

Columbia Gas of Pennsylvania, Inc.
2015 General Rate Case
Docket No. R-2015-2468056
Standard Data Request
GASCOS No. 01-21
Volume 1 of 1

Columbia Gas of Pennsylvania, Inc.

Standard Data Request

Cost of Service

Question No. GAS-COS-001:

Please explain the Company's policy with regard to when customer advances and contributions in aid of construction must be made.

Response:

The Company's policy with regard to when customer advances and contributions in aid of construction must be made is defined within Tariff Pa. P.U.C. No. 9 currently on file with the Pennsylvania Public Utility Commission ("Commission"). More specifically, Section 8.2 Extensions, Main Extension Policy indicates residential, commercial and industrial customers electing service shall pay a refundable cash deposit to the Company equal to the difference between the minimum capital investment required to serve the applicant's gas requirement and the amount of capital that the Company can justify investing in the project, based on the anticipated gas requirements of the applicant(s). The minimum capital investment is the capital expenditure required to serve only the gas requirement requested by the particular applicant(s).

The maximum allowable investment is the amount of capital expenditure which the estimated revenues generated from a proposed project would support and still provide the necessary return to the company, taking into consideration the estimated additional annual volumes, rate schedule, cost of gas, operating and maintenance expense, interest and taxes.

Additionally, Section 8.2.3 Capital Expenditure Policy, Reduction or Elimination of Deposit of the Company's tariff currently on file with the PA PUC provides that in any case where a deposit is required, it may be reduced or eliminated, if in the Company's judgment, the institution of such service will benefit other customers within a reasonable period of time.

Please see Exhibit No. 14, Schedule No. 2, for a complete copy of Columbia's tariff.

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Question No. GAS-COS-002:

Please provide a detailed explanation describing how contributions in aid of construction and customer advances are reflected in the Company's cost of service study.

Response:

Customer Advances for Construction have been classified to one of two different 252 sub-accounts. Account 252-15561 has been used as a classification for Customer Advances since January 2000. Account 252-15560 was used prior to January 2000. Use of account 252-15561 began with the adoption of a revised method of accounting for Customer Advances. A reduction to rate base has been properly included for Customer Advances pertaining to both 252 sub-accounts.

A debit is made to 101-Gas Plant in Service once plant is placed in service regardless of the accounting treatment for Customer Advances. A credit is made to 101-Gas Plant in Service in recognition of Customer Advances since January 2000. Therefore, a reduction to rate base has already been included related to account 252-15561 by including the net 101-Gas Plant in Service per books.

Prior to January 2000, there was no 101-Gas Plant in Service offset for Customer Advances. As such, rate base would not be reduced through Account 101 for Customer Advances prior to January 2000. The reduction to rate base for these Customer Advances is made by including account 252-15560 in rate base.

The following table provides a summary of the entries described above.

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Entries for Customer Advances not Refunded <u>1/</u>	Prior to January 2000		After January 2000	
	Debit	Credit	Debit	Credit
Record Cost of Construction	101	131	101	131
Record Billing for Customer Advance	143	252	143	101
Customer Advance Received	131	143	131	143
Record Liability for Customer Advance			186	252
<i>Both methods show customer advances received at this point and a liability recorded in 252. However, the net entries are different</i>	101	252	186	252
Record Customer Advances not Refunded	252	101	252	186
<i>Once a Customer Advance is deemed non-refundable it becomes a Contribution in Aid of Construction and there are no remaining entries on the books in recognition of a liability.</i>				
<u>1/</u> Entries are not shown as running through 107-Construction Work in Progress for simplicity purposes				

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Question No. GAS-COS-003:

Please provide a breakdown of contributions in aid of construction by customer class and plant account number for the most recent year available.

Response:

Please see Exhibit No. 8, Schedule No. 1, for contributions in aid of construction by plant account for the historic test year. Contributions in aid of construction are not recorded on the Company's books by customer class.

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Question No. GAS-COS-004:

Please provide a breakdown of transmission and distribution mains investment by pipe diameter.

