

Adam J. Lanier Director Rates & Regulatory Affairs

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September 29, 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. 248 to Tariff Gas Pa. P.U.C. No. 9. Docket No. R-2016-2531807

Secretary Chiavetta:

Enclosed for filing on behalf of Columbia Gas of Pennsylvania, Inc. ("Columbia") is Supplement No. 248 to Tariff Gas Pa. P.U.C. No. 9 ("Supplement No. 248"). Supplement No. 248 issued September 30, 2016, to be effective October 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 \$0.02771/Therm in their gas supply and pass-through charges, effective October 1, 2016. The gas cost changes are reflected in the attached tariff rate schedules and Purchased Gas Cost Rider.

In accordance with Act 47, the Company has removed first year transportation service from the over-or-under collection adjustment (Commodity E-Factor) for the projected period October, 2016 – September, 2017 (see Line 10 on Exhibit 1-

A, Schedule 1, Sheet 1 of 2). In addition, the Company has reflected interest on the over-or-under collection at the current prime rate for commercial borrowing as reported in the Wall Street Journal, which is 3.5%, beginning September 1, 2016 (see Line 12 on Exhibit 1-E, Schedule 4, Sheet 1a of 6 and Sheet 1b of 6). The tariffs have been adjusted for changes related to Act 47 as well.

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

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: September 29, 2016 EFFECTIVE: October 1, 2016

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

NOTICE

This Tariff Supplement Makes Changes to the Existing Tariff – See the List of Changes Made by This Tariff Supplement on Page Nos. 2 through 2b.

LIST OF CHANGES MADE BY THIS TARIFF SUPPLEMENT

Page	Page Description	Revision Description
Cover	Tariff Cover Page	Supplement No., Issue and Effective Date.
2 – 2a	List of Changes	List of Changes.
16	Rate Summary	Deleted footnote "4/" and "5/". The "Gas Supply Charge" has decreased. The "Gas Cost Adjustment" has increased. The "Pass-through Charge" has decreased. The "Total Effective Rate" has increased and decreased.
17	Rate Summary	Deleted footnote "4/" and "5/". Deleted the "Usage Charge: Customer Electing CHOICE – 1st year" section and associated rates. Revised the heading "Usage Charge: Customer Electing Choice – more than 1 year". Changed the Rider EBS footnote "6/" label to footnote "4/". The "Gas Supply Charge" has decreased. The "Gas Cost Adjustment" has increased. The "Pass-through Charge" has decreased. The "Total Effective Rate" has increased and decreased.
18	Rate Summary	Deleted footnote "4/" and "5/". Changed the Rider EBS footnote "6/" label to footnote "4/". The "Gas Supply Charge" has decreased. The "Gas Cost Adjustment" has increased. The "Pass-through Charge" has decreased. The "Total Effective Rate" has increased.
19	Rate Summary	Deleted footnote "4/" and "5/". Changed the Rider EBS footnote "6/" label to footnote "4/". The "Gas Supply Charge" has decreased. The "Gas Cost Adjustment" has increased. The "Pass-through Charge" has decreased. The "Total Effective Rate" has increased.
20	Other Rates Summary	The "Residential Price-to-Compare" has increased. The "Commercial Price-to-Compare" has increased. The "Standby Service" has decreased.
21	Rider Summary	The "Merchant Function Charge – Rider MFC" has decreased.

Effective: October 1, 2016

LIST OF CHANGES MADE BY THIS TARIFF SUPPLEMENT

LIST OF CHANGES MADE BY THIS TARTER SUPPLEMENT								
Page	Page Description	Revision Description						
		The "PGCC" has decreased.						
21a	Gas Supply Charge Summary	The "Rider MFC" has decreased.						
		The "Total Gas Supply Charge" has decreased.						
		The "PGDC" has decreased.						
21b	Pass-through Charge Summary	The "PGDC "E" Factor" has increased.						
210	Pass-tillough Charge Summary	The "Capacity Assignment Factor" has increased.						
		The "Total Pass-through Charge" has decreased.						
		The "PGCC" has decreased.						
		The "Gas Cost Adjustment" has increased.						
21c	Price-to-Compare Summary	The "Capacity Assignment Factor" has decreased.						
		The "Rider MFC" has decreased						
		The "Total Price-to-Compare" has increased.						
76	Rate RSS	Revised the "RATE" paragraph.						
78	Rate RDS	Revised the "RATE" paragraph.						
86	Rate SGSS	Revised the "RATE" paragraph.						
92	Rate SGDS	Revised the "CUSTOMER DEVELOPMENT/RETENTION PROVISIONS" paragraph.						
93	Rate SCD	Revised the "RATE" paragraph.						
		The Purchased Gas Commodity Cost, made up of the Commodity Cost and the Commodity "E" Factor has increased.						
		The Commodity Cost has decreased.						
		The Commodity "E" Factor has increased.						
		The Demand Cost has decreased.						
151	Rider PGC	The Demand "E" Factor has increased.						
		The Purchased Gas Demand Cost billed to Rate SGDS has decreased.						
		The Purchased Gas Demand Cost billed to Rate RDS and Rate SCD has decreased.						
		The Capacity Assignment Factor credited to Rate RDS and Rate SCD has increased.						

LIST OF CHANGES MADE BY THIS TARIFF SUPPLEMENT

Page	Page Description	Revision Description
154	Rider PGC	The Purchased Gas Demand Cost billed to Rate RDS and Rate SCD has decreased. The Capacity Assignment Factor credited to Rate RDS and Rate SCD has decreased.
155	Rider PGC	Added the remainder of the "Demand "E" Factor" paragraph from page 156 and revised the last sentence.
156	Rider PGC	Moved the "Demand "E" Factor" paragraph text to page 155. Added separate designation for commodity and demand "E Factor" adjustments under the "ADJUSTMENT OF "E" FACTOR AMOUNTS". Moved the "SHARING OF OFF-SYSTEM SALES REVENUE" paragraph to page 158.
158	Rider PGC	Revised the "SHARING OF CAPACITY RELEASE REVENUE" paragraph. Added the "SHARING OF OFF-SYSTEM SALES REVENUE" paragraph from page 156.

Canceling One Hundred-fourth and One Hundred-sixth Revised Page No. 16

Columbia Gas of Fermsylvania, inc.			ancening One	i iui iui c u-ioui t	n and One Hund	ieu-sixiii itevi	seu rage No. 10
		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	16.75
Usage Charge	\$	0.47806	0.29994	(0.01917)	0.19498	0.00000	0.95381
Rate RDS - Residential Distribution Service							
Customer Charge Usage Charge:	\$	16.75				0.00	16.75
Customers Electing CHOICE	\$	0.47806	-	-	0.16481	0.00000	0.64287
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	d to the Cu	stomer Charge	and the Distribut	on Charge.			
Issued: September 29, 2016						Effective:	October 1, 2016

Mark Kempic - President

		Rate Sum	mary				
		Rate per	thm				
Commercial / Industrial Rate Schedules <= 64,400 therms - 12 Months Ending October		Distribution Charge	Gas Supply Charge 1/	Gas Cost Adjustment	Pass-through Charge 2/	State Tax Adjustment Surcharge	Total Effective Rate
Rate SGSS - Small General Sales Service							
Customer Charge:							
Annual Throughput <= 6,440 thm Annual Throughput > 6,440 thm and <= 64,400 thm	\$ \$	21.25 48.00				0.00 0.00	21.25 48.00
Isage Charge							
Annual Throughput <= 6,440 thm	\$	0.35939	0.29679	(0.01917)	0.12268	0.00000	0.75969
Annual Throughput > 6,440 thm and <= 64,400 thm	\$	0.32246	0.29679	(0.01917)	0.12268	0.00000	0.72276
tate SCD - Small Commercial Distribution							
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
Jsage Charge: Customers Electing CHOICE							
Annual Throughput <=6,440 thm	\$	0.35939	-	-	0.09251	0.00000	0.45190
Annual Throughput >6,440 and <=64,400 thm	\$	0.32246	-	-	0.09251	0.00000	0.41497
Rate SGDS - Small General Distribution Service							
Customer Charge:		04.05					24.25
Annual Throughput <= 6,440 thm	\$	21.25					21.25
Annual Throughput > 6,440 thm and <= 64,400 thm	\$	48.00					48.00
Jsage Charge - Priority One							
Annual Throughput <= 6,440 thm	\$	0.33759	-	-	0.12268	0.00000	0.46027
Annual Throughput > 6,440 thm and <= 64,400 thm	\$	0.32062	-	-	0.12268	0.00000	0.44330
sage Charge - Non-Priority One							
Annual Throughput <= 6,440 thm	\$	0.33759	-	-	0.00010	-	0.33769
Annual Throughput > 6,440 and <= 64,400 thm	\$	0.32062	-	-	0.00010	-	0.32072
/ Please see Page No. 21a for rate components.							
/ Please see Page No. 21b for rate components.	•						
The STAS percentage is reflected on Page No. 20 and is applied to the Plus Rider EBS Option 1 or 2 - See Page 21.	ne Custome	er Charge and t	the Distribution Cl	harge.			

Issued: September 29, 2016

	<u> </u>	Rate Summ	nary				
		Rate per th	m				
Commercial / Industrial Rate Schedules > 64,400 therms - 12 Months Ending October		Distribution Charge	Gas Supply Charge 1/	Gas Cost Adjustment	Pass-through Charge 2/	State Tax Adjustment Surcharge 3/	Total Effective Rate
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
Usage Charge:							
Annual Throughput > 64,400 thm and <= 110,000 thm	\$	0.20774	0.29550	(0.01917)	0.12258	0.00000	0.60665
Annual Throughput > 110,000 thm and <= 540,000 thm	\$	0.19422	0.29550	(0.01917)	0.12258	0.00000	0.59313
Annual Throughput > 540,000 thm and <= 1,074,000 thm	\$	0.12001	0.29550	(0.01917)	0.12258	0.00000	0.51892
Annual Throughput > 1,074,000 thm and <= 3,400,000 thm	\$	0.10645	0.29550	(0.01917)	0.12258	0.00000	0.50536
Annual Throughput > 3,400,000 thm and <= 7,500,000 thm	\$	0.09553	0.29550	(0.01917)	0.12258	0.00000	0.49444
Annual Throughput > 7,500,000 thm	\$	0.05684	0.29550	(0.01917)	0.12258	0.00000	0.45575
Rate SDS - Small Distribution 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
Usage Charge:	*	000.00				0.00	000.00
Annual Throughput > 64,400 thm and <= 110,000 thm	\$	0.20774	-	-	-	0.00000	0.20774
Annual Throughput > 110,000 thm and <= 540,000 thm	\$	0.19422	-	-	-	0.00000	0.19422
Data I DO La com Distribution Comiss							
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	-	-	-	0.00000	0.12001
Annual Throughput > 1,074,000 thm and <= 3,400,000 thm	\$	0.10645	-	-	-	0.00000	0.10645 0.09553
Annual Throughput > 3,400,000 thm and <= 7,500,000 thm	\$	0.09553	-	-	-	0.00000	0.09553 0.05684
Annual Throughput > 7,500,000 thm	\$	0.05684	-	-	-	0.00000	0.05684
/ Please see Page No. 21a for rate components.							
2/ Please see Page No. 21b for rate components.		th - D:	atuibutian Obar				
3/ The STAS percentage is reflected on Page No. 20 and is applied to the C 4/ Plus Rider EBS Option 1 or 2 - See Page 21.	Justomer Ch	large and the Di	smoution Charge.				
rod. Sentember 20, 2016							o. Ootobor 1 2

Issued: September 29, 2016 Effective: October 1, 2016

		Rate Summ	ary				
		Rate per th	m				
Main Line Service Rate Schedules Commercial / Industrial		Distribution Charge	Gas Supply Charge	Gas Cost Adjustment	Pass-through Charge 2/	State Tax Adjustment Surcharge	Total Effective Rate
			17		21	3/	
ate MLSS - Main Line Sales Service							
ustomer 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
sage Charge:							
MLS Class I Annual Throughput > 274,000 thm	\$	0.00937	0.29550	(0.01917)	0.12258	0.00000	0.40828
MLS Class II:							
Annual Throughput > 2,146,000 thm and <= 3,400,000 thm	\$	0.04479	0.29550	(0.01917)	0.12258	0.00000	0.44370
Annual Throughput > 3,400,000 thm and <= 7,500,000 thm	\$	0.03874	0.29550	(0.01917)	0.12258	0.00000	0.43765
Annual Throughput > 7,500,000 thm	\$	0.03355	0.29550	(0.01917)	0.12258	0.00000	0.43246
ate MLDS - Main Line Distribution Service							
ustomer 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
sage Charge:							
MLS Class I Annual Throughput > 274,000 thm	\$	0.00937	-	-	-	0.00000	0.00937
MLS Class II:	,						
Annual Throughput > 2,146,000 thm and <= 3,400,000 thm	\$	0.04479	-	-	_	0.00000	0.04479
Annual Throughput > 3,400,000 thm and <= 7,500,000 thm	\$	0.03874	-	-	_	0.00000	0.03874
Annual Throughput > 7,500,000 thm	\$	0.03355	-	-	-	0.00000	0.03355
Please see Page No. 21a for rate components.							
Please see Page No. 21b for rate components.							
The STAS percentage is reflected on Page No. 20 and is applied to the Cu	stomer C	harge and the Di	stribution Charge.				
Plus Rider EBS Option 1 or 2 - See Page 21.							

