SST													
1	Injections - DTH	(887,000)	0	(11,000)	0	0	(48,000)	(1,934,000)	(3,264,000)	(3,264,000)	(3,061,000)	(3,059,000)	(3,130,000)	(18,658,000)
2	Withdrawals - DTH	0	2,846,000	3,454,000	4,865,000	4,845,000	4,383,000	(1,551,600)	0	(3,201,000)	(0,001,000)	0	(5,150,000)	20,393,000
3	Trans. Chrg. \$/Dth	0.0196	0.0194	0.0194	0.0192	0.0192	0.0192	0.0194	0.0194	0.0194	0.0195	0.0195	0.0195	- , ,
4	Cost-\$	17,385	55,212	67,221	93,408	93,024	85,076	37,520	63,322	63,322	59,690	59,651	61,035	755,866
	DOMINION TRANSMISSION	I - GSS												
5	Injections - DTH	(293,000)	0	0	0	0	0	(286,000)	(211,000)	(211,000)	(120,000)	(286,000)	(94,000)	(1,501,000)
6	Withdrawals - DTH	0	106,000	380,000	528,000	317,000	148,000	75,000	0	0	0	0	0	1,554,000
7	Rate-\$/DTH	0.0196	0.0182	0.0182	0.0142	0.0142	0.0142	0.0194	0.0194	0.0194	0.0195	0.0195	0.0195	
8	Cost-\$	5,743	1,929	6,916	7,498	4,501	2,102	7,003	4,093	4,093	2,340	5,577	1,833	53,628
	EQUITRANS - SS													
9	Injections - DTH	(161,000)	0	0	0	0	0	(161,000)	(161,000)	(161,000)	(228,000)	(228,000)	(221,000)	(1,321,000)
10	Withdrawals - DTH	0	75,000	375,000	375,000	300,000	0	0	0	0	0	0	0	1,125,000
11	Rate-\$/DTH	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
12	Cost-\$	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Total Storage - DTH	(1,341,000)	3,027,000	4,198,000	5,768,000	5,462,000	4,483,000	(2,306,000)	(3,636,000)	(3,636,000)	(3,409,000)	(3,573,000)	(3,445,000)	1,592,000
13	Total EUB - DTH	271,000	(228,000)	(762,000)	(1,033,000)	(916,000)	(494,000)	(2,300,000) 81,000	444,000	581,000	621,000	620,000	561,000	(254,000)
15	Total DTH	(1,070,000)	2,799,000	3,436,000	4,735,000	4,546,000	3,989,000	(2,225,000)	(3,192,000)	(3,055,000)	(2,788,000)	(2,953,000)	(2,884,000)	1,338,000
15		(1,070,000)	2,777,000	5,450,000	4,755,000	4,540,000	5,767,000	(2,225,000)	(5,1)2,000)	(3,055,000)	(2,700,000)	(2,)55,000)	(2,004,000)	1,550,000
16	Total Purchase Cost	(3,388,171)	9,314,988	12,920,447	17,658,733	16,721,914	13,760,602	(4,435,512)	(7,465,798)	(7,741,044)	(8,110,352)	(8,581,274)	(8,527,408)	22,127,125
17	Total Choice Bank Cost	742,540	(624,720)	(2,087,880)	(2,187,997)	(1,940,180)	(1,046,341)	171,566	940,436	1,230,616	1,726,132	1,723,352	1,559,356	206,879
18	Total Inject/With. Cost	22,888	45,876	61,375	83,939	79,835	70,458	38,433	55,467	55,467	49,977	54,296	50,352	668,363
19	Total Transp. Charge	23,128	57,141	74,137	100,906	97,525	87,178	44,523	67,415	67,415	62,030	65,228	62,868	809,494
20	Total Storage Cost	(2,599,615)	8,793,285	10,968,079	15,655,581	14,959,094	12,871,897	(4,180,990)	(6,402,480)	(6,387,546)	(6,272,213)	(6,738,398)	(6,854,832)	23,811,862

Exhibit 1-E Schedule 4 Sheet 1a of 6 Commodity

## COLUMBIA GAS OF PENNSYLVANIA, INC. STATEMENT OF COMMODITY OVER/(UNDER) COLLECTIONS FROM GAS COST RATE OCTOBER, 2015 THROUGH SEPTEMBER, 2016

Line No.	Month Reference:	Total Commodity Sales Revenue (1) \$ Sch. 4, Pg. 2	Rate Schedule NSS Gas Cost Recovery (2) \$ Sch. 4, Pg. 3	Total Commodity Purchase Gas Cost Recovery (3 = 1 + 2) \$	Total Commodity Cost of Fuel (4) \$	Total Commodity Over/(Under) Collection (5 = 3 - 4) \$	Number of Months (6)	Rate (7)	Commodity Over/(Under) Collection Interest (8 = 5 x 6 x 7)	Total Commodity Over/(Under) Collection (9 = 5 + 8)
	Actuals through	May 2016								
1	October, 2015	3,063,399	7,565	3,070,964	5,696,938	(2,625,974)	18 / 12	8.00%	(315,117)	(2,941,091)
2	November	5,804,706	14,873	5,819,580	6,813,412	(993,833)	17 / 12	8.00%	(112,634)	(1,106,467)
3	December	10,829,408	16,369	10,845,777	9,497,103	1,348,674	16 / 12	8.00%	143,859	1,492,533
4	January, 2016	15,352,521	20,697	15,373,218	23,577,144	(8,203,926)	15 / 12	8.00%	(820,393)	(9,024,319)
5	February	17,220,951	24,117	17,245,069	15,883,932	1,361,137	14 / 12	8.00%	127,039	1,488,176
6	March	12,682,943	14,055	12,696,997	9,892,492	2,804,505	13 / 12	8.00%	243,057	3,047,562
7	April	8,044,202	11,201	8,055,403	2,523,553	5,531,850	12 / 12	8.00%	442,548	5,974,398
8	May	4,307,404	9,863	4,317,267	1,987,150	2,330,118	11 / 12	8.00%	170,875	2,500,993
9	June	0	0	0	0	0	10 / 12	8.00%	0	0
10	July	0	0	0	0	0	9 / 12	8.00%	0	0
11	August	0	0	0	0	0	8 / 12	8.00%	0	0
12	September	0	0	0	0	0	7 / 12	8.00%	0	0
13	TOTAL	77,305,533	118,742	77,424,275	75,871,724	1,552,551			(120,766)	1,431,785

Exhibit 1-E Schedule 4 Sheet 1b of 6 Demand

# COLUMBIA GAS OF PENNSYLVANIA, INC. STATEMENT OF DEMAND OVER/(UNDER) COLLECTIONS FROM GAS COST RATE OCTOBER, 2015 THROUGH SEPTEMBER, 2016

Line No.	Month Reference:	Total Demand Sales <u>Revenue</u> (1) \$ Sch. 4,	Total Banking and Balancing Revenue (2) \$ Sch. 4,	Total Standby Demand Revenue (3) \$ Sch. 4,	NSS Capacity Release Revenue (4) \$ Sch. 4,	Demand Purchased Gas Cost Recovery (5 =1+2+3+4) \$	Demand Cost of Fuel (6) \$	Total Demand Over/(Under) Collection (7 = 5 - 6) \$	Number of Months (8)	Rate (9)	Demand Over/(Under) Collection Interest (10 = 7 x 8 x 9)	Total Demand Over/(Under) Collection (11 = 7 + 10)
		Pg. 4	Pg. 6	Pg. 5	Pg. 6							
	Actuals through	n May 2016										
1	October, 2015	1,558,194	73	49,920	30	1,608,216	5,527,271	(3,919,054)	18 / 12	6.00%	(352,715)	(4,271,769)
2	November	3,168,467	168	50,349	69	3,219,052	5,586,751	(2,367,698)	17 / 12	6.00%	(201,254)	(2,568,952)
3	December	5,875,908	177	50,349	638	5,927,072	5,617,585	309,488	16 / 12	6.00%	24,759	334,247
4	January, 2016	9,055,921	218	50,349	972	9,107,459	5,616,791	3,490,668	15 / 12	6.00%	261,800	3,752,468
5	February	10,631,584	257	49,042	1,136	10,682,018	5,795,723	4,886,295	14 / 12	8.00%	456,054	5,342,349
6	March	7,842,226	188	44,847	107	7,887,367	5,796,593	2,090,774	13 / 12	8.00%	181,200	2,271,974
7	April	5,042,980	138	44,847	57	5,088,022	4,301,722	786,300	12 / 12	8.00%	62,904	849,204
8	May	2,697,230	116	44,847	48	2,742,242	4,118,661	(1,376,419)	11 / 12	8.00%	(100,937)	(1,477,356)
9	June	0	0	0	0	0	0	0	10 / 12	8.00%	0	0
10	July	0	0	0	0	0	0	0	9 / 12	8.00%	0	0
11	August	0	0	0	0	0	0	0	8 / 12	8.00%	0	0
12	September	0	0	0	0	0	0	0	7 / 12	8.00%	0	0
13	TOTAL	45,872,510	1,334	384,549	3,056	46,261,449	42,361,097	3,900,352			331,811	4,232,163