Response:

The requested breakdown is as follows:

<u>Diameter</u>	<u>Quantity (Feet)</u>	<u>Amount \$</u>
1/2"	3	233
3/4"	8,097	13,153
1"	99,368	262,376
1-1/8"	2,303	5,709
1-1/4"	698,443	2,953,586
1-1/2"	15,885	12,649
2"	13,729,998	130,970,948
2-1/2"	5,025	3,292
3"	3,413,309	30,961,068
3-1/4"	653	3,764
3-1/2"	8,138	27,469
4"	11,526,921	240,108,217
4-1/2"	4,004	24,094
4-7/8"	17,345	19,108
5"	53,378	52,520
5-1/4"	621	344
5-3/16"	19,665	38,663
5-1/2"	295	343
5-5/8"	21,122	22,430
6"	5,748,368	165,071,779
6-1/4"	21,608	6,032
6-5/8"	119,530	744,389
7-5/8"	12,467	15,407
8"	2,879,207	128,848,176

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8-1/4"	962	3,657
8-5/8"	8,232	361,804
9-5/8"	1,269	7,380
10"	824,385	20,804,241
12"	430,509	24,644,283
14"	450	5,167
16"	321,082	17,565,799
20"	<u>34,204</u>	<u>6,961,170</u>
Total Pipe	40,026,847	\$770,519,253
Other Costs (Valves, Castings, etc.) and 106 Unclassified		\$214,362,449
Per Exhibit 8, Schedule 1, Page 1, Col. 8 Total Gas In Service, Lines 30 thru 33.		\$984,881,702

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Question No. GAS-COS-005:

Please provide a breakdown of customer advances by customer class for the most recent year available.

Response:

Customer Advances are not recorded on Columbia's books by customer class.

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Question No. GAS-COS-006

Please provide a breakdown of services investment by service line diameter, and a breakdown of services by size and customer class.

Response:

The table below summarizes the Company's investment in service lines by size, as of November 30, 2014. The company does not maintain on its books and records, the service line investment by size, by customer class. Please see Columbia Statement No. 11 for an explanation of the assignment of services to the various rate schedules for the Company's Class Cost of Service Studies.

101 - Gas Plant In Service

<u>Size</u>	<u>Amount</u>
	\$
Total Under 3"	385,200,470
3"	857,515
3 1/8"	5,672
3 1/2"	2,099
4"	1,802,820
4 1/2"	5,980
5"	618
6"	215,441
6 5/8"	2,650
8"	82,923
8 5/8"	663
10"	112
12"	742
20"	158
Total Acct 380 Services 1/	388,177,862

1/ The amount ties to Gas Plant In Service for Account 380 – Services for the historic test year as shown on Exh. No. 8, Sch. No. 1, Pg. 1 of 2, Col. 'Account 101.1000', Ln. 39.

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Question GAS-COS-007:

If available, please provide a breakdown of meter investment by meter size, and a breakdown of meters by size and customer class.

Response:

The table below lists the Company's investments in meters, Account 381, by size as identified on the Company's books and records as of November 30, 2014. The amount ties to the amount included in Exhibit No. 8, Schedule No. 1, Page 2 of 2. The Company's books and records do not identify the assignment of meters to the various customer classes. Please see Columbia Statement No. 11 for an explanation of the assignment of meters to each customer rate class for the Class Cost of Service studies.

<u>Size</u> <u>Cubic Feet Per</u> <u>Hour</u>	<u>Investment</u> \$
0 - 500	21,549,836
501 - 1000	4,725,358
1001 - 1500	1,066,452
Over 1500	<u>6,368,604</u>
Total	33,710,250
Other Costs	<u>353,334</u>
Total Account 381	<u><u>34,063,584</u></u>

Other costs include inactive meters, in stock meters, and timing differences.

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Question No. GAS-COS-o8:

Please provide the Company's rate design models and cost of service study on an IBM PC-compatible computer disk in Lotus 1-2-3 or Quattro format. If the models consist of more than one file, please include information on all files on the disk and what they contain. If not available in Lotus 1-2-3 or Quattro format, please provide in ASCII format.

Response:

Please see the enclosed CD containing Excel files of the Company's rate design and allocated cost of service studies.

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Question No. GAS-COS-09:

Please provide a copy of the Company's current customer extension policy. Provide a representative sample of the analyses conducted by the Company when deciding whether service to a new customer qualifies under the Company's customer extension policy.

Response:

The Company's current customer extension policy appears on pages 48-50 of its tariff as reproduced below.