Issued: September 29, 2016

Supplement No. 248 to Tariff Gas - Pa. P.U.C. No. 9 Ninety-seventh Revised Page No. 20 Canceling Ninety-fifth and Ninety-sixth Revised Page No. 20

Columbia Gas of Pennsylvania, Inc.

Columbia Cas of 1 chinsylvania, inc.			Canceling Whice into and Whitely Sixth Revised 1 age No. 20
	Oth	er Rates Sum	nmary
		Rate per thm	
Description		Rate	Applicable Rate Schedules
		\$/ thm	
Price to Compare for Residential Gas Supply	\$	0.31094 1/	RSS
Price to Compare for Commercial Gas Supply	\$	0.30779 1/	SGSS (< = 64,400 thms)
State Tax Adjustment Surcharge Percentage		0.00000%	Customer and Distribution Charges on all rates
Rate SS - Standby Service	\$	0.74946	Per therm based on a customer's Maximum Daily Firm Requirement. See Pages 134 - 136 herein for
1/ Please see Page No. 21c for rate components.			

Issued: September 29, 2016 Effective: October 1, 2016

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Canceling One Hundred-thirteenth and One Hundred-fifteenth Revised Page No. 21

	R	dider Summary	
Riders	_	Rate	Applicable Rate Schedules
Customer Choice - Rider CC	\$	0.00010 /thm	RSS/RDS/SGSS/SGDS/SCD/DGDS
Universal Service Plan - Rider USP	\$	0.07230 /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:			555 · 5 3 55 · · · · · · · · · · · · · · · · · ·
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	\$	0.00444 /thm	RSS
Merchant Function Charge - Rider MFC	\$	0.00129 /thm	SGSS
Purchased Gas Cost - Rider PGC	Pg. 21a & 21b		Rate Schedules specified on Page 21a & 21b

Issued: September 29, 2016 Effective: October 1, 2016

Gas Supply Charge Summary Rate per thm Total Gas Supply Rate Schedule **PGCC** Rider GPC Charge Rider MFC **Rate CAP - Customer Assistance Plan** \$ **Rate RSS - Residential Sales Service** 0.28855 0.00695 0.00444 0.29994 Rate SGSS - Small General Sales Service 0.28855 0.00129 0.29679 0.00695 0.00695 Rate LGSS - Large General Sales Service 0.28855 0.29550 0.29550 **Rate MLSS Main Line Sales Service** 0.28855 0.00695

Issued: September 29, 2016 Effective: October 1, 2016

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			.				.
Rate Schedule	 PGDC	PGDC "E" Factor	Capacity Assignment Factor	Pipeline Refund	Rider CC	Rider USP	Total Pass- through
Rate CAP - Customer Assistance Plan	\$ 0.11696	0.00562	(0.03017)	-	-	-	0.0924
Rate RSS - Residential Sales Service	\$ 0.11696	0.00562	-	-	0.00010	0.07230	0.1949
Rate SGSS - Small General Sales Service	\$ 0.11696	0.00562	-	-	0.00010	-	0.1226
Rate LGSS - Large General Sales Service	\$ 0.11696	0.00562	-	-	-	-	0.1225
Rate MLSS Main Line Sales Service	\$ 0.11696	0.00562	-	-	-	-	0.1225
Rate RDS - Residential Distribution Service	\$ 0.11696	0.00562	(0.03017)	-	0.00010	0.07230	0.1648
Rate SCD - Small Commercial Distribution (Choice)	\$ 0.11696	0.00562	(0.03017)	-	0.00010	-	0.0925
Rate SGDS - Small General Distribution Service Priority One (P1) Non-Priority One (NP1)	\$ 0.11696	0.00562	- -	- -	0.00010 0.00010	-	0.1226 0.0001
Rate SDS - Small Distribution Service	\$ -	-	-	-	-	-	-
Rate LDS - Large Distribution Service	\$ -	-	-	-	-	-	-
Rate MLDS - Main Line Distribution Service	\$ _	_	-	-	-	-	_

Issued: September 29, 2016 Effective: October 1, 2016

Supplement No. 248 to Tariff Gas - Pa. P.U.C. No. 9 Twenty-first Revised Page No. 21c

Columbia Gas of Pennsylvania, Inc.

Canceling Nineteenth and Twentieth Revised Page No. 21c Price-to-Compare (PTC) Summary Rate per thm Total Capacity Gas Cost Assignment Price-to-**Customer Class PGCC** Rider GPC Adjustment Factor Rider MFC Compare Residential 0.28855 (0.01917)0.03017 0.00695 0.00444 0.31094 0.30779 Commercial < = 64,400 thm/year 0.28855 (0.01917)0.03017 0.00695 0.00129

Issued: September 29, 2016 Effective: October 1, 2016

Mark Kempic - President

RATE RSS - RESIDENTIAL SALES SERVICE

APPLICABILITY

Throughout the territory served under this Tariff.

AVAILABILITY

Available, at one location, for the total requirements of any residential customer.

RATE (C)

The customers under this rate schedule shall be subject to a Customer Charge, a Gas Supply Charge, a Distribution Charge, a Weather Normalization Adjustment, a Pass-through Charge and a Gas Cost Adjustment.

The rate information is detailed in the Rate Summary pages of this tariff.

The Distribution Charge may be flexed in accordance with the Flexible Rate Provisions set forth in the Rules and Regulations of this Tariff. For accounts with distributed generation served under this rate schedule, the term "alternate fuel" shall include electricity.

MINIMUM CHARGE

The minimum charge shall be the Customer Charge.

STATE TAX ADJUSTMENT SURCHARGE

The charges described in this rate schedule are subject to a State Tax Adjustment Surcharge as set forth in this tariff.

RIDER PGC

The Pass-through Charge and the Gas Supply Charge include recovery of purchased gas costs pursuant to the Purchased Gas Cost Rider of this tariff.

USP COSTS AND CUSTOMER CHOICE COSTS

Rider Universal Services Plan and Rider Customer Choice as specified within Rider USP and Rider Customer Choice in this tariff will be reflected in the Pass-through Charge on the customer bill.

DISTRIBUTION SYSTEM IMPROVEMENT CHARGE

Rate RSS is subject to a Distribution System Improvement Charge as specified within Rider DSIC of this Tariff.

RATE RDS - RESIDENTIAL DISTRIBUTION SERVICE

APPLICABILITY

Throughout the territory served under this Tariff.

AVAILABILITY

Available to any residential customer meeting the following conditions:

- 1. The customer does not take service under any other rate schedule.
- 2. The customer or group of customers having an aggregate annual demand of at least 53,650 thm or a minimum of 50 customers and in compliance with the aggregation provisions in the Rules Applicable to Distribution Service elect an NGS to provide natural gas commodity service. The gas supply for each aggregation must enter the Company's system at a city gate(s) used by the Company to serve the customers unless otherwise permitted by Columbia.

CHARACTER OF SERVICE

Service furnished pursuant to this rate schedule shall be considered firm service.

RATE (C)

The customers under this rate schedule shall be subject to a Customer Charge, a Distribution Charge, a Weather Normalization Adjustment and a Pass-through Charge.

The rate information is detailed in the Rate Summary pages of this tariff.

The Distribution Charge may be flexed in accordance with the Flexible Rate Provisions set forth in the Rules and Regulations of this Tariff. For accounts with distributed generation served under this rate schedule, the term "alternate fuel" shall include electricity.

MINIMUM CHARGE

The minimum charge shall be the Customer Charge.

RIDER PGC

The Pass-through Charge includes recovery of purchased gas demand costs pursuant to the Rider PGC as set forth in this Tariff.

STATE TAX ADJUSTMENT SURCHARGE

The charges described in this rate schedule are subject to a State Tax Adjustment Surcharge as set forth in this tariff.

USP COSTS AND CUSTOMER CHOICE COSTS

Rider Universal Service Plan and Rider Customer Choice as specified within Rider USP and Rider Customer Choice in this tariff will be reflected in the Pass-through Charge on the customer bill.

DISTRIBUTION SYSTEM IMPROVEMENT CHARGE

Rate RDS is subject to a Distribution System Improvement Charge as specified within Rider DSIC of this Tariff.

RATE SGSS - SMALL GENERAL SALES SERVICE

APPLICABILITY

Throughout the territory served under this Tariff.

AVAILABILITY

Available, at one location, for the total requirements of any commercial or industrial customer whose total throughput requirements are less than or equal to 64,400 thm annually, and who does not contract for distribution service.

RATE (C)

The customers under this rate schedule shall be subject to a Customer Charge, a Gas Supply Charge, a Distribution Charge, a Pass-through Charge and a Gas Cost Adjustment.

The rate information is detailed in the Rate Summary pages of this Tariff.

MINIMUM CHARGE

The minimum charge shall be the Customer Charge.

DETERMINATION OF CUSTOMER CHARGE

The Customer Charge will be determined based upon the Customer's actual throughput quantities, including sales and distribution, measured in therms (thm), for the twelve most recent billing cycle periods ending with the October billing cycle. If a Customer does not have sufficient consumption history to determine its Customer Charge based on twelve months, the Customer Charge will be developed by annualizing the consumption history available. In the instance where a customer has no consumption history, the Company will request the Customer to submit estimated annual gas requirement, including sales and distribution, upon which to develop the Customer Charge. The Company in all cases retains the right to review and modify the Customer's estimate where necessary. A customer's Customer Charge will remain constant annually, subject to change as of the January billing cycle of each year.

In all cases, the Company reserves the right to review the Customer Charge and, upon receipt of satisfactory proof, to adjust the Customer Charge to reflect the installation and use of energy efficient gas burning equipment, or the implementation of energy conservation practices or measures, which results in a measurable permanent change in the customer's requirement or consumption.

RATE SGDS - SMALL GENERAL DISTRIBUTION SERVICE (Continued)

CUSTOMER DEVELOPMENT/RETENTION PROVISIONS (Continued)

c. If the Customer qualifies under these Customer Development/Retention Provisions, the monthly charges for service to the Customer shall be computed based upon a declining, percentage reduction in the Distribution Charge under this rate schedule. The Customer Charge, Gas Supply Charge, Pass-through Charge, penalties and charges of third party transporters, if any, to a Customer served under this rate schedule are not subject to reduction. The percentage reductions are as follows:

(C)

First Year 35% reduction Second Year 25% reduction Third Year 15% reduction

2. Except as modified by the terms of these Customer Development/Retention Provisions, all provisions of this rate schedule apply to service to the Customer.

SPECIAL PROVISIONS

- 1. If service is discontinued at the request of the customer, the Company shall be under no obligation to reconnect service to the same customer on the same premises until the customer pays the minimum charge for each billing cycle of the intervening period, but not to exceed twelve (12) months.
- 2. Where a customer has installed a gas light(s) in lighting devices approved by the Company, and the gas used by such light(s) is unmetered, the gas consumed by such light(s) shall be assumed to be twenty-one (21) thm per billing cycle when the Btu/hr input rating for such light(s) is 2,700 or less. For each additional 1,350 Btu/hr or fraction thereof, the assumed consumption shall be increased by eleven (11) thm per billing cycle. Such assumed consumption shall be billed under the rates contained herein, or if in combination with metered usage under this rate schedule, shall be added to the customer's metered usage and the total billed under the rates contained herein.
- 3. Energy usage eligibility for this rate schedule will be determined annually. In the event the Customer's total annual purchases of sales and distribution are in excess of 64,400 thm, the customer shall be transferred to Rate SDS, or Rate LDS, as applicable.
- 4. The Company reserves the right, as a condition of service or as a condition of continuation of service under this rate schedule, to require the customer to install and bear the costs associated with a daily demand reading meter plus all costs associated with dedicated telephone lines and telemetering equipment, and such installation shall be at the expense of the customer, excluding the cost of the meter. The meter and associated telemetering equipment shall be the property of the Company.

RULES AND REGULATIONS

The Rules and Regulations Governing the Distribution and Sale of Gas of this Tariff, which are not inconsistent with the provisions of this rate schedule, shall govern where applicable, the supply of gas service under this rate schedule.

RATE SCD - SMALL COMMERCIAL DISTRIBUTION

APPLICABILITY

Throughout the territory served under this Tariff.

AVAILABILITY

Available to any commercial customer meeting the following conditions:

- 1. The customer's historic throughput is less than or equal to 64,400 thm annually.
- 2. The customer does not take service under any other rate schedule.
- 3. The customer or group of customers having an aggregate annual demand of at least 53,650 thm or a minimum of 50 customers and in compliance with the aggregation provisions in the Rules Applicable to Distribution Service elect an NGS to provide natural gas commodity service. The gas supply for each aggregation must enter the Company's system at a city gate(s) used by the Company to serve the customers unless otherwise permitted by Columbia.