# COLUMBIA GAS OF PENNSYLVANIA, INC. DETAIL OF COMMODITY GAS COST RECOVERY OCTOBER, 2015 THROUGH SEPTEMBER, 2016

NO.         MONTH         COST OF GAS         GAS           (1)         (2)         (1)         (2)           THERM         \$/THERM         \$/THERM           1         October, 2015 Est. Old         4,515,622         0.376           2         October, 2015 Est. New         4,408,533         0.312           3         September, 2015 Est.         (5,790,556)         0.376           4         September, 2015 Act.         5,763,556         0.376	$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$
I         October, 2015 Est. Old         4,515,622         0.376           2         October, 2015 Est. New         4,408,533         0.312           3         September, 2015 Est.         (5,790,556)         0.376	\$ 14 1,698,506 52 1,377,755 14 (2,178,060) 14 2,167,904 85 (20) 00 (2,686) 3,063,399
1       October, 2015 Est. Old       4,515,622       0.376         2       October, 2015 Est. New       4,408,533       0.312         3       September, 2015 Est.       (5,790,556)       0.376	$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$
2         October, 2015 Est. New         4,408,533         0.312           3         September, 2015 Est.         (5,790,556)         0.376	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
3 September, 2015 Est. (5,790,556) 0.376	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
1 /	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
4 September, 2015 Act. 5,763,556 0.376	85 (20) 00 (2,686) 3,063,399
	00 (2,686) 3,063,399
5 September - Interruptible Less NSS Act. (70) 0.280	00 (2,686) 3,063,399
6 September Act. Prior Period Adjustments 0.000	
7 Total 8,897,085	50 5 000 545
8 November, 2015 Est. 18,657,190 0.312	52 5,830,745
9 October, 2015 Est. Old (4,515,622) 0.376	14 (1,698,506)
10 October, 2015 Est. New (4,408,533) 0.312	52 (1,377,755)
11 October, 2015 Act. Old 4,477,698 0.376	14 1,684,241
12 October, 2015 Act. New 4,371,507 0.312	
13October - Interruptible Less NSS Act.00.412	88 0
14 October Act. Prior Period Adjustments 0.000	00 (203)
15 Total 18,582,240	5,804,706
16 December, 2015 Est. 34,991,405 0.312	52 10,935,514
17 November, 2015 Est. (18,657,190) 0.312	52 (5,830,745)
18 November, 2015 Act. 18,317,820 0.312	52 5,724,685
19November - Interruptible Less NSS Act.(870)0.212	69 (185)
20 November Act. Prior Period Adjustments	139
21 Total 34,651,165	10,829,408
22 January, 2016 Est. Old 19,480,120 0.312	52 6,087,927
23 January, 2016 Est. New 34,184,122 0.273	54 9,350,725
24 December, 2015 Est. (34,991,405) 0.312	52 (10,935,514)
25 December, 2015 Act. 34,708,925 0.312	52 10,847,233
26December - Interruptible Less NSS Act.00.672	
27 December Act. Prior Period Adjustments 0	2,150
28 Total 53,381,762	15,352,521

# COLUMBIA GAS OF PENNSYLVANIA, INC. DETAIL OF COMMODITY GAS COST RECOVERY OCTOBER, 2015 THROUGH SEPTEMBER, 2016

	4MODITY COST COVERY
THERM         \$/THERM           1         February, 2016 Est.         63,292,534         0.27354           2         January, 2016 Est. Old         (19,480,120)         0.31252           3         January, 2016 Est. New         (34,184,122)         0.27354           4         January, 2016 Act. Old         19,359,466         0.31252           5         January, 2016 Act. New         33,972,396         0.27354           6         January - Interruptible Less NSS Act.         270         0.28910           7         January Act. Prior Period Adjustments         -         -           8         Total         62,960,424         -           9         March, 2016 Est.         46,519,284         0.27354           10         February, 2016 Act.         63,138,254         0.27354           11         February, 2016 Act.         63,138,254         0.27354           12         February - Interruptible Less NSS Act.         1,100         0.25478           13         February Act. Prior Period Adjustments         -         -	$= 1 \times 2$ )
2       January, 2016 Est. Old       (19,480,120)       0.31252         3       January, 2016 Est. New       (34,184,122)       0.27354         4       January, 2016 Act. Old       19,359,466       0.31252         5       January, 2016 Act. New       33,972,396       0.27354         6       January, 2016 Act. New       33,972,396       0.27354         6       January - Interruptible Less NSS Act.       270       0.28910         7       January Act. Prior Period Adjustments       -       -         8       Total       62,960,424       -         9       March, 2016 Est.       46,519,284       0.27354         10       February, 2016 Est.       (63,292,534)       0.27354         11       February, 2016 Act.       63,138,254       0.27354         12       February - Interruptible Less NSS Act.       1,100       0.25478         13       February Act. Prior Period Adjustments       -       -	\$
3       January, 2016 Est. New       (34,184,122)       0.27354         4       January, 2016 Act. Old       19,359,466       0.31252         5       January, 2016 Act. New       33,972,396       0.27354         6       January - Interruptible Less NSS Act.       270       0.28910         7       January Act. Prior Period Adjustments       -       -         8       Total       62,960,424       -         9       March, 2016 Est.       46,519,284       0.27354         10       February, 2016 Est.       (63,292,534)       0.27354         11       February, 2016 Act.       63,138,254       0.27354         12       February - Interruptible Less NSS Act.       1,100       0.25478         13       February Act. Prior Period Adjustments       -       -	17,313,040
4       January, 2016 Act. Old       19,359,466       0.31252         5       January, 2016 Act. New       33,972,396       0.27354         6       January - Interruptible Less NSS Act.       270       0.28910         7       January Act. Prior Period Adjustments       -       -         8       Total       62,960,424       -         9       March, 2016 Est.       46,519,284       0.27354         10       February, 2016 Est.       (63,292,534)       0.27354         11       February, 2016 Act.       63,138,254       0.27354         12       February - Interruptible Less NSS Act.       1,100       0.25478         13       February Act. Prior Period Adjustments       -       -	(6,087,927)
5       January, 2016 Act. New       33,972,396       0.27354         6       January - Interruptible Less NSS Act.       270       0.28910         7       January Act. Prior Period Adjustments       -       -         8       Total       62,960,424       -         9       March, 2016 Est.       46,519,284       0.27354         10       February, 2016 Est.       (63,292,534)       0.27354         11       February, 2016 Act.       63,138,254       0.27354         12       February - Interruptible Less NSS Act.       1,100       0.25478         13       February Act. Prior Period Adjustments       -       -	(9,350,725)
6       January - Interruptible Less NSS Act.       270       0.28910         7       January Act. Prior Period Adjustments       -       -         8       Total       62,960,424       -         9       March, 2016 Est.       46,519,284       0.27354         10       February, 2016 Est.       (63,292,534)       0.27354         11       February, 2016 Act.       63,138,254       0.27354         12       February - Interruptible Less NSS Act.       1,100       0.25478         13       February Act. Prior Period Adjustments       -	6,050,220
7       January Act. Prior Period Adjustments       -         8       Total       62,960,424         9       March, 2016 Est.       46,519,284       0.27354         10       February, 2016 Est.       (63,292,534)       0.27354         11       February, 2016 Act.       63,138,254       0.27354         12       February - Interruptible Less NSS Act.       1,100       0.25478         13       February Act. Prior Period Adjustments       -	9,292,809
8       Total       62,960,424         9       March, 2016 Est.       46,519,284       0.27354         10       February, 2016 Est.       (63,292,534)       0.27354         11       February, 2016 Act.       63,138,254       0.27354         12       February - Interruptible Less NSS Act.       1,100       0.25478         13       February Act. Prior Period Adjustments       -	78
9March, 2016 Est.46,519,2840.2735410February, 2016 Est.(63,292,534)0.2735411February, 2016 Act.63,138,2540.2735412February - Interruptible Less NSS Act.1,1000.2547813February Act. Prior Period Adjustments-	3,456
10       February, 2016 Est.       (63,292,534)       0.27354         11       February, 2016 Act.       63,138,254       0.27354         12       February - Interruptible Less NSS Act.       1,100       0.25478         13       February Act. Prior Period Adjustments       -	17,220,951
11       February, 2016 Act.       63,138,254       0.27354         12       February - Interruptible Less NSS Act.       1,100       0.25478         13       February Act. Prior Period Adjustments       -	12,724,885
12February - Interruptible Less NSS Act.1,1000.2547813February Act. Prior Period Adjustments	(17,313,040)
13 February Act. Prior Period Adjustments -	17,270,838
	280
14 Total 46,366,104	(21)
	12,682,943
15 April, 2016 Est. 29,699,130 0.27354	8,123,900
16 March, 2016 Est. (46,519,284) 0.27354	(12,724,885)
17 March, 2016 Act. 46,201,764 0.27354	12,638,031
18March - Interruptible Less NSS Act.4,5600.22069	1,006
19 March Act. Prior Period Adjustments -	6,150
20 Total 29,386,170	8,044,202
21 May, 2016 Est. 15,921,580 0.27354	4,355,189
22 April, 2016 Est. (29,699,130) 0.27354	(8,123,900)
23 April, 2016 Act. 29,518,760 0.27354	8,074,562
24April - Interruptible Less NSS Act.2,6700.24694	659
25 April Act. Prior Period Adjustments 0 -	894
26 Total 15,743,880	4,307,404