8. Extensions

8.1 Service Connections

The Company will install the service line from its main to point of delivery, as defined in the Point of Delivery section of this tariff; provided, however;

- (a) In the territories formerly served under Tariff Gas--Pa. P.U.C. No. 6 and Tariff Gas--Pa. P.U.C. No. 7, the Company will install the service line from its main to a convenient point approximately fifty (50) feet inside the customer's property line. (See the description of Territory section of this tariff to identify territory formerly served under Tariff Gas--Pa. P.U.C. No. 6 and Tariff Gas--Pa. P.U.C. No. 7.)
- (b) In rural areas, where service is not available directly from the Company, service may be provided from a transmission or production line. It is the sole discretion of the owner of the transmission or production line to allow service from their facilities to the customer. If connection is allowed, the Company's service connection will consist of a tap on the line and a service valve.

8.2 Capital Expenditure Policy

8.2.1 Residential Distribution Service

The applicants will be required to provide a refundable cash deposit to the Company equal to the difference between the minimum capital investment required to serve the applicant's gas requirements and the amount of capital that the Company can justify

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investing in the project, based on the anticipated gas requirements of the applicant(s). Minimum capital investment is the capital expenditure required to serve only the gas requirements requested by the particular applicant(s).

The maximum allowable investment is the amount of capital expenditure which the estimated revenues generated from a proposed project would support and still provide the necessary return to the company, taking into consideration the estimated additional annual quantities, rate schedule, cost of gas, operating and maintenance expense, interest and taxes.

8.2.2 Commercial and Industrial Distribution Service

The applicants will be required to provide a refundable cash deposit to the Company equal to the difference between the minimum capital investment required to serve the applicant's gas requirements and the amount of capital that the Company can justify investing in the project, based on the anticipated gas requirements of the applicant(s). Minimum capital investment is the capital expenditure required to serve only the gas requirements requested by the particular applicant(s).

- (a) Projects Where the Net Present Value of the Cash Flows, Using the Minimum Capital Investment, is Equal to or Greater than Zero.

Such projects are economically feasible provided that there are assurances that the applicant will use the projected quantities of gas for the minimum time period stated in the agreement. Such assurances may be provided in the form of a minimum use agreement, in which applicant contractually agrees to take delivery of certain minimum quantities of gas, and to pay the applicable distribution charges for such quantities, irrespective of applicant's actual consumption of gas. At the Company's sole discretion, a deposit may be required if the Company is not certain that the applicant will use the quantity of gas, as projected, for the entire Minimum Time Period. The maximum required deposit shall be no more than the minimum capital investment.

- (b) Projects Where the Net Present Value of the Cash Flows, Using the Minimum Capital Investment, is Less than Zero.

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The Company shall require a refundable deposit in the amount that the net present value is below zero. For example, if the net present value of a project is -\$1,000, the Company shall require a \$1,000 refundable deposit. In addition, if there is uncertainty that the applicant will use the projected quantity of gas for the minimum time period stated in the agreement, the Company may, in its sole discretion, (1) require the Applicant to pay an additional refundable deposit, or (2) require the applicant to enter into a minimum use agreement, in which applicant contractually agrees to take delivery of certain minimum quantities of gas, and to pay the applicable distribution charges for such quantity, irrespective of applicant's actual consumption of gas. The additional refundable deposit, if required, shall be no more than the combined total of the Company's minimum capital investment and the net present value. For example, if the Company's minimum capital investment is \$10,000 and the net present value of the project is -\$1,000, the applicant shall be required to provide an additional \$9,000 deposit.

For purposes of subsection (a) and (b), above, the maximum allowable investment is the amount of capital expenditure which the estimated revenues generated from a proposed project would support and still provide the necessary return to the Company, taking into consideration the estimated additional annual quantity, rate schedule, cost of gas, operating and maintenance expense, interest and taxes.

8.2.3 Reduction or Elimination of Deposit

In any case where a deposit is required, it may be reduced or eliminated, if in the Company's judgment, the institution of such service will benefit other customers within a reasonable period of time.

8.2.4 Taxes on Deposits for Construction & Customer Advances

Any deposit, advance or other like amounts received from the applicant which shall constitute taxable income as defined by the Internal Revenue Service will have the income taxes segregated in a deferred account for inclusion in rate base in a future rate case proceeding. Such income taxes associated with a deposit or advance will not be charged to the specific depositor of the capital.

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Please see Attachment A for sample analysis conducted by CPA.

