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<br>Canonsburg, Pennsylvania RATES AND RULES

FOR

## FURNISHING GAS SERVICE

IN
THE TERRITORY AS DESCRIBED HEREIN

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 " $5 /$ ". <br> The "Gas Supply Charge" has decreased. <br> The "Gas Cost Adjustment" has increased. <br> The "Pass-through Charge" has decreased. <br> The "Total Effective Rate" has increased and decreased. |
| 17 | Rate Summary | Deleted footnote " $4 /$ " and " $5 /$ ". <br> Deleted the "Usage Charge: Customer Electing CHOICE - $1^{\text {st }}$ year" section and associated rates. <br> Revised the heading "Usage Charge: Customer Electing Choice - more than 1 year". <br> Changed the Rider EBS footnote " $6 /$ " label to footnote " $4 /$ ". <br> The "Gas Supply Charge" has decreased. <br> The "Gas Cost Adjustment" has increased. <br> The "Pass-through Charge" has decreased. <br> The "Total Effective Rate" has increased and decreased. |
| 18 | Rate Summary | Deleted footnote " $4 /$ " and " $5 /$ ". <br> Changed the Rider EBS footnote " $6 /$ " label to footnote " $4 /$ ". <br> The "Gas Supply Charge" has decreased. <br> The "Gas Cost Adjustment" has increased. <br> The "Pass-through Charge" has decreased. <br> The "Total Effective Rate" has increased. |
| 19 | Rate Summary | Deleted footnote " $4 /$ " and " $5 /$ ". <br> Changed the Rider EBS footnote " $6 /$ " label to footnote " $4 /$ ". <br> The "Gas Supply Charge" has decreased. <br> The "Gas Cost Adjustment" has increased. <br> The "Pass-through Charge" has decreased. <br> 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. |

## LIST OF CHANGES MADE BY THIS TARIFF SUPPLEMENT

\(\left.$$
\begin{array}{|c|l|l|}\hline \text { Page } & \text { Page Description } & \text { Revision Description } \\
\hline 21 a & \text { Gas Supply Charge Summary } & \begin{array}{l}\text { The "PGCC" has decreased. } \\
\text { The "Rider MFC" has decreased. } \\
\text { The "Total Gas Supply Charge" has decreased. }\end{array} \\
\hline 21 b & \text { Pass-through Charge Summary } & \begin{array}{l}\text { The "PGDC" has decreased. } \\
\text { The "PGDC "E" Factor" has increased. } \\
\text { The "Capacity Assignment Factor" has increased. } \\
\text { The "Total Pass-through Charge" has decreased. }\end{array} \\
\hline 21 c & \text { Price-to-Compare Summary } & \begin{array}{l}\text { The "PGCC" has decreased. } \\
\text { The "Gas Cost Adjustment" has increased. } \\
\text { The "Capacity Assignment Factor" has decreased. } \\
\text { The "Rider MFC" has decreased } \\
\text { The "Total Price-to-Compare" has increased. }\end{array}
$$ <br>
\hline 76 \& Rate RSS \& Rate RDS <br>

\hline 78 \& Rider PGC \& Revised the "RATE" paragraph.\end{array}\right\}\)| Rate SGSS |
| :--- |
| 96 |
| Rate SGDS |
| Revised the "RATE" paragraph. |

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

Columbia Gas of Pennsylvania, Inc.


Columbia Gas of Pennsylvania, Inc.



Columbia Gas of Pennsylvania, Inc.
Canceling Twenty-fifth and Twenty-sixth Revised Page No. 19

| Rate Summary <br> Rate per thm |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Main Line Service Rate Schedules Commercial / Industrial |  | $\begin{gathered} \text { Distribution } \\ \text { Charge } \\ \hline \end{gathered}$ | Gas Supply Charge | Gas Cost Adjustment | Pass-through Charge | State Tax Adjustment Surcharge | Total Effective Rate |  |
|  |  |  | 1/ |  | $2 /$ | $3 /$ |  |  |
| Rate MLSS - Main Line Sales Service |  |  |  |  |  |  |  |  |
| Customer Charge: |  |  |  |  |  |  |  |  |
| Annual Throughput $>$ 274,000 thm and $<=540,000$ thm | \$ | 469.34 |  |  |  | 0.00 | 469.34 |  |
| Annual Throughput $>$ 540,000 thm and $<=1,074,000$ thm | \$ | 1,149.00 |  |  |  | 0.00 | 1,149.00 |  |
| Annual Throughput $>1,074,000$ thm and $<=3,400,000$ thm | \$ | 2,050.00 |  |  |  | 0.00 | 2,050.00 |  |
| Annual Throughput $>3,400,000$ thm and $<=7,500,000$ thm | \$ | 4,096.00 |  |  |  | 0.00 | 4,096.00 |  |
| Annual Throughput $>7,500,000$ thm | \$ | 7,322.00 |  |  |  | 0.00 | 7,322.00 |  |
| Usage Charge: |  |  |  |  |  |  |  |  |
| MLS Class I Annual Throughput > 274,000 thm | \$ | 0.00937 | 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 |  |
| Rate MLDS - Main Line Distribution Service |  |  |  |  |  |  |  |  |
| Customer Charge: |  |  |  |  |  |  |  |  |
| Annual Throughput > 274,000 thm and <= 540,000 thm | \$ | 469.34 |  |  |  | 0.00 | 469.34 |  |
| Annual Throughput > 540,000 thm and <= 1,074,000 thm | \$ | 1,149.00 |  |  |  | 0.00 | 1,149.00 |  |
| Annual Throughput > 1,074,000 thm and <= 3,400,000 thm | \$ | 2,050.00 |  |  |  | 0.00 | 2,050.00 |  |
| Annual Throughput $>3,400,000$ thm and $<=7,500,000$ thm | \$ | 4,096.00 |  |  |  | 0.00 | 4,096.00 |  |
| Annual Throughput $>7,500,000$ thm | \$ | 7,322.00 |  |  |  | 0.00 | 7,322.00 |  |
| Usage Charge: |  |  |  |  |  |  |  |  |
| MLS Class I Annual Throughput > 274,000 thm | \$ | 0.00937 | - | - | - | 0.00000 | 0.00937 | 4/ |
| MLS Class II: |  |  |  |  |  |  |  |  |
| Annual Throughput > 2,146,000 thm and <= 3,400,000 thm | \$ | 0.04479 | - | - | - | 0.00000 | 0.04479 | 4/ |
| Annual Throughput $>3,400,000$ thm and $<=7,500,000 \mathrm{thm}$ | \$ | 0.03874 | - | - | - | 0.00000 | 0.03874 | 4/ |
| Annual Throughput $>7,500,000$ thm | \$ | 0.03355 | - | - | - | 0.00000 | 0.03355 | 4/ |
| 1/ Please see Page No. 21a for rate components. |  |  |  |  |  |  |  |  |
| 2/ Please see Page No. 21b for rate components. |  |  |  |  |  |  |  |  |
| 3/ The STAS percentage is reflected on Page No. 20 and is applied to the Customer Charge and the Distribution Charge. <br> 4/ Plus Rider EBS Option 1 or 2 - See Page 21. |  |  |  |  |  |  |  |  |
| sued: September 29, 2016 |  |  |  |  |  | Effect | ctober 1, 2 | 2016 |

Columbia Gas of Pennsylvania, Inc.

| Description |
| :--- |
|  |
| Price to Compare for Residential Gas Supply |
| Price to Compare for Commercial Gas Supply |
| State Tax Adjustment Surcharge Percentage |

Rate SS - Standby Service
Other Rates Summary
Rate per thm
$\frac{\text { Rate }}{\$ / \text { thm }}$
Applicable Rate Schedules
\$ 0.31094 1/ RSS
$\$ \quad 0.307791 / \quad$ SGSS $(<=64,400$ thms $)$
0.00000\% Customer and Distribution Charges on all rates
\$ $0.74946 \quad$ 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.