# COLUMBIA GAS OF PENNSYLVANIA, INC. DETAIL OF COMMODITY GAS COST RECOVERY OCTOBER, 2015 THROUGH SEPTEMBER, 2016

LINE NO.	MONTH	SALES SUBJECT TO COMMODITY COST OF GAS (1) THERM	COMMODITY COST OF GAS (2) \$/THERM	TOTAL COMMODITY COST RECOVERY $(3 = 1 \times 2)$ \$
		0		0
1	June, 2016 Est.	0	-	0
2	May, 2016 Est.	0	-	0
3	May, 2016 Act.	0	-	0
4	May - Interruptible Less NSS Act.	0	-	0
5	May Act. Prior Period Adjustments	0	-	0
6	Total	0		0
7	July, 2016 Est. Old	0	-	0
8	July, 2016 Est. New	0	-	0
9	June, 2016 Est.	0	-	0
10	June, 2016 Act.	0	-	0
11	June - Interruptible Less NSS Act.	0	-	0
12	June Act. Prior Period Adjustments		-	0
13	Total	0		0
14	August, 2016 Est.	0	-	0
15	July, 2016 Est. Old	0	-	0
16	July, 2016 Est. New	0	-	0
17	July, 2016 Act. Old	0	-	0
18	July, 2016 Act. New	0	-	0
19	July - Interruptible Less NSS Act.	0	-	0
20	July Act. Prior Period Adjustments	-	-	0
21	Total	0		0
22	September, 2016 Est.	0	_	0
22	August, 2016 Est.	0		0
23 24	August, 2016 Act.	0		0
24	August - Interruptible Less NSS Act.	0	-	0
25 26	August Act. Prior Period Adjustments	0	-	0
20 27	Total	0		0
28		269.968.830		77,305,533
28	TOTAL	269,968,830		77,30

#### COLUMBIA GAS OF PENNSYLVANIA, INC. DETAIL OF NSS COMMODITY COST RECOVERY OCTOBER, 2015 THROUGH SEPTEMBER, 2016

LINE		RATE SCHEDULE NSS		NSS GAS COST
NO.	MONTH	VOLUMES	RATE	RECOVERY
110.		(1)	(2)	(3=1*2)
		THERM	\$/THERM	\$
1	October, 2015 Est.	35,001	0.23697	8,294
2	September, 2015 Act.	22,110	0.25171	5,565
3	September, 2015 Est.	(25,007)	0.25171	(6,295)
4		32,104		7,565
5	November, 2015 Est.	60,006	0.19195	11,518
6	October, 2015 Act.	49,160	0.23697	11,649
7	October, 2015 Est.	(35,001)	0.23697	(8,294)
8		74,165		14,873
0	December 2015 Est	80.000	0.20866	16 602
9	December, 2015 Est.	80,000	0.20866	16,693
10	November, 2015 Act.	58,320	0.19195	11,195
11 12	November, 2015 Est.	(60,006) 78,314	0.19195	(11,518) 16,369
12		,0,011		10,507
13	January, 2016 Est.	100,004	0.21431	21,432
14	December, 2015 Act.	76,480	0.20866	15,958
15	December, 2015 Est.	(80,000)	0.20866	(16,693)
16		96,484		20,697
17	February, 2016 Est.	100,006	0.21211	21,212
18	January, 2016 Act.	113,560	0.21211	24,337
10	January, 2016 Est.	(100,004)	0.21431	(21,432)
20	January, 2010 Est.	113,562	0.21451	24,117
20		115,502		24,117
21	March, 2016 Est.	80,005	0.16715	13,373
22	February, 2016 Act.	103,220	0.21211	21,894
23	February, 2016 Est.	(100,006)	0.21211	(21,212)
24		83,219		14,055
25	April, 2016 Est.	60,002	0.18458	11,075
26	March, 2016 Act.	80,760	0.16715	13,499
27	March, 2016 Est.	(80,005)	0.16715	(13,373)
28	11400, 2010 201	60,757	0110712	11,201
29	May, 2016 Est.	34,996	0.19514	6,829
30	April, 2016 Act.	76,440	0.18458	14,109
31	April, 2016 Est.	(60,002)	0.18458	(11,075)
32		51,434		9,863
33	June, 2016 Est.	0	-	0
34	May, 2016 Act.	0	-	0
35	May, 2016 Est.	0	-	0
36		0		0
37	July, 2016 Est.	0	-	0
38	June, 2016 Act.	0		0
39	June, 2016 Est.	0		0
40	Julie, 2010 Est.	0		0
41	August, 2016 Est.	0	-	0
42	July, 2016 Act.	0	-	0
43	July, 2016 Est.	0	-	0
44		0		0
45	September, 2016 Est.	0	-	0
46	August, 2016 Act.	0	-	0
47	August, 2016 Est.	0	-	0
48		0		0
49	TOTAL	590,039		118,742