CHARACTER OF SERVICE

Service furnished pursuant to this rate schedule shall be considered firm service.

RATE (C)

The customers under this rate schedule shall be subject to a Customer Charge, a Distribution Charge and a Pass-through Charge.

The rate information is detailed in the Rate Summary pages of this Tariff.

The Pass-through Charge includes the applicable Purchase Gas Demand Cost rate.

The Distribution Charge may be flexed in accordance with the Flexible Rate Provisions set forth in the Rules and Regulations of this Tariff.

MINIMUM CHARGE

The minimum charge shall be the Customer Charge.

STATE TAX ADJUSTMENT SURCHARGE

The charges described in this rate schedule are subject to a State Tax Adjustment Surcharge as set forth in the tariff.

(I)(D)

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 \$0.39196 per thm for recovery of purchased gas costs. This rate includes the commodity cost component (CC) of \$0.28855 per thm, the commodity "E" Factor component (CE) of (\$0.01917) per thm, the demand cost component (DC) of \$0.11696 per thm, and the demand "E" Factor component of \$0.00562 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 shall include 0.12258 per thm for recovery of Purchased Gas Demand Costs (PGDC). This rate includes the DC of 0.11696 per thm and the demand "E" Factor component of 0.00562 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 \$0.09241 per thm for (I)(D) recovery of Purchased Gas Demand Costs. This rate includes the DC of \$0.11696 per thm, the Capacity Assignment Factor (CAF) of (\$0.03017) per thm and the DC "E" Factor component of \$0.00562 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 Charge includes the PGDC of \$0.11696 per thm plus the demand "E" Factor of \$0.00562 per thm. The two factors total \$0.12258 per thm. The Gas Supply Charge includes the PGCC of \$0.28855 per thm. The Gas Cost Adjustment is the commodity "E" Factor of (\$0.01917) per thm.

For General Distribution Service customers served under Priority-One Rate SGDS, the Pass-through Charge includes the PGDC of \$0.11696 per thm and the demand "E" Factor component of \$0.00562 per thm, totaling \$0.12258 per thm.

For Choice Distribution Service customers served under Rate RDS or Rate SCD, the Pass-through Charge includes the PGDC of \$0.11696 per thm, the CAF of (\$0.03017) per thm and the demand "E" Factor component of \$0.00562 per thm, all of which total \$0.09241 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.

(D) Indicates Decrease (I) Indicates Increase

(D)

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 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 \$0.09241 per thm. Such rate shall be equal to the PGDC component of \$0.12258 per thm as calculated above, less the CAF of \$0.03017 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 \$0.03017 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.

(D) Indicates Decrease (I) Indicates Increase

RIDER PGC - PURCHASED GAS COST (Continued)

DETERMINATION OF OVER/UNDERCOLLECTION OF GAS COSTS - Continued

- (b) The following amount shall be included as revenues recovered for gas commodity costs:
 - (1) an amount determined by multiplying commodity sales quantities subject only to Rider PGC billed under the Rate RSS, Rate SGSS, Rate LGSS, and Rate MLSS rate schedules, for the applicable over/undercollection period, times the PGCC component excluding the commodity E Factor; plus
 - (2) an amount determined by multiplying commodity sales quantities billed under Rate SGDS, Rate SDS, Rate LDS, Rate MLDS, and Rate SDSS rate schedules, times the index price of gas defined in the Consumption in Excess of Deliveries section of the Rules Applicable to Distribution Service.

Demand "E" Factor

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

- (a) All experienced purchased gas demand costs actually incurred by the Company to service customers pursuant to all rate schedules of this tariff, excluding the cost of capacity acquired for the purpose of providing Full Balancing Service under Option 1 of the Elective Balancing Services Rider. Capacity acquired to provide Full Balancing Service under EBS Option 1 will include sufficient storage capacity for the aggregate of the maximum banks provided under this option, and sufficient storage withdrawal and transportation capacity to provide the firm balancing entitlements.
- (b) The following amount shall be included as revenues recovered for gas demand costs:
 - (1) an amount determined by multiplying Distribution quantities billed under this Rider for the Rate RSS, Rate CAP, Rate RDS, Rate SCD, Rate SGSS, Priority One Rate SGDS, Rate LGSS and MLSS rate schedules, for the applicable over/undercollection period, times the PGDC component excluding the demand E Factor; plus
 - (2) the amounts billed under Rate SS; plus
 - (3) the amounts billed distribution service customers under Rider EBS Option 2; plus
 - (4) credits received for capacity assigned pursuant to the Rules Applicable to Distribution Service.

Interest on over/under collection of commodity and demand costs shall be computed in accordance with Section 1307(f)(5) of the Public Utility Code from the month that the over or undercollection occurs to the effective month such over or undercollection is refunded.

(C)

RIDER PGC - PURCHASED GAS COST (Continued)

DETERMINATION OF OVER/UNDERCOLLECTION OF GAS COSTS - Continued

ADJUSTMENT OF "E" FACTOR AMOUNTS

Each 1307(f) rate shall also provide for refund or recovery of amounts necessary to adjust for over or underrecoveries of "E" Factor amounts included in prior 1307(f) rates. In computing the amount to be included for over or undercollection of "E" Factor amounts, the amount recovered for "E" Factor amounts under the prior 1307(f) rate shall be determined by multiplying the applicable Distribution quantities billed under the Rate CAP, Rate RSS, Rate SGSS, Rate LGSS, Rate MLSS, Rate RDS, Priority One Rate SGDS, and Rate SCD rate schedules during the applicable 1307(f) period times the portion of the PGCC and the PGDC component that provides for recovery of "E" Factor amounts.

SUPPLIER REFUNDS APPLICABLE TO RATE SS CUSTOMERS

Any supplier refunds received from Columbia Gas Transmission Corporation, which are specifically identified as refunds of Contract Demand charges made after March 31, 1992, shall be refunded pro rata to customers taking service during the applicable prior period(s) under Rate SS. All refunds shall include interest added at the annual rate of six percent (6%) calculated from the month received to the month the refund is made. Refunds shall be paid once each year, as soon as practicable following October 30 of each year, and shall include all applicable supplier refunds received by the Company during the preceding twelvemonth period ended October 30.

PURCHASED GAS COST RIDER (Continued)

RATE NGV GAS COST CREDIT - Continued

1. Demand Costs - continued

For interruptible sales under Rate NGV, an amount for recovery of upstream capacity costs, which is the greater of the following:

- The average rate per thm of all final accepted bids for thirty day recallable capacity received by the Company five days prior to the commencement of each month of the contract; or
- b. \$.00465/thm in December, January and February, and \$.00093/thm in all other months.

2. Commodity Costs

The amount to be credited for recovery of commodity costs shall be determined on a monthly basis and shall equal the highest cost of spot purchases scheduled to commence on the first day of each month, including transportation and retainage. If no spot purchases are scheduled, the amount to be credited shall be the average commodity cost of gas purchased during the months, including transportation and retainage.

SHARING OF CAPACITY RELEASE REVENUE

Capacity release credits derived from "administrative releases" shall be excluded from the foregoing sharing calculation, and all such credits actually derived shall be included in the demand "E" Factor in their entirety. "Administrative releases" are defined as follows:

(C)

- (i) Revenues for release of capacity to a producer or marketer where Columbia purchased the gas transported by the producer or marketer for its system supply;
- (ii) Revenues from releases of capacity at full margin to certain end-use customers where such releases were the result of the conversion of pre-Federal Energy Regulatory Commission Order No. 636 buy-sell arrangements; and
- (iii) Revenues from releases of capacity used in serving end users in a Commission-approved unbundling of service, provided that the benchmark would be adjusted to reflect the assignment of such capacity.

SHARING OF OFF-SYSTEM SALES REVENUE

Following is the definition of gas cost for off-system sales program:

- (i) For sales in which a specific purchase is not made, the cost of gas will be defined as the daily average city gate commodity cost of the gas supplies purchased by the Company and flowing on the first of the month (WACCOG). For sales made upstream of the Company's city gate, the cost of transportation, including retainage, from the point of sale to the city gate will be subtracted from the WACCOG. This amount will be further adjusted to include applicable taxes, other than income taxes, and other costs.
- (ii) For incremental sales in which a specific purchase is made, the cost of gas will be defined as the purchase price plus transportation costs, including retainage, taxes and other costs that have or will be incurred.

(C) Indicates Change

Issued: September 29, 2016 Mark Kempic Effective: October 1, 2016
President

COLUMBIA GAS OF PENNSYLVANIA, INC. COMPUTATION OF CHANGE IN RATE PURSUANT TO SECTION 1307(f) APPLICATION PERIOD: OCTOBER, 2016 THROUGH SEPTEMBER, 2017

Line No.	Description	Amount	
110.	Description	(1)	=
1	Purchased Gas Commodity Cost	\$	
2	Commodity Cost of Gas (Exhibit 1-B, Schedule 1)	95,937,270	
3	Projected tariff sales for the twelve billing periods of	75,751,210	
4	October, 2016 through September, 2017	332,476,097	Therms
5	PGCC (Line 2/Line 4)	0.28855	- 111011113
J	1 000 (Bin 2 2 in 1)	0.2000	
6	Commodity (Over)/Under Collection		
7	Commodity E-Factor	(6.272.700)	
8	(Exhibit No. 1-E)	(6,372,700)	
9	Projected sales for the twelve billing periods of	222 476 007	TI
10	October, 2016 through September, 2017	332,476,097	_
11	Commodity E-Factor (Line 8/ Line 10)	(0.01917)	
12	Purchased Gas Demand Cost		
13	Demand cost of gas (Exhibit 1-B, Schedule 1)	62,156,240	
14	Less: Purchased Gas Demand recovered under Rate SS		
15	(Exhibit 1-A, Schedule 2, Sheet 2)	529,898	
16	Less: Purchased Gas Demand Cost allocated to Rates LTS, STS,		
17	SGS-TS and MLS (Exh 1-A, Sch 2, Page 3)	0	_
18	Subtotal (Line 13 - Line 15 - Line 17)	61,626,342	
19	Projected sales for the twelve billing periods of		
20	October, 2016 through September, 2017 1_/	463,638,520	Therms
21	PGDC Rate prior to Capacity Release Credit (Line 18 / Line 20)	0.13292	
22	Off System Sales and Capacity Release Credit	(0.01596)	_
23	PGDC Rate	0.11696	
24	Demand (Over)/Under Collection		
25	Demand E- Factor		
26	(Exhibit No. 1-E)	2,606,823	
27	Projected sales for the twelve billing periods of		
28	October, 2016 through September, 2017 1_/	463,638,520	Therms
29	Demand E-Factor (Line 26 / Line 28)	0.00562	
30	Total Purchased Gas Cost		
31	PGCC Rate (Line 5)	0.28855	
32	PGDC Rate (Line 23)	0.11696	
33	PGC Rate	0.40551	- "
34	Currently effective PGC	0.44658	_
35	Increase (Decrease) in PGC	(0.04107)	
36	Net (Over) Under Collection		
37	Commodity E-Factor (Line 11)	(0.01917)	
38	Demand E-Factor (Line 29)	0.00562	
39	E-Factor	(0.01355)	_
40	Currently effective E-Factor	(0.08233)	
41	Increase (Decrease) in E-Factor	0.06878	
42	PGC Rate	0.40551	
43	E-Factor	(0.01355)	
44	Total Rate	0.39196	_
45	Currently effective Rate	0.36425	
46	Increase (Decrease) in Rate	0.02771	-

COLUMBIA GAS OF PENNSYLVANIA, INC. PURCHASED GAS COST RECOVERED UNDER RATES SS AND COMPUTATION OF DAILY PURCHASED GAS DEMAND APPLICATION PERIOD: OCTOBER, 2016 THROUGH SEPTEMBER, 2017

Line				
No.	Description	Detail		Total
		(1)		(2)
1	Total estimated demand charges for the period			
2	October, 2016 through September, 2017	62,156,240		
3	Estimated Demand Quantity (Therms) 1_/	82,934,160		
4	Daily purchased gas demand rate (Line 2 / line 3)	\$0.74946	per Therm	
5	Daily purchased gas demand (Therms)	707,040	Therms	
6	Daily purchased gas demand rate per Therm	\$0.74946	_	
7	Total rate SS Daily Demand Cost to be			
8	Recovered (Line 5 x Line 6)			\$529,898
7	Total rate SS Daily Demand Cost to be	\$0.74946		\$529,89

¹_/ Monthly Demand Billing Determinants x 12

COLUMBIA GAS OF PENNSYLVANIA, INC. SUMMARY OF PROJECTED SALES QUANTITIES AND REVENUES FOR THE PERIOD SALES AT PGCC AND PGDC RATES OCTOBER, 2016 THROUGH SEPTEMBER, 2017