Columbia Gas of Pennsylvania, Inc.

|  |
| ---: |
| Riders |

Customer Choice - Rider CC
Universal Service Plan - Rider USP
Distribution System Improvement Charge - Rider DSIC

## Elective Balancing Service - Rider EBS:

Option 1 - Small Customer
Option 1 - Large Customer
Option 2 - Small Customer
Option 2 - Large Customer
Gas Procurement Charge - Rider GPC
Merchant Function Charge - Rider MFC
Merchant Function Charge - Rider MFC
Purchased Gas Cost - Rider PGC

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

| Rate |  |  | Applicable Rate Schedules |
| :---: | :---: | :---: | :---: |
| \$ | 0.00010 | /thm | RSS/RDS/SGSS/SGDS/SCD/DGDS |
| \$ | 0.07230 | /thm | RSS/RDS |
|  | 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. |
| \$ | 0.01677 | /thm | SGDS/SDS |
| \$ | 0.00727 | /thm | LDS/MLDS |
| \$ | 0.00697 | /thm | SGDS/SDS |
| \$ | 0.00226 | /thm | LDS/MLDS |
| \$ | 0.00695 | /thm | RSS/SGSS/LGSS/MLSS |
| \$ | 0.00444 | /thm | RSS |
| \$ | 0.00129 | /thm | SGSS |
|  | 21a \& 21b |  | Rate Schedules specified on Page 21a \& 21b |

Supplement No. 248 to
Tariff Gas - Pa. P.U.C. No. 9
Twenty-first Revised Page No. 21a
Columbia Gas of Pennsylvania, Inc. Canceling Nineteenth and Twentieth Revised Page No. 21a

| Gas Supply Charge Summary Rate per thm |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Rate Schedule |  | PGCC | Rider GPC | Rider MFC | Total Gas Supply Charge |
| 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 | 0.00695 | 0.00129 | 0.29679 |
| Rate LGSS - Large General Sales Service | \$ | 0.28855 | 0.00695 | - | 0.29550 |
| Rate MLSS Main Line Sales Service | \$ | 0.28855 | 0.00695 | - | 0.29550 |


| Pass-through Charge Summary <br> Rate per thm |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rate Schedule |  | PGDC | $\begin{gathered} \text { PGDC } \\ \text { "E" Factor } \\ \hline \end{gathered}$ | Capacity Assignment Factor | Pipeline Refund | Rider CC | Rider USP | Total Passthrough |
| Rate CAP - Customer Assistance Plan | \$ | 0.11696 | 0.00562 | (0.03017) | - | - | - | 0.09241 |
| Rate RSS - Residential Sales Service | \$ | 0.11696 | 0.00562 | - | - | 0.00010 | 0.07230 | 0.19498 |
| Rate SGSS - Small General Sales Service | \$ | 0.11696 | 0.00562 | - | - | 0.00010 | - | 0.12268 |
| Rate LGSS - Large General Sales Service | \$ | 0.11696 | 0.00562 | - | - | - | - | 0.12258 |
| Rate MLSS Main Line Sales Service | \$ | 0.11696 | 0.00562 | - | - | - | - | 0.12258 |
| Rate RDS - Residential Distribution Service | \$ | 0.11696 | 0.00562 | (0.03017) | - | 0.00010 | 0.07230 | 0.16481 |
| Rate SCD - Small Commercial Distribution (Choice) | \$ | 0.11696 | 0.00562 | (0.03017) | - | 0.00010 | - | 0.09251 |
| Rate SGDS - Small General Distribution Service <br> Priority One (P1) <br> Non-Priority One (NP1) | \$ | 0.11696 | 0.00562 - |  | - | $\begin{aligned} & 0.00010 \\ & 0.00010 \end{aligned}$ | - | $\begin{aligned} & 0.12268 \\ & 0.00010 \end{aligned}$ |
| Rate SDS - Small Distribution Service | \$ | - | - | - | - | - | - | - |
| Rate LDS - Large Distribution Service | \$ | - | - | - | - | - | - | - |
| Rate MLDS - Main Line Distribution Service | \$ | - | - | - | - | - | - | - |
| ued: September 29, 2016 |  |  |  |  |  |  | Effectiv | tober 1, 201 |

Columbia Gas of Pennsylvania, Inc.
Canceling Nineteenth and Twentieth Revised Page No. 21c


## 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

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

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.

## (C) Indicates Change

## 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

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:

| 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 $1,350 \mathrm{Btu} / \mathrm{hr}$ 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

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.

## 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 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 Passthrough 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 $52 . \mathrm{Pa}$. Code $\S 53.64$ (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

## 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.

## 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) Indicates Change

## 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:
a. 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:
(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 buysell 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.

Effective: October 1, 2016

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 |  |
|  |  | (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 |  |  |
| 4 | October, 2016 through September, 2017 | 332,476,097 | Therms |
| 5 | PGCC (Line 2/Line 4) | 0.28855 |  |
| 6 | Commodity (Over)/Under Collection |  |  |
| 7 | Commodity E-Factor |  |  |
| 8 | (Exhibit No. 1-E) | $(6,372,700)$ |  |
| 9 | Projected sales for the twelve billing periods of |  |  |
| 10 | October, 2016 through September, 2017 | 332,476,097 | Therms |
| 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 | $\underline{\text { Net (Over) Under Collection }}$ |  |  |
| 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 |  |

[^0]
## 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.

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
Daily purchased gas demand rate (Line 2 / line 3)
$\xlongequal{\$ 0.74946}$ per Therm

Daily purchased gas demand (Therms)
707,040 Therms
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) $\quad \$ 529,898$

[^1]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 <br> No. | Month | Sales <br> Subject | PGCC | Sales |  | PGDC | PGDC | Purchased Gas Cost |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | PGCC | Subject |  |  |  |
|  |  | 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 |

Total
332,476,097
95,935,977
463,638,520

61,626,832

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

| Line <br> No. | Month | Daily Purchased Gas Demand Quantity | Daily <br> Gas Demand <br> Rate | Daily <br> Purchased Gas <br> 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

| $\begin{aligned} & \text { Line } \\ & \text { No. } \end{aligned}$ | Month | Lg. Quantity GDS $\qquad$ | Rate | Revenue | Sm. Quantity GDS Deliveries | Rate | Revenue | Total <br> Trans. <br> 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 |
| 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 |
| 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 <br> No. | Month | Commodity Recoveries PGCC Revenue | Total Commodity Cost of Gas 1_/ | Commodity Over/ Undercollection | Demand Recoveries PGDC Revenue | Total <br> Demand Cost of Gas 1_/ | Demand Over/ <br> Undercollection | Total Over/ <br> 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.