#### COLUMBIA GAS OF PENNSYLVANIA, INC. DETAIL OF DEMAND GAS COST RECOVERY OCTOBER, 2015 THROUGH SEPTEMBER, 2016

		VOLUMES SUBJ.		DEMAND
LINE		TO DEMAND	COST OF	COST
NO.	MONTH	COST OF GAS	GAS	RECOVERY
		(1)	(2)	(3 = 1 x 2)
		THERM	\$/THERM	\$
1	October, 2015 Est. Old	4,515,622	0.13501	609,654
2	October, 2015 Est. New	4,408,533	0.13027	574,300
3	October Choice - Est. Old	1,624,024	0.10511	170,701
4	October Choice - Est. New	1,690,311	0.09984	168,761
5	October Est. Priority One Transportation Old	178,066	0.13501	24,041
6	October Est. Priority One Transportation New	173,844	0.13027	22,647
7	September, 2015 Est.	(5,790,556)	0.13501	(781,783)
8	September 2015 Act.	5,763,556	0.13501	778,138
9	September Choice - Est.	(2,032,880)	0.10511	(213,676)
10	September Choice - Act.	2,032,880	0.10511	213,676
11	September Est. Priority One Transportation	(282,250)	0.13501	(38,107)
12	September Act. Priority One Transportation	221,040	0.13501	29,843
13	Prior Period Adjustment	0	0.00000	0
14	Total	12,502,190		1,558,194
15	November, 2015 Est. New	18,657,190	0.13027	2,430,472
16	November Choice - Est. New	6,877,229	0.09984	686,623
17	November Est. Priority One Transportation New	518,600	0.13027	67,558
18	October Est. Old	(4,515,622)	0.13501	(609,654)
19	October Est. New	(4,408,533)	0.13027	(574,300)
20	October Act. Old	4,477,698	0.13501	604,534
21	October Act. New	4,371,507	0.13027	569,476
22	October Choice - Est. Old	(1,624,024)	0.10511	(170,701)
23	October Choice - Est. New	(1,690,311)	0.09984	(168,761)
24	October Choice - Act. Old	1,624,024	0.10511	170,701
25	October Choice - Act. New	1,690,311	0.09984	168,761
26	October Est. Priority One Transportation Old	(178,066)	0.13501	(24,041)
27 28	October Est. Priority One Transportation New	(173,844)	0.13027	(22,647)
28 29	October Act. Priority One Transportation Old October Act. Priority One Transportation New	154,259 150,601	0.13501 0.13027	20,827 19,619
30	Total	25,931,019	0.13027	3,168,467
50	10(a)	23,931,019		5,108,407
31	December, 2015 Est.	34,991,405	0.13027	4,558,330
32	December Choice - Est.	12,852,105	0.09984	1,283,154
33	December Est. Priority One Transportation	626,710	0.13027	81,642
34	November Est.	(18,657,190)	0.13027	(2,430,472)
35	November Act.	18,317,820	0.13027	2,386,262
36	November Choice - Est. November Choice - Act.	(6,877,229)	0.09984	(686,623)
37 38		6,877,229	0.09984 0.13027	686,623
38 39	November Est. Priority One Transportation November Act. Priority One Transportation	(518,600)	0.13027 0.13027	(67,558)
40	Total	495,510 48,107,760	0.13027	<u>64,550</u> 5,875,908
41	January 2016 Ect. Old	19,480,120	0 12007	7 577 675
41 42	January, 2016 Est. Old January, 2016 Est. New		0.13027	2,537,675
42 43	January Choice - Est. Old	34,184,122 6,999,236	0.13081 0.09984	4,471,625 698,804
43 44	January Choice - Est. New	12,335,669	0.09984	1,232,087
44 45	January Est. Priority One Transportation Old	376,489	0.13027	49,045
43 46	January Est. Priority One Transportation New	660,671	0.13027	49,043 86,422
40	December 2015 Est.	(34,991,405)	0.13027	(4,558,330)
48	December 2015 Act.	34,708,925	0.13027	4,521,532
49	December 2015 Het. December Choice - Est.	(12,852,105)	0.09984	(1,283,154)
50	December Choice - Act.	12,852,105	0.09984	1,283,154
51	December Est. Priority One Transportation	(626,710)	0.13027	(81,642)
52	December Act. Priority One Transportation	757,680	0.13027	98,703
53	Total	73,884,797		9,055,921

#### COLUMBIA GAS OF PENNSYLVANIA, INC. DETAIL OF DEMAND GAS COST RECOVERY OCTOBER, 2015 THROUGH SEPTEMBER, 2016

		VOLUMES SUBJ.		DEMAND
LINE		TO DEMAND	COST OF	COST
NO.	MONTH	COST OF GAS	GAS	RECOVERY
		(1)	(2)	$(3 = 1 \times 2)$
		THERM	\$/THERM	\$
1	February, 2016 Est. New	63,292,534	0.13081	8,279,296
2	February Choice - Est. New	22,698,769	0.09988	2,267,153
3	February Est. Priority One Transportation New	974,290	0.13081	127,447
4	January Est. Old	(19,480,120)	0.13027	(2,537,675)
5	January Est. New	(34,184,122)	0.13081	(4,471,625)
6	January Act. Old	19,359,466	0.13027	2,521,958
7	January Act. New	33,972,396	0.13081	4,443,929
8	January Choice - Est. Old	(6,999,236)	0.09984	(698,804)
9	January Choice - Est. New	(12,335,669)	0.09988	(1,232,087)
10	January Choice - Act. Old	6,999,236	0.09984	698,804
11	January Choice - Act. New	12,335,669	0.09988	1,232,087
12	January Est. Priority One Transportation Old	(376,489)	0.13027	(49,045)
13	January Est. Priority One Transportation New	(660,671)	0.13081	(86,422)
14	January Act. Priority One Transportation Old	379,549	0.13027	49,444
15	January Act. Priority One Transportation New	666,041	0.13081	87,125
16	Total	86,641,643		10,631,584
		,- ,		-, ,
17	March, 2016 Est.	46,519,284	0.13081	6,085,188
18	March Choice - Est.	16,621,588	0.09988	1,660,164
19	March Est. Priority One Transportation	710,450	0.13081	92,934
20	February Est.	(63,292,534)	0.13081	(8,279,296)
21	February Act.	63,138,254	0.13081	8,259,115
22	February Choice - Est.	(22,698,769)	0.09988	(2,267,153)
23	February Choice - Act.	22,698,769	0.09988	2,267,153
24	February Est. Priority One Transportation	(974,290)	0.13081	(127,447)
25	February Act. Priority One Transportation	1,158,690	0.13081	151,568
26	Total	63,881,442		7,842,226
27	April, 2016 Est.	29,699,130	0.13081	3,884,943
28	April Choice - Est.	10,818,471	0.09988	1,080,549
29	April Est. Priority One Transportation	700,410	0.13081	91,621
30	March Est.	(46,519,284)	0.13081	(6,085,188)
31	March Act.	46,201,764	0.13081	6,043,653
32	March Choice - Est.	(16,621,588)	0.09988	(1,660,164)
33	March Choice - Act.	16,621,588	0.09988	1,660,164
34	March Est. Priority One Transportation	(710,450)	0.13081	(92,934)
35	March Act. Priority One Transportation	919,930	0.13081	120,336
36	Total	41,109,971		5,042,980
37	May, 2016 Est.	15,921,580	0.13081	2,082,702
38	May Choice - Est. New	5,790,775	0.09988	578,383
39	May Est. Priority One Transportation New	476,180	0.13081	62,289
40	April, 2014 Est.	(29,699,130)	0.13081	(3,884,943)
40	April, 2014 Act.	29,518,760	0.13081	3,861,349
41	April Choice - Est.	(10,818,471)	0.09988	(1,080,549)
43	April Choice - Act.	10,818,471	0.09988	1,080,549
44	April Est. Priority One Transportation	(700,410)	0.13081	(91,621)
45	April Act. Priority One Transportation	680,920	0.13081	89,071
46	Total	21,988,675	0.15001	2,697,230
-10	- out	21,700,075		2,071,230

#### COLUMBIA GAS OF PENNSYLVANIA, INC. DETAIL OF DEMAND GAS COST RECOVERY OCTOBER, 2015 THROUGH SEPTEMBER, 2016

LINE NO.	MONTH	VOLUMES SUBJ. TO DEMAND COST OF GAS	COST OF GAS	DEMAND COST RECOVERY
		(1) <b>THERM</b>	(2) \$/THERM	(3 = 1 x 2) \$
1	June, 2016 Est.	0	-	0
2	June Choice - Est.	0	-	0
3	June Est. Priority One Transportation	0	-	0
4	May Est.	0	-	0
5	May Act.	0	-	0
6	May Choice - Est.	0	-	0
7	May Choice - Act.	0	-	0
8	May Est. Priority One Transportation	0	-	0
9	May Act. Priority One Transportation	0	-	0
10	Total	0		0
11	July, 2016 Est. Old	0	-	0
12	July, 2016 Est. New	0	-	0
13	July Choice - Est. Old	0	-	0
14	July Choice - Est. New	0	-	0
15	July Est. Priority One Transportation Old	0	-	0
16	July Est. Priority One Transportation New	0	-	0
17	June 2016 Est.	0	-	0
18	June 2016 Act.	0	-	0
19	June Choice - Est.	0	-	0
20	June Choice - Act.	0	-	0
21	June Est. Priority One Transportation	0	-	0
22	June Act. Priority One Transportation	0	-	0
23	Total	0		0
24	August, 2016 Est.	0	-	0
25	August Choice - Est. New	0	-	0
26	August Est. Priority One Transportation New	0	-	0
27	July 2016 Est.Old	0	-	0
28	July, 2016 Est. New	0	-	0
29	July 2016 Act. Old	0	-	0
30	July 2016 Act. New	0	-	0
31	July Choice - Est. Old	0	-	0
32	July Choice - Est. New	0	-	0
33	July Choice - Act. Old	0	-	0
34	July Choice - Act. New	0	-	0
35	July Est. Priority One Transportation Old	0	-	0
36	July Est. Priority One Transportation New	0	-	0
37	July Act. Priority One Transportation Old	0	-	0
38	July Act. Priority One Transportation New	0	-	0
39	Total	0		0
40	Sept., 2016 Est.	0	-	0
41	Sept. Choice - Est.	0	-	0
42	Sept. Est. Priority One Transportation	0	-	0
43	August Estimate	0	-	0
44	August Actual	0	-	0
45	August Choice - Est.	0	-	0
46	August Choice - Act.	0	-	0
47	August Est. Priority One Transportation	0	-	0
48	August Act. Priority One Transportation	0	-	0
49	Total	0		0
50	TOTAL	374,047,497		45,872,510