Line		Sales Subject	PGCC	PGCC	Sales Subject	PGDC	PGDC	Purchased Gas Cost	
No.	Month	To PGCC	Rate 1_/	Revenue	To PGDC	Rate 1_/	Revenue	Revenue	
		(1)	(2)	(3=1x2)	(4)	(5)	(6=4x5)	(7=3+6)	
		Therms	\$/Therm	\$	Therms	\$/Therm	\$	\$	
1	October - 2016	8,110,835	0.28855	2,340,381	12,279,069	0.13292	1,632,134	3,972,515	
2	November	21,261,672	0.28855	6,135,055	30,480,794	0.13292	4,051,507	10,186,562	
3	December	44,199,912	0.28855	12,753,885	61,472,104	0.13292	8,170,872	20,924,757	
4	January - 2017	65,450,301	0.28855	18,885,684	89,569,295	0.13292	11,905,551	30,791,235	
5	February	65,393,059	0.28855	18,869,167	89,131,749	0.13292	11,847,392	30,716,559	
6	March	53,636,333	0.28855	15,476,764	73,434,895	0.13292	9,760,966	25,237,730	
7	April	34,612,491	0.28855	9,987,434	48,115,320	0.13292	6,395,488	16,382,922	
8	May	16,855,101	0.28855	4,863,539	24,093,161	0.13292	3,202,463	8,066,002	
9	June	8,185,978	0.28855	2,362,064	12,160,738	0.13292	1,616,405	3,978,469	
10	July	5,087,790	0.28855	1,468,082	7,797,860	0.13292	1,036,492	2,504,574	
11	August	4,647,838	0.28855	1,341,134	7,298,745	0.13292	970,149	2,311,283	
12	September	5,034,787	0.28855	1,452,788	7,804,790	0.13292	1,037,413	2,490,201	
13	Total	332,476,097		95,935,977	463,638,520		61,626,832	157,562,809	

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, 2016 THROUGH SEPTEMBER, 2017

		Daily		
		Purchased	Daily	Daily
Line		Gas Demand	Gas Demand	Purchased Gas
No.	Month	Quantity	Rate	Demand Revenue
		(1)	(2)	(3=1x2)
		Therms	\$/Therm	\$
1	October - 2016	58,920	0.74946	44,158
2	November	58,920	0.74946	44,158
3	December	58,920	0.74946	44,158
4	January - 2017	58,920	0.74946	44,158
5	February	58,920	0.74946	44,158
6	March	58,920	0.74946	44,158
7	April	58,920	0.74946	44,158
8	May	58,920	0.74946	44,158
9	June	58,920	0.74946	44,158
10	July	58,920	0.74946	44,158
11	August	58,920	0.74946	44,158
12	September	58,920	0.74946	44,158
13	Total	707,040		529,898

COLUMBIA GAS OF PENNSYLVANIA, INC. SUMMARY OF PROJECTED SALES QUANTITIES AND REVENUES FOR THE PERIOD SALES AT BANKING AND BALANCING RATES OCTOBER, 2016 THROUGH SEPTEMBER, 2017

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 2016	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 2017	0	0.00226	0	0	0.00697	0	0
	Junuary 2017	Ü	0.00220	Ü	O	0.00077	O	Ü
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
8	May	0	0.00226	0	0	0.00697	0	0
9	June	0	0.00226	0	0	0.00697	0	0
10	July	0	0.00226	0	0	0.00697	0	0
11	August	0	0.00226	0	0	0.00697	0	0
12	September	0	0.00226	0	0	0.00697	0	0
12	September		0.00220			0.00077		
13	Total	0		0	0		0	0

COLUMBIA GAS OF PENNSYLVANIA, INC. SUMMARY OF PROJECTED TOTAL OVER/UNDERCOLLECTION FOR THE 2016 1307(f) PERIOD OCTOBER, 2016 THROUGH SEPTEMBER, 2017

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
		(1)	(2)	(3=1-2)	(4)	(5)	(6=4-5)	(7=3+6)
		\$	\$	\$	\$	\$	\$	\$
1	October 2016	2,340,381	3,811,361	(1,470,980)	1,676,292	5,884,404	(4,208,112)	(5,679,092)
2	November	6,135,055	9,654,416	(3,519,361)	4,095,665	5,886,852	(1,791,187)	(5,310,548)
3	December	12,753,885	17,077,268	(4,323,383)	8,215,030	5,936,192	2,278,838	(2,044,544)
4	January 2017	18,885,684	21,213,642	(2,327,958)	11,949,709	5,936,212	6,013,497	3,685,539
5	February	18,869,167	18,284,369	584,798	11,891,550	5,936,212	5,955,338	6,540,136
6	March	15,476,764	13,729,537	1,747,228	9,805,124	5,936,212	3,868,912	5,616,140
7	April	9,987,434	6,382,828	3,604,606	6,439,646	4,440,026	1,999,620	5,604,226
8	May	4,863,539	2,483,502	2,380,037	3,246,621	4,440,026	(1,193,405)	1,186,633
9	June	2,362,064	834,810	1,527,254	1,660,563	4,440,026	(2,779,463)	(1,252,209)
10	July	1,468,082	737,549	730,533	1,080,650	4,440,026	(3,359,376)	(2,628,843)
11	August	1,341,134	719,491	621,643	1,014,307	4,440,026	(3,425,719)	(2,804,076)
12	September	1,452,788	1,008,498	444,290	1,081,571	4,440,026	(3,358,455)	(2,914,165)
13	Total	95,935,977	95,937,270	(1,294)	62,156,730	62,156,240	490	(803)

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

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, 2017

\$62,156,240		1. Projected Demand Costs Oct. 2016 through Sept. 2017 (Exh. 1-E	3, Sch. 1 from Oct. 2016 PGC)
(529,898)		1a. Less Purchased Gas Demand Costs Recovered Under Rate SS	
0		(Exhibit 1-A, Schedule 1, Sheet 2) 1b. Less Purchased Gas Demand Allocated to Rates LTS, STS, SGS	-TS, and MLS
2,606,823		1c. Experienced Demand Net Under/(Over) Collection (Exhibit No.	1-E)
\$64,233,165		2. Total Adjusted Demand Costs per 1307(f) Filing (1) + (1a) + (1b) + (1c)
\$126.86	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	3, Sheet 2)
46,364	MMDth	4. Projected Sales & Choice Requirements for 12 billing periods of 6 through September, 2017	October, 2016
46,688	MMDth	5. Projected Sales & Choice Requirements 12 months ended Septem Unaccounted For @ 0.7%	ber 2017, including
21,755	MMDth	6. 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 Sys	tem
1.0070	Dth	7c. Quantity Delivered to the City Gate. (7a)/(1-7b)	
\$1.3854	per Dth	8. Unit Demand Charge: (2) / (4)	
(\$0.1596)	per Dth	9. OSS and Capacity Release Credit	
0.0028	Dth	10. Average Daily FT Delivery: (7c) / 365 days	
\$0.3552	per Dth	11. Annual Demand Charge for the Assigned FT Capacity payable to	to the pipeline(s): $(3) X (10)$
\$1.0302	per Dth	12. Annual Demand Charge for other capacity that CPA retains (8) -	(11)
0.4692	Dth	13. Quantity Injected and Withdrawn to Deliver 1 Dth to the Custon	ner: (6) / (4)
\$0.0072		14a. Injection Charge @ \$0.0153/Dth	
\$0.0021		14b. FSS Shrinkage @ 0.15 percent for gas at \$2.9247/Dth	
\$0.0072		14c. Withdrawal Charge @ \$0.0153/Dth	
\$0.0090		14d. SST Commodity Charge @ \$0.0192/Dth	
\$0.0280	-	14e. SST retention @ 2.0420% for gas at \$2.9247/Dth	
\$0.0535	per Dth	14f. Total Annual Variable Storage Costs	
		15. Credit to Purchased Gas Demand Charge for the CHOICE Custo	omer:
\$0.3552	per Dth	15a. For Demand Cost Paid to Pipelines: $= (11)$	
(\$0.0535)		15b. Less Storage Costs: = (14f)	
\$0.3017	per Dth	15c. Net Credit: (15a) + (15b)	
\$0.03017	per Therm	15d. Per Therm: (15c)/10 - Capacity Assignment Factor	
\$0.9241	per Dth	16. Purchased Gas Demand Charge Paid By the CHOICE Customer:	(8)+(9) - (15c)
\$0.09241	per Therm	17. Per Therm: (16)/10	October 1 2016 Quarterly Fi

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	CGT	Total:
	FT	FTS-1	TCO and
	Capacity	Capacity	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/	\$9,461,268	\$2,247,060	
4a. Monthly Billing Determinants	127,373	43,632	
4b. Annual Demand Charge (4/4a)	\$74.28	\$51.50	
4c. Monthly Demand Charge (4b / number of months)	\$6.190	\$4.292	
Transportation Pilot: Allocation Capacity and Costs.			
5. Capacity Allocation:	1.0000	1.0208 2/	
6. Number of Months	12	12	
7. Unit Annual Cost of City Gate Capacity: (4c) x (5) x (6) \$/Dth	\$74.28	\$52.58 <u> </u>	\$126.86

Notes:

^{1/} Projected demand costs for the period 12 months ended September, 2017.

 $^{2/1.020 \}text{ Dth/day} = 1.000 / (1-\text{retention}) = 1.000 / (1-0.02042)$

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 2016 Through September 2017

Line			2016						2017					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
1	Total Quantity													
2	DTH	1,434,000	3,580,000	6,049,000	7,539,000	6,451,000	5,022,000	2,228,000	823,000	241,000	211,000	193,000	296,000	34,067,000
2	T. ID. IC.	5 004 404	5 006 050	5.026.102	5.026.212	5.026.212	5.026.212	4.440.026	4 440 026	4 440 026	4 440 026	4 440 026	4 440 026	62.156.240
3	Total Demand Costs	5,884,404	5,886,852	5,936,192	5,936,212	5,936,212	5,936,212	4,440,026	4,440,026	4,440,026	4,440,026	4,440,026	4,440,026	62,156,240
4	Total Commodity Costs	3,811,361	9,654,416	17,077,268	21,213,642	18,284,369	13,729,537	6,382,828	2,483,502	834,810	737,549	719,491	1,008,498	95,937,270
5	Total Estimated Gas Costs	9,695,765	15,541,268	23,013,460	27,149,854	24,220,581	19,665,749	10,822,854	6,923,528	5,274,836	5,177,575	5,159,517	5,448,524	158,093,510
3	(Line 5 = Line 3 + Line 4)	7,075,705	13,341,200	23,013,400	27,147,034	24,220,361	17,003,747	10,822,834	0,723,320	3,274,630	3,177,373	3,132,317	3,440,324	136,073,310

COLUMBIA GAS OF PENNSYLVANIA, INC.

Summary of Total Estimated Purchased Gas Costs $\underline{Demand\ Costs}$

Line			2016						2017					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
1	Columbia Gas Transmission	4,954,428	4,954,428	4,954,428	4,954,428	4,954,428	4,954,428	3,579,231	3,579,231	3,579,231	3,579,231	3,579,231	3,579,231	51,201,954
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	238,272	238,272	287,612	287,632	287,632	287,632	238,272	238,272	238,272	238,272	238,272	238,272	3,056,684
4	Dominion Transmission	165,371	200,935	200,935	200,935	200,935	200,935	164,338	164,338	164,338	164,338	164,338	164,338	2,156,074
5	Tennessee Gas	343,973	277,978	277,978	277,978	277,978	277,978	277,978	277,978	277,978	277,978	277,978	277,978	3,401,731
6	National Fuel Gas	15,946	15,946	15,946	15,946	15,946	15,946	15,946	15,946	15,946	15,946	15,946	15,946	191,352
7	Equitrans	4,159	37,038	37,038	37,038	37,038	37,038	2,006	2,006	2,006	2,006	2,006	2,006	201,385
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	5,884,404	5,886,852	5,936,192	5,936,212	5,936,212	5,936,212	4,440,026	4,440,026	4,440,026	4,440,026	4,440,026	4,440,026	62,156,240

COLUMBIA GAS OF PENNSYLVANIA, INC.

