Director
Rates \& Regulatory Affairs

Southpointe Industrial Park 121 Champion Way, Ste. 100 Canonsburg, PA 15317 724.416.6390 Cell: 724.255.8302
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June 30, 2016

## VIA E-FILING

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

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

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

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

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

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

Sincerely,


Adam J. Lanier
Director, Rates \& Regulatory Affairs
Enclosure
c: Theodore J. Gallagher, Esquire
Andrew S. Tubbs, Esquire
Michael W. Hassell, Esquire
Todd Stewart, Esquire, Counsel for NGS Parties
Bureau of Investigation and Enforcement
Office of Consumer Advocate
Office of Small Business Advocate

# COLUMBIA GAS OF PENNSYLVANIA, INC. 

121 Champion Way, Suite 100<br>Canonsburg, Pennsylvania<br>RATES AND RULES

FOR

FURNISHING GAS SERVICE
IN

## THE TERRITORY AS DESCRIBED HEREIN

## NOTICE

[^0]LIST OF CHANGES MADE BY THIS TARIFF SUPPLEMENT

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

Columbia Gas of Pennsylvania, Inc.
LIST OF CHANGES MADE BY THIS TARIFF SUPPLEMENT

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

Supplement No. 246 to
Tariff Gas - Pa. P.U.C. No. 9
One Hundred-fifth Revised Page No. 16
Columbia Gas of Pennsylvania, Inc.
Canceling One Hundred-third Revised Page No. 16

| Residential Rate Schedules | Rate Summary <br> Rate per thm |  |  |  |  | Pass-ThroughCharge | State Tax Adjustment Surcharge | Total Effective Rate |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { Distribution } \\ \text { Charge } \\ \hline \end{gathered}$ | $\begin{gathered} \begin{array}{c} \text { Gas Supply } \\ \text { Charge } \end{array} \\ \hline 1 / \end{gathered}$ | Gas Cost <br> Adjustment |  |  |  |  |
| Rate RSS - Residential Sales Service |  |  |  |  |  |  |  |  |
| Customer Charge | \$ | 16.75 | - | - |  | - | 0.00 | 16.75 |
| Usage Charge | \$ | 0.47806 | 0.31678 | (0.06811) |  | 0.19309 | 0.00000 | 0.91982 |
| Customer Transferring from Rate Schedule RDS - Usage Charge | \$ | 0.47806 | 0.31678 | - | 4/ | 0.19309 | 0.00000 | 0.98793 |
| Rate RDS - Residential Distribution Service |  |  |  |  |  |  |  |  |
| Customer Charge | \$ | 16.75 | - | - |  |  | 0.00 | 16.75 |
| Usage Charge: |  |  |  |  |  |  |  |  |
| Customers Electing CHOICE - 1st Year | \$ | 0.47806 | - | (0.06811) | 5/ | 0.16229 | 0.00000 | 0.57224 |
| Customers Electing CHOICE - 2nd Year | \$ | 0.47806 | - | - |  | 0.16229 | 0.00000 | 0.64035 |
| 1/ Please see Page No. 21a for rate components. |  |  |  |  |  |  |  |  |
| 2/ Please see Page No. 21b for rate components. |  |  |  |  |  |  |  |  |
| $3 /$ The STAS percentage is reflected on Page No. 20 and is applied to the Customer Charge and the Distribution Charge. |  |  |  |  |  |  |  |  |
| 4/ If a customer transfers to RSS from RDS, the Gas Cost Adjustment shall not be billed for up to twelve billing cycles. |  |  |  |  |  |  |  |  |
| 5/ If a customer transfers to RDS from RSS, the Gas Cost Adjustment shall be billed for up to twelve billing cycles. |  |  |  |  |  |  |  |  |

Columbia Gas of Pennsylvania, Inc


| Columbia Gas of Pennsylvania, Inc. |  |  |  |  | , |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Commercial / Industrial Rate Schedules <br> >64,400 therms - 12 Months Ending October | Rate Summary Rate per thm |  |  | Gas Cost Adjustment | Pass-throughCharge | State Tax Adjustment Surcharge | Total Effective Rate |  |
|  |  | $\begin{gathered} \text { Distribution } \\ \text { Charge } \\ \hline \end{gathered}$ | Gas Supply Charge |  |  |  |  |  |
|  |  |  | $1 /$ |  | 2/ | $3 /$ |  |  |
| Rate LGSS - Large General Sales Service |  |  |  |  |  |  |  |  |
| Customer Charge: |  |  |  |  |  |  |  |  |
| Annual Throughput > 64,400 thm and $<=110,000$ thm | \$ | 215.00 |  |  |  | 0.00 | 215.00 |  |
| Annual Throughput > 110,000 thm and $<=540,000$ thm | \$ | 685.00 |  |  |  | 0.00 | 685.00 |  |
| Annual Throughput > 540,000 thm and $<=1,074,000 \mathrm{thm}$ | \$ | 1,800.00 |  |  |  | 0.00 | 1,800.00 |  |
| Annual Throughput $>1,074,000$ thm and $<=3,400,000$ thm | \$ | 2,800.00 |  |  |  | 0.00 | 2,800.00 |  |
| Annual Throughput $>3,400,000$ thm and $<=7,500,000$ thm | \$ | 5,400.00 |  |  |  | 0.00 | 5,400.00 |  |
| Annual Throughput > 7,500,000 thm | \$ | 8,000.00 |  |  |  | 0.00 | 8,000.00 |  |
| Usage Charge: |  |  |  |  |  |  |  |  |
| Annual Throughput > 64,400 thm and $<=110,000$ thm | \$ | 0.20774 | 0.31208 | (0.06811) $4 /$ | 0.12723 | 0.00000 | 0.57894 |  |
| Annual Throughput > 110,000 thm and $<=540,000$ thm | \$ | 0.19422 | 0.31208 | (0.06811) 4/ | 0.12723 | 0.00000 | 0.56542 |  |
| Annual Throughput > 540,000 thm and $<=1,074,000 \mathrm{thm}$ | \$ | 0.12001 | 0.31208 | (0.06811) 4 4 | 0.12723 | 0.00000 | 0.49121 |  |
| Annual Throughput $>1,074,000$ thm and $<=3,400,000$ thm | \$ | 0.10645 | 0.31208 | (0.06811) $4 /$ | 0.12723 | 0.00000 | 0.47765 |  |
| Annual Throughput $>3,400,000$ thm and $<=7,500,000$ thm | \$ | 0.09553 | 0.31208 | (0.06811) 4 / | 0.12723 | 0.00000 | 0.46673 |  |
| Annual Throughput > 7,500,000 thm | \$ | 0.05684 | 0.31208 | (0.06811) 4/ | 0.12723 | 0.00000 | 0.42804 |  |
| Rate SDS - Small Distribution Service |  |  |  |  |  |  |  |  |
| Customer Charge: |  |  |  |  |  |  |  |  |
| Annual Throughput > 64,400 thm and <= 110,000 thm | \$ | 215.00 | - | - | - | 0.00 | 215.00 |  |
| Annual Throughput > 110,000 thm and <= 540,000 thm | \$ | 685.00 | - | - | - | 0.00 | 685.00 |  |
| Usage Charge: |  |  |  |  |  |  |  |  |
| Annual Throughput > 64,400 thm and <= 110,000 thm | \$ | 0.20774 | - | $5 /$ | - | 0.00000 | 0.20774 | $6 /$ |
| Annual Throughput $>110,000$ thm and $<=540,000$ thm | \$ | 0.19422 | - | $5 /$ | - | 0.00000 | 0.19422 | $6 /$ |
| Rate LDS - Large Distribution Service |  |  |  |  |  |  |  |  |
| Customer Charge: |  |  |  |  |  |  |  |  |
| Annual Throughput > 540,000 thm and <= 1,074,000 thm | \$ | 1,800.00 | - | - | - | 0.00 | 1,800.00 |  |
| Annual Throughput $>1,074,000$ thm and $<=3,400,000$ thm | \$ | 2,800.00 | - | - | - | 0.00 | 2,800.00 |  |
| Annual Throughput $>3,400,000$ thm and $<=7,500,000$ thm | \$ | 5,400.00 | - | - | - | 0.00 | 5,400.00 |  |
| Annual Throughput > 7,500,000 thm | \$ | 8,000.00 | - | - | - | 0.00 | 8,000.00 |  |
| Usage Charge: |  |  |  |  |  |  |  |  |
| Annual Throughput > 540,000 thm and <= 1,074,000 thm | \$ | 0.12001 | - | $5 /$ | - | 0.00000 | 0.12001 | $6 /$ |
| Annual Throughput $>1,074,000$ thm and $<=3,400,000$ thm | \$ | 0.10645 | - | $5 /$ | - | 0.00000 | 0.10645 | 6/ |
| Annual Throughput $>3,400,000$ thm and $<=7,500,000$ thm | \$ | 0.09553 | - | $5 /$ | - | 0.00000 | 0.09553 | $6 /$ |
| Annual Throughput > 7,500,000 thm | \$ | 0.05684 | - | $5 /$ | - | 0.00000 | 0.05684 | $6 /$ |
| 1/ Please see Page No. 21a for rate components. |  |  |  |  |  |  |  |  |
| 2/ Please see Page No. 21b for rate components. |  |  |  |  |  |  |  |  |
| $3 /$ The STAS percentage is reflected on Page No. 20 and is applied to the Customer Charge and the Distribution Charge. |  |  |  |  |  |  |  |  |
| 4/ If a customer transfers to LGSS from SDS or LDS, the Gas Cost Adjustment shall not be billed for up to twelve billing cycles. |  |  |  |  |  |  |  |  |
| 5 / If a customer transfers to SDS or LDS from LGSS, the Gas Cost Adjustment shall be billed for up to twelve billing cycles. |  |  |  |  |  |  |  |  |
| 6/ Plus Rider EBS Option 1 or 2 - See Page 21. |  |  |  |  |  |  |  |  |