Exhibit 1-E Schedule 4 Sheet 5 of 6

## COLUMBIA GAS OF PENNSYLVANIA, INC. DETAIL OF STANDBY DEMAND COST RECOVERY OCTOBER, 2015 THROUGH SEPTEMBER, 2016

LINE NO.	MONTH	STANDBY VOLUMES	STANDBY DEMAND RATE	STANDBY GAS DEMAND RECOVERIES	
		(1) THERM	(2) \$/THERM	(3 = 1 x 2) \$	
1	October, 2015 Est.	0		0	
2	September, 2015 Act.	66,700	0.74843	49,920	
3	September, 2015 Est.	0	-	0	
4		66,700		49,920	
5	November, 2015 Est.	0	-	0	
6	October, 2015 Act.	66,700	0.75485	50,349	
7 8	October, 2015 Est.	<u> </u>	-	<u> </u>	
0		00,700		50,549	
9	December, 2015 Est.	0	-	0	
10	November, 2015 Act.	66,700	0.75485	50,349	
11 12	November, 2015 Est.	0	-	50,349	
12		66,700		50,549	
13	January, 2016 Est.	0	-	0	
14	December, 2015 Act.	66,700	0.75485	50,349	
15 16	December, 2015 Est.	<u> </u>	-	50,349	
10		66,700		50,549	
17	February, 2016 Est.	0	-	0	
18	January, 2016 Act.	65,120	0.75310	49,042	
19	January, 2016 Est.	0	-	0	
20		65,120		49,042	
21	March, 2016 Est.	0	-	0	
22	February, 2016 Act.	59,550	0.75310	44,847	
23	February, 2016 Est.	0	-	0	
24		59,550		44,847	
25	April, 2016	0	-	0	
26	March, 2016 Act.	59,550	0.75310	44,847	
27	March, 2016 Est.	0	-	0	
28		59,550		44,847	
29	May, 2016	0	-	0	
30	April, 2016 Act.	59,550	0.75310	44,847	
31	April, 2016 Est.	0	-	0	
32		59,550		44,847	
33	June, 2016	0	-	0	
34	May, 2016 Act.	0	-	0	
35 36	May, 2016 Est.	0	-	0	
50		0		0	
37	July, 2016	0	-	0	
38	June, 2016 Act.	0	-	0	
39 40	June, 2016 Est.	0	-	0	
40		0		0	
41	August, 2016	0	-	0	
42	July, 2016 Act.	0	-	0	
43 44	July, 2016 Est.	0	-	0	
44		U		U	
45	September, 2016	0	-	0	
46	August, 2016 Act	0	-	0	
47 48	August, 2016 Est.	0	-	0	
49	TOTAL	510,570		384,549	