Columbia Gas of Pennsylvania, Inc. Capacity Assignment Factor

Assignment of FT Only
Purchased Gas Demand Charge (PGDC) Paid By the CHOICE Customer Rates Based on Projected Costs For 12 Months Ending September, 2017
$(529,898)$
0

2,606,823
\$64,233,165
\$126.86 per Dth

46,364 MMDth

46,688 MMDth

21,755 MMDth
1 Dth
0.7\%
1.0070 Dth
\$1.3854 per Dth
(\$0.1596) per Dth
0.0028 Dth
$\$ 0.3552$ per Dth
\$1.0302 per Dth
0.4692 Dth
\$0.0072
\$0.0021
\$0.0072
$\$ 0.0090$
\$0.0280
$\$ 0.0535$ per Dth
\$0.3552 per Dth
(\$0.0535) per Dth $\$ \mathbf{0 . 3 0 1 7}$ per Dth $\mathbf{\$ 0 . 0 3 0 1 7}$ per Therm
$\$ \mathbf{0 . 9 2 4 1}$ per Dth

1. Projected Demand Costs Oct. 2016 through Sept. 2017 (Exh. 1-B, Sch. 1 from Oct. 2016 PGC)

1a. Less Purchased Gas Demand Costs Recovered Under Rate SS (Exhibit 1-A, Schedule 1, Sheet 2)
1b. Less Purchased Gas Demand Allocated to Rates LTS, STS, SGS-TS, and MLS

1c. Experienced Demand Net Under/(Over) Collection (Exhibit No. 1-E)
2. Total Adjusted Demand Costs per 1307(f) Filing (1) + (1a) + (1b) + (1c)
3. Unit FT Demand Charge Per Dth of Gulf/TCO capacity the marketer would pay Gulf and TCO. (Exhibit 1-A, Schedule 3, Sheet 2)
4. Projected Sales \& Choice Requirements for 12 billing periods of October, 2016 through September, 2017
5. Projected Sales \& Choice Requirements 12 months ended September 2017, including Unaccounted For @ 0.7\%
6. Annual Injections and Withdrawals, Normal Weather

7a. Quantity Delivered to the Customer
7b. Unaccounted-for \& Co. Use Factor from Volume Balancing System
7c. Quantity Delivered to the City Gate. (7a)/(1-7b)
8. Unit Demand Charge: (2) / (4)
9. OSS and Capacity Release Credit
10. Average Daily FT Delivery: (7c) / 365 days
11. Annual Demand Charge for the Assigned FT Capacity payable to the pipeline(s): (3) X (10)
12. Annual Demand Charge for other capacity that CPA retains (8) - (11)
13. Quantity Injected and Withdrawn to Deliver 1 Dth to the Customer: (6) / (4)

14a. Injection Charge @ \$0.0153/Dth
14b. FSS Shrinkage @ 0.15 percent for gas at $\$ 2.9247 / D t h$
14c. Withdrawal Charge @ \$0.0153/Dth
14d. SST Commodity Charge @ \$0.0192/Dth
14e. SST retention @ $2.0420 \%$ for gas at $\$ 2.9247 / D t h$
14f. Total Annual Variable Storage Costs
15. Credit to Purchased Gas Demand Charge for the CHOICE Customer:

15a. For Demand Cost Paid to Pipelines: = (11)
15b. Less Storage Costs: $=(14 \mathrm{f})$
15c. Net Credit: $(15 a)+(15 b)$
15d. Per Therm: (15c)/10-Capacity Assignment Factor
16. Purchased Gas Demand Charge Paid By the CHOICE Customer: (8)+(9) - (15c)

## 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: |
| :---: | :---: | :---: |
|  | FTS-1 | TCO and |
| Capacity | Capacity | Gulf |

1 CPA FT Capacity on TCO and Columbia Gulf
2 CPA Contract: Dth/d127,37343,632
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

## Notes:

1/ Projected demand costs for the period 12 months ended September, 2017.
2/ $1.020 \mathrm{Dth} /$ day $=1.000 /(1$-retention $)=1.000 /(1-0.02042)$

## COLUMBIA GAS OF PENNSYLVANIA, INC.

Summary of Total Estimated Purchased Gas Costs
For the Period October 2016 Through September 2017

| Line |  | 2016 |  |  | 2017 |  |  |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | Description | October | November | December | January | February | March | April | May | June | July | August | September |  |
| 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 |
| 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 (Line 5 = Line 3 + Line 4) | $\underline{9,695,765} \xlongequal{15,541,268}$ |  | 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 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## COLUMBIA GAS OF PENNSYLVANIA, INC

Summary of Total Estimated Purchased Gas Costs Demand Costs

| Line |  | 2016 |  |  | 2017 |  |  |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | Description | October | November | December | January | February | March | April | May | June | July | August | September |  |
|  |  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 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 | $\underline{62,156,240}$ |

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

## COLUMBIA GAS OF PENNSYLVANIA, INC.

Summary of Total Estimated Purchased Gas Costs
Commodity Costs

| $\begin{gathered} \text { Line } \\ \text { No. } \\ \hline \end{gathered}$ | Description | 2016 |  |  | 2017 |  |  |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | October | November | December | January | February | March | April | May | June | July | August | September |  |
|  |  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 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 |

## COLUMBIA GAS OF PENNSYLVANIA, INC.

Summary of Total Estimated Purchased Gas Costs Commodity Quantities

| Line |  | 2016 |  |  | 2017 |  |  |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | Description | October | November | December | January | February | March | April | May | June | July | August | September |  |
|  | 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 |
|  | Spot |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | 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 |
|  | Local |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | 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 |
|  | Storage |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | 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) | $(2,952,000)$ | $(421,000)$ |
|  | Total - All Sources |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | 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 |