| Rate Summary <br> Rate per thm |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Main Line Service Rate Schedules Commercial / Industrial |  | Distribution <br> Charge | $\begin{gathered} \text { Gas Supply } \\ \text { Charge } \\ \hline \end{gathered}$ | Gas Cost <br> Adjustment | $\begin{gathered} \text { Pass-through } \\ \text { Charge } \\ \hline \end{gathered}$ | State Tax Adjustment Surcharge | Total Effective Rate |  |
|  |  |  | $1 /$ |  | 21 | $3 /$ |  |  |
| 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 $>3,400,000 \mathrm{thm}$ and $<=7,500,000$ thm | \$ | 4,096.00 | - | - | - | 0.00 | 4,096.00 |  |
| Annual Throughput > 7,500,000 thm | \$ | 7,322.00 | - | - | - | 0.00 | 7,322.00 |  |
| Usage Charge: |  |  |  |  |  |  |  |  |
| MLS Class I Annual Throughput > 274,000 thm | \$ | 0.00937 | 0.31208 | (0.06811) $4 /$ | 0.12723 | 0.00000 | 0.38057 |  |
| MLS Class II: |  |  |  |  |  |  |  |  |
| Annual Throughput > 2,146,000 thm and <= 3,400,000 thm | \$ | 0.04479 | 0.31208 | (0.06811) $4 /$ | 0.12723 | 0.00000 | 0.41599 |  |
| Annual Throughput > 3,400,000 thm and << 7,500,000 thm | \$ | 0.03874 | 0.31208 | (0.06811) $4 /$ | 0.12723 | 0.00000 | 0.40994 |  |
| Annual Throughput > 7,500,000 thm | \$ | 0.03355 | 0.31208 | (0.06811) $4 /$ | 0.12723 | 0.00000 | 0.40475 |  |
| Rate MLDS - Main Line Distribution Service |  |  |  |  |  |  |  |  |
| Customer Charge: |  |  |  |  |  |  |  |  |
| Annual Throughput > 274,000 thm and $<=540,000$ thm | \$ | 469.34 | - | - | - | 0.00 | 469.34 |  |
| Annual Throughput > 540,000 thm and <= 1,074,000 thm | \$ | 1,149.00 | - | - | - | 0.00 | 1,149.00 |  |
| Annual Throughput $>1,074,000$ thm and $<=3,400,000$ thm | \$ | 2,050.00 | - | - | - | 0.00 | 2,050.00 |  |
| Annual Throughput $>3,400,000$ thm and $<=7,500,000$ thm | \$ | 4,096.00 | - | - | - | 0.00 | 4,096.00 |  |
| Annual Throughput > 7,500,000 thm | \$ | 7,322.00 | - | - | - | 0.00 | 7,322.00 |  |
| Usage Charge: |  |  |  |  |  |  |  |  |
| MLS Class I Annual Throughput > 274,000 thm | \$ | 0.00937 | - | 5/ | - | 0.00000 | 0.00937 | 6/ |
| MLS Class II: |  |  |  |  |  |  |  |  |
| Annual Throughput $>$ 2,146,000 thm and $<=3,400,000 \mathrm{thm}$ | \$ | 0.04479 | - | 5/ | - | 0.00000 | 0.04479 | 6/ |
| Annual Throughput $>3,400,000 \mathrm{thm}$ and $<=7,500,000 \mathrm{thm}$ | \$ | 0.03874 | - | 5/ | - | 0.00000 | 0.03874 | 6/ |
| Annual Throughput > 7,500,000 thm | \$ | 0.03355 | - | 5/ |  | 0.00000 | 0.03355 | 6/ |
| 1/ Please see Page No. 21a for rate components. |  |  |  |  |  |  |  |  |
| $2 /$ Please see Page No. 21b for rate components. |  |  |  |  |  |  |  |  |
| $3 /$ The STAS percentage is reflected on Page No. 20 and is applied to the Customer Charge and the Distribution Charge. |  |  |  |  |  |  |  |  |
| 4/ If a customer transfers to MLSS from MLDS, the Gas Cost Adjustment shall not be billed for up to twelve billing cycles. |  |  |  |  |  |  |  |  |
| 5/ If a customer transfers to MLDS from MLSS, the Gas Cost Adjustment shall be billed for up to twelve billing cycles. 6/ Plus Rider EBS Option 1 or 2 - See Page 21. |  |  |  |  |  |  |  |  |
| Issued: June 30, 2016 Effective: July 1, |  |  |  |  |  |  |  |  |


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

One Hundred-fourteenth Revised Page No. 21

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: <br> Option 1 - Small Customer <br> 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 |

Supplement No. 246 to
Tariff Gas - Pa. P.U.C. No. 9
Twentieth Revised Page No. 21a
Columbia Gas of Pennsylvania, Inc.
Canceling Seventeenth Revised Page No. 21a
Rate Schedule

Gas Supply Charge Summary Rate per thm

Total

Rate Schedule

Rate CAP - Customer Assistance Plan
Rate RSS - Residential Sales Service

Rate SGSS - Small General Sales Service

Rate LGSS - Large General Sales Service
Rate MLSS Main Line Sales Service
PGCC
Rider GPC
Rider MFC
Gas Supply
Charge
\$

| $\$$ | 0.30513 | 0.00695 | 0.00470 | 0.31678 |
| :--- | :--- | :--- | :--- | :--- |
| $\$$ | 0.30513 | 0.00695 | 0.00136 | 0.31344 |
| $\$$ | 0.30513 | 0.00695 | - | 0.31208 |
| $\$$ | 0.30513 | 0.00695 | - | 0.31208 |