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

Line			2016						2017					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
1	Term	1,970,730	1,808,667	8,146,086	8,323,837	7,763,534	1,956,612	2,165,479	2,528,560	2,604,705	2,735,768	2,746,860	2,575,703	45,326,541
2	Spot	3,297,508	840,588	434,930	345,697	306,838	1,623,846	10,191,406	9,056,606	7,475,312	7,277,190	7,240,637	6,721,397	54,811,955
3	Local	55,242	55,566	63,822	66,660	60,740	65,978	57,981	60,280	58,233	61,732	61,974	58,821	727,029
4	Storage	(1,512,119)	6,949,595	8,432,430	12,477,448	10,153,257	10,083,101	(6,032,038)	(9,161,944)	(9,303,440)	(9,337,141)	(9,329,980)	(8,347,423)	(4,928,255)
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	3,811,361	9,654,416	17,077,268	21,213,642	18,284,369	13,729,537	6,382,828	2,483,502	834,810	737,549	719,491	1,008,498	95,937,270

Summary of Total Estimated Purchased Gas Costs <u>Commodity Quantities</u>

Line			2016						2017					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
	Term													
1	Total-DTH	706,000	625,000	2,618,000	2,553,000	2,377,000	596,000	712,000	836,000	853,000	888,000	889,000	837,000	14,490,000
2	<u>Spot</u> Total-DTH	1,340,000	293,000	155,000	155,000	140,000	547,000	3,654,000	3,260,000	2,673,000	2,577,000	2,556,000	2,390,000	19,740,000
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	Storage Total-DTH	(634,000)	2,641,000	3,254,000	4,809,000	3,914,000	3,857,000	(2,159,000)	(3,295,000)	(3,306,000)	(3,276,000)	(3,274,000)	(2,952,000)	(421,000)
5	Total - All Sources Total-DTH	1,434,000	3,580,000	6,049,000	7,539,000	6,451,000	5,022,000	2,228,000	823,000	241,000	211,000	193,000	296,000	34,067,000

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

Line			2016						2017					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
<u> </u>		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
	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	6.1900	6.1900	6.1900	6.1900	6.1900	6.1900	6.1900	6.1900	6.1900	6.1900	6.1900	6.1900	
5	Demand Cost	788,439	788,439	788,439	788,439	788,439	788,439	788,439	788,439	788,439	788,439	788,439	788,439	9,461,268
	Tag P													
	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
	<u>SST</u>													
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	6.0200	6.0200	6.0200	6.0200	6.0200	6.0200	6.0200	6.0200	6.0200	6.0200	6.0200	6.0200	
14	Demand Cost	2,750,394	2,750,394	2,750,394	2,750,394	2,750,394	2,750,394	1,375,197	1,375,197	1,375,197	1,375,197	1,375,197	1,375,197	24,753,546
15	Total TCO Demand Cost	4,954,428	4,954,428	4,954,428	4,954,428	4,954,428	4,954,428	3,579,231	3,579,231	3,579,231	3,579,231	3,579,231	3,579,231	51,201,954
13	Total TCO Demand Cost	4,754,428	4,734,428	4,734,420	7,734,426	7,754,428	7,754,428	3,379,231	3,379,231	3,317,231	3,377,231	3,379,231	3,379,231	31,201,934

⁽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.

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

Line			2016						2017					
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

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

Line			2016						2017					
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	15.0893	15.0893	15.0893	15.0893	15.0893	15.0893	15.0893	15.0893	15.0893	15.0893	15.0893	15.0893	
9	Demand Cost	35,339	35,339	35,339	35,339	35,339	35,339	35,339	35,339	35,339	35,339	35,339	35,339	424,068
	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	13.0357	13.0357	13.0357	13.0357	13.0357	13.0357	13.0357	13.0357	13.0357	13.0357	13.0357	13.0357	
12	Demand Cost	65,179	65,179	65,179	65,179	65,179	65,179	65,179	65,179	65,179	65,179	65,179	65,179	782,148
	CDS - Chambersburg													
13	Billing Determinant-Dth	158	158	158	158	158	158	158	158	158	158	158	158	
14	Demand Rate	15.0960	15.0960	15.0960	15.0960	15.0960	15.0960	15.0960	15.0960	15.0960	15.0960	15.0960	15.0960	
15	Demand Cost	2,385	2,385	2,385	2,385	2,385	2,385	2,385	2,385	2,385	2,385	2,385	2,385	28,620
	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
19	Total TETCO Demand Cost	238,272	238,272	287,612	287,632	287,632	287,632	238,272	238,272	238,272	238,272	238,272	238,272	3,056,684
19	Total TETCO Demand Cost	238,272	238,212	287,012	287,032	287,032	287,032	238,212	238,212	238,212	238,212	238,212	238,212	3,036,0

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

		2016						2017					
Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Dominion Transmission													
GSS - Reservation													
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	
Demand Rate	1.8618	1.8618	1.8618	1.8618	1.8618	1.8618	1.8618	1.8618	1.8618	1.8618	1.8618	1.8618	
Demand Cost	44,683	44,683	44,683	44,683	44,683	44,683	44,683	44,683	44,683	44,683	44,683	44,683	536,196
GSS - Canacity													
	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	
Č .			, ,		<i>' '</i>						, , , , , , , , , , , , , , , , , , ,		
													325,584
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	323,304
FTNN													
Billing Determinant-Dth	0	6,000	6,000	6,000	6,000	6,000	0	0	0	0	0	0	
Total-DTH	0.0000	4.1619	4.1619	4.1619	4.1619	4.1619	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Demand Cost	0	24,971	24,971	24,971	24,971	24,971	0	0	0	0	0	0	124,855
FT													
	22,479	25,024	25,024	25,024	25,024	25,024	22,231	22,231	22,231	22,231	22,231	22,231	
Total-DTH	4.1619	4.1619	4.1619	4.1619	4.1619	4.1619	4.1619	4.1619	4.1619	4.1619	4.1619	4.1619	
Demand Cost	93,556	104,149	104,149	104,149	104,149	104,149	92,523	92,523	92,523	92,523	92,523	92,523	1,169,439
Total DTI Demand Cost	165,371	200,935	200,935	200,935	200,935	200,935	164,338	164,338	164,338	164,338	164,338	164,338	2,156,074
	Dominion Transmission GSS - Reservation Billing Determinant-Dth Demand Rate Demand Cost GSS - Capacity Billing Determinant-Dth Demand Rate Demand Cost FTNN Billing Determinant-Dth Total-DTH Demand Cost FT Billing Determinant-Dth Total-DTH Demand Cost	S Dominion Transmission GSS - Reservation Billing Determinant-Dth 24,000 Demand Rate 1.8618 Demand Cost 44,683 GSS - Capacity Billing Determinant-Dth 1,871,176 Demand Rate 0.0145 Demand Cost 27,132 FTNN Billing Determinant-Dth 0 Total-DTH 0.0000 Demand Cost 0 FT Billing Determinant-Dth 22,479 Total-DTH 4.1619 Demand Cost 93,556	Description October November \$ \$ \$ Dominion Transmission GSS - Reservation 3 Billing Determinant-Dth 24,000 24,000 Demand Rate 1.8618 1.8618 Demand Cost 44,683 44,683 GSS - Capacity Billing Determinant-Dth 1,871,176 1,871,176 Demand Rate 0.0145 0.0145 0.0145 Demand Cost 27,132 27,132 27,132 FTNN Billing Determinant-Dth 0 6,000 4.1619 Total-DTH 0.0000 4.1619 24,971 FT Billing Determinant-Dth 22,479 25,024 Total-DTH 4.1619 4.1619 Demand Cost 93,556 104,149	Description October November December \$ \$ \$ \$ Dominion Transmission GSS - Reservation 24,000 24,000 24,000 Demand Rate 1.8618 1.8618 1.8618 1.8618 Demand Cost 44,683 44,683 44,683 44,683 GSS - Capacity Billing Determinant-Dth 1,871,176 1,871,176 1,871,176 0.0145	Description October November December January \$ \$ \$ \$ \$ Dominion Transmission GSS - Reservation Billing Determinant-Dth 24,000 24,000 24,000 24,000 24,000 24,000 December 3,000 24,000 34,683 34,683 34,683 34,683 34,683 34,683 34,683 34,683 34,683 34,683 34,683	Description October November December January February S \$ <td>Description October November December January February March S \$</td> <td> Description</td> <td> Description October November December January February March April May </td> <td> Description October November December January February March April May June </td> <td> Description October November December January February March April May June July </td> <td> Description October November December January February March April May June July August </td> <td> Description October November December January February March April May June July August September S S S S S S S S S </td>	Description October November December January February March S \$	Description	Description October November December January February March April May	Description October November December January February March April May June	Description October November December January February March April May June July	Description October November December January February March April May June July August	Description October November December January February March April May June July August September S S S S S S S S S

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

Line			2016						2017					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
	Tennessee Gas FT-A (Direct) New Castle - 50	00 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	14.8658	14.8658	14.8658	14.8658	14.8658	14.8658	14.8658	14.8658	14.8658	14.8658	14.8658	14.8658	
3	Demand Cost	112,980	112,980	112,980	112,980	112,980	112,980	112,980	112,980	112,980	112,980	112,980	112,980	1,355,760
	Tennessee Gas FT-A (Direct) New Castle - 80	00 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	14.8658	14.8658	14.8658	14.8658	14.8658	14.8658	14.8658	14.8658	14.8658	14.8658	14.8658	14.8658	
6	Demand Cost	124,873	124,873	124,873	124,873	124,873	124,873	124,873	124,873	124,873	124,873	124,873	124,873	1,498,476
	Tennessee Gas FT-A (Direct) Pitt Teminal - 50	00 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	5.2796	5.2796	5.2796	5.2796	5.2796	5.2796	5.2796	5.2796	5.2796	5.2796	5.2796	5.2796	
9	Demand Cost	40,125	40,125	40,125	40,125	40,125	40,125	40,125	40,125	40,125	40,125	40,125	40,125	481,500
	Tennessee Gas FT-A (Direct) TCO - 500 Line	;												
10	Billing Determinant-Dth	12,500	0	0	0	0	0	0	0	0	0	0	0	
11	Demand Rate	5.2796	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
12	Total-DTH	65,995	0	0	0	0	0	0	0	0	0	0	0	65,995
13	Total Tennessee Gas Demand Cost	343,973	277,978	277,978	277,978	277,978	277,978	277,978	277,978	277,978	277,978	277,978	277,978	3,401,731

Summary of Total Estimated Purchased Gas Demand Costs <u>National Fuel Gas Supply</u>

Line			2016						2017					
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	3.7049	3.7049	3.7049	3.7049	3.7049	3.7049	3.7049	3.7049	3.7049	3.7049	3.7049	3.7049	
3	Demand Cost	15,946	15,946	15,946	15,946	15,946	15,946	15,946	15,946	15,946	15,946	15,946	15,946	191,352
4	Total National Fuel Demand Cost	15,946	15,946	15,946	15,946	15,946	15,946	15,946	15,946	15,946	15,946	15,946	15,946	191,352

Summary of Total Estimated Purchased Gas Demand Costs $\underline{\textbf{Equitrans}}$

Line			2016						2017					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
	Equitrans FTS													
1	Billing Determinant-Dth	749	6,051	6,051	6,051	6,051	6,051	361	361	361	361	361	361	
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	4,159	37,038	37,038	37,038	37,038	37,038	2,006	2,006	2,006	2,006	2,006	2,006	201,385
4	Total Equitrans Demand Cost	4,159	37,038	37,038	37,038	37,038	37,038	2,006	2,006	2,006	2,006	2,006	2,006	201,385

Summary of Total Estimated Purchased Gas Commodity Costs $\underline{Term\ Contracts}$

Line			2016						2017					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
	<u>TERM</u>													
	COLUMBIA GULF - TCO													
1	Quantity - DTH	0	0	30,000	0	0	0	0	0	0	0	0	0	30,000
2	Rate-\$/DTH	0.0000	0.0000	3.0898	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
3	Cost-\$	0	0	92,694	0	0	0	0	0	0	0	0	0	92,694
	COLUMBIA TRANSMISSION													
4	Quantity - DTH	0	0	1,413,000	1,434,000	1,289,000	0	0	0	0	0	0	0	4,136,000
5	Rate-\$/DTH	0.0000	0.0000	2.9809	3.1126	3.1197	1.8538	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
6	Cost-\$	0	0	4,212,012	4,463,468	4,021,293	0	0	0	0	0	0	0	12,696,773
	TEXAS EASTERN													
7	Quantity - DTH	655,000	700,000	655,000	674,000	654,000	725,000	686,000	707,000	682,000	705,000	705,000	683,000	8,231,000
8	Rate-\$/DTH	2.7709	2.9111	3.1405	3.2744	3.2817	3.2423	3.0409	3.0191	3.0533	3.0876	3.0990	3.0824	
9	Cost-\$	1,814,940	2,037,770	2,057,028	2,206,946	2,146,232	2,350,668	2,086,057	2,134,504	2,082,351	2,176,758	2,184,795	2,105,279	25,383,328
	TENNESSEE GAS PIPELINE													
10	Quantity - DTH	0	0	731,000	731,000	660,000	0	0	0	0	0	0	0	2,122,000
11	Rate-\$/DTH	0.0000	0.0000	3.3227	3.4570	3.4642	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
12	Cost-\$	0	0	2,428,894	2,527,067	2,286,372	0	0	0	0	0	0	0	7,242,333
	CAP													
13	Quantity - DTH	220,000	213,000	220,000	220,000	199,000	220,000	213,000	220,000	213,000	220,000	220,000	213,000	2,591,000
14	Rate-\$/DTH	3.0547	3.0547	3.0547	3.0547	3.0547	3.0547	3.0547	3.0547	3.0547	3.0547	3.0547	3.0547	
15	Cost-\$	672,034	650,651	672,034	672,034	607,885	672,034	650,651	672,034	650,651	672,034	672,034	650,651	7,914,727
	LESS CAP BILLING													
16	Quantity - DTH	(169,000)	(288,000)	(431,000)	(506,000)	(425,000)	(349,000)	(187,000)	(91,000)	(42,000)	(37,000)	(36,000)	(59,000)	(2,620,000)
17	Rate-\$/DTH	3.0547	3.0547	3.0547	3.0547	3.0547	3.0547	3.0547	3.0547	3.0547	3.0547	3.0547	3.0547	
18	Cost-\$	(516,244)	(879,754)	(1,316,576)	(1,545,678)	(1,298,248)	(1,066,090)	(571,229)	(277,978)	(128,297)	(113,024)	(109,969)	(180,227)	(8,003,314)
19	Total - DTH	706,000	625,000	2,618,000	2,553,000	2,377,000	596,000	712,000	836,000	853,000	888,000	889,000	837,000	14,490,000
20	Total Term Commodity													
21	Cost-\$	1,970,730	1,808,667	8,146,086	8,323,837	7,763,534	1,956,612	2,165,479	2,528,560	2,604,705	2,735,768	2,746,860	2,575,703	45,326,541