Print Project Detail

GAS-COS-009
Attachment A
Page 1 of 6

01/30/15
07:11:39

COLUMBIA GAS DISTRIBUTION COMPANIES NEW LOAD REPORTING SYSTEM PROJECT INFORMATION PROJECT DETAIL

The Landings Phase 1B

WMS Project ID WMS1424318
Project Name
Project Type Residential
Priority Normal
Prepared by Amelia Sucharski
Company Columbia Gas of Pennsylvania, Inc.
Location
City

Required Approval LDR - Leader Level
Approval Status LDR - Leader Level
Project Status PE - Pending - Approved, awaiting installation.

PROJECT SUMMARY DATA

# of New Load Data Sheets	1	Buildout Years 2		
Date Response to Customer	8/10/2014	Future 0		
	MINIMUM	RECOMMENDED	***CASH FLOW ANALYSIS RESULTS***	MINIMUM
	---	---		---
Total Added Connect (Dth/Hr) ..	2.38	2.38	Net Present Value Cash Flow	\$50,913.98
Total Added Max Hour (Dth/Hr) ..	2.38	2.38	Required Deposit	\$0.00
Total Added Max Day (Dth)	17.33	17.33	Required Deposit w/Tax Gross Up ..	***
Total Annual Increase (Dth) ..	1810.00	1810.00	Actual Deposit	\$0.00
Total Plant Investment	\$35,837.00	\$35,837.00	IRR without Deposit	22.73 %
Mainline Extension Costs	\$8,600.00	\$8,600.00	IRR with Deposit	22.73 %
			Discounted Payback Year.....	6

COMMENTS

SIGNATURES TO DATE

UserID	Name	Approval Level / Type	Step	Date Signed	Signature Type
NA\U125789	AMELIA SUCHARSKI	RPO / SM_Rep1	1	7/21/2014	Release
NA\U126739	BRADLEY SNYDER	ENG / EN_Rep	2	7/23/2014	Release
NA\U125789	AMELIA SUCHARSKI	REP / SM_Rep3	3	7/23/2014	Release
NA\U122918	ZACH MCPHERSON	LDR / NB_Ldr2	4	7/25/2014	Signature

**** RESIDENTIAL CUSTOMER DATA ****

Customer/Development Name		Builder/Developer		Date of Request
[REDACTED]		[REDACTED]		7/21/2014
Street(s)		Between		Answer Needed Date
[REDACTED]		[REDACTED]		8/10/2014
City	State	Zip	County	Gas Required Date
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	9/30/2014
Contact Name: Address: Telephone: Email:				PSID
[REDACTED]				501159904
Supply Pipe = 0 Subdivision Pipe = 0 Betterment Pipe = 0 Relocation Pipe = 0 Total Pipe = 0				
Mkt Rep. ID = NA\125789				
Comment:				

**** UNIT ADDITIONS ****

Buildout Years: 2				Future Buildout Years: 0					Total Project Buildout Years: 2				
Type of Units	Buildout	Future	Project	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Single Family	21	0	21	11	10	0	0	0	0	0	0	0	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0
Conversion	0	0	0	0	0	0	0	0	0	0	0	0	0
Add-On Heat Pump	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Units	21	0	21	11	10	0	0	0	0	0	0	0	0

**** HEATING CALCULATIONS ****

Type of Units	Avg Sq Ft Per Unit	Space Ht Factors	Heat Ld Percent
Single Family	2400	0.0330	100
Multi-Family	0	0.0280	100
Conversion	0	0.0360	100
Add-On Heat Pump	0	0.0140	100

**** OTHER LOAD Calculation Parameters****

Description	Bth/Yr	Percent
Water Heating	20.00	5
Cooking	4.00	20
Drying	3.00	10
Lights	12.00	0
Logs/Fireplace	10.00	50
Grills	2.00	0
Pool Heater	20.00	0
Generator	12.00	0

**** Calculated Load Summary ****

Year	Number of Units	Added Heat Load	Added Other Load	Total Added Load
2014	11	871	77	948
2015	10	792	70	862
Totals	21	1663	147	1810

Print Project Detail

** LOAD DATA **

Volume Description	Connected Load Dth/Hr	Operating Usage - MCF									
		Max Hr (Mcf/Hr)		Max Day (Mcf/Day)		Max Month (Mcf/Mth)					
Existing Load	0.00	0.00		0.00		0.00					
Added (New) Load	2.38	2.26		16.48		313.20					
Total Immediate Load	2.38	2.26		16.48		313.20					
Additional Future Load	0.00	0.00		**		**					
Total Potential Load	2.38	2.26		16.48		313.20					
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Annual Load Additions	948	862	0	0	0	0	0	0	0	0	0
Month of Max Day for New Load: Jan											
Year for Additional Future Load: 2016											
Minimum Delivery Pressure Required: 7"WC											

** NEW LOAD DESCRIPTION **

Description	# of Units	Total connected Dth/Hr	Total Operating Dth/Yr
Heating	21	1.68	1663.00
Water Heating	2	0.12	21.00
Cooking	5	0.25	21.00
Logs/Fireplace	11	0.33	105.00

** GAS SUPPLY INFORMATION **

Quality of Service	Existing Requirements	Added Requirements	Future Added	Current Forecast
Daily Dth				
Firm Sales	0	18	0	0
Standby Sales	0	0	0	0
Interruptible Sales	0	0	0	0
Interruptible Trans	0	0	0	0
Total daily Dth	0	18	0	0
Annual Dth				
Firm Sales	0	1810	0	0
Standby Sales	0	0	0	0
Interruptible Sales	0	0	0	0
Interruptible Trans	0	0	0	0
Total Annual Dth	0	1810	0	0

**** CASH FLOW INPUTS ****

Rate Number..... RSS/RDGSS - Residential		** Volume Spreads**						
Sales & Distribution Sale Service			Additional	Total	Annual	Annual	Annual	Annual
Rate Type..... Tariff			Load Dth	Load Dth	Step 1	Step 2	Step 3	Step 4
Existing Customer? No		Existing		0.00	0.00	0.00	0.00	0.00
Cash Flow Analysis: 40 Years		2014	948.00	948.00	948.00	0.00	0.00	0.00
		2015	862.00	1810.00	1810.00	0.00	0.00	0.00

**** CASH FLOW INPUTS - ADDITIONAL EXPENSES ****

Year	Promotional	Incremental Maintenance	Other 1	Other 2	Other 3	Total
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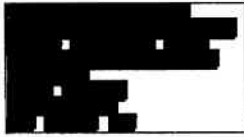
**** Minimum Services / Meters Costs ****

Cost Per Service		Labor Cost Per Meter/Regulator		Meter/Regulator Materials	
\$ 1174.00		\$ 16.00		\$ 107.00	
Year	Number of Services	Total Service Cost	Number of Meters	Total Labor Cost	Total Materials Cost
2014	11	\$12,914.00	11	\$176.00	\$1,177.00
2015	10	\$11,740.00	10	\$160.00	\$1,070.00
Total Investment: \$27,237.00					

**** Recommended Services / Meters Costs ****

Cost Per Service		Labor Cost Per Meter/Regulator		Meter/Regulator Materials	
\$ 1174.00		\$ 16.00		\$ 107.00	
Year	Number of Services	Total Service Cost	Number of Meters	Total Labor Cost	Total Materials Cost
2014	11	\$12,914.00	11	\$176.00	\$1,177.00
2015	10	\$11,740.00	10	\$160.00	\$1,070.00
Total Investment: \$27,237.00					

** INVESTMENT DESCRIPTION **



** SOURCE OF SUPPLY **

** DISTRIBUTION INFORMATION **		
Existing Measurement Station No.	DIS System No. 37003005	TBS No.
Existing CAB Customer? No	Map No. 8256516r	TBS Name
Pressure Range, Maximum 60	Pressure Range, Minimum 54.3	Pressure Range, Normal 56
** TRANSMISSION INFORMATION **		
Transmission Company		Transmission Line No.
New Transmission Tap Required ? No		

** FACILITIES COST **

** MINIMUM **				** RECOMMENDED **			
Year	Extension	Betterment	Relocation	Extension	Betterment	Relocation	
2014	8600.00	0.00	0.00	8600.00	0.00	0.00	
2015	0.00	0.00	0.00	0.00	0.00	0.00	
Total Minimum Mains Investment:			\$8,600.00	Total Recommended Mains Investment:			\$8,600.00
Dig and Backfill(CIAC): \$2,839.00							
Job Order Number(s): 14-0242626-00 ;							

PROJECT MEMOS

From Amelia Sucharski
To
Created Date 9/18/2014
Subject. Release 555

Please release 555 job order ask I received both signed D&B agreement and certificate of insurance. Adding customer approval to project. Customer advised the site will be ready for installation in October. // ASucharski-NBT

From Bradley Snyder
To
Created Date 9/19/2014
Subject. JO 14-0242626-00 Release

Amy,

I have release the JO 14-0242626-00 pouch to construction.

Thanks,

From Amelia Sucharski
To Bradley Snyder;
Created Date 7/21/2014
Subject. Project Details

this is the [REDACTED]
[REDACTED] there is existing main line on a portion of [REDACTED]. The customer would like to assist with the dig and backfilling of the trench work for the main. I will forward Brad the site plans provided by the developer. Please contact Amy Sucharski at 614-460-5400 ext 3044 with any questions. Thanks!

From Bradley Snyder
To Amelia Sucharski;
Created Date 7/23/2014
Subject. Engineering Completed

Amy,

An 815'-2" PUMP MLE is required to serve this load. The 555 JO 14-0242626-00 was estimate as Dig and Backfill Each house requires a 1" service line with a 700 series EFV. An AC-250 meter, 5/4" B-42-IMR regulator with 3/16" orifice and Brown spring are required per house.

Thank you,
Bradley Snyder

From Amelia Sucharski
To Zach McPherson;
Created Date 7/23/2014
Subject. Recommendation

I recommend approval of this project at no cost, pending signed Dig and Backfill agreement and proof of insurance from plumber/contractor assisting with the trench work. PI is \$35,837.00, IRR is 22.73%, DPP is 6 years, and win/rec are the same. This project will consist of installing 815' - 2" PUMP. Each home will require the following: 1" service line, 700 series EFV, AC-250 meter, 5/4" B-42-IMR regulator with 3/16" orifice and brown spring set at 7"WC. // ASucharski-NBT

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Question No. GAS-COS-10:

Please provide a detailed supply and requirement schedule for the Company's three most recent annual peak days and for design day. The schedules should include deliveries by source and requirements by rate schedule. Identify sources and requirements for transportation customers separately. Also include the Company's daily sendout sheet for each peak day and applicable weather data.

Response:

Attachment A to this response provides the actual peak day requirements and associated supplies by source for the Company's peak day each winter for the 2011/12 through 2013/14 heating seasons. The requirements shown represent the Company's total throughput. The breakdown by class is an estimate since actual daily-metered volumes are not available for all customers and are based on an analysis of both daily and monthly billing data for the Company's customers. Also shown for each day are the actual weather conditions of most significance (current day average temperature, prior day average temperature, and current day average wind speed).

Attachment B to this response separately provides the estimated requirements of the Company's Gas Distribution Service customers by rate schedule and their associated supply for the Company's actual peak days each winter for the 2011/12 through 2013/14 heating seasons.

Attachment C to this response provides the peak day requirements, as contained on COS-10 Attachment A, segregated by rate schedule and service type (Sales, Choice, and Gas Distribution Service). The allocation of requirements by rate schedule and service type is estimated based on actual monthly billing information.

Attachment D to this response provides by revenue class the peak day requirements for Winter 2014/15 as expected at the Company's design day conditions. Also shown are the supply sources required by the Company to meet its design peak day firm service obligations.

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Attachment E to this response provides the winter 2014/15 forecasted design peak day requirements, as contained on COS-10 Attachment D, segregated by rate schedule and service type.

Columbia Gas of Pennsylvania

Historical Peak Day

Units are in MDth/Day

Historical Winter Season

	2011 / 12	2012 / 13	2013 / 14
Day of Week	Tue	Tue	Tue
Date	Jan. 03	Jan. 22	Jan. 07
Current Day Average Temp	15° F	9° F	5° F
Prior Day Average Temp	26° F	17° F	4° F
Current Day Average Wind Speed	10 mph	11 mph	10 mph
Requirements ⁽¹⁾			
Residential	297.4	353.0	407.1
Commercial	167.3	198.5	229.0
Industrial	80.6	79.7	96.0
Total Retail:	545.3	631.2	732.1
Company Use:	0.3	0.4	0.5
Unaccounted For:	1.6	0.8	0.7
Total Requirements:	547.2	632.4	733.3
Supply ⁽²⁾			
Columbia Gas Transmission Corp.	459.2	548.2	616.5
Dominion	10.5	7.9	13.1
Equitrans	15.6	9.7	18.9
National Fuel Gas Supply Corp.	4.5	5.1	5.9
Tennessee Gas Pipeline	20.3	21.7	24.6
Texas Eastern Transmission	32.2	35.1	49.0
Direct Local	4.9	4.7	5.3
Blackhawk Storage	0.0	0.0	0.0
Total Supply:	547.2	632.4	733.3

⁽¹⁾ Total actual throughput; breakdown by category/class is an estimate.

⁽²⁾ Actual supplies via identified sources.

Columbia Gas of Pennsylvania

Historical Peak Day Requirements of Delivery Service Customers by Rate Schedule and Associated Supply by Source ⁽¹⁾

Units are in MDth

		Historical Winter Season		
		2011 / 12	2012 / 13	2013 / 14
Day of Week	Tue	Tue	Tue	Tue
Date	Jan. 3	Jan. 22	Jan. 07	
Current Day Average Temp	15° F	9° F	5° F	
Prior Day Average Temp	26° F	17° F	4° F	
Current Day Average Wind Speed	10 mph	11 mph	10 mph	
Requirements ⁽²⁾				
Commercial				
SGDS	23.0	28.8	29.5	
LDS	13.0	16.3	17.3	
MLDS	0.5	0.5	0.8	
NCS	0.1	0.0	0.3	
SDS	33.8	35.7	34.7	
Total Commercial	70.4	81.3	82.6	
Industrial				
SGDS	0.2	0.6	0.6	
LDS	36.3	35.8	51.5	
MLDS	19.1	18.6	18.9	
NCS	15.8	15.2	13.8	
SDS	8.7	8.8	10.6	
Total Industrial	80.1	79.0	95.4	
Requirements		150.5	160.3	178.0
Supply ⁽³⁾				
Columbia Gas Transmission Corp.	136.7	149.3	163.1	
Dominion Transmission Inc.	3.5	1.0	6.0	
Equitrans	0.0	0.0	0.0	
National Fuel Gas Supply Corp.	0.1	0.1	0.5	
Tennessee Gas Pipeline	5.0	4.8	2.6	
Texas Eastern Transmission	0.3	0.4	0.5	
Direct Local	4.9	4.7	5.3	
Total Supply:	150.5	160.3	178.0	

⁽¹⁾ Excludes Choice quantities (SCD).

⁽²⁾ Allocation of daily rate schedule requirement based on actual rate schedule demand for month.

⁽³⁾ Transportation supplies via identified sources.

Columbia Gas Of Pennsylvania

Historical Peak Day Requirements by Rate Schedule Volume in MDth/Day

	Jan. 3, 2012 Total Demand			Jan. 22, 2013 Total Demand			Jan. 7, 2014 Total Demand		
	<u>Tariff</u>	<u>Choice/GDS</u>	<u>Total</u> <u>Throughput</u>	<u>Tariff</u>	<u>Choice/GDS</u>	<u>Total</u> <u>Throughput</u>	<u>Tariff</u>	<u>Choice/GDS</u>	<u>Total</u> <u>Throughput</u>
Residential									
RSS	190.1	0.0	190.1	244.4	0.0	244.4	295.1	0.0	295.1
RDGSS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CAP	0.0	26.4	26.4	0.0	24.0	24.0	0.0	25.3	25.3
RDS	0.0	72.4	72.4	0.0	79.6	79.6	0.0	86.7	86.7
RDGDS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Residential Total	190.1	98.8	288.9	244.4	103.6	348.0	295.1	112.0	407.1
Commercial									
SGSS	75.3	0.0	75.3	98.2	0.0	98.2	113.5	0.0	113.5
LGSS	6.8	0.0	6.8	6.2	0.0	6.2	8.7	0.0	8.7
NSS	1.4	0.0	1.4	0.5	0.0	0.5	0.6	0.0	0.6
SDSS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MLSS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NGV	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SGDS	0.0	26.6	26.6	0.0	36.1	36.1	0.0	39.0	39.0
LDS	0.0	15.8	15.8	0.0	18.9	18.9	0.0	17.3	17.3
MLDS	0.0	0.6	0.6	0.0	0.7	0.7	0.0	0.8	0.8
SCD	0.0	20.2	20.2	0.0	13.3	13.3	0.0	14.1	14.1
NCS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3
SDS	0.0	29.1	29.1	0.0	30.0	30.0	0.0	34.7	34.7
EBS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Commercial	83.5	92.3	175.8	104.9	99.0	203.9	122.8	106.2	229.0
Industrial									
SGSS	0.3	0.0	0.3	0.3	0.0	0.3	0.4	0.0	0.4
LGSS	0.1	0.0	0.1	0.3	0.0	0.3	0.2	0.0	0.2
NSS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SDSS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MLSS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NGV	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SGDS	0.0	0.3	0.3	0.0	0.8	0.8	0.0	0.6	0.6
LDS	0.0	52.4	52.4	0.0	51.0	51.0	0.0	51.5	51.5
MLDS	0.0	18.4	18.4	0.0	17.0	17.0	0.0	18.9	18.9
SCD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NCS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.8	13.8
SDS	0.0	9.6	9.6	0.0	10.3	10.3	0.0	10.6	10.6
EBS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Industrial	0.4	80.7	81.1	0.6	79.1	79.7	0.6	95.4	96.0
Other	1.3	0.0	1.3	1.0	0.0	1.0	1.2	0.0	1.2
Historical Peak	275.3	271.8	547.1	350.9	281.7	632.6	419.7	313.6	733.3