## COLUMBIA GAS OF PENNSYLVANIA, INC.

| $\begin{aligned} & \text { Lin } \\ & \text { No. } \end{aligned}$ | Description | 2016 |  |  | 2017 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | October | November | December | January | February | March | April | May | June | July | August | September | Total |
|  |  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| Columbia Gas Transmission |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | FTS |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | Billing Determinant-Dth | 132,588 | 132,588 | 132,588 | 132,588 | 132,588 | 132,588 | 132,588 | 132,588 | 132,588 | 132,588 | 132,588 | 132,588 |  |
| 2 | Less Capacity Release (1) | 5,215 | 5,215 | 5,215 | 5,215 | 5,215 | 5,215 | 5,215 | 5,215 | 5,215 | 5,215 | 5,215 | 5,215 |  |
| 3 | Net Billing Determinant - Dth | 127,373 | 127,373 | 127,373 | 127,373 | 127,373 | 127,373 | 127,373 | 127,373 | 127,373 | 127,373 | 127,373 | 127,373 |  |
| 4 | Demand Rate | 6.1900 | 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 |
| FSS-Reservation |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 | Billing Determinat-Dth | 456,876 | 456,876 | 456,876 | 456,876 | 456,876 | 456,876 | 456,876 | 456,876 | 456,876 | 456,876 | 456,876 | 456,876 |  |
| 7 | Demand Rate | 1.5010 | 1.5010 | 1.5010 | 1.5010 | 1.5010 | 1.5010 | 1.5010 | 1.5010 | 1.5010 | 1.5010 | 1.5010 | 1.5010 |  |
| 8 | Demand Cost | 685,771 | 685,771 | 685,771 | 685,771 | 685,771 | 685,771 | 685,771 | 685,771 | 685,771 | 685,771 | 685,771 | 685,771 | 8,229,252 |
| FSS-Capacity |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 | Total-DTH | 25,341,126 | 25,341,126 | 25,341,126 | 25,341,126 | 25,341,126 | 25,341,126 | 25,341,126 | 25,341,126 | 25,341,126 | 25,341,126 | 25,341,126 | 25,341,126 |  |
| 10 | Demand Rate | 0.0288 | 0.0288 | 0.0288 | 0.0288 | 0.0288 | 0.0288 | 0.0288 | 0.0288 | 0.0288 | 0.0288 | 0.0288 | 0.0288 |  |
| 11 | Demand Cost | 729,824 | 729,824 | 729,824 | 729,824 | 729,824 | 729,824 | 729,824 | 729,824 | 729,824 | 729,824 | 729,824 | 729,824 | 8,757,888 |
| SST |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 | Billing Determinant-Dth | 456,876 | 456,876 | 456,876 | 456,876 | 456,876 | 456,876 | 228,438 | 228,438 | 228,438 | 228,438 | 228,438 | 228,438 |  |
| 13 | Demand Rate | 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 |

[^2]
## COLUMBIA GAS OF PENNSYLVANIA, INC.

Summary of Total Estimated Purchased Gas Demand Costs Columbia Gulf Transmission Company

| Line | Description | 2016 |  |  | 2017 |  |  |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. |  | October | November | December | January | February | March | April | May | June | July | August | September |  |
|  |  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
|  | Columbia Gulf Transmission |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | FTS-1 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | Billing Determinant-Dth | 43,632 | 43,632 | 43,632 | 43,632 | 43,632 | 43,632 | 43,632 | 43,632 | 43,632 | 43,632 | 43,632 | 43,632 |  |
| 2 | Demand Rate | 4.2917 | 4.2917 | 4.2917 | 4.2917 | 4.2917 | 4.2917 | 4.2917 | 4.2917 | 4.2917 | 4.2917 | 4.2917 | 4.2917 |  |
| 3 | Demand Cost | 187,255 | 187,255 | 187,255 | 187,255 | 187,255 | 187,255 | 187,255 | 187,255 | 187,255 | 187,255 | 187,255 | 187,255 | 2,247,060 |
| 4 | Total Columbia Gulf Demand Cost | 187,255 | 187,255 | 187,255 | 187,255 | 187,255 | 187,255 | 187,255 | 187,255 | 187,255 | 187,255 | 187,255 | 187,255 | 2,247,060 |

COLUMBIA GAS OF PENNSYLVANIA, INC.
Exhibit 1-B
Schedule 3
Sheet 1 of 1

Summary of Total Estimated Purchased Gas Demand Costs
Texas Eastern Transmission Corporation


## COLUMBIA GAS OF PENNSYLVANIA, INC.

| Line |  | 2016 |  |  | 2017 |  |  |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | Description | October | November | December | January | February | March | April | May | June | July | August | September |  |
|  |  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |

Dominion Transmission
GSS - Reservation
Billing Determinant-Dth
Demand Rate
Demand Cost
GSS - Capacity
Billing Determinant-Dth
Demand Rate
FTNN
Billing Determinant-Dth
Total-DTH
Demand Cost
FT
10 Billing Determinant-Dth
11 Total-DTH
13 Total DTI Demand Cost

| 24,000 | 24,000 | 24,000 | 24,000 | 24,000 | 24,000 | 24,000 | 24,000 | 24,000 | 24,000 | 24,000 | 24,000 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1.8618 | 1.8618 | 1.8618 | 1.8618 | 1.8618 | 1.8618 | 1.8618 | 1.8618 | 1.8618 | 1.8618 | 1.8618 | 1.8618 |  |
| 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 |
| 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 |  |
| 0.0145 | 0.0145 | 0.0145 | 0.0145 | 0.0145 | 0.0145 | 0.0145 | 0.0145 | 0.0145 | 0.0145 | 0.0145 | 0.0145 |  |
| 27,132 | 27,132 | 27,132 | 27,132 | 27,132 | 27,132 | 27,132 | 27,132 | 27,132 | 27,132 | 27,132 | 27,132 | 325,584 |
| 0 | 6,000 | 6,000 | 6,000 | 6,000 | 6,000 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| 0.0000 | 4.1619 | 4.1619 | 4.1619 | 4.1619 | 4.1619 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |  |
| 0 | 24,971 | 24,971 | 24,971 | 24,971 | 24,971 | 0 | 0 | 0 | 0 | 0 | 0 | 124,855 |
| 22,479 | 25,024 | 25,024 | 25,024 | 25,024 | 25,024 | 22,231 | 22,231 | 22,231 | 22,231 | 22,231 | 22,231 |  |
| 4.1619 | 4.1619 | 4.1619 | 4.1619 | 4.1619 | 4.1619 | 4.1619 | 4.1619 | 4.1619 | 4.1619 | 4.1619 | 4.1619 |  |
| 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 |
| 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 |

## COLUMBIA GAS OF PENNSYLVANIA, INC.

Summary of Total Estimated Purchased Gas Demand Costs

| Line |  | 2016 |  |  | 2017 |  |  |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | Description | October | November | December | January | February | March | April | May | June | July | August | September |  |
|  |  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| Tennessee Gas FT-A (Direct) New Castle - 500 Line |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | Billing Determinant-Dth | 7,600 | 7,600 | 7,600 | 7,600 | 7,600 | 7,600 | 7,600 | 7,600 | 7,600 | 7,600 | 7,600 | 7,600 |  |
| 2 | Demand Rate | 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 - 800 Line |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | Billing Determinant-Dth | 8,400 | 8,400 | 8,400 | 8,400 | 8,400 | 8,400 | 8,400 | 8,400 | 8,400 | 8,400 | 8,400 | 8,400 |  |
| 5 | Demand Rate | 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 - 500 Line |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 | Billing Determinant-Dth | 7,600 | 7,600 | 7,600 | 7,600 | 7,600 | 7,600 | 7,600 | 7,600 | 7,600 | 7,600 | 7,600 | 7,600 |  |
| 8 | Demand Rate | 5.2796 | 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 | $\underline{\text { 277,978 }}$ | 277,978 | 277,978 | 277,978 | $\xrightarrow{277,978}$ | $\underline{\text { 277,978 }}$ | $\underline{ }$ 277,978 | $\underline{\text { 277,978 }}$ | 277,978 | 277,978 | 277,978 | $\xrightarrow{3,401,731}$ |