Columbia Gas of Pennsylvania, Inc. Canceling Thirtieth Revised Page No. 21b


Supplement No. 246 to
Tariff Gas - Pa. P.U.C. No. 9 Twentieth Revised Page No. 21c
Columbia Gas of Pennsylvania, Inc.
Canceling Seventeenth Revised Page No. 21c


## RIDER PGC - PURCHASED GAS COST

## PROVISIONS FOR RECOVERY OF PURCHASED GAS COSTS

## RIDER PGC APPLICABLE TO SALES SERVICE CUSTOMERS

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

## RIDER PGC APPLICABLE TO SGDS PRIORITY ONE CUSTOMERS

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

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

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

## PRESENTATION ON CUSTOMER BILLS

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

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

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

## QUARTERLY UPDATES

The Company's rates for recovery of purchased gas costs are also subject to quarterly adjustments under procedures set forth in the Commission's regulations at 52. Pa. Code $\S 53.64$ (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 $\$ 0.09643$ per thm. Such rate shall be equal to the PGDC component of $\$ 0.12723$ per thm as calculated above, less the CAF of $\$ 0.03080$ per thm. The CAF shall be equal to the projected annual cost of assigned Firm Capacity less estimated annual storage commodity costs (storage injection, withdrawal, shrinkage and commodity transportation cost) with the net divided by the estimated, normalized annual usage of customers electing Choice Distribution Service. The CAF of $\$ 0.03080$ per thm representing costs not assignable to CHOICE customers shall be included in the Price-to-Compare.

## DETERMINATION OF OVER/UNDERCOLLECTION OF GAS COSTS

## Commodity E-factor

In computing the experienced over/under collection of purchased gas commodity costs for a period defined by the Commission, the following procedure shall be used:
(a) All experienced purchased gas commodity costs actually incurred by the Company to service customers pursuant to all rate schedules of this Tariff.

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

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

| Line <br> No. | Description | Amount |  | Change in Rate | Effective 1-1-16 | Change in Rate | Effective 4-1-16 | Change in Rate | Effective 7-1-16 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | (1) |  | (2=3-1) | (3) | (4=5-3) | (5) | (6=7-5) | (7) |
| 1 | Purchased Gas Commodity Cost | \$ |  |  |  |  |  |  |  |
| 2 | Commodity Cost of Gas (Exhibit 1-B, Schedule 1) | 107,704,715 |  |  |  |  |  |  |  |
| 3 | Projected tariff sales for the twelve billing periods of |  |  |  |  |  |  |  |  |
| 4 | October, 2015 through September, 2016 | 344,628,945 | Therms |  |  |  |  |  |  |
| 5 | PGCC (Line 2/Line 4) | 0.31252 |  | (0.03898) | 0.27354 | 0.00000 | 0.27354 | 0.03159 | 0.30513 |
| 6 | Commodity (Over)/Under Collection |  |  |  |  |  |  |  |  |
| 7 | Commodity E-Factor |  |  |  |  |  |  |  |  |
| 8 | (Exhibit No. 1-E) | $(24,552,807)$ |  | 921,053 | $(23,631,754)$ | 0.00000 | $(23,631,754)$ | 0.00000 | $(23,631,754)$ |
| 9 | Projected sales for the twelve billing periods of |  |  |  |  |  |  |  |  |
| 10 | October, 2015 through September, 2016 | 346,961,450 | Therms |  | 346,961,450 |  | 346,961,450 |  | 346,961,450 |
| 11 | Commodity E-Factor (Line 8/ Line 10) | (0.07077) |  | 0.00266 | (0.06811) | 0.00000 | (0.06811) | 0.00000 | (0.06811) |
| 12 | Purchased Gas Demand Cost |  |  |  |  |  |  |  |  |
| 13 | Demand cost of gas (Exhibit 1-B, Schedule 1) | 62,602,665 |  |  |  |  |  |  |  |
| 14 | Less: Purchased Gas Demand recovered under Rate SS |  |  |  |  |  |  |  |  |
| 15 | (Exhibit 1-A, Schedule 2, Sheet 2) | 604,182 |  |  |  |  |  |  |  |
| 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) | 61,998,483 |  |  |  |  |  |  |  |
| 19 | Projected sales for the twelve billing periods of |  |  |  |  |  |  |  |  |
| 20 | October, 2015 through September, 2016 1_/ | 475,918,191 | Therms |  |  |  |  |  |  |
| 21 | PGDC Rate prior to Capacity Release Credit (Line 18 / Line 20) | 0.13027 |  | 0.00054 | 0.13081 | 0.00000 | 0.13081 | 0.02272 | 0.15353 |
| 22 | Off System Sales and Capacity Release Credit | (0.01208) |  | 0.00000 | (0.01208) | 0.00000 | (0.01208) | 0.00000 | (0.01208) |
| 23 | PGDC Rate | 0.11819 |  | 0.00054 | 0.11873 | 0.00000 | 0.11873 | 0.02272 | 0.14145 |
| 24 | Demand (Over)/Under Collection |  |  |  |  |  |  |  |  |
| 25 | Demand E- Factor |  |  |  |  |  |  |  |  |
| 26 | (Exhibit No. 1-E) | (6,509,238) |  | $(259,942)$ | $(6,769,180)$ | 0.00000 | $(6,769,180)$ | 0.00000 | (6,769,180) |
| 27 | Projected sales for the twelve billing periods of |  |  |  |  |  |  |  |  |
| 28 | October, 2015 through September, 2016 1_/ | 475,918,191 | Therms |  | 475,918,191 |  | 475,918,191 |  | 475,918,191 |
| 29 | Demand E-Factor (Line 26 / Line 28) | (0.01368) |  | (0.00054) | (0.01422) | 0.00000 | (0.01422) | 0.00000 | (0.01422) |
| 30 | Total Purchased Gas Cost |  |  |  |  |  |  |  |  |
| 31 | PGCC Rate (Line 5) | 0.31252 |  | (0.03898) | 0.27354 | 0.00000 | 0.27354 | 0.03159 | 0.30513 |
| 32 | PGDC Rate (Line 23) | 0.11819 |  | 0.00054 | 0.11873 | 0.00000 | 0.11873 | 0.02272 | 0.14145 |
| 33 | PGC Rate | 0.43071 |  | (0.03844) | 0.39227 | 0.00000 | 0.39227 | 0.05431 | 0.44658 |
| 34 | Currently effective PGC | 0.49565 |  |  | 0.43071 |  | 0.39227 |  | 0.39227 |
| 35 | Increase (Decrease) in PGC | (0.06494) |  |  | (0.03844) |  | 0.00000 |  | 0.05431 |
| 36 | Net (Over) Under Collection |  |  |  |  |  |  |  |  |
| 37 | Commodity E-Factor (Line 11) | (0.07077) |  | 0.00266 | (0.06811) | 0.00000 | (0.06811) | 0.00000 | (0.06811) |
| 38 | Demand E-Factor (Line 29) | (0.01368) |  | (0.00054) | (0.01422) | 0.00000 | (0.01422) | 0.00000 | (0.01422) |
| 39 | E-Factor | (0.08445) |  | 0.00212 | (0.08233) | 0.00000 | (0.08233) | 0.00000 | (0.08233) |
| 40 | Currently effective E-Factor | (0.02775) |  |  | (0.08445) |  | (0.08233) |  | (0.08233) |
| 41 | Increase (Decrease) in E-Factor | (0.05670) |  |  | 0.00212 |  | 0.00000 |  | 0.00000 |
| 42 | PGC Rate | 0.43071 |  | (0.03844) | 0.39227 | 0.00000 | 0.39227 |  | 0.44658 |
| 43 | E-Factor | (0.08445) |  | 0.00212 | (0.08233) | 0.00000 | (0.08233) |  | (0.08233) |
| 44 | Total Rate | 0.34626 |  | (0.03632) | 0.30994 | 0.00000 | 0.30994 |  | 0.36425 |
| 45 | Currently effective Rate | 0.46790 |  |  | 0.34626 |  | 0.30994 |  | 0.30994 |
| 46 | Increase (Decrease) in Rate | (0.12164) |  |  | (0.03632) |  | 0.00000 |  | 0.05431 |