## COLUMBIA GAS OF OF PENNSYLVANIA, INC.

## DETAIL OF NSS BANKING & BALANCING AND CAPACITY RELEASE REVENUE OCTOBER, 2015 THROUGH SEPTEMBER, 2016

$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			NSS-BA	NKING & BALA	NCING	NSS-CAPACITY RELEASE		
THERM         STHERM         S         THERM         STHERM         S           1         October, 2015 Est.         35,001         0.00226         79         55,001         0.00003           3         September, 2015 Est. $(25,007)$ 0.00226 $(57)$ $(25,007)$ 0.00003           4         November, 2015 Est. $(25,007)$ 0.00026 $(136)$ $(0,0006)$ 0.00023           5         November, 2015 Est. $(30,001)$ 0.00226 $(136)$ $(0,0006)$ 0.00003           7         Q.tober, 2015 Est. $(30,001)$ $0.00226$ $(136)$ $(0,0006)$ $0.00003$ 10         November, 2015 Est. $(30,000)$ $0.00226$ $(136)$ $(0,0006)$ $0.00003$ 11         November, 2015 Est. $(00,004)$ $0.00226$ $(226)$ $(100,004)$ $0.00226$ 14         December, 2015 Est. $(00,004)$ $0.00226$ $(227)$ $(100,004)$ $0.00226$ 15         December, 2015 Est. $(00,004)$ $0.00226$ $(27)$ $(100,004)$ $0.00226$ 16 <th></th> <th>DESCRIPTION</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>AMOUNT</th>		DESCRIPTION						AMOUNT
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$								(6=4 x5) \$
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1	Ostabas 2015 Est	25 001	0.00226	70	25 001	0.00002	22
3         September, 2015 Est. $(25,007)$ 32,104 $0.00226$ $(57)$ 73 $(25,007)$ 32,104 $0.00093$ 5         November, 2015 Est. $49,160$ $0.00226$ $136$ $60,0069$ $0.00093$ 7         October, 2015 Est. $49,160$ $0.00226$ $111$ $49,160$ $0.00093$ 9         December, 2015 Est. $80,000$ $0.00226$ $181$ $80,000$ $0.00093$ 10         November, 2015 Est. $80,000$ $0.00226$ $132$ $58,320$ $0.00093$ 12         November, 2015 Est. $100,004$ $0.00226$ $276$ $100,004$ $0.00093$ 14         December, 2015 Est. $100,004$ $0.00226$ $276$ $100,004$ $0.00800$ 15         December, 2015 Est. $100,006$ $0.00226$ $226$ $100,004$ $0.0026$ 16         December, 2016 Est. $100,006$ $0.00226$ $2275$ $113,560$ $0.01000$ 16         January, 2016 Est. $100,006$ $0.00226$ $233$ $100,006$		,						33 21
4         73         32,104         73         32,104           5         November, 2015 Est.         60,006         0.00026         136         60,006         0.00093           6         October, 2015 Est.         49,160         0.000226         111         49,160         0.00093           7         October, 2015 Est.         58,320         0.00093         168         74,165         0.00093           9         December, 2015 Est.         58,320         0.00226         181         80,000         0.00093           10         November, 2015 Est.         (60,006)         0.00226         173         76,480         0.00800           12         December, 2015 Est.         100,004         0.00226         173         76,480         0.00800           14         December, 2015 Est.         100,006         0.00226         113         60,006         0.00000           15         December, 2015 Est.         100,006         0.00226         2257         113,560         0.01000           18         January, 2016 Est.         100,006         0.00226         (2257)         113,562         0.01000           19         January, 2016 Est.         80,025         0.00226         (225)         113,562								(23)
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		September, 2015 Est.		0.00220			0.00093	30
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	5	November, 2015 Est.	60,006	0.00226	136	60,006	0.00093	56
7       October, 2015 Est. $(35,001)$ $0.00226$ $(79)$ $(35,001)$ $0.00800$ 9       December, 2015 Est. $80,000$ $0.00226$ $181$ $80,000$ $0.0093$ 10       November, 2015 Est. $58,320$ $0.00226$ $1132$ $58,320$ $0.00093$ 12       November, 2015 Est. $(60,006)$ $0.00226$ $(136)$ $(60,006)$ $0.0093$ 14       December, 2015 Est. $100,004$ $0.00226$ $173$ $76,480$ $0.00800$ 15       December, 2015 Est. $100,006$ $0.00226$ $226$ $100,004$ $0.01000$ 16       December, 2016 Est. $100,006$ $0.00226$ $227$ $113,560$ $0.01000$ 18       January, 2016 Est. $100,006$ $0.00226$ $233$ $103,220$ $0.01000$ 19       January, 2016 Est. $80,005$ $0.00226$ $233$ $103,220$ $0.01000$ 21       March, 2016 Est. $80,005$ $0.00226$ $183$ $80,760$ $0.0093$ 22       February, 2016 Est. $60,0757$ $0.00226$	6				111			46
8         74,165         168         74,165           9         December, 2015 Est.         80,000         0.00226         181         80,000         0.00800           10         November, 2015 Act.         58,320         0.00093         132         58,320         0.00093           11         November, 2015 Act.         78,314         177         78,314	7	October, 2015 Est.		0.00226	(79)	(35,001)	0.00093	(33)
10         November, 2015 Act.         S8.320         0.00226         (136)         (60.006)         0.00093           11         November, 2015 Est.         (60.006)         (136)         (60.006)         0.00093           13         Jamary, 2016 Est.         100.004         0.00226         173         76,480         0.00800           14         December, 2015 Act.         76,480         0.00226         (181)         (80.000)         0.00800           15         December, 2015 Est.         100,006         0.00226         226         100,006         0.01000           18         Jamary, 2016 Est.         100,006         0.00226         227         113,560         0.01000           19         Jamary, 2016 Est.         100,006         0.00226         123         103,220         0.01000           20          (100,004)         0.00226         181         80,005         0.00093           21         March, 2016 Est.         103,220         0.00226         133         103,220         0.01000           23         February, 2016 Est.         60,0757         113,560         0.00093         0.00093           24          83,760         0.000226         173         76,440 <td>8</td> <td></td> <td>74,165</td> <td></td> <td>168</td> <td>74,165</td> <td></td> <td>69</td>	8		74,165		168	74,165		69
11         November, 2015 Est.         (60,006) 78,314         0.00226         (136) 177         (60,004) 78,314         0.00093           13         January, 2016 Est.         100,004         0.00226         173         76,480         0.00000           14         December, 2015 Est.         (76,480         0.00226         (131)         (80,000)         0.00800           15         December, 2015 Est.         (80,000)         0.00226         (273)         76,480         0.00800           16         February, 2016 Est.         100,006         0.00226         257         113,556         0.01000           19         January, 2016 Est.         (100,004)         0.00226         257         113,556         0.01000           20         March, 2016 Est.         80,005         0.000226         131         80,005         0.00093           21         March, 2016 Est.         103,220         0.00226         133         80,760         0.00093           22         February, 2016 Est.         60,757         0.00226         138         80,760         0.00093           23         February, 2016 Est.         60,757         0.00226         138         60,757         0.00093           24         60,757	9	December, 2015 Est.	80,000	0.00226	181	80,000	0.00800	640
12       78,314       177       78,314       177       78,314         13       January, 2016 Est.       100,004       0.00226       226       100,004       0.00000         14       December, 2015 Est.       76,480       0.00226       173       76,480       0.00000         16       December, 2015 Est.       100,006       0.00226       226       100,006       0.00000         17       February, 2016 Est.       100,006       0.00226       226       100,006       0.01000         18       January, 2016 Est.       100,006       0.00226       2257       113,562       0.01000         20       January, 2016 Act.       113,562       0.00226       233       103,220       0.01000         21       March, 2016 Est.       80,005       0.00226       233       103,220       0.01000         22       February, 2016 Act.       103,220       0.00226       (100,0006)       0.01000          23       February, 2016 Est.       60,002       0.00226       136       60,002       0.00093         24       March, 2016 Est.       60,757       0.00226       138       80,760       0.00093         25       April, 2016 Act.       76,44	10	November, 2015 Act.	58,320	0.00226	132	58,320	0.00093	54
13       January, 2016 Est.       100,004       0.00226       226       100,004       0.00000         14       December, 2015 Est. $(80,000)$ $0.00226$ $(181)$ $(80,000)$ $0.00800$ 16       December, 2015 Est. $96,484$ $0.00226$ $(218)$ $96,484$ $0.00800$ 17       February, 2016 Est.       100,006 $0.00226$ $2257$ $113,550$ $0.01000$ 19       January, 2016 Est. $(100,004)$ $0.00226$ $2277$ $113,552$ $0.01000$ 20       March, 2016 Est. $(100,004)$ $0.00226$ $237$ $113,552$ $0.01000$ 21       March, 2016 Est. $(100,006)$ $0.00226$ $233$ $103,220$ $0.01000$ 23       February, 2016 Est. $(100,006)$ $0.00226$ $(138)$ $80,005$ $0.00093$ 24       87.756 $0.000226$ $138$ $80,005$ $0.00093$ 25       April, 2016 Est. $80,005$ $0.00226$ $138$ $80,756$ $0.00093$ 26       March, 2016 Est. $34,996$ $0.00093$ $0.00226$ $138$ <td>11</td> <td>November, 2015 Est.</td> <td>(60,006)</td> <td>0.00226</td> <td>(136)</td> <td>(60,006)</td> <td>0.00093</td> <td>(56)</td>	11	November, 2015 Est.	(60,006)	0.00226	(136)	(60,006)	0.00093	(56)
14       December, 2015 Est.       76,480       0.00226       173       76,480       0.00800         15       December, 2015 Est.       96,484       218       96,484       0.00000         17       February, 2016 Est.       100,006       0.00226       226       100,006       0.01000         18       January, 2016 Est.       (100,004)       0.00226       227       113,560       0.01000         20       January, 2016 Est.       (100,004)       0.00226       2257       113,562       0.01000         21       March, 2016 Est.       103,220       0.00226       223       103,220       0.01000         23       February, 2016 Act.       103,220       0.00226       128       80,005       0.00093         24       83,219       188       83,219       0.01000          25       April, 2016 Est.       60,002       0.00226       138       60,075       0.000033         26       March, 2016 Est.       (60,002)       0.00226       173       76,440       0.000033         27       March, 2016 Est.       0       0       0           29       March, 2016 Est.       0       0       0	12		78,314		177	78,314		638
15       December. 2015 Est.       (80,000) 96,484       0.00226       (181)       (80,000) 96,484       0.00800         17       February. 2016 Est.       100,006       0.00226       226       100,006       0.01000         18       January. 2016 Act.       113,560       0.00226       227       113,562       0.01000         20       march, 2016 Est.       80,005       0.00226       (226)       (100,004)       0.01000         21       March, 2016 Est.       80,005       0.00226       (226)       (100,006)       0.01000         22       February, 2016 Act.       103,220       0.00226       (226)       (100,006)       0.01000         24       83,219       188       83,219       0.01000          25       April, 2016 Est.       60,002       0.00226       136       60,002       0.00093         26       March, 2016 Act.       80,760       0.00226       138       80,760       0.00093         28       -60,757       138       60,757       138       60,757          29       May, 2016 Est.       34,996       0.00226       173       76,440       0.00093         31       April, 2016 Est.       0	13	January, 2016 Est.	100,004	0.00226	226	100,004	0.01000	1,000
16       96,484       218       96,484       0.0026         17       February, 2016 Est.       100,006       0.00226       226       100,006       0.01000         18       January, 2016 Act.       113,560       0.00226       227       113,560       0.01000         19       January, 2016 Est.       (100,004)       0.00226       2260       (100,004)       0.01000         20       March, 2016 Est.       80,005       0.00226       233       103,220       0.01000         21       March, 2016 Est.       103,220       0.00226       233       103,220       0.01000         22       February, 2016 Act.       103,220       0.00226       136       60,002       0.00093         23       February, 2016 Est.       60,002       0.00226       138       83,219          24       83,219       188       83,219            25       April, 2016 Act.       80,760       0.00226       138       60,757       0.00093         28       -60,757	14	December, 2015 Act.	76,480	0.00226	173	76,480	0.00800	612
17       February, 2016 Est.       100,006       0.00226       226       100,006       0.01000         19       January, 2016 Est.       (100,004)       0.00226       (226)       (100,004)       0.01000         20       March, 2016 Est.       80,005       0.00226       (227)       113,562       0.01000         21       March, 2016 Est.       80,005       0.00226       233       103,220       0.01000         22       February, 2016 Est.       (100,006)       0.00226       (226)       (100,006)       0.01000         24       Forwary, 2016 Est.       60,002       0.00226       136       60,002       0.00093         25       April, 2016 Est.       60,002       0.00226       138       83,219          25       March, 2016 Est.       60,002       0.00226       183       80,760       0.00093         26       March, 2016 Est.       34,996       0.00226       183       60,757       0.0093         28       60,757       0.00226       173       76,440       0.00093         29       May, 2016 Est.       34,996       0.00226       173       76,440       0.00093         30       April, 2016 Est.       0	15	December, 2015 Est.		0.00226			0.00800	(640)