## COLUMBIA GAS OF PENNSYLVANIA, INC

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

| Line |  | 2016 |  |  | 2017 |  |  |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | Description | October | November | December | January | February | March | April | May | June | July | August | $\underline{\text { September }}$ |  |
|  |  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
|  | 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 |

## COLUMBIA GAS OF PENNSYLVANIA, INC.

Summary of Total Estimated Purchased Gas Demand Costs
Equitrans

| Line | Description | 2016 |  |  | 2017 |  |  |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. |  | October | November | December | January | February | March | April | May | June | July | August | $\underline{\text { September }}$ |  |
|  |  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
|  | 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 |



## COLUMBIA GAS OF PENNSYLVANIA, INC.

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

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

## Line

$\qquad$

$\qquad$ | January $\quad$ February |
| :--- | March $\quad \begin{aligned} & \\ & 2017 \\ & \text { April } \quad \text { May }\end{aligned}$ June July August September $\qquad$ Total

$\frac{\text { SPOT }}{\text { Base }}$

| 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 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rate-\$/DTH | 2.4590 | 2.8689 | 2.8060 | 2.2303 | 2.1917 | 2.9114 | 2.7890 | 2.7781 | 2.7966 | 2.8239 | 2.8328 | 2.8123 |  |
| 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 |
| Swing |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Quantity - DTH | 16,000 | 0 | 0 | 0 | 0 | 155,000 | 5,000 | 0 | 0 | 0 | 0 | 0 | 176,000 |
| 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 |  |
| Cost-\$ | 41,792 | 0 | 0 | 0 | 0 | 482,577 | 14,345 | 0 | 0 | 0 | 0 | 0 | 538,714 |
| 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 |
| Total Spot |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 |
| 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 |  |
| 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 |
| 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 |
| Total Local |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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
$\qquad$

| October |
| :---: |


| January | February | March | April | May | June | July | Augus | September |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |


|  | DOMINION TRANSMIS |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 |
|  | 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 | 2.5742 | 2.8805 | 3.0929 | 3.2000 | 3.2050 | 3.1299 | 2.8299 | 2.8280 | 2.8583 | 2.8892 | 2.8986 | 2.8805 |  |
| 18 | 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 |
| 19 | 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 |  |
| 20 | Cost-\$ | $(1,632,043)$ | 6,904,102 | 8,366,102 | 12,929,833 | 10,856,773 | 10,970,155 | (5,767,336) | $(9,796,192)$ | $(9,895,435)$ | $(10,008,189)$ | (10,034,953) | (9,015,965) | $(6,123,148)$ |
| 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 | $(2,249,000)$ | $(3,751,000)$ | $(3,894,000)$ | $(3,903,000)$ | $(3,901,000)$ | $(3,518,000)$ | $(396,000)$ |
| 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 |

$\qquad$
$\qquad$ January $\quad$ February March April 2017
May 017 $-$ June une July y Augus nst September $\qquad$ Total

| TCO-SST |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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) | $(19,730,000)$ |
| 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 |
| 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 |  |
| 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 TRANSMISSION - GSS |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Injections - DTH | $(116,000)$ | 0 | 0 | 0 | 0 | 0 | $(310,000)$ | $(211,000)$ | $(211,000)$ | $(211,000)$ | $(211,000)$ | $(211,000)$ | $(1,481,000)$ |
| Withdrawals - DTH | 0 | 106,000 | 380,000 | 528,000 | 317,000 | 148,000 | 99,000 | 0 | 0 | 0 | 0 | 0 | 1,578,000 |
| 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 |  |
| 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 |
| EQUITRANS - SS |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Injections - DTH | $(181,000)$ | 0 | 0 | 0 | 0 | 0 | 0 | $(76,000)$ | $(221,000)$ | $(228,000)$ | $(228,000)$ | $(177,000)$ | $(1,111,000)$ |
| Withdrawals - DTH | 0 | 75,000 | 375,000 | 375,000 | 300,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,125,000 |
| 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 |  |
| Cost-\$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Storage - DTH | $(931,000)$ | 2,822,000 | 3,958,000 | 5,849,000 | 4,770,000 | 4,352,000 | $(2,249,000)$ | $(3,751,000)$ | $(3,894,000)$ | $(3,903,000)$ | $(3,901,000)$ | $(3,518,000)$ | $(396,000)$ |
| Total EUB - DTH | 297,000 | $(181,000)$ | (704,000) | $(1,040,000)$ | (856,000) | $(495,000)$ | 90,000 | 456,000 | 588,000 | 627,000 | 627,000 | 566,000 | $(25,000)$ |
| 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) | $(421,000)$ |
| 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) | $(6,397,818)$ |
| 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 |
| 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 |
| 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 |
| Total Storage Cost | $\xrightarrow{(1,512,119)}$ | 6,949,595 | $\xrightarrow{8,432,430}$ | 12,477,448 | $\underline{\text { 10,153,257 }}$ | 10,083,101 | $\stackrel{(6,032,038)}{ }$ | $\stackrel{(9,161,944)}{ }$ | $\stackrel{(9,303,440)}{ }$ | $\stackrel{(9,337,141)}{ }$ | $\xrightarrow{(9,329,980)}$ | $\stackrel{(8,347,423)}{ }$ | $\underline{(4,928,255)}$ |

## COLUMBIA GAS OF PENNSYLVANIA, INC.

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

## RECONCILIATION OF COMMODITY COST OF GAS

FROM 2015-1307(f)
COMMODITY

Sales


COLUMBIA GAS OF PENNSYLVANIA, INC.

Exhibit 1-E Schedule 2b Sheet 1 of 2

## RECONCILIATION OF DEMAND COST OF GAS

FROM 2015-1307(f)
DEMAND

| Sales |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Line |  | Subject to |  |  | Net Demand Over (Under) |
|  |  | Demand |  |  |  |
| No. | Month | E-Factor | Rate | Amount | Collection |
|  |  | Therm | \$/Therm | \$ | \$ |
| 1 | True-up of Net Demand Costs Included 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) | $(658,114)$ |  |
| $\begin{aligned} & 10 \\ & 11 \end{aligned}$ | January, 2016 1_/ | 47,180,460 | (0.01422) | $(670,906)$ |  |
|  |  | 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) Period |  |  |  | (5,829,771) |
| 22 | Amount to be Passed Back in the 2016 1307(f) |  |  |  | 825,051 |
|  | 1_/ Rate in effect January 1, 2016. |  |  |  |  |
|  | 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 $\$ 20 \mathrm{~K}$, 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. |  |  |  |  |
|  | Amount represents an adjustmen January 2013 - July 2016. | ct Choice GM | coveries not | iously includ | the period of |

## COLUMBIA GAS OF PENNSYLVANIA, INC.

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


## COLUMBIA GAS OF PENNSYLVANIA, INC.

## RECONCILIATION OF OFF SYSTEM SALES CREDIT

FROM 2015-1307(f)


1_/ Rate in effect January 1, 2016.