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


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

| Original Projected | Updated for 1/1/16 | Difference | Updated for 4/1/16 | Difference | Updated for 7/1/16 | Difference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Exhibit 1-B | Exhibit 1-B | Included in | Exhibit 1-B | Included in | Exhibit 1-B | Included in |
| Schedule 1 | Schedule 1 | 1/1/16 GCR | Schedule 1 | 4/1/16 GCR | Schedule 1 | 7/1/16 GCR |
| (1) | (2) | (3=2-1) | (4) | (5=4-2) | (6) | (7=6-4) |
| \$ | \$ | \$ | \$ | \$ | \$ | \$ |

## C-FACTOR

Commodity Cost of Gas

| 1 | December, 2015 | 19,177,272 | 19,177,272 | 0 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | January, 2016 | 23,403,029 | 20,454,854 | $(2,948,175)$ |  |  |  |  |
| 3 | February | 21,155,448 | 19,112,792 | $(2,042,656)$ |  |  |  |  |
| 4 | March | 15,767,428 | 14,948,955 | $(818,473)$ | 14,948,955 | 0 |  |  |
| 5 | April | 6,321,180 | 4,628,910 | (1,692,270) | 4,628,910 | 0 |  |  |
| 6 | May | 2,603,248 | 2,001,018 | $(602,230)$ | 2,001,018 | 0 |  |  |
| 7 | June | 932,984 | 743,840 | $(189,144)$ | 743,840 | 0 | 743,840 | 0 |
| 8 | July | 839,932 | 662,055 | $(177,877)$ | 662,055 | 0 | 1,005,705 | 343,649 |
| 9 | August | 841,957 | 739,335 | $(102,622)$ | 739,335 | 0 | 915,919 | 176,584 |
| 10 | September | 1,132,150 | 969,097 | $(163,053)$ | 969,097 | 0 | 1,132,922 | 163,825 |
| 11 | Total | 92,174,627 | 83,438,128 | $(8,736,499)$ | 24,693,210 | 0 | 3,798,385 | 684,058 |
| 12 | Projected Sales |  |  |  |  |  |  | 16,308,659 |
| 13 | Change in PGCC |  |  |  |  |  |  | 0.04194 |

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

| Original Projected | Updated for 1/1/16 | Difference | Updated for 4/1/16 | Difference | Updated for 7/1/16 | Difference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Exhibit 1-B | Exhibit 1-B | Included in | Exhibit 1-B | Included in | Exhibit 1-B | Included in |
| Schedule 1 | Schedule 1 | 1/1/16 GCR | Schedule 1 | 4/1/16 GCR | Schedule 1 | 7/1/16 GCR |
| (1) | (2) | (3=2-1) | (4) | (5=4-2) | (6) | (7=6-4) |
| \$ | \$ | \$ | \$ | \$ | \$ | \$ |

## D-FACTOR

Demand Cost of Gas

| 1 | December, 2015 | 5,971,403 | 5,971,403 | 0 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | January, 2016 | 5,971,403 | 5,949,833 | $(21,570)$ |  |  |  |  |
| 3 | February | 5,971,403 | 5,949,833 | $(21,570)$ |  |  |  |  |
| 4 | March | 5,971,403 | 5,949,833 | $(21,570)$ | 5,949,833 | 0 |  |  |
| 5 | April | 4,488,514 | 4,475,101 | $(13,413)$ | 4,475,101 | 0 |  |  |
| 6 | May | 4,488,514 | 4,475,101 | $(13,413)$ | 4,475,101 | 0 |  |  |
| 7 | June | 4,488,514 | 4,475,101 | $(13,413)$ | 4,475,101 | 0 | 4,475,101 | 0 |
| 8 | July | 4,488,514 | 4,475,101 | $(13,413)$ | 4,475,101 | 0 | 4,508,414 | 33,313 |
| 9 | August | 4,488,514 | 4,475,101 | $(13,413)$ | 4,475,101 | 0 | 4,508,414 | 33,313 |
| 10 | September | 4,488,514 | 4,475,101 | $(13,413)$ | 4,475,101 | 0 | 4,508,414 | 33,313 |
| 11 | Total | 50,816,696 | 50,671,508 | $(145,188)$ | 32,800,439 | 0 | 18,000,343 | 99,939 |
| 12 | Projected Sales |  |  |  |  |  |  | 24,157,861 |
| 13 | Change in PGDC |  |  |  |  |  |  | 0.00414 |

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

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

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

Line
No.
1Total estimated demand charges for the period
October, 2015 through September, 2016 ..... 62,557,416
Estimated Demand Quantity (Therms) 1_/ ..... 82,934,1603
4Daily purchased gas demand rate (Line 2 / line 3)$\$ 0.75430$ per Therm
5 Daily purchased gas demand (Therms)800,400 ThermsDaily purchased gas demand rate per Therm
Detail Total ..... (2)

(1)

(2)

Description
Total rate SS Daily Demand Cost to beRecovered (Line 5 x Line 6)\$603,742
Total Rate SS Daily Demand Cost to beRecovered (Effective January 1, 2016)\$602,781
Difference (Line 8 minus Line 10) ..... \$961
Projected Sales for the Period October 2015 through September 2016 ..... 475,918,191
Rate Differential \$ -
1_/ Monthly Demand Billing Determinants x 12

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

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

99,075,540
475,918,191
62,625,122
161,700,662

1_/ Excludes refunds and experienced over/undercollections

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

| Line <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 - 2015 | 66,700 | 0.75485 | 50,348 |
| 2 | November | 66,700 | 0.75485 | 50,348 |
| 3 | December | 66,700 | 0.75485 | 50,348 |
| 4 | January - 2016 | 66,700 | 0.75310 | 50,232 |
| 5 | February | 66,700 | 0.75310 | 50,232 |
| 6 | March | 66,700 | 0.75310 | 50,232 |
| 7 | April | 66,700 | 0.75310 | 50,232 |
| 8 | May | 66,700 | 0.75310 | 50,232 |
| 9 | June | 66,700 | 0.75310 | 50,232 |
| 10 | July | 66,700 | 0.75430 | 50,312 |
| 11 | August | 66,700 | 0.75430 | 50,312 |
| 12 | September | 66,700 | 0.75430 | 50,312 |
| 13 | Total | 800,400 |  | 603,372 |

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


COLUMBIA GAS OF PENNSYLVANIA, INC.

## SUMMARY OF PROJECTED TOTAL OVER/UNDERCOLLECTION

FOR THE 2015 1307(f) PERIOD
OCTOBER, 2015 THROUGH SEPTEMBER, 2016

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

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

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

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

## 47,592 MMDth

47,925 MMDth

21,755 MMDth

1 Dth 0.7\%
1.0070 Dth
\$1.1605 per Dth
\$0.0094
(\$0.0040)
$\$ 0.0000$
$\$ 0.0000$
\$0.1858
$\$ 0.0414$
(\$0.1208) per Dth
0.0028 Dth
\$0.3531 per Dth
$\$ 1.0400$ per Dth
0.4571 Dth

## $\$ 0.0070$

\$0.0015
$\$ 0.0070$
\$0.0088
$\$ 0.0208$
$\$ 0.0451$ per Dth

| $\$ 0.3531$ <br> $(\$ 0.0451)$ | per Dth <br> per Dth <br> p0.3080 |
| :---: | :--- |
| per Dth |  |
| per Therm |  |
| $\mathbf{\$ 0 . 0 3 0 8 0}$ |  |