18       January, 2016 Act.       113,560       0.00226       257       113,560       0.01000         19       January, 2016 Est.       (100,004)       0.00226       (226)       (100,004)       0.01000         20       Harch, 2016 Est.       80,005       0.00226       233       103,220       0.01000         21       March, 2016 Est.       (100,006)       0.00226       233       103,220       0.01000         23       February, 2016 Act.       103,220       0.00226       (226)       (100,006)       0.01000         24       Pebruary, 2016 Est.       60,002       0.00226       (226)       (100,006)       0.01000         25       April, 2016 Est.       60,002       0.00226       183       80,760       0.00093         26       March, 2016 Est.       (80,005)       0.00226       183       80,757       0.00093         28       60,757       0.00226       79       34,996       0.00093       -         29       May, 2016 Est.       34,996       0.00226       173       76,440       0.00093         30       April, 2016 Est.       0       -       0       0       -         34       May, 2016 Est.       0	16		96,484		218	96,484		972
19       January, 2016 Est.       (100,004)       0.00226       (226)       (100,004)       0.01000         20       March, 2016 Est.       80,005       0.00226       233       103,220       0.01000         21       March, 2016 Est.       103,220       0.00226       233       103,220       0.01000         23       February, 2016 Est.       (100,006)       0.00226       (226)       (100,006)       0.00093         24       March, 2016 Est.       60,002       0.00226       136       60,002       0.00093         26       March, 2016 Est.       60,057       0.00226       138       80,760       0.00093         27       March, 2016 Est.       60,757       138       60,757       0.00093         28       60,757       138       60,757       0.00093          29       May, 2016 Est.       34,996       0.00026       (136)       (60,002)       0.00093         31       April, 2016 Act.       76,440       0.00226       173       76,440       0.00093         32       51,434       116       51,434       116       51,434           33       June, 2016 Est.       0       -       0 <td>17</td> <td>February, 2016 Est.</td> <td>100,006</td> <td>0.00226</td> <td>226</td> <td>100,006</td> <td>0.01000</td> <td>1,000</td>	17	February, 2016 Est.	100,006	0.00226	226	100,006	0.01000	1,000
20       113,562       257       113,562         21       March, 2016 Est.       80,005       0,00226       233       103,220       0,01000         23       February, 2016 Est.       (100,006)       0,00226       233       103,220       0,01000         24       83,219       188       83,219       0,01000       0,00226         24       April, 2016 Est.       60,002       0,00226       136       60,002       0,00093         26       March, 2016 Est.       60,757       0,00226       138       80,760       0,00093         27       March, 2016 Est.       34,996       0,00226       138       60,757       0,00093         28       60,757       0,00226       173       76,440       0,00093         30       April, 2016 Est.       34,996       0,00226       173       76,440       0,00093         31       April, 2016 Est.       0       -       0       0       -         32       June, 2016 Est.       0       -       0       0       -         34       May, 2016 Est.       0       -       0       0       -         35       May, 2016 Est.       0       -       0 </td <td>18</td> <td>January, 2016 Act.</td> <td>113,560</td> <td>0.00226</td> <td>257</td> <td>113,560</td> <td>0.01000</td> <td>1,136</td>	18	January, 2016 Act.	113,560	0.00226	257	113,560	0.01000	1,136
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	19	January, 2016 Est.	(100,004)	0.00226	(226)	(100,004)	0.01000	(1,000)
22       February, 2016 Act.       103,220       0.00226       233       103,220       0.01000         23       February, 2016 Est.       (100,006)       0.00226       (226)       (100,006)       0.01000         24       83,219       188       83,219       0       0.00026       (136       60,002       0.00093         25       April, 2016 Est.       60,002       0.00226       136       60,002       0.00093         26       March, 2016 Est.       80,760       0.000226       183       80,760       0.00093         28       60,757       0.0226       79       34,996       0.00093         29       May, 2016 Est.       34,996       0.00226       173       76,440       0.00093         31       April, 2016 Act.       76,440       0.00226       173       76,440       0.00093         32       51,434       116       51,434       16       51,434         33       June, 2016 Est.       0       -       0       0       -         34       May, 2016 Est.       0       -       0       0       -       -         35       May, 2016 Est.       0       -       0       0       - <td>20</td> <td></td> <td>113,562</td> <td></td> <td>257</td> <td>113,562</td> <td></td> <td>1,136</td>	20		113,562		257	113,562		1,136
23       February, 2016 Est.       (100,006) $0.00226$ (226)       (100,006) $0.01000$ 24       April, 2016 Est. $60,002$ $0.00226$ $136$ $60,002$ $0.00093$ 25       April, 2016 Est. $60,005$ $0.00226$ $138$ $83,219$ $0.00093$ 26       March, 2016 Est. $60,0757$ $0.00226$ $(181)$ $(80,005)$ $0.00226$ 27       March, 2016 Est. $34,996$ $0.000226$ $(131)$ $(80,005)$ $0.00093$ 28 $60,757$ $138$ $60,757$ $0.00093$ $0.00093$ 29       May, 2016 Est. $34,996$ $0.000226$ $(73)$ $76,440$ $0.00093$ 30       April, 2016 Est. $0$ $ 0$ $0$ $-$ 33       June, 2016 Est. $0$ $ 0$ $0$ $-$ 33       June, 2016 Est. $0$ $ 0$ $0$ $-$ 34       June, 2016 Est. $0$ $ 0$ $0$ $-$ 34       June, 2016 Est. $0$	21	March, 2016 Est.	80,005	0.00226	181	80,005	0.00093	74
24       83,219       188       83,219         25       April, 2016 Est.       60,002       0.00226       136       60,002       0.00093         26       March, 2016 Act.       80,760       0.00226       183       80,760       0.00093         27       March, 2016 Est.       (80,005)       0.00226       (181)       (80,005)       0.00093         28       60,757       138       60,757       0.00093       0.00093         29       May, 2016 Est.       34,996       0.00226       79       34,996       0.00093         30       April, 2016 Est.       76,440       0.00226       173       76,440       0.00093         31       April, 2016 Est.       0       -       0       0       -         32       51,434       116       51,434       -       -       -         33       June, 2016 Est.       0       -       0       0       -       -         34       May, 2016 Act.       0       -       0       0       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -			103,220	0.00226	233	103,220	0.01000	1,032
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		February, 2016 Est.		0.00226			0.01000	(1,000)
26       March, 2016 Act.       80,760       0.00226       183       80,760       0.00093         27       March, 2016 Est. $(80,005)$ $0.00226$ $(181)$ $(80,005)$ $0.00093$ 28 $addet addet add$	24		83,219		188	83,219		107
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	25	April, 2016 Est.	60,002	0.00226	136	60,002	0.00093	56
28 $\overline{60,757}$ $\overline{138}$ $\overline{60,757}$ 29       May, 2016 Est.       34,996       0.00226       79       34,996       0.00093         30       April, 2016 Act.       76,440       0.00226       173       76,440       0.00093         31       April, 2016 Est.       (60,002)       0.00226       (136)       (60,002)       0.00093         32       51,434       116       51,434       0       -         33       June, 2016 Est.       0       -       0       0       -         34       May, 2016 Act.       0       -       0       0       -         35       May, 2016 Est.       0       -       0       0       -         36       0       -       0       0       -       -       -         36       0       -       0       0       -<								75
30       April, 2016 Act.       76,440       0.00226       173       76,440       0.00093         31       April, 2016 Est. $(60,002)$ $0.00226$ $(136)$ $(60,002)$ $0.00093$ 32 $51,434$ $116$ $51,434$ $0$ $0$ $0$ 33       June, 2016 Est. $0$ $ 0$ $0$ $-$ 34       May, 2016 Act. $0$ $ 0$ $0$ $-$ 35       May, 2016 Est. $0$ $ 0$ $0$ $-$ 36 $0$ $ 0$ $0$ $ -$ 36 $0$ $ 0$ $0$ $ -$ 37       July, 2016 Est. $0$ $ 0$ $0$ $-$ 40 $0$ $ 0$ $0$ $  0$ 41       August, 2016 Est. $0$ $ 0$ $0$ $ -$ 42       July, 2016 Act. $0$ $ 0$ $0$ $ -$		March, 2016 Est.		0.00226			0.00093	(74)
30       April, 2016 Act.       76,440       0.00226       173       76,440       0.00093         31       April, 2016 Est. $(60,002)$ $0.00226$ $(136)$ $(60,002)$ $0.00093$ 32 $51,434$ $116$ $51,434$ $0$ $0$ $0$ 33       June, 2016 Est. $0$ $ 0$ $0$ $-$ 34       May, 2016 Act. $0$ $ 0$ $0$ $-$ 35       May, 2016 Est. $0$ $ 0$ $0$ $-$ 36 $0$ $ 0$ $0$ $ -$ 36 $0$ $ 0$ $0$ $ -$ 37       July, 2016 Est. $0$ $ 0$ $0$ $-$ 40 $0$ $ 0$ $0$ $  0$ $-$ 41       August, 2016 Est. $0$ $ 0$ $0$ $           -$	•				-			
31       April, 2016 Est. $(60,002)$ $0.00226$ $(136)$ $(60,002)$ $0.00093$ 32       June, 2016 Est.       0       -       0       0       -         33       June, 2016 Est.       0       -       0       0       -         34       May, 2016 Act.       0       -       0       0       -         35       May, 2016 Est.       0       -       0       0       -         36       0       -       0       0       -       -         36       0       -       0       0       -       -         37       July, 2016 Est.       0       -       0       0       -         38       June, 2016 Act.       0       -       0       0       -         40       0       -       0       0       -       -       -         40       0       -       0       0       -       -       -       -         40       0       -       0       0       -       -       -       -         41       August, 2016 Est.       0       -       0       0       - <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>33</td>		-						33
32 $\overline{51,434}$ $\overline{116}$ $\overline{51,434}$ 33       June, 2016 Est.       0       -       0       0       -         34       May, 2016 Act.       0       -       0       0       -         35       May, 2016 Est.       0       -       0       0       -       -         36       0       -       0       0       -		-						71 (56)
34       May, 2016 Act.       0       -       0       0       -         35       May, 2016 Est.       0       -       0       0       -       -         36       0       -       0       0       -		April, 2010 Est.		0.00220			0.00075	48
34       May, 2016 Act.       0       -       0       0       -         35       May, 2016 Est.       0       -       0       0       -       -         36       0       -       0       0       -	33	June, 2016 Est.	0	-	0	0	-	0
35       May, 2016 Est.       0       -       0       0       0       -         36       0       -       0       0       0       -				-			-	0
37       July, 2016 Est.       0       -       0       0       -         38       June, 2016 Act.       0       -       0       0       -         39       June, 2016 Est.       0       -       0       0       -         40       0       -       0       0       -       -       -         41       August, 2016 Est.       0       -       0       0       -       -         42       July, 2016 Est.       0       -       0       0       -       -         43       July, 2016 Est.       0       -       0       0       -       -         44       0       -       0       0       -<				-		0	-	0
38       June, 2016 Act.       0       -       0       0       -         39       June, 2016 Est.       0       -       0       0       -       -         40       0       -       0       0       -	36	-	0		0	0		0
38       June, 2016 Act.       0       -       0       0       -         39       June, 2016 Est.       0       -       0       0       -       -         40       0       -       0       0       -	37	July, 2016 Est.	0	-	0	0	-	0
40       0       0       0       0         41       August, 2016 Est.       0       -       0       0       -         42       July, 2016 Act.       0       -       0       0       -         43       July, 2016 Est.       0       -       0       0       -         44       0       -       0       0       -       -         45       September, 2016 Est.       0       -       0       0       -         46       August, 2016 Act.       0       -       0       0       -         47       August, 2016 Est.       0       -       0       0       -         48       0       0       0       0       -       -       -	38	June, 2016 Act.	0	-	0	0	-	0
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	39	June, 2016 Est.	0	-	0	0	-	0
42       July, 2016 Act.       0       -       0       0       -         43       July, 2016 Est.       0       -       0       0       -       -         44       0       -       0       0       -	40		0		0	0		0
43       July, 2016 Est.       0       -       0       0       -         44       0       0       -       0       0       -         45       September, 2016 Est.       0       -       0       0       -         46       August, 2016 Act.       0       -       0       0       -         47       August, 2016 Est.       0       -       0       0       -         48       0       0       0       0       -       -	41	August, 2016 Est.		-			-	0
44     0     0     0       45     September, 2016 Est.     0     -     0     0       46     August, 2016 Act.     0     -     0     0     -       47     August, 2016 Est.     0     -     0     0     -       48     0     0     0     0     -				-			-	0
45       September, 2016 Est.       0       -       0       0       -         46       August, 2016 Act.       0       -       0       0       -         47       August, 2016 Est.       0       -       0       0       -         48       0       -       0       0       0       -		July, 2016 Est.		-			-	0
46     August, 2016 Act.     0     -     0     0     -       47     August, 2016 Est.     0     -     0     0     -       48     0     0     0     0     -								
47     August, 2016 Est.     0     -     0     0     -       48     0     0     0     0     0		-		-			-	0 0
48 0 0 0		-		-			-	0
49 TOTAL 590.039 1.334 590.039		August, 2010 Est.		-			-	0
49 TOTAL 590.039 1.334 590.039								
	49	TOTAL	590,039		1,334	590,039		3,056