## COLUMBIA GAS OF PENNSYLVANIA, INC.

## RECONCILIATION OF OFF SYSTEM SALES CREDIT

 FROM 2015-1307(f)
## DEMAND

| Sales |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Line | Month | Subject to Off-System Sales Credit | Rate | Amount | Net Demand Over (Under) Collection |
|  |  |  |  |  |  |
| No. |  |  |  |  |  |
|  |  | Therm | \$/Therm | \$ | \$ |
| 1 | Beginning Balance |  |  |  | $(2,460)$ |
| 2 | October, 2015 | 6,272,690 | (0.01208) | $(75,774)$ |  |
| 3 |  | 6,229,500 | (0.00498) | $(31,023)$ |  |
| 4 | November | 25,992,740 | (0.01208) | $(313,992)$ |  |
| 5 |  | $(61,730)$ | (0.00498) | 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 <br> No. | Month | Total Commodity Sales Revenue | Rate <br> Schedule NSS <br> Gas Cost <br> Recovery | Total Commodity Purchase Gas Cost Recovery | Total Commodity Cost of Fuel | Total Commodity Over/(Under) Collection | Number of Months | Rate | Commodity Over/(Under) Collection Interest | Total Commodity Over/(Under) Collection |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | (1) | (2) | ( 3 = $1+2$ ) | (4) | (5 = 3-4) | (6) | (7) | ( $8=5 \times 6 \times 7$ ) | (9 = 5 + 8) |
|  |  | \$ | \$ | \$ | \$ | \$ |  |  |  |  |
|  | Reference: | Sch. 4, <br> Pg. 2 | $\begin{gathered} \text { Sch. 4, } \\ \text { Pg. } 3 \end{gathered}$ |  |  |  |  |  |  |  |

Actuals through August 2016; Projections 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 | 1 | 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 | 1 | 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 | 1 | 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 | 1 | 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 | 1 | 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 | 1 | 12 | 8.00\% | 7,776 | 137,377 |
| 11 | August | 1,579,931 | 6,460 | 1,586,391 | 1,972,212 | $(385,821)$ | 8 | 1 | 12 | 8.00\% | $(20,577)$ | $(406,398)$ |
| 12 | September - Est. | 1,521,184 | 0 | 1,521,184 | 863,072 | 658,112 | 7 | 1 | 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


Actuals through August 2016; Projections for September 2016

| 1 | October, 2015 | 1,558,194 | 73 | 49,920 | 30 | 1,608,216 | 5,527,271 | (3,919,054) | 18 | / | 12 | 6.00\% | $(352,715)$ | (4,271,769) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | November | 3,168,467 | 168 | 50,349 | 69 | 3,219,052 | 5,586,751 | $(2,367,698)$ | 17 | 1 | 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 | 1 | 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 | 1 | 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 | 1 | 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 | 1 | 12 | 3.50\% | $(65,488)$ | (3,273,052) |
| 13 | TOTAL | 50,733,226 | 1,573 | 561,977 | 3,154 | 51,299,930 | $\underline{\text { 59,391,417 }}$ | $(8,091,488)$ |  |  |  |  | $(257,540)$ | (8,349,028) |

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


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


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


Exhibit 1-E
Schedule 4
Sheet 3 of 6
COLUMBIA GAS OF PENNSYLVANIA, INC. DETAIL OF NSS COMMODITY COST RECOVERY OCTOBER, 2015 THROUGH SEPTEMBER, 2016

| LINE | RATE |  |  | NSS GAS |
| :---: | :---: | :---: | :---: | :---: |
|  |  | SCHEDULE |  |  |
|  |  | NSS |  | COST |
| NO. | MONTH | VOLUMES | RATE | RECOVERY |
|  |  | (1) | (2) | (3=1*2) |
|  |  | THERM | \$/THERM | \$ |
| 1 | October, 2015 Est. | 35,001 | 0.23697 | 8,294 |
| 2 | September, 2015 Act. | 22,110 | 0.25171 | 5,565 |
| 3 | September, 2015 Est. | $(25,007)$ | 0.25171 | $(6,295)$ |
| 4 |  | 32,104 |  | 7,565 |
| 5 | November, 2015 Est. | 60,006 | 0.19195 | 11,518 |
| 6 | October, 2015 Act. | 49,160 | 0.23697 | 11,649 |
| 7 | October, 2015 Est. | $(35,001)$ | 0.23697 | $(8,294)$ |
| 8 |  | 74,165 |  | 14,873 |
| 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 |

October 1, 2016 Quarterly Filing

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

| $\begin{gathered} \text { LINE } \\ \text { NO. } \end{gathered}$ | MONTH | $\begin{aligned} & \text { VOLUMES SUBJ. } \\ & \text { TO DEMAND } \\ & \text { COST OF GAS } \end{aligned}$ | $\begin{gathered} \text { COST OF } \\ \text { GAS } \end{gathered}$ | $\begin{aligned} & \text { DEMAND } \\ & \text { COST } \\ & \text { RECOVERY } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
|  |  | (1) | (2) | ( $3=1 \times 2$ ) |
|  |  | THERM | \$/THERM | \$ |
| 1 | October, 2015 Est. Old | 4,515,622 | 0.13501 | 609,654 |
| 2 | October, 2015 Est. New | 4,408,533 | 0.13027 | 574,300 |
| 3 | October Choice - Est. Old | 1,624,024 | 0.10511 | 170,701 |
| 4 | October Choice - Est. New | 1,690,311 | 0.09984 | 168,761 |
| 5 | October Est. Priority One Transportation Old | 178,066 | 0.13501 | 24,041 |
| 6 | October Est. Priority One Transportation New | 173,844 | 0.13027 | 22,647 |
| 7 | September, 2015 Est. | $(5,790,556)$ | 0.13501 | $(781,783)$ |
| 8 | September 2015 Act. | 5,763,556 | 0.13501 | 778,138 |
| 9 | September Choice - Est. | $(2,032,880)$ | 0.10511 | $(213,676)$ |
| 10 | September Choice - Act. | 2,032,880 | 0.10511 | 213,676 |
| 11 | September Est. Priority One Transportation | $(282,250)$ | 0.13501 | $(38,107)$ |
| 12 | September Act. Priority One Transportation | 221,040 | 0.13501 | 29,843 |
| 13 | 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 | October Choice - Act. Old | 1,624,024 | 0.10511 | 170,701 |
| 24 | October Choice - Act. New | 1,690,311 | 0.09984 | 168,761 |
| 25 | October Est. Priority One Transportation Old | $(178,066)$ | 0.13501 | $(24,041)$ |
| 26 | 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 | December Est. Priority One Transportation | $(626,710)$ | 0.13027 | $(81,642)$ |
| 51 | December Act. Priority One Transportation | 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

| $\begin{gathered} \text { LINE } \\ \text { NO. } \end{gathered}$ | MONTH | VOLUMES SUBJ. TO DEMAND COST OF GAS | $\begin{gathered} \text { COST OF } \\ \text { GAS } \end{gathered}$ | DEMAND COST <br> 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

| $\begin{gathered} \text { LINE } \\ \text { NO. } \end{gathered}$ | MONTH | $\begin{aligned} & \text { VOLUMES SUBJ. } \\ & \text { TO DEMAND } \\ & \text { COST OF GAS } \\ & \hline \end{aligned}$ | $\begin{gathered} \text { COST OF } \\ \text { GAS } \end{gathered}$ | $\begin{aligned} & \text { DEMAND } \\ & \text { COST } \\ & \text { RECOVERY } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
|  |  | (1) | (2) | ( $3=1 \times 2$ ) |
|  |  | THERM | \$/THERM | \$ |
| 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 |  |  | 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 | $\underline{409,555,467}$ |  | 50,733,226 |