$\mathbf{\$ 0 . 0 9 6 4 3}$ per Therm

1. Projected Demand Costs Oct. 2015 through Sept. 2016 (Exh. 1-B, Sch. 1 from Oct. 2015 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 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, 2015 through September, 2016
5. Projected Sales \& Choice Requirements 12 months ended September 2016, 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)

9a. Quarterly Purchased Gas Demand Adjustment (Jan. 1, 2016 Filing, Schedule 1, Sheet 2)
9b. Quarterly Purchased Gas Demand Adjustment (Jan. 1, 2016 Filing, Schedule 1, Sheet 4)
9c. Quarterly Purchased Gas Demand Adjustment (Apr. 1, 2016 Filing, Schedule 1, Sheet 2)
9d. Quarterly Purchased Gas Demand Adjustment (Apr. 1, 2016 Filing, Schedule 1, Sheet 4) 9e. Quarterly Purchased Gas Demand Adjustment (July 1, 2016 Filing, Schedule 1, Sheet 2) 9f. Quarterly Purchased Gas Demand Adjustment (July 1, 2016 Filing, Schedule 1, Sheet 4)
10. Net Unit Demand Charge (8) $+(9 a)+(9 b)+(9 c)+(9 d)+(9 e)+(9 f)$
11. OSS and Capacity Release Credit
12. Average Daily FT Delivery: (7c) / 365 days
13. Annual Demand Charge for the Assigned FT Capacity payable to the pipeline(s): (3) X (12)
14. Annual Demand Charge for other capacity that CPA retains (10) - (13)
15. Quantity Injected and Withdrawn to Deliver 1 Dth to the Customer: (6) / (4)

16a. Injection Charge @ \$0.0153/Dth
16b. FSS Shrinkage @ 0.15 percent for gas at $\$ 2.2311 / D t h$
16c. Withdrawal Charge @ \$0.0153/Dth
16d. SST Commodity Charge @ \$0.0193/Dth
16e. SST retention @ 2.0420\% for gas at \$2.2311/Dth
16f. Total Annual Variable Storage Costs
17. Credit to Purchased Gas Demand Charge for the CHOICE Customer:

17a. For Demand Cost Paid to Pipelines: = (13)
17b. Less Storage Costs: $=(16 \mathrm{f})$
17c. Net Credit: (17a) + (17b)
17d. Per Therm: (17c)/10 - Capacity Assignment Factor
18. Purchased Gas Demand Charge Paid By the CHOICE Customer: (10)+(11) - (17c)
17. Per Therm: (18)/10
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/\$2,247,060
4a. Monthly Billing Determinants ..... 127,373 ..... 43,632
4b. Annual Demand Charge (4/ 4a) ..... $\$ 73.53$ ..... \$51.50
4c. Monthly Demand Charge (4b / number of months) ..... \$6.128 ..... $\$ 4.292$
Transportation Pilot: Allocation Capacity and Costs.
5. Capacity Allocation: ..... 1.0000
1.0208 ..... 2/
6. Number of Months ..... 12 ..... 12
7. Unit Annual Cost of City Gate Capacity: (4c) $x$ (5) $x$ (6)\$/Dth\$73.54\$52.58

## Notes:

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

## COLUMBIA GAS OF PENNSYLVANIA, INC.

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

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

## COLUMBIA GAS OF PENNSYLVANIA, INC

Summary of Total Estimated Purchased Gas Costs Demand Costs

| Line |  | 2015 |  |  | 2016 |  |  |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | Description | October | November | December | January | February | March | April | May | June | July | August | September |  |
|  |  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 1 | Columbia Gas Transmission | 4,919,957 | 4,919,957 | 4,919,957 | 4,898,923 | 4,898,923 | 4,898,923 | 3,545,428 | 3,545,428 | 3,545,428 | 3,579,231 | 3,579,231 | 3,579,231 | 50,830,617 |
| 2 | Columbia Gulf Transmission | 187,255 | 187,255 | 187,255 | 187,255 | 187,255 | 187,255 | 187,255 | 187,255 | 187,255 | 187,255 | 187,255 | 187,255 | 2,247,060 |
| 3 | Texas Eastern Transmission | 237,612 | 237,612 | 286,952 | 287,002 | 287,002 | 287,002 | 237,642 | 237,642 | 237,642 | 237,477 | 237,477 | 237,477 | 3,048,539 |
| 4 | Dominion Transmission | 166,253 | 201,416 | 201,416 | 201,570 | 201,570 | 201,570 | 165,371 | 165,371 | 165,371 | 165,371 | 165,371 | 165,371 | 2,166,021 |
| 5 | Tennessee Gas | 355,330 | 344,713 | 344,713 | 343,973 | 343,973 | 343,973 | 343,973 | 343,973 | 343,973 | 343,973 | 343,973 | 343,973 | 4,140,513 |
| 6 | National Fuel Gas | 16,271 | 16,271 | 16,271 | 16,271 | 16,271 | 16,271 | 16,271 | 16,271 | 16,271 | 15,946 | 15,946 | 15,946 | 194,277 |
| 7 | Equitrans | 6,228 | 39,839 | 39,839 | 39,839 | 39,839 | 39,839 | 4,161 | 4,161 | 4,161 | 4,161 | 4,161 | 4,161 | 230,389 |
| 8 | LT-FTS Contract Demand | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9 | Less Elective Balancing Svc. Credit | 25,000 | 25,000 | 25,000 | 25,000 | 25,000 | 25,000 | 25,000 | 25,000 | 25,000 | 25,000 | 25,000 | 25,000 | 300,000 |
| 10 | Total Demand Cost | 5,863,906 | 5,922,063 | 5,971,403 | 5,949,833 | 5,949,833 | 5,949,833 | 4,475,101 | 4,475,101 | 4,475,101 | 4,508,414 | 4,508,414 | 4,508,414 | 62,557,416 |

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

## COLUMBIA GAS OF PENNSYLVANIA, INC.

Summary of Total Estimated Purchased Gas Costs
Commodity Costs

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

## COLUMBIA GAS OF PENNSYLVANIA, INC.

Summary of Total Estimated Purchased Gas Costs Commodity Quantities

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

## COLUMBIA GAS OF PENNSYLVANIA, INC.

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

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

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

| Line | Description | 2015 |  |  | 2016 |  |  |  |  |  |  |  |  | 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 | $\underline{\text { 187,255 }}$ | 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

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

## COLUMBIA GAS OF PENNSYLVANIA, INC.

| Line |  | 2015 |  |  | 2016 |  |  |  |  |  |  |  |  | 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
12 Demand Cost
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 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1.8625 | 1.8625 | 1.8625 | 1.8618 | 1.8618 | 1.8618 | 1.8618 | 1.8618 | 1.8618 | 1.8618 | 1.8618 | 1.8618 |  |
| 44,700 | 44,700 | 44,700 | 44,683 | 44,683 | 44,683 | 44,683 | 44,683 | 44,683 | 44,683 | 44,683 | 44,683 | 536,247 |
| 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 | 4.1564 | 4.1564 | 4.1619 | 4.1619 | 4.1619 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |  |
| 0 | 24,938 | 24,938 | 24,971 | 24,971 | 24,971 | 0 | 0 | 0 | 0 | 0 | 0 | 124,789 |
| 22,717 | 25,177 | 25,177 | 25,177 | 25,177 | 25,177 | 22,479 | 22,479 | 22,479 | 22,479 | 22,479 | 22,479 |  |
| 4.1564 | 4.1564 | 4.1564 | 4.1619 | 4.1619 | 4.1619 | 4.1619 | 4.1619 | 4.1619 | 4.1619 | 4.1619 | 4.1619 |  |
| 94,421 | 104,646 | 104,646 | 104,784 | 104,784 | 104,784 | 93,556 | 93,556 | 93,556 | 93,556 | 93,556 | 93,556 | 1,179,401 |
| 166,253 | 201,416 | 201,416 | 201,570 | 201,570 | 201,570 | $\underline{\text { 165,371 }}$ | 165,371 | 165,371 | 165,371 | 165,371 | 165,371 | $\underline{\text { 2,166,021 }}$ |