# COLUMBIA GAS OF PENNSYLVANIA, INC. COMMODITY REFUNDS RECEIVED FROM VARIOUS SUPPLIERS

Line No.	Month	Refund	Number of Months		Rate	Amount of Interest	Total	
		(1) \$	(	(2)		(3) %	$(4 = 1 \times 2 \times 3)$	(5 = 1 + 4)
1	September, 2015	0	19	/	12	6.00%	0	0
2	October	0	18	/	12	6.00%	0	0
3	November	0	17	/	12	6.00%	0	0
4	December	0	16	/	12	6.00%	0	0
5	January, 2016	0	15	/	12	6.00%	0	0
6	February	0	14	/	12	6.00%	0	0
7	March	0	13	/	12	6.00%	0	0
8	April	0	12	/	12	6.00%	0	0
9	May	0	11	/	12	6.00%	0	0
10	June	0	10	/	12	6.00%	0	0
11	July	0	9	/	12	6.00%	0	0
12	August	0	8	/	12	6.00%	0	0
13	September	0	7	/	12	6.00%	0	0
14	TOTAL	0					0	0

# COLUMBIA GAS OF PENNSYLVANIA, INC. DEMAND REFUNDS RECEIVED FROM VARIOUS SUPPLIERS

Line No.	Month	Refund		mber Ionth		Rate	Amount of Interest	Total
<u> </u>	Wohth	(1)		(2)	15	(3)	$(4 = 1 \times 2 \times 3)$	(5 = 1 + 4)
		\$				%	\$	\$
1	September, 2015	0	19	/	12	6.00%	0	0
2	October	0	18	/	12	6.00%	0	0
3	November	0	17	/	12	6.00%	0	0
4	December	0	16	/	12	6.00%	0	0
5	January, 2016	50,299	15	/	12	6.00%	3,772	54,071
6	February	0	14	/	12	6.00%	0	0
7	March	0	13	/	12	6.00%	0	0
8	April	0	12	/	12	6.00%	0	0
9	May	0	11	/	12	6.00%	0	0
10	June	0	10	/	12	6.00%	0	0
11	July	0	9	/	12	6.00%	0	0
12	August	0	8	/	12	6.00%	0	0
13	September	0	7	/	12	6.00%	0	0
14	TOTAL	50,299					3,772	54,071

# COLUMBIA GAS OF PENNSYLVANIA, INC. DEMAND REFUNDS RECEIVED FROM VARIOUS SUPPLIERS

Line			Number		Amount of	
No.	Month	Refund	of Months	Rate	Interest	Total
		(1)	(2)	(3)	(4 = 1 x 2 x 3)	(5 = 1 + 4)
		\$		%	\$	\$
1	September, 2014	0	31 / 12	6.00%	0	0
2	October	0	30 / 12	6.00%	0	0
3	November	0	29 / 12	6.00%	0	0
4	December	0	28 / 12	6.00%	0	0
5	January, 2015	0	27 / 12	6.00%	0	0
6	February	0	26 / 12	6.00%	0	0
7	March	0	25 / 12	6.00%	0	0
8	April	0	24 / 12	6.00%	0	0
9	May	62,370	23 / 12	6.00%	7,173	69,543
10	June	0	22 / 12	6.00%	0	0
11	July	0	21 / 12	6.00%	0	0
12	August	107,844	20 / 12	6.00%	10,784	118,628
13	September	0	19 / 12	6.00%	0	0
14	TOTAL	170,213			17,957	188,170