Summary of Total Estimated Purchased Gas Commodity Costs <u>Spot and Local Purchases</u>

Line			2016						2017					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
	anom													
	SPOT Base													
1	Base Quantity - DTH	1,324,000	293,000	155,000	155,000	140,000	392,000	3,649,000	3,260,000	2,673,000	2,577,000	2,556,000	2,390,000	19,564,000
2	Rate-\$/DTH	2.4590	2.8689	2.8060	2.2303	2.1917	2.9114	2.7890	2.7781	2,673,000	2,377,000	2,336,000	2,390,000	19,364,000
3	Cost-\$	3,255,716	840,588	434,930	345,697	306,838	1,141,269	10,177,061	9,056,606	7,475,312	7,277,190	7,240,637	6,721,397	54,273,241
3	Cost-\$	3,233,710	040,300	434,930	343,097	300,636	1,141,209	10,177,001	9,030,000	7,473,312	7,277,190	7,240,037	0,721,397	34,273,241
	Swing													
4	Quantity - DTH	16,000	0	0	0	0	155,000	5,000	0	0	0	0	0	176,000
5	Rate-\$/DTH	2.6120	0.0000	0.0000	0.0000	0.0000	3.1134	2.8689	0.0000	0.0000	0.0000	0.0000	0.0000	,
6	Cost-\$	41,792	0	0	0	0	482,577	14,345	0	0	0	0	0	538,714
		,					ŕ	,						,
7	Total - DTH	1,340,000	293,000	155,000	155,000	140,000	547,000	3,654,000	3,260,000	2,673,000	2,577,000	2,556,000	2,390,000	19,740,000
8	Total Spot													
9	Commodity Cost - \$	3,297,508	840,588	434,930	345,697	306,838	1,623,846	10,191,406	9,056,606	7,475,312	7,277,190	7,240,637	6,721,397	54,811,955
	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	2.5110	2.6460	2.9010	3.0300	3.0370	2.9990	2.7610	2.7400	2.7730	2.8060	2.8170	2.8010	
12	Cost-\$	55,242	55,566	63,822	66,660	60,740	65,978	57,981	60,280	58,233	61,732	61,974	58,821	727,029
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
	T . 1 . 1													
14	Total Local	55.242	EE E(/	62 922	66.660	60.740	65.078	57.001	60.290	59.222	61 722	61.074	50 021	727.020
15	Commodity Cost - \$	55,242	55,566	63,822	66,660	60,740	65,978	57,981	60,280	58,233	61,732	61,974	58,821	727,029

Summary of Total Estimated Purchased Gas Commodity Costs $\underline{Storage}$

Line			2016						2017					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
	DOMINION TRANSMISSION	- GSS												
1	Injections - DTH	(116,000)	0	0	0	0	0	(310,000)	(211,000)	(211,000)	(211,000)	(211,000)	(211,000)	(1,481,000)
2	Injection Rate - \$/Dth	2.5742	2.8805	3.0929	3.2000	3.2050	3.1299	2.8299	2.8280	2.8583	2.8892	2.8986	2.8805	
3	Withdrawals - DTH	0	106,000	380,000	528,000	317,000	148,000	99,000	0	0	0	0	0	1,578,000
4	Withdrawl Rate - \$/Dth	2.6142	2.6142	2.6142	2.6142	2.6142	2.6169	2.6693	2.7145	2.7473	2.7737	2.7932	2.8040	
5	Cost-\$	(298,607)	277,105	993,396	1,380,298	828,701	387,301	(613,008)	(596,708)	(603,101)	(609,621)	(611,605)	(607,786)	(73,635)
6	Injection Rate \$/Dth	0.0262	0.0262	0.0262	0.0262	0.0262	0.0262	0.0262	0.0262	0.0262	0.0262	0.0262	0.0262	
7	Withdrawl Rate \$/Dth	0.0180	0.0180	0.0180	0.0180	0.0180	0.0180	0.0180	0.0180	0.0180	0.0180	0.0180	0.0180	
8	Cost - \$	3,039	1,908	6,840	9,504	5,706	2,664	9,904	5,528	5,528	5,528	5,528	5,528	67,205
Ü	Cost \$	3,037	1,500	0,010	,,50.	3,700	2,001	,,,,,,,,,	3,520	5,520	3,520	5,520	5,520	07,203
	EQUITRANS - SS													
9	Injections - DTH	(181,000)	0	0	0	0	0	0	(76,000)	(221,000)	(228,000)	(228,000)	(177,000)	(1,111,000)
10	Injection Rate - \$/Dth	2.5742	2.8805	3.0929	3.2000	3.2050	3.1299	2.8299	2.8280	2.8583	2.8892	2.8986	2.8805	
11	Withdrawals - DTH	0	75,000	375,000	375,000	300,000	0	0	0	0	0	0	0	1,125,000
12	Withdrawl Rate - \$/Dth	2.6142	2.6142	2.6142	2.6142	2.6142	2.6169	2.6693	2.7145	2.7473	2.7737	2.7932	2.8040	
13	Cost-\$	(465,930)	196,065	980,325	980,325	784,260	0	0	(214,928)	(631,684)	(658,738)	(660,881)	(509,849)	(201,035)
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	(634,000)	0	(15,000)	0	0	(61,000)	(2,038,000)	(3,464,000)	(3,462,000)	(3,464,000)	(3,462,000)	(3,130,000)	(19,730,000)
17	Injection Rate - \$/Dth Withdrawals - DTH	2.5742	2.8805	3.0929	3.2000 4,946,000	3.2050	3.1299	2.8299	2.8280	2.8583	2.8892	2.8986	2.8805 0	19,223,000
18 19	Withdrawl Rate - \$/Dth	2.6142	2,641,000	3,218,000 2.6142		4,153,000 2.6142	4,265,000	2.6693	2.7145	2.7473	2.7737	0	2.8040	19,223,000
20	Cost-\$	(1,632,043)	2.6142 6,904,102	8,366,102	2.6142	10,856,773	2.6169 10,970,155	(5,767,336)	(9,796,192)	(9,895,435)	(10,008,189)	(10,034,953)	(9,015,965)	(6,123,148)
20	Cost-\$	(1,032,043)	0,904,102	8,300,102	12,929,833	10,830,773	10,970,133	(3,707,330)	(9,790,192)	(9,893,433)	(10,008,189)	(10,034,933)	(9,013,903)	(0,123,148)
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 - \$	9,700	40,407	49,465	75,674	63,541	66,188	31,181	52,999	52,969	52,999	52,969	47,889	595,981
23	Quantity - DTH	(931,000)	2,822,000	3,958,000	5,849,000	4,770,000	4,352,000	(2,249,000)	(3,751,000)	(3,894,000)	(3,903,000)	(3,901,000)	(3,518,000)	(396,000)
23	Annual - Dill	(231,000)	2,022,000	3,730,000	3,042,000	4,770,000	4,332,000	(2,247,000)	(3,731,000)	(3,074,000)	(3,703,000)	(3,701,000)	(3,516,000)	(370,000)
24	Total Purchase Cost	(2,396,580)	7,377,272	10,339,823	15,290,456	12,469,734	11,357,456	(6,380,344)	(10,607,828)	(11,130,220)	(11,276,548)	(11,307,439)	(10,133,600)	(6,397,818)
25	Total Inject/With. Cost	12,739	42,315	56,305	85,178	69,247	68,852	41,085	58,527	58,497	58,527	58,497	53,417	663,186

Summary of Total Estimated Purchased Gas Commodity Costs Storage Transportation Charges

Line			2016						2017					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
	TCO - SST													
1	Injections - DTH	(634,000)	0	(15,000)	0	0	(61,000)	(2,038,000)	(3,464,000)	(3,462,000)	(3,464,000)	(3,462,000)	(3,130,000)	(19,730,000)
2	Withdrawals - DTH	0	2,641,000	3,218,000	4,946,000	4,153,000	4,265,000	0	0	0	0	0	0	19,223,000
3	Trans. Chrg. \$/Dth	0.0194	0.0192	0.0192	0.0192	0.0192	0.0192	0.0194	0.0194	0.0194	0.0194	0.0194	0.0194	
4	Cost-\$	12,300	50,707	62,074	94,963	79,738	83,059	39,537	67,202	67,163	67,202	67,163	60,722	751,830
_	DOMINION TRANSMISSIO													
5	Injections - DTH	(116,000)	0	0	0	0	0	(310,000)	(211,000)	(211,000)	(211,000)	(211,000)	(211,000)	(1,481,000)
6	Withdrawals - DTH	0	106,000	380,000	528,000	317,000	148,000	99,000	0	0	0	0	0	1,578,000
7	Rate-\$/DTH	0.0194	0.0159	0.0159	0.0159	0.0159	0.0159	0.0194	0.0194	0.0194	0.0194	0.0194	0.0194	
8	Cost-\$	2,250	1,685	6,042	8,395	5,040	2,353	7,935	4,093	4,093	4,093	4,093	4,093	54,165
	DOLUME AND GO													
	EQUITRANS - SS									.==				
9	Injections - DTH	(181,000)	0	0	0	0	0	0	(76,000)	(221,000)	(228,000)	(228,000)	(177,000)	(1,111,000)
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	(021 000)	2,822,000	3,958,000	5,849,000	4,770,000	4,352,000	(2.240.000)	(3,751,000)	(2.804.000)	(3,903,000)	(2.001.000)	(2.519.000)	(396,000)
	Total EUB - DTH	(931,000)						(2,249,000)		(3,894,000)		(3,901,000) 627,000	(3,518,000)	
14 15	Total EUB - DTH	297,000	(181,000)	(704,000)	(1,040,000)	(856,000)	(495,000) 3,857,000	90,000	(3,295,000)	588,000	(3,276,000)		566,000	(25,000)
15	Total DTH	(634,000)	2,641,000	3,234,000	4,809,000	3,914,000	3,837,000	(2,159,000)	(3,293,000)	(3,306,000)	(3,276,000)	(3,274,000)	(2,952,000)	(421,000)
16	Total Purchase Cost	(2,396,580)	7,377,272	10,339,823	15,290,456	12,469,734	11,357,456	(6,380,344)	(10,607,828)	(11,130,220)	(11,276,548)	(11,307,439)	(10,133,600)	(6,397,818)
17	Total Choice Bank Cost	857,172	(522,384)	(2,031,814)	(3,001,544)	(2,470,502)	(1,428,620)	259,749	1,316,062	1,697,027	1,809,585	1,847,706	1,667,945	382
18	Total Inject/With. Cost	12,739	42,315	56,305	(5,001,344)	69,247	68,852	41,085	58,527	58,497	58,527	58,497	53,417	663,186
19	Total Transp. Charge	14,550	52,392	68,116	103,358	84,778	85,412	47,472	71,295	71,256	71,295	71,256	64,815	805,995
20	Total Storage Cost	(1,512,119)	6,949,595	8,432,430	12,477,448	10,153,257	10,083,101	(6,032,038)	(9,161,944)	(9,303,440)	(9,337,141)	(9,329,980)	(8,347,423)	(4,928,255)

COLUMBIA GAS OF PENNSYLVANIA, INC. STATEMENT OF EXPERIENCED NET OVER (UNDER) COLLECTION

Line No.	<u>Description</u>	Total Demand \$	Total Commodity \$	Total Amount \$
1 2	Remaining Balance - Over (Under) Collection from 2015 - 1307(f) (See Schedule 2a and 2b herein)	825,051	2,652,347	3,477,398
3 4 5	Unified Credit for Off-system Sales and Capacity Release for the period October, 2015 through September, 2016 (See Schedule 3a and 3b herein)	4,288,103	(46,351)	4,241,753
6 7	Over (Under) Collection for the period October, 2015 through September 2016 (See Schedule 4 herein)	(8,091,488)	3,766,061	(4,325,427)
8 9	Interest on Over (Under) Collection for the period October, 2015 through September, 2016 (See Schedule 4 herein)	(257,540)	643	(256,897)
10 11 12	Supplier Refunds and Interest received on Supplier Refunds between September, 2015 and September, 2016 (See Schedule 5 herein)	440,880	0	440,880
13 14 15	Supplier Refunds and Interest received on Supplier Refunds between September, 2014 and September, 2015 (See Schedule 5 herein)	188,170	0	188,170
16	TOTAL EXPERIENCED NET OVER (UNDER) COLLECTION	(2,606,823)	6,372,700	3,765,877