## COLUMBIA GAS OF PENNSYLVANIA, INC.

Summary of Total Estimated Purchased Gas Demand Costs

| Line |  | 2015 |  |  | 2016 |  |  |  |  |  |  |  |  | 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 | 15.3455 | 14.8863 | 14.8863 | 14.8658 | 14.8658 | 14.8658 | 14.8658 | 14.8658 | 14.8658 | 14.8658 | 14.8658 | 14.8658 |  |
| 3 | Demand Cost | 116,626 | 113,136 | 113,136 | 112,980 | 112,980 | 112,980 | 112,980 | 112,980 | 112,980 | 112,980 | 112,980 | 112,980 | 1,359,718 |
| Tennessee Gas FT-A (Direct) New Castle - 800 Line |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | Billing Determinant-Dth | 8,400 | 8,400 | 8,400 | 8,400 | 8,400 | 8,400 | 8,400 | 8,400 | 8,400 | 8,400 | 8,400 | 8,400 |  |
| 5 | Demand Rate | 15.3455 | 14.8863 | 14.8863 | 14.8658 | 14.8658 | 14.8658 | 14.8658 | 14.8658 | 14.8658 | 14.8658 | 14.8658 | 14.8658 |  |
| 6 | Demand Cost | 128,902 | 125,045 | 125,045 | 124,873 | 124,873 | 124,873 | 124,873 | 124,873 | 124,873 | 124,873 | 124,873 | 124,873 | 1,502,849 |
| Tennessee Gas FT-A (Direct) Pitt Teminal - 500 Line |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 | Billing Determinant-Dth | 7,600 | 7,600 | 7,600 | 7,600 | 7,600 | 7,600 | 7,600 | 7,600 | 7,600 | 7,600 | 7,600 | 7,600 |  |
| 8 | Demand Rate | 5.4628 | 5.3001 | 5.3001 | 5.2796 | 5.2796 | 5.2796 | 5.2796 | 5.2796 | 5.2796 | 5.2796 | 5.2796 | 5.2796 |  |
| 9 | Demand Cost | 41,517 | 40,281 | 40,281 | 40,125 | 40,125 | 40,125 | 40,125 | 40,125 | 40,125 | 40,125 | 40,125 | 40,125 | 483,204 |
| Tennessee Gas FT-A (Direct) TCO - 500 Line |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 | Billing Determinant-Dth | 12,500 | 12,500 | 12,500 | 12,500 | 12,500 | 12,500 | 12,500 | 12,500 | 12,500 | 12,500 | 12,500 | 12,500 |  |
| 11 | Demand Rate | 5.4628 | 5.3001 | 5.3001 | 5.2796 | 5.2796 | 5.2796 | 5.2796 | 5.2796 | 5.2796 | 5.2796 | 5.2796 | 5.2796 |  |
| 12 | Total-DTH | 68,285 | 66,251 | 66,251 | 65,995 | 65,995 | 65,995 | 65,995 | 65,995 | 65,995 | 65,995 | 65,995 | 65,995 | 794,742 |
| 13 | Total Tennessee Gas Demand Cost | 355,330 | 344,713 | 344,713 | 343,973 | 343,973 | 343,973 | 343,973 | 343,973 | 343,973 | 343,973 | 343,973 | 343,973 | 4,140,513 |


| Line | Description | 2015 |  |  | 2016 |  |  |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. |  | October | November | December | January | February | March | April | May | June | July | August | 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 | 3.7805 | 3.7805 | 3.7805 | 3.7805 | 3.7805 | 3.7805 | 3.7805 | 3.7805 | 3.7805 | 3.7049 | 3.7049 | 3.7049 |  |
| 3 | Demand Cost | 16,271 | 16,271 | 16,271 | 16,271 | 16,271 | 16,271 | 16,271 | 16,271 | 16,271 | 15,946 | 15,946 | 15,946 | 194,277 |
| 4 | Total National Fuel Demand Cost | 16,271 | 16,271 | 16,271 | 16,271 | 16,271 | 16,271 | 16,271 | 16,271 | 16,271 | 15,946 | 15,946 | 15,946 | 194,277 |

## COLUMBIA GAS OF PENNSYLVANIA, INC.

Summary of Total Estimated Purchased Gas Demand Costs
Equitrans

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


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

## 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 |
| :--- |
| No. | $\qquad$ January February

March $\quad$|  |
| :--- |
| 2016 |
|  |
| April | June July —— August September $\qquad$

| $\underline{\text { SPOT }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Base |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Quantity - DTH | 1,797,000 | 290,000 | 666,000 | 1,317,000 | 891,000 | 392,000 | 3,772,000 | 3,275,000 | 2,514,000 | 2,204,000 | 2,332,000 | 2,423,000 | 21,873,000 |
| Rate-\$/DTH | 2.3928 | 2.7959 | 2.7096 | 1.7676 | 1.8380 | 1.9913 | 1.9142 | 1.9905 | 2.0420 | 2.2867 | 2.3010 | 2.4034 |  |
| Cost-\$ | 4,299,862 | 810,811 | 1,804,594 | 2,327,929 | 1,637,658 | 780,590 | 7,220,362 | 6,518,888 | 5,133,588 | 5,039,887 | 5,365,932 | 5,823,438 | 46,763,539 |
| Swing |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Quantity - DTH | 0 | 0 | 0 | 0 | 0 | 7,000 | 46,000 | 0 | 0 | 0 | 0 | 0 | 53,000 |
| Rate-\$/DTH | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.8881 | 1.9512 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |  |
| Cost-\$ | 0 | 0 | 0 | 0 | 0 | 13,217 | 89,755 | 0 | 0 | 0 | 0 | 0 | 102,972 |
| Total - DTH | 1,797,000 | 290,000 | 666,000 | 1,317,000 | 891,000 | 399,000 | 3,818,000 | 3,275,000 | 2,514,000 | 2,204,000 | 2,332,000 | 2,423,000 | 21,926,000 |
| Total Spot |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Commodity Cost - \$ | 4,299,862 | 810,811 | 1,804,594 | 2,327,929 | 1,637,658 | 793,807 | 7,310,117 | 6,518,888 | 5,133,588 | 5,039,887 | 5,365,932 | 5,823,438 | 46,866,511 |
| 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 | 2.5130 | 2.5550 | 2.6920 | 1.6720 | 1.7360 | 1.8000 | 1.8610 | 1.9290 | 1.9890 | 2.2310 | 2.3030 | 2.3420 |  |
| Cost-\$ | 55,286 | 53,655 | 59,224 | 36,784 | 34,720 | 39,600 | 39,081 | 42,438 | 41,769 | 49,082 | 50,666 | 49,182 | 551,487 |
| 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 - \$ | 55,286 | 53,655 | 59,224 | 36,784 | 34,720 | 39,600 | 39,081 | 42,438 | 41,769 | 49,082 | 50,666 | 49,182 | 551,487 |