Exhibit 1-E
Schedule 4
Sheet 5 of 6
COLUMBIA GAS OF PENNSYLVANIA, INC. DETAIL OF STANDBY DEMAND COST RECOVERY OCTOBER, 2015 THROUGH SEPTEMBER, 2016

| $\begin{aligned} & \text { LINE } \\ & \text { NO. } \\ & \hline \end{aligned}$ | MONTH | STANDBY <br> VOLUMES | STANDBY DEMAND RATE | STANDBY GAS DEMAND RECOVERIES |
| :---: | :---: | :---: | :---: | :---: |
|  |  | (1) | (2) | ( 3 = $1 \times 2$ ) |
|  |  | THERM | \$/THERM | \$ |
| 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 | November, 2015 Est. | 0 | - | 0 |
| 12 |  | 66,700 |  | 50,349 |
| 13 | January, 2016 Est. | 0 | - | 0 |
| 14 | December, 2015 Act. | 66,700 | 0.75485 | 50,349 |
| 15 | December, 2015 Est. | 0 | - | 0 |
| 16 |  | 66,700 |  | 50,349 |
| 17 | February, 2016 Est. | 0 | - | 0 |
| 18 | January, 2016 Act. | 65,120 | 0.75310 | 49,042 |
| 19 | January, 2016 Est. | 0 | - | 0 |
| 20 |  | 65,120 |  | 49,042 |
| 21 | March, 2016 Est. | 0 | - | 0 |
| 22 | February, 2016 Act. | 59,550 | 0.75310 | 44,847 |
| 23 | February, 2016 Est. | 0 | - | 0 |
| 24 |  | 59,550 |  | 44,847 |
| 25 | April, 2016 | 0 | - | 0 |
| 26 | March, 2016 Act. | 59,550 | 0.75310 | 44,847 |
| 27 | March, 2016 Est. | 0 | - | 0 |
| 28 |  | 59,550 |  | 44,847 |
| 29 | May, 2016 | 0 | - | 0 |
| 30 | April, 2016 Act. | 59,550 | 0.75310 | 44,847 |
| 31 | April, 2016 Est. | 0 | - | 0 |
| 32 |  | 59,550 |  | 44,847 |
| 33 | June, 2016 | 0 | - | 0 |
| 34 | May, 2016 Act. | 59,550 | 0.75310 | 44,847 |
| 35 | May, 2016 Est. | 0 | - | 0 |
| 36 |  | 59,550 |  | 44,847 |
| 37 | July, 2016 | 0 | - | 0 |
| 38 | June, 2016 Act. | 58,020 | 0.75310 | 43,695 |
| 39 | June, 2016 Est. | 0 | - | 0 |
| 40 |  | 58,020 |  | 43,695 |
| 41 | August, 2016 | 0 | - | 0 |
| 42 | July, 2016 Act. | 58,920 | 0.75430 | 44,443 |
| 43 | July, 2016 Est. | 0 | - | 0 |
| 44 |  | 58,920 |  | 44,443 |
| 45 | September, 2016 | 0 | - | 0 |
| 46 | August, 2016 Act | 58,920 | 0.75430 | 44,443 |
| 47 | August, 2016 Est. | 0 | - | 0 |
| 48 |  | 58,920 |  | 44,443 |
| 49 | TOTAL | 745,980 |  | 561,977 |

October 1, 2016 Quarterly Filing

COLUMBIA GAS OF OF PENNSYLVANIA, INC.
DETAIL OF NSS BANKING \& BALANCING AND CAPACITY RELEASE REVENUE OCTOBER, 2015 THROUGH SEPTEMBER, 2016

| $\begin{gathered} \text { LINE } \\ \text { NO. } \\ \hline \end{gathered}$ | DESCRIPTION | NSS-BANKING \& BALANCING |  |  | NSS-CAPACITY RELEASE |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | VOLUME | RATE | AMOUNT | VOLUME | RATE | AMOUNT |
|  |  | (1) | (2) | (3=1 $\times 2$ ) | (4) | (5) | (6=4 x5) |
|  |  | THERM | \$/THERM | \$ | THERM | \$/THERM | \$ |
| 1 | October, 2015 Est. | 35,001 | 0.00226 | 79 | 35,001 | 0.00093 | 33 |
| 2 | September, 2015 Act. | 22,110 | 0.00226 | 50 | 22,110 | 0.00093 | 21 |
| 3 | September, 2015 Est. | $(25,007)$ | 0.00226 | (57) | $(25,007)$ | 0.00093 | (23) |
| 4 |  | 32,104 |  | 73 | 32,104 |  | 30 |
| 5 | November, 2015 Est. | 60,006 | 0.00226 | 136 | 60,006 | 0.00093 | 56 |
| 6 | October, 2015 Act. | 49,160 | 0.00226 | 111 | 49,160 | 0.00093 | 46 |
| 7 | October, 2015 Est. | $(35,001)$ | 0.00226 | (79) | $(35,001)$ | 0.00093 | (33) |
| 8 |  | 74,165 |  | 168 | 74,165 |  | 69 |
| 9 | December, 2015 Est. | 80,000 | 0.00226 | 181 | 80,000 | 0.00800 | 640 |
| 10 | November, 2015 Act. | 58,320 | 0.00226 | 132 | 58,320 | 0.00093 | 54 |
| 11 | November, 2015 Est. | $(60,006)$ | 0.00226 | (136) | $(60,006)$ | 0.00093 | (56) |
| 12 |  | 78,314 |  | 177 | 78,314 |  | 638 |
| 13 | January, 2016 Est. | 100,004 | 0.00226 | 226 | 100,004 | 0.01000 | 1,000 |
| 14 | December, 2015 Act. | 76,480 | 0.00226 | 173 | 76,480 | 0.00800 | 612 |
| 15 | December, 2015 Est. | $(80,000)$ | 0.00226 | (181) | $(80,000)$ | 0.00800 | (640) |
| 16 |  | 96,484 |  | 218 | 96,484 |  | 972 |
| 17 | February, 2016 Est. | 100,006 | 0.00226 | 226 | 100,006 | 0.01000 | 1,000 |
| 18 | January, 2016 Act. | 113,560 | 0.00226 | 257 | 113,560 | 0.01000 | 1,136 |
| 19 | January, 2016 Est. | $(100,004)$ | 0.00226 | (226) | $(100,004)$ | 0.01000 | $(1,000)$ |
| 20 |  | 113,562 |  | 257 | 113,562 |  | 1,136 |
| 21 | March, 2016 Est. | 80,005 | 0.00226 | 181 | 80,005 | 0.00093 | 74 |
| 22 | February, 2016 Act. | 103,220 | 0.00226 | 233 | 103,220 | 0.01000 | 1,032 |
| 23 | February, 2016 Est. | $(100,006)$ | 0.00226 | (226) | $(100,006)$ | 0.01000 | $(1,000)$ |
| 24 |  | 83,219 |  | 188 | 83,219 |  | 107 |
| 25 | April, 2016 Est. | 60,002 | 0.00226 | 136 | 60,002 | 0.00093 | 56 |
| 26 | March, 2016 Act. | 80,760 | 0.00226 | 183 | 80,760 | 0.00093 | 75 |
| 27 | March, 2016 Est. | $(80,005)$ | 0.00226 | (181) | $(80,005)$ | 0.00093 | (74) |
| 28 |  | 60,757 |  | 138 | 60,757 |  | 57 |
| 29 | May, 2016 Est. | 34,996 | 0.00226 | 79 | 34,996 | 0.00093 | 33 |
| 30 | April, 2016 Act. | 76,440 | 0.00226 | 173 | 76,440 | 0.00093 | 71 |
| 31 | April, 2016 Est. | $(60,002)$ | 0.00226 | (136) | $(60,002)$ | 0.00093 | (56) |
| 32 |  | 51,434 |  | 116 | 51,434 |  | 48 |
| 33 | June, 2016 Est. | 25,001 | 0.00226 | 57 | 25,001 | 0.00093 | 23 |
| 34 | May, 2016 Act. | 61,120 | 0.00226 | 138 | 61,120 | 0.00093 | 57 |
| 35 | May, 2016 Est. | $(34,996)$ | 0.00226 | (79) | $(34,996)$ | 0.00093 | (33) |
| 36 |  | 51,125 |  | 116 | 51,125 |  | 47 |
| 37 | July, 2016 Est. | 24,998 | 0.00226 | 56 | 24,998 | 0.00093 | 23 |
| 38 | June, 2016 Act. | 30,700 | 0.00226 | 69 | 30,700 | 0.00093 | 29 |
| 39 | June, 2016 Est. | $(25,001)$ | 0.00226 | (57) | $(25,001)$ | 0.00093 | (23) |
| 40 |  | 30,697 |  | 69 | 30,697 |  | 28 |
| 41 | August, 2016 Est. | 25,005 | 0.00226 | 57 | 25,005 | 0.00093 | 23 |
| 42 | July, 2016 Act. | 23,770 | 0.00226 | 54 | 23,770 | 0.00093 | 22 |
| 43 | July, 2016 Est. | $(24,998)$ | 0.00226 | (57) | $(24,998)$ | 0.00093 | (23) |
| 44 |  | 23,777 |  | 54 | 23,777 |  | 22 |
| 45 | September, 2016 Est. | 0 | - | 0 | 0 | - | 0 |
| 46 |  | 0 |  | 0 | 0 |  | 0 |
| 47 | TOTAL | $\underline{\text { 695,638 }}$ |  | 1,573 | 695,638 |  | 3,154 |

## COLUMBIA GAS OF PENNSYLVANIA, INC.

## COMMODITY REFUNDS RECEIVED

FROM VARIOUS SUPPLIERS

| $\begin{gathered} \text { Line } \\ \text { No. } \\ \hline \end{gathered}$ | Month | Refund | Number of Months |  |  | Rate | Amount of Interest | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | (1) | (2) |  |  | (3) | (4=1×2 ${ }^{\text {a }}$ ) | ( $5=1+4$ ) |
|  |  | \$ |  |  |  | \% | \$ | \$ |
| 1 | September, 2015 | 0 | 19 | 1 | 12 | 6.00\% | 0 | 0 |
| 2 | October | 0 | 18 | 1 | 12 | 6.00\% | 0 | 0 |
| 3 | November | 0 | 17 | 1 | 12 | 6.00\% | 0 | 0 |
| 4 | December | 0 | 16 | 1 | 12 | 6.00\% | 0 | 0 |
| 5 | January, 2016 | 0 | 15 | 1 | 12 | 6.00\% | 0 | 0 |
| 6 | February | 0 | 14 | 1 | 12 | 6.00\% | 0 | 0 |
| 7 | March | 0 | 13 | 1 | 12 | 6.00\% | 0 | 0 |
| 8 | April | 0 | 12 | 1 | 12 | 6.00\% | 0 | 0 |
| 9 | May | 0 | 11 | 1 | 12 | 6.00\% | 0 | 0 |
| 10 | June | 0 | 10 | 1 | 12 | 6.00\% | 0 | 0 |
| 11 | July | 0 | 9 | 1 | 12 | 6.00\% | 0 | 0 |
| 12 | August | 0 | 8 | 1 | 12 | 6.00\% | 0 | 0 |
| 13 | September | 0 | 7 | 1 | 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 | Number of Months |  |  | Rate | Amount of Interest | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | (1) | (2) |  |  | (3) | (4 = $1 \times 2 \times 3$ ) | (5 = 1 + 4) |
|  |  | \$ |  |  |  | \% | \$ | \$ |
| 1 | September, 2015 | 0 | 19 | 1 | 12 | 6.00\% | 0 | 0 |
| 2 | October | 0 | 18 | 1 | 12 | 6.00\% | 0 | 0 |
| 3 | November | 0 | 17 | 1 | 12 | 6.00\% | 0 | 0 |
| 4 | December | 0 | 16 | 1 | 12 | 6.00\% | 0 | 0 |
| 5 | January, 2016 | 50,299 | 15 | 1 | 12 | 6.00\% | 3,772 | 54,071 |
| 6 | February | 0 | 14 | 1 | 12 | 6.00\% | 0 | 0 |
| 7 | March | 0 | 13 | 1 | 12 | 6.00\% | 0 | 0 |
| 8 | April | 0 | 12 | 1 | 12 | 6.00\% | 0 | 0 |
| 9 | May | 0 | 11 | 1 | 12 | 6.00\% | 0 | 0 |
| 10 | June | 368,389 | 10 | 1 | 12 | 6.00\% | 18,419 | 386,808 |
| 11 | July | 0 | 9 | 1 | 12 | 6.00\% | 0 | 0 |
| 12 | August | 0 | 8 | 1 | 12 | 6.00\% | 0 | 0 |
| 13 | September | 0 | 7 | 1 | 12 | 6.00\% | 0 | 0 |
| 14 | TOTAL | 418,689 |  |  |  |  | 22,191 | 440,880 |

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

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


[^0]:    1_/ Includes 131,162,423 Therm Transportation Quantities for the Company's Choice Program

[^1]:    1_/ Monthly Demand Billing Determinants x 12

[^2]:    (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.