RECONCILIATION OF COMMODITY COST OF GAS $\underline{FROM\ 2015-1307(f)}$

COMMODITY

Line No.	Month	Sales Subject to Commodity E-Factor	Rate	Amount Recovered	Net Commodity Over (Under) Collection
		Therm	\$/Therm	\$	\$
1	True-up of Net Commodity Co	osts Included in 2015 1	307(f):		23,631,754
2	Beginning Balance Adjustmen	nt			(165,379) 2/
3 4	October, 2015	4,694,270 4,801,730	(0.07077) (0.00321)	(332,213) (15,414)	
5 6	November	19,199,330 196,220	(0.07077) (0.00321)	(1,358,737) (630)	
7 8	December	35,905,690 1,760	(0.07077) (0.00321)	(2,541,046) (6)	
9 10	January, 2016 1_/	35,380,610 19,737,770	(0.06811) (0.07077)	(2,409,773) (1,396,842)	
11 12	February	64,511,800 795,690	(0.06811) (0.07077)	(4,393,899) (56,311)	
13 14	March	48,237,490 6,880	(0.06811) (0.07077)	(3,285,455) (487)	
15	April	30,773,650	(0.06811)	(2,095,993)	
16 17	May	16,674,690 2,550	(0.06811) (0.07077)	(1,135,713) (180)	
18 19	June	9,729,300 3,470	(0.06811) (0.07077)	(662,663) (246)	
20 21	July	6,209,480 (390)	(0.06811) (0.07077)	(422,928) 28	
22	August	5,373,170	(0.06811)	(365,967)	
23	September Est.	4,985,364	(0.06811)	(339,553)	
24	Amount Collected/(Passed Ba	ck) during 2015 1307(f) Period		(20,814,028)
25	Amount to be Passed Back in	the 2016 1307(f)			2,652,347

¹_/ Rate in effect January 1, 2016.

²_/ Amount represents an adjustment for Interruptible recoveries that were incorrectly priced October 2012 through September 2015.

RECONCILIATION OF DEMAND COST OF GAS FROM 2015 - 1307(f)

DEMAND

Salac

Line No.	Month	Sales Subject to Demand E-Factor Therm	Rate \$/Therm	Amount \$	Net Demand Over (Under) Collection
		Hiemi	φ/ HileHili	Ф	Φ
1	True-up of Net Demand Costs Inclu	ded in 2015 1307(f):			6,769,180
2	Beginning Balance Adjustment				(142,135) 2/
3	Beginning Balance Adjustment				5,598 3/
4	Beginning Balance Adjustment				22,179 4/
5	October, 2015	6,272,690	(0.01368)	(85,810)	
6		6,229,500	(0.02454)	(152,872)	
7	November	25,992,740	(0.01368)	(355,582)	
8		(61,730)	(0.02454)	1,515	
9	December	48,107,760	(0.01368)	(658,114)	
10	January, 2016 1_/	47,180,460	(0.01422)	(670,906)	
11		26,704,330	(0.01368)	(365,315)	
12	February	86,759,230	(0.01422)	(1,233,716)	
13		(117,590)	(0.01368)	1,609	
14	March	63,881,440	(0.01422)	(908,394)	
15	April	41,109,970	(0.01422)	(584,584)	
16	May	21,988,670	(0.01422)	(312,679)	
17	June	12,444,620	(0.01422)	(176,962)	
18	July	8,158,120	(0.01422)	(116,008)	
19	August	7,167,210	(0.01422)	(101,918)	
20	September Est.	7,738,025	(0.01422)	(110,035)	
21	Amount Collected/(Passed Back) in	the 2015 1307(f) Per	riod		(5,829,771)
22	Amount to be Passed Back in the 20	016 1307(f)			825,051

- 1_/ Rate in effect January 1, 2016.
- 2/ Represents a demand interest adjustment for the months February 2015 through September 2015, reducing the interest rate from 8% to 6% due to an under collection balance for the twelve months ended January 2016. Please refer to Exh. 1-E, Schedule 2b, Sheet 2 for detailed calculation of this adjustment.
- 3/ Amount represents remaining portion of the TCO Modernization Refund (Docket R-2012-25321748) on the books. Due to the remaining balance being under \$20K, it is being included in the demand e-factor to be passed back. This amount is due to the adjustment to actual for September 2015.
- 4/ Amount represents an adjustment to reflect Choice GMB recoveries not previously included for the period of January 2013 - July 2016.

COLUMBIA GAS OF PENNSYLVANIA, INC. STATEMENT OF DEMAND OVER/(UNDER) COLLECTIONS FROM GAS COST RATE OCTOBER, 2014 THROUGH SEPTEMBER, 2015

Line No.	Month	Total Purchased Gas Cost Recovery (1)	Total Cost of Fuel (2)	Total Over (Under) Collection (3 = 1 - 2)	Number of Months (4)		Over (Under) Collection Interest (6=3x4x5)	Rate (7)	Over (Under) Collection Interest (8=3x4x7)	Interest Difference (9=8-6)
1	February, 2015	12,298,473	5,544,182	6,754,291	14 / 12	8.00%	630,400	6.00%	472,800	(157,600)
2	March	11,983,155	5,553,548	6,429,606	13 / 12	8.00%	557,233	6.00%	417,924	(139,309)
3	April	6,407,892	4,061,999	2,345,893	12 / 12	8.00%	187,671	6.00%	140,754	(46,917)
4	May	2,602,941	4,136,468	(1,533,527)	11 / 12	8.00%	(112,459)	6.00%	(84,344)	28,115
5	June	1,350,599	4,250,522	(2,899,922)	10 / 12	8.00%	(193,328)	6.00%	(144,996)	48,332
6	July	1,102,457	4,194,217	(3,091,759)	9 / 12	8.00%	(185,506)	6.00%	(139,129)	46,377
7	August	1,023,618	4,193,617	(3,170,000)	8 / 12	8.00%	(169,067)	6.00%	(126,800)	42,267
8	September	1,057,793	4,194,883	(3,137,090)	7 / 12	8.00%	(146,398)	6.00%	(109,798)	36,600
9	TOTAL	37,826,928	36,129,436	1,697,492			568,546		426,411	(142,135)

RECONCILIATION OF OFF SYSTEM SALES CREDIT FROM 2015 - 1307(f)

COMMODITY

Line No.	Month	Sales Subject to Off-System Sales Credit Therm	Rate \$/Therm	Amount \$	Net Commodity Over (Under) Collection
1 2	October, 2015	4,545,840 4,349,720	0.00000 (0.01052)	0 (45,759)	
3 4	November	18,523,860 54,940	0.00000 (0.01052)	0 (578)	
5 6	December	34,629,600 1,320	0.00000 (0.01052)	0 (14)	
7	January, 2016 1_/	53,217,720	0.00000	0	
8	February	62,961,470	0.00000	0	
9	March	46,303,700	0.00000	0	
10	April	29,409,310	0.00000	0	
11	May	15,734,570	0.00000	0	
12	June	8,901,600	0.00000	0	
13	July	5,872,640	0.00000	0	
14	August	5,179,020	0.00000	0	
15	September Est.	4,985,364	0.00000	0	
16	Amount Passed Back in the	2015 1307 (f)			(46,351)
17	Unified Sharing Mechanism	- \$9,194,201 (0% Commodity	y)		0
18	Amount to be Collected in the	ne 2016 1307(f)			(46,351)

¹_/ Rate in effect January 1, 2016.

RECONCILIATION OF OFF SYSTEM SALES CREDIT FROM 2015 - 1307(f)

DEMAND

Line No.	Month	Sales Subject to Off-System Sales Credit	Rate	Amount	Net Demand Over (Under) Collection
		Therm	\$/Therm	\$	\$
1	Beginning Balance Adjustment				(2,460) 2/
2 3	October, 2015	6,272,690 6,229,500	(0.01208) (0.00498)	(75,774) (31,023)	
4 5	November	25,992,740 (61,730)	(0.01208) (0.00498)	(313,992) 307	
6	December	48,107,760	(0.01208)	(581,142)	
7	January, 2016 1_/	73,884,790	(0.01208)	(892,528)	
8	February	86,641,640	(0.01208)	(1,046,631)	
9	March	63,881,440	(0.01208)	(771,688)	
10	April	41,109,970	(0.01208)	(496,608)	
11	May	21,988,670	(0.01208)	(265,623)	
12	June	12,444,620	(0.01208)	(150,331)	
13	July	8,158,120	(0.01208)	(98,550)	
14	August	7,167,210	(0.01208)	(86,580)	
15	September Est.	7,738,025	(0.01208)	(93,475)	
16	Amount Passed Back in the 2015	1307(f)		-	(4,903,638)
17	Unified Sharing Mechanism - \$9	194,201 (100% Demand)		9,194,201
18	Amount to be Passed Back in the	2016 1307(f)		_	4,288,103

¹_/ Rate in effect January 1, 2016.

 $^{2\}_/$ Amount represents an adjustment to reflect Choice GMB passbacks not previously included for the period of January 2013 - July 2016.

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 $(8 = 5 \times 6 \times 7)$	Total Commodity Over/(Under) Collection $(9 = 5 + 8)$
	Actuals through A	August 2016; Projectio	ns for September 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	2,436,554	10,198	2,446,752	635,135	1,811,617	10 / 12	8.00%	120,774	1,932,391
10	July	1,690,589	8,425	1,699,015	1,569,413	129,601	9 / 12	8.00%	7,776	137,377
11	August	1,579,931	6,460	1,586,391	1,972,212	(385,821)	8 / 12	8.00%	(20,577)	(406,398)
12	September - Est.	1,521,184	0	1,521,184	863,072	658,112	7 / 12	3.50%	13,436	671,548
13	TOTAL	84,533,792	143,825	84,677,617	80,911,557	3,766,061			643	3,766,704

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 Revenue (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)
	Actuals through	Pg. 4 August 2016; Proj	Pg. 6	Pg. 5	Pg. 6							
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	1,527,139	116	44,847	47	1,572,149	4,180,727	(2,608,578)	10 / 12	8.00%	(173,905)	(2,782,483)
10	July	1,088,868	69	43,695	28	1,132,660	4,220,723	(3,088,063)	9 / 12	8.00%	(185,284)	(3,273,347)
11	August	1,056,690	54	44,443	22	1,101,209	4,188,844	(3,087,635)	8 / 12	8.00%	(164,674)	(3,252,309)
12	September	1,188,019	0	44,443	0	1,232,462	4,440,026	(3,207,564)	7 / 12	3.50%	(65,488)	(3,273,052)
13	TOTAL	50,733,226	1,573	561,977	3,154	51,299,930	59,391,417	(8,091,488)			(257,540)	(8,349,028)

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 x 2) \$
1	0.41. 2015 F.4.011	4.515.600	0.27614	1 600 506
1	October, 2015 Est. Old	4,515,622	0.37614	1,698,506
2	October, 2015 Est. New	4,408,533	0.31252	1,377,755
3	September, 2015 Est.	(5,790,556)	0.37614	(2,178,060)
4	September, 2015 Act.	5,763,556	0.37614	2,167,904
5	September - Interruptible Less NSS Act.	(70)	0.28085	(20)
6	September Act. Prior Period Adjustments		0.00000	(2,686)
7	Total	8,897,085		3,063,399
8	November, 2015 Est.	18,657,190	0.31252	5,830,745
9	October, 2015 Est. Old	(4,515,622)	0.37614	(1,698,506)
10	October, 2015 Est. New	(4,408,533)	0.31252	(1,377,755)
11	October, 2015 Act. Old	4,477,698	0.37614	1,684,241
12	October, 2015 Act. New	4,371,507	0.31252	1,366,183
13	October Act. Prior Period Adjustments		0.00000	(203)
14	Total	18,582,240		5,804,706
15	December, 2015 Est.	34,991,405	0.31252	10,935,514
16	November, 2015 Est.	(18,657,190)	0.31252	(5,830,745)
17	November, 2015 Act.	18,317,820	0.31252	5,724,685
18	November - Interruptible Less NSS Act.	(870)	0.21269	(185)
19	November Act. Prior Period Adjustments	(****)	_	139
20	Total	34,651,165		10,829,408
21	January, 2016 Est. Old	19,480,120	0.31252	6,087,927
22	January, 2016 Est. New	34,184,122	0.27354	9,350,725
23	December, 2015 Est.	(34,991,405)	0.31252	(10,935,514)
24	December, 2015 Act.	34,708,925	0.31252	10,847,233
25	December Act. Prior Period Adjustments	5 .,, 5 6,, 2 25	-	2,150
26	Total	53,381,762		15,352,521