Summary of Total Estimated Purchased Gas Commodity Costs
$\qquad$

| October |
| :---: |

January $\quad$ February $\quad$ March $\quad$ April $\quad$ M

| 1 | Injections - DTH | $(293,000)$ | 0 | 0 | 0 | 0 | 0 | $(286,000)$ | $(211,000)$ | $(211,000)$ | $(120,000)$ | $(286,000)$ | $(94,000)$ | (1,501,000) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | Injection Rate - \$/Dth | 2.5266 | 2.8156 | 2.9008 | 1.7323 | 1.8183 | 1.8983 | 1.9513 | 2.0533 | 2.1290 | 2.3791 | 2.4017 | 2.4753 |  |
| 3 | Withdrawals - DTH | 0 | 106,000 | 380,000 | 528,000 | 317,000 | 148,000 | 75,000 | 0 | 0 | 0 | 0 | 0 | 1,554,000 |
| 4 | Withdrawl Rate - \$/Dth | 3.0773 | 3.0773 | 3.0773 | 3.0615 | 3.0615 | 3.0571 | 2.8071 | 2.6125 | 2.5133 | 2.4917 | 2.4786 | 2.4782 |  |
| 5 | Cost-\$ | $(740,294)$ | 326,194 | 1,169,374 | 1,616,472 | 970,496 | 452,451 | $(347,539)$ | $(433,246)$ | $(449,219)$ | $(285,492)$ | $(686,886)$ | (232,678) | 1,359,633 |
| 6 | Injection Rate \$/Dth | 0.0318 | 0.0318 | 0.0318 | 0.0262 | 0.0262 | 0.0262 | 0.0262 | 0.0262 | 0.0262 | 0.0262 | 0.0262 | 0.0262 |  |
| 7 | Withdrawl Rate \$/Dth | 0.0220 | 0.0220 | 0.0220 | 0.0180 | 0.0180 | 0.0180 | 0.0180 | 0.0180 | 0.0180 | 0.0180 | 0.0180 | 0.0180 |  |
| 8 | Cost - \$ | 9,317 | 2,332 | 8,360 | 9,504 | 5,706 | 2,664 | 8,843 | 5,528 | 5,528 | 3,144 | 7,493 | 2,463 | 70,882 |
|  | EQUITRANS - SS |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 | Injections - DTH | $(161,000)$ | 0 | 0 | 0 | 0 | 0 | $(161,000)$ | $(161,000)$ | $(161,000)$ | $(228,000)$ | $(228,000)$ | $(221,000)$ | $(1,321,000)$ |
| 10 | Injection Rate - \$/Dth | 2.5266 | 2.8156 | 2.9008 | 1.7323 | 1.8183 | 1.8983 | 1.9513 | 2.0533 | 2.1290 | 2.3791 | 2.4017 | 2.4753 |  |
| 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 | 3.0773 | 3.0773 | 3.0773 | 3.0615 | 3.0615 | 3.0571 | 2.8071 | 2.6125 | 2.5133 | 2.4917 | 2.4786 | 2.4782 |  |
| 13 | Cost-\$ | $(406,783)$ | 230,798 | 1,153,988 | 1,148,063 | 918,450 | 0 | $(314,159)$ | $(330,581)$ | $(342,769)$ | $(542,435)$ | $(547,588)$ | $(547,041)$ | 419,943 |
| 14 | Inject/With. Rate \$/DTH | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |  |
| 15 | Cost - \$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | TCO-FSS |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 16 | Injections - DTH | $(887,000)$ | 0 | $(11,000)$ | 0 | 0 | $(48,000)$ | $(1,934,000)$ | $(3,264,000)$ | $(3,264,000)$ | $(3,061,000)$ | $(3,059,000)$ | $(3,130,000)$ | (18,658,000) |
| 17 | Injection Rate - \$/Dth | 2.5266 | 2.8156 | 2.9008 | 1.7323 | 1.8183 | 1.8983 | 1.9513 | 2.0533 | 2.1290 | 2.3791 | 2.4017 | 2.4753 |  |
| 18 | Withdrawals - DTH | 0 | 2,846,000 | 3,454,000 | 4,865,000 | 4,845,000 | 4,383,000 | 0 | 0 | 0 | 0 | 0 | 0 | 20,393,000 |
| 19 | Withdrawl Rate - \$/Dth | 3.0773 | 3.0773 | 3.0773 | 3.0615 | 3.0615 | 3.0571 | 2.8071 | 2.6125 | 2.5133 | 2.4917 | 2.4786 | 2.4782 |  |
| 20 | Cost-\$ | $(2,241,094)$ | 8,757,996 | 10,597,085 | 14,894,198 | 14,832,968 | 13,308,151 | (3,773,814) | $(6,701,971)$ | $(6,949,056)$ | $(7,282,425)$ | $(7,346,800)$ | $(7,747,689)$ | 20,347,549 |
| 21 | Inject/With. Rate \$/DTH | 0.0153 | 0.0153 | 0.0153 | 0.0153 | 0.0153 | 0.0153 | 0.0153 | 0.0153 | 0.0153 | 0.0153 | 0.0153 | 0.0153 |  |
| 22 | Cost - \$ | 13,571 | 43,544 | 53,015 | 74,435 | 74,129 | 67,794 | 29,590 | 49,939 | 49,939 | 46,833 | 46,803 | 47,889 | 597,481 |
| 23 | Quantity - DTH | (1,341,000) | 3,027,000 | 4,198,000 | 5,768,000 | 5,462,000 | 4,483,000 | $(2,306,000)$ | $(3,636,000)$ | $(3,636,000)$ | $(3,409,000)$ | $(3,573,000)$ | $(3,445,000)$ | 1,592,000 |
| 24 | Total Purchase Cost | $(3,388,171)$ | 9,314,988 | 12,920,447 | 17,658,733 | 16,721,914 | 13,760,602 | $(4,435,512)$ | (7,465,798) | $(7,741,044)$ | (8,110,352) | $(8,581,274)$ | $(8,527,408)$ | 22,127,125 |
| 25 | Total Inject/With. Cost | 22,888 | 45,876 | 61,375 | 83,939 | 79,835 | 70,458 | 38,433 | 55,467 | 55,467 | 49,977 | 54,296 | 50,352 | 668,363 |

Summary of Total Estimated Purchased Gas Commodity Costs Storage Transportation Charges
$\qquad$ January $\xrightarrow{\text { February }}$ March - April 2016

May 2016 Description | October |
| :---: | March



## COLUMBIA GAS OF PENNSYLVANIA, INC.

STATEMENT OF COMMODITY OVER/(UNDER) COLLECTIONS FROM GAS COST RATE OCTOBER, 2015 THROUGH SEPTEMBER, 2016

| $\begin{aligned} & \text { Line } \\ & \text { No. } \end{aligned}$ | Month | Total Commodity Sales Revenue | Rate <br> Schedule NSS <br> Gas Cost <br> Recovery | Total <br> Commodity <br> Purchase Gas <br> 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) |  | (8=5x6x7) | (9 = $5+8$ ) |
|  |  | \$ | \$ | \$ | \$ | \$ |  |  |  |  |
|  | Reference: | Sch. 4, <br> Pg. 2 | Sch. 4, <br> Pg. 3 |  |  |  |  |  |  |  |

Actuals through May 2016

| 1 | October, 2015 | 3,063,399 | 7,565 | 3,070,964 | 5,696,938 | (2,625,974) | 18 | / | 12 | 8.00\% | $(315,117)$ | $(2,941,091)$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | November | 5,804,706 | 14,873 | 5,819,580 | 6,813,412 | $(993,833)$ | 17 | 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 | 1 | 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 | 0 | 0 | 0 | 0 | 0 | 10 | / | 12 | 8.00\% | 0 | 0 |
| 10 | July | 0 | 0 | 0 | 0 | 0 | 9 | 1 | 12 | 8.00\% | 0 | 0 |
| 11 | August | 0 | 0 | 0 | 0 | 0 | 8 | / | 12 | 8.00\% | 0 | 0 |
| 12 | September | 0 | 0 | 0 | 0 | 0 | 7 | 1 | 12 | 8.00\% | 0 | 0 |
| 13 | TOTAL | 77,305,533 | 118,742 | 77,424,275 | 75,871,724 | $\xrightarrow{1,552,551}$ |  |  |  |  | $(120,766)$ | $\xrightarrow{1,431,785}$ |

> COLUMBIA GAS OF PENNSYLVANIA, INC.