Note: Allocation based on monthly billing information.

Columbia Gas of Pennsylvania

**Forecasted Design Day Requirements and Supply
For 2014/15 Heating Season
Units are in MDth/Day**

		Total Design Day Demand	
		2014 / 15	
Day of Week		Weekday	
Current Day Average Temp		-5° F	
Prior Day Average Temp		6° F	
Current Day Average Wind Speed		11mph	
Requirements ⁽¹⁾			
Firm :		450.2	
Residential		172.3	
Commercial ⁽²⁾		7.1	
Industrial ⁽²⁾		0.5	
Company Use		0.6	
Unaccounted For Gas		630.7	
Total Firm:			
Non-Firm: Residential		0.0	
Commercial		84.3	
Industrial		79.5	
Total Non-Firm:		163.8	
Total Requirements:		794.5	
Supply ⁽³⁾			
Columbia Gas Transmission Corp.		549.0	
Dominion		13.8	
Equitrans		14.3	
National Fuel Gas Supply Corp.		4.3	
Tennessee Gas Pipeline		19.3	
Texas Eastern Transmission		19.3	
Direct Local		0.7	
Blackhawk Storage		10.0	
Total Supply:		630.7	
Imbalance ⁽⁴⁾		163.8	

⁽¹⁾ Per CPA's "2014 Design Day Forecast."

⁽²⁾ Includes Standby Service and Elective Balancing Service quantities.

⁽³⁾ Supply provided by CPA and Natural Gas Suppliers.

⁽⁴⁾ Represents customer demand of a non-firm nature, for which the Company has no dedicated supply/capacity assets, that would have to be accounted for by customers or suppliers acting on their behalf.

Columbia Gas Of Pennsylvania 2014 Peak Day Forecast, 2014/15 - 2018/19

2014/15 Peak Day Requirements by Rate Schedule Volume in MDth/Day

	Total Demand			Firm Demand			Non-Firm Demand			Additional Firm Obligation	Total Firm Obligation
	Tariff	GTS	Throughput	Tariff	GTS	Throughput	Tariff	GTS	Throughput		
Residential											
RSS	326.3	0.0	326.3	326.3	0.0	326.3	0.0	0.0	0.0	0.0	326.3
RDGSS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CAP	0.0	28.0	28.0	0.0	28.0	28.0	0.0	0.0	0.0	0.0	28.0
RDS	0.0	95.9	95.9	0.0	95.9	95.9	0.0	0.0	0.0	0.0	95.9
RDGDS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Residential Total	326.3	123.9	450.2	326.3	123.9	450.2	0.0	0.0	0.0	0.0	450.2
Commercial											
SGSS	126.0	0.0	126.0	126.0	0.0	126.0	0.0	0.0	0.0	0.0	126.0
LGSS	9.7	0.0	9.7	9.7	0.0	9.7	0.0	0.0	0.0	0.0	9.7
NSS	0.7	0.0	0.7	0.7	0.0	0.7	0.0	0.0	0.0	0.0	0.7
SDSS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MLSS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NGV