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

LINE		SALES SUBJECT TO COMMODITY	COMMODITY COST OF	TOTAL COMMODITY COST
NO.	MONTH	COST OF GAS	GAS	RECOVERY
		(1)	(2)	$(3 = 1 \times 2)$
		THERM	\$/THERM	\$
1	February, 2016 Est.	63,292,534	0.27354	17,313,040
2	January, 2016 Est. Old	(19,480,120)	0.31252	(6,087,927)
3	January, 2016 Est. New	(34,184,122)	0.27354	(9,350,725)
4	January, 2016 Act. Old	19,359,466	0.31252	6,050,220
5	January, 2016 Act. New	33,972,396	0.27354	9,292,809
6	January - Interruptible Less NSS Act.	270	0.28910	78
7	January Act. Prior Period Adjustments		-	3,456
8	Total	62,960,424		17,220,951
9	March, 2016 Est.	46,519,284	0.27354	12,724,885
10	February, 2016 Est.	(63,292,534)	0.27354	(17,313,040)
11	February, 2016 Act.	63,138,254	0.27354	17,270,838
12	February - Interruptible Less NSS Act.	1,100	0.25478	280
13	February Act. Prior Period Adjustments		-	(21)
14	Total	46,366,104		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
18	March - Interruptible Less NSS Act.	4,560	0.22069	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
24	April - Interruptible Less NSS Act.	2,670	0.24694	659
25	April Act. Prior Period Adjustments		-	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	COMMODITY COST OF GAS	TOTAL COMMODITY COST RECOVERY
		(1)	(2)	$(3 = 1 \times 2)$
		THERM	\$/THERM	\$
1	June, 2016 Est.	9,091,308	0.27354	2,486,836
2	May, 2016 Est.	(15,921,580)	0.27354	(4,355,189)
3	May, 2016 Act.	15,736,830	0.27354	4,304,652
4	May Act. Prior Period Adjustments		-	255
5	Total	8,906,558		2,436,554
6	July, 2016 Est. Old	3,269,359	0.27354	894,300
7	July, 2016 Est. New	2,685,757	0.30513	819,505
8	June, 2016 Est.	(9,091,308)	0.27354	(2,486,836)
9	June, 2016 Act.	9,004,128	0.27354	2,462,989
10	June Act. Prior Period Adjustments		-	631
11	Total	5,867,936		1,690,589
12	August, 2016 Est.	5,218,658	0.30513	1,592,369
13	July, 2016 Est. Old	(3,269,359)	0.27354	(894,300)
14	July, 2016 Est. New	(2,685,757)	0.30513	(819,505)
15	July, 2016 Act. Old	3,249,007	0.27354	888,733
16	July, 2016 Act. New	2,669,039	0.30513	814,404
17	July - Interruptible Less NSS	(8,600)		(1,819)
18	July Act. Prior Period Adjustments		-	49
19	Total	5,172,988		1,579,931
20	September, 2016 Est.	4,985,364	0.30513	1,521,184
21	Total	4,985,364		1,521,184
22	TOTAL	294,901,676		84,533,792

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

LINE NO.	MONTH	RATE SCHEDULE NSS VOLUMES	RATE	NSS GAS COST RECOVERY
		(1) THERM	(2) \$/THERM	(3=1*2) \$
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
9	December, 2015 Est.	80,000	0.20866	16,693
10	November, 2015 Act.	58,320	0.19195	11,195
11	November, 2015 Est.	(60,006)	0.19195	(11,518)
12		78,314		16,369
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	0.21431	24,337
19	January, 2016 Est.	(100,004)	0.21431	(21,432)
20		113,562		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		60,757		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.	25,001	0.20399	5,100
34	May, 2016 Act.	61,120	0.19514	11,927
35	May, 2016 Est.	(34,996)	0.19514	(6,829)
36		51,125		10,198
37	July, 2016 Est.	24,998	0.29053	7,263
38	June, 2016 Act.	30,700	0.20399	6,262
39	June, 2016 Est.	(25,001)	0.20399	(5,100)
40		30,697		8,425
41	August, 2016 Est.	25,005	0.27263	6,817
42	July, 2016 Act.	23,770	0.29053	6,906
43	July, 2016 Est.	(24,998)	0.29053	(7,263)
44		23,777		6,460
45	September, 2016 Est.	0	-	0
46	• ,	0		0
47	TOTAL	695,638		143,825

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) THERM	(2) \$/THERM	(3 = 1 x 2) \$
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	Total	12,502,190		1,558,194
14	November, 2015 Est. New	18,657,190	0.13027	2,430,472
15	November Choice - Est. New	6,877,229	0.09984	686,623
16	November Est. Priority One Transportation New	518,600	0.13027	67,558
17	October Est. Old	(4,515,622)	0.13501	(609,654)
18	October Est. New	(4,408,533)	0.13027	(574,300)
19	October Act. Old	4,477,698	0.13501	604,534
20	October Act. New	4,371,507	0.13027	569,476
21	October Choice - Est. Old	(1,624,024)	0.10511	(170,701)
22	October Choice - Est. New	(1,690,311)	0.09984	(168,761)
23 24	October Choice - Act. Old October Choice - Act. New	1,624,024	0.10511 0.09984	170,701
25	October Est. Priority One Transportation Old	1,690,311 (178,066)	0.09984	168,761 (24,041)
26	October Est. Priority One Transportation Old October Est. Priority One Transportation New	(173,844)	0.13027	(22,647)
27	October Act. Priority One Transportation Old	154,259	0.13501	20,827
28	October Act. Priority One Transportation New	150,601	0.13027	19,619
29	Total	25,931,019	******	3,168,467
30	December, 2015 Est.	34,991,405	0.13027	4,558,330
31	December Choice - Est.	12,852,105	0.09984	1,283,154
32	December Est. Priority One Transportation	626,710	0.13027	81,642
33	November Est.	(18,657,190)	0.13027	(2,430,472)
34	November Act.	18,317,820	0.13027	2,386,262
35	November Choice - Est.	(6,877,229)	0.09984	(686,623)
36	November Choice - Act.	6,877,229	0.09984	686,623
37	November Est. Priority One Transportation	(518,600)	0.13027	(67,558)
38	November Act. Priority One Transportation	495,510	0.13027	64,550
39	Total	48,107,760		5,875,908
40	January, 2016 Est. Old	19,480,120	0.13027	2,537,675
41	January, 2016 Est. New	34,184,122	0.13081	4,471,625
42	January Choice - Est. Old	6,999,236	0.09984	698,804
43	January Choice - Est. New	12,335,669	0.09988	1,232,087
44	January Est. Priority One Transportation Old	376,489	0.13027	49,045
45	January Est. Priority One Transportation New	660,671	0.13081	86,422
46	December 2015 Est.	(34,991,405)	0.13027	(4,558,330)
47	December 2015 Act.	34,708,925	0.13027	4,521,532
48	December Choice - Est.	(12,852,105)	0.09984	(1,283,154)
49	December Choice - Act.	12,852,105	0.09984	1,283,154
50 51	December Est. Priority One Transportation December Act. Priority One Transportation	(626,710)	0.13027	(81,642)
51 52	, ,	757,680	0.13027	98,703
52	Total	73,884,797		9,055,921

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

LINE		VOLUMES SUBJ. TO DEMAND	COST OF	DEMAND 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 Est.	(29,699,130)	0.13081	(3,884,943)
41	April Act.	29,518,760	0.13081	3,861,349
42	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		2,697,230

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
NO.	MONTH	(1)	(2)	$(3 = 1 \times 2)$
		THERM	\$/THERM	(3 = 1 x 2) \$
1	June, 2016 Est.	9,091,308	0.13081	1,189,234
2	June Choice - Est.	3,257,103	0.09988	325,319
3	June Est. Priority One Transportation	330,080	0.13081	43,178
4	May Est.	(15,921,580)	0.13081	(2,082,702)
5	May Act.	15,736,830	0.13081	2,058,535
6	May Choice - Est.	(5,790,775)	0.09988	(578,383)
7	May Choice - Act.	5,790,775	0.09988	578,383
8	May Est. Priority One Transportation	(476,180)	0.13081	(62,289)
9	May Act. Priority One Transportation	427,060	0.13081	55,864
10	Total	12,444,621		1,527,139
11	July, 2016 Est. Old	3,269,359	0.13081	427,665
12	July, 2016 Est. New	2,685,757	0.15353	412,344
13	July Choice - Est. Old	1,120,426	0.09988	111,908
14	July Choice - Est. New	924,147	0.12273	113,421
15	July Est. Priority One Transportation Old	150,338	0.13081	19,666
16	July Est. Priority One Transportation New	123,502	0.15353	18,961
17	June Est.	(9,091,308)	0.13081	(1,189,234)
18	June Act.	9,004,128	0.13081	1,177,830
19	June Choice - Est.	(3,257,103)	0.09988	(325,319)
20	June Choice - Act.	3,257,103	0.09988	325,319
21	June Est. Priority One Transportation	(330,080)	0.13081	(43,178)
22	June Act. Priority One Transportation	301,850	0.13081	39,485
23	Total	8,158,119		1,088,868
24	August, 2016 Est.	5,218,658	0.15353	801,221
25	August Choice - Est. New	1,732,947	0.12273	212,685
26	August Est. Priority One Transportation New	286,600	0.15353	44,002
27	July Est.Old	(3,269,359)	0.13081	(427,665)
28	July Est. New	(2,685,757)	0.15353	(412,344)
29	July Act. Old	3,249,007	0.13081	425,003
30	July Act. New	2,669,039	0.15353	409,778
31	July Choice - Est. Old	(1,120,426)	0.09988	(111,908)
32	July Choice - Est. New	(924,147)	0.12273	(113,421)
33	July Choice - Act. Old	1,121,769	0.09988	112,042
34	July Choice - Act. New	925,254	0.12273	113,556
35	July Est. Priority One Transportation Old	(150,338)	0.13081	(19,666)
36	July Est. Priority One Transportation New	(123,502)	0.15353	(18,961)
37	July Act. Priority One Transportation Old	130,366	0.13081	17,053
38	July Act. Priority One Transportation New	107,094	0.15353	16,442
39	July - Prior Period Choice GMB Adjustment	107,054	0.13333	8,873
40	Total	7,167,205		1,056,690
41	Sept., 2016 Est.	7,738,025	0.15353	1,188,019
42	Total	7,738,025		1,188,019
43	TOTAL	409,555,467		50,733,226

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	$(3 = 1 \times 2)$
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	October, 2015 Est.	0	-	0
8		66,700		50,349
9	December, 2015 Est.	0	-	0
10	November, 2015 Act.	66,700	0.75485	50,349
11 12	November, 2015 Est.	0	-	50.240
12		66,700		50,349
13	January, 2016 Est.	0	-	0
14	December, 2015 Act.	66,700	0.75485	50,349
15 16	December, 2015 Est.	66 700	-	50.240
10		66,700		50,349
17	February, 2016 Est.	0	-	0
18	January, 2016 Act.	65,120	0.75310	49,042
19	January, 2016 Est.	65 120	-	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.	50.550	-	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.	50.550	-	0
28		59,550		44,847
29	May, 2016	0	-	0
30	April, 2016 Act.	59,550	0.75310	44,847
31 32	April, 2016 Est.	59,550	-	44,847
32		37,330		44,047
33	June, 2016	0	-	0
34	May, 2016 Act.	59,550	0.75310	44,847
35 36	May, 2016 Est.	59,550	-	44,847
30		39,330		44,647
37	July, 2016	0	-	0
38	June, 2016 Act.	58,020	0.75310	43,695
39 40	June, 2016 Est.	58 020	-	43,695
40		58,020		43,093
41	August, 2016	0	-	0
42	July, 2016 Act.	58,920	0.75430	44,443
43 44	July, 2016 Est.	58,920	-	44,443
44		30,720		44,443
45	September, 2016	0	_	0
46 47	August, 2016 Act	58,920	0.75430	44,443
47 48	August, 2016 Est.	58,920	-	44,443
40	TOTAL			521.055
49	TOTAL	745,980		561,977

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

RATE (5) \$/THERM 0.00093 0.00093 0.00093 0.00093 0.00093 0.00093 0.00093 0.00093 0.00093 0.00093	AMOUNT (6=4 x5) \$ 33 21 (23) 30 56 46 (33) 69 640 54 (56) 638
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COLUMBIA GAS OF PENNSYLVANIA, INC. COMMODITY REFUNDS RECEIVED FROM VARIOUS SUPPLIERS

Line No.	Month	Refund (1)	Number (of Mo (2)	nths	Rate (3) %	Amount of Interest $(4 = 1 \times 2 \times 3)$	Total (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 (1) \$	of M	mber lonth (2)		Rate (3) %	Amount of Interest $(4 = 1 \times 2 \times 3)$ $\$$	Total (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	368,389	10	/	12	6.00%	18,419	386,808
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	418,689					22,191	440,880

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

Line No.	Month	Refund (1) \$	Number of Months (2)	Rate (3) %	Amount of Interest $(4 = 1 \times 2 \times 3)$	Total (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