STATEMENT OF DEMAND OVER/(UNDER) COLLECTIONS FROM GAS COST RATE OCTOBER, 2015 THROUGH SEPTEMBER, 2016

$\begin{array}{ccccc}\text { Reference: } & \text { Sch. } 4, & \text { Sch. } 4, & \text { Sch. } 4, & \text { Sch. } 4, \\ & \text { Pg. } 4 & \text { Pg. } 6 & \text { Pg. } 5 & \text { Pg. } 6\end{array}$
Actuals through May 2016

| 1 | October, 2015 | 1,558,194 | 73 | 49,920 | 30 | 1,608,216 | 5,527,271 | $(3,919,054)$ | 18 | 1 | 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 | 1 | 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 | 1 | 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 | 1 | 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 | 1 | 12 | 8.00\% | $(100,937)$ | $(1,477,356)$ |
| 9 | June | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 1 | 12 | 8.00\% | 0 | 0 |
| 10 | July | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 1 | 12 | 8.00\% | 0 | 0 |
| 11 | August | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 1 | 12 | 8.00\% | 0 | 0 |
| 12 | September | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 1 | 12 | 8.00\% | 0 | 0 |
| 13 | TOTAL | 45,872,510 | 1,334 | 384,549 | 3,056 | 46,261,449 | $\underline{\text { 42,361,097 }}$ | 3,900,352 |  |  |  |  | 331,811 | 4,232,163 |

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

| $\begin{gathered} \text { LINE } \\ \text { NO. } \end{gathered}$ | MONTH | SALES SUBJECT TO COMMODITY COST OF GAS | $\begin{gathered} \text { COMMODITY } \\ \text { COST OF } \\ \text { GAS } \\ \hline \end{gathered}$ | TOTAL COMMODITY COST RECOVERY |
| :---: | :---: | :---: | :---: | :---: |
|  |  | (1) | (2) | (3 = $1 \times 2$ ) |
|  |  | THERM | \$/THERM | \$ |
| 1 | October, 2015 Est. Old | 4,515,622 | 0.37614 | 1,698,506 |
| 2 | October, 2015 Est. New | 4,408,533 | 0.31252 | 1,377,755 |
| 3 | September, 2015 Est. | $(5,790,556)$ | 0.37614 | $(2,178,060)$ |
| 4 | September, 2015 Act. | 5,763,556 | 0.37614 | 2,167,904 |
| 5 | September - Interruptible Less NSS Act. | (70) | 0.28085 | (20) |
| 6 | September Act. Prior Period Adjustments |  | 0.00000 | $(2,686)$ |
| 7 | Total | 8,897,085 |  | 3,063,399 |
| 8 | November, 2015 Est. | 18,657,190 | 0.31252 | 5,830,745 |
| 9 | October, 2015 Est. Old | $(4,515,622)$ | 0.37614 | $(1,698,506)$ |
| 10 | October, 2015 Est. New | $(4,408,533)$ | 0.31252 | $(1,377,755)$ |
| 11 | October, 2015 Act. Old | 4,477,698 | 0.37614 | 1,684,241 |
| 12 | October, 2015 Act. New | 4,371,507 | 0.31252 | 1,366,183 |
| 13 | October - Interruptible Less NSS Act. | 0 | 0.41288 | 0 |
| 14 | October Act. Prior Period Adjustments |  | 0.00000 | (203) |
| 15 | Total | 18,582,240 |  | 5,804,706 |
| 16 | December, 2015 Est. | 34,991,405 | 0.31252 | 10,935,514 |
| 17 | November, 2015 Est. | $(18,657,190)$ | 0.31252 | $(5,830,745)$ |
| 18 | November, 2015 Act. | 18,317,820 | 0.31252 | 5,724,685 |
| 19 | November - Interruptible Less NSS Act. | (870) | 0.21269 | (185) |
| 20 | November Act. Prior Period Adjustments |  | - | 139 |
| 21 | Total | 34,651,165 |  | 10,829,408 |
| 22 | January, 2016 Est. Old | 19,480,120 | 0.31252 | 6,087,927 |
| 23 | January, 2016 Est. New | 34,184,122 | 0.27354 | 9,350,725 |
| 24 | December, 2015 Est. | $(34,991,405)$ | 0.31252 | $(10,935,514)$ |
| 25 | December, 2015 Act. | 34,708,925 | 0.31252 | 10,847,233 |
| 26 | December - Interruptible Less NSS Act. | 0 | 0.67290 | 0 |
| 27 | December Act. Prior Period Adjustments | 0 | - | 2,150 |
| 28 | Total | 53,381,762 |  | 15,352,521 |

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


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

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



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


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, 2014 Est. | $(29,699,130)$ | 0.13081 | $(3,884,943)$ |
| 41 | April, 2014 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

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

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

| $\begin{gathered} \text { LINE } \\ \text { NO. } \\ \hline \end{gathered}$ | 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. | 0 | - | 0 |
| 35 | May, 2016 Est. | 0 | - | 0 |
| 36 |  | 0 |  | 0 |
| 37 | July, 2016 | 0 | - | 0 |
| 38 | June, 2016 Act. | 0 | - | 0 |
| 39 | June, 2016 Est. | 0 | - | 0 |
| 40 |  | 0 |  | 0 |
| 41 | August, 2016 | 0 | - | 0 |
| 42 | July, 2016 Act. | 0 | - | 0 |
| 43 | July, 2016 Est. | 0 | - | 0 |
| 44 |  | 0 |  | 0 |
| 45 | September, 2016 | 0 | - | 0 |
| 46 | August, 2016 Act | 0 | - | 0 |
| 47 | August, 2016 Est. | 0 | - | 0 |
| 48 |  | 0 |  | 0 |
| 49 | TOTAL | 510,570 |  | 384,549 |

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

| $\begin{gathered} \text { LINE } \\ \text { NO. } \\ \hline \end{gathered}$ |  | NSS-BANKING \& BALANCING |  |  | NSS-CAPACITY RELEASE |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | DESCRIPTION | 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. | 0 | - | 0 | 0 | - | 0 |
| 34 | May, 2016 Act. | 0 | - | 0 | 0 | - | 0 |
| 35 | May, 2016 Est. | 0 | - | 0 | 0 | - | 0 |
| 36 |  | 0 |  | 0 | 0 |  | 0 |
| 37 | July, 2016 Est. | 0 | - | 0 | 0 | - | 0 |
| 38 | June, 2016 Act. | 0 | - | 0 | 0 | - | 0 |
| 39 | June, 2016 Est. | 0 | - | 0 | 0 | - | 0 |
| 40 |  | 0 |  | 0 | 0 |  | 0 |
| 41 | August, 2016 Est. | 0 | - | 0 | 0 | - | 0 |
| 42 | July, 2016 Act. | 0 | - | 0 | 0 | - | 0 |
| 43 | July, 2016 Est. | 0 | - | 0 | 0 | - | 0 |
| 44 |  | 0 |  | 0 | 0 |  | 0 |
| 45 | September, 2016 Est. | 0 | - | 0 | 0 | - | 0 |
| 46 | August, 2016 Act. | 0 | - | 0 | 0 | - | 0 |
| 47 | August, 2016 Est. | 0 | - | 0 | 0 | - | 0 |
| 48 |  | 0 |  | 0 | 0 |  | 0 |
| 49 | TOTAL | 590,039 |  | 1,334 | 590,039 |  | 3,056 |

## COLUMBIA GAS OF PENNSYLVANIA, INC.

## COMMODITY REFUNDS RECEIVED

FROM VARIOUS SUPPLIERS

| Line <br> No. | 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 <br> 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, 2015 | 0 | 19 | / | 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 | 0 | 10 | 1 | 12 | 6.00\% | 0 | 0 |
| 11 | July | 0 | 9 | / | 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 | 50,299 |  |  |  |  | 3,772 | 54,071 |

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

[^1]:    1_/ Includes 131,289,246 Therm Transportation Quantities for the Company's Choice Program

[^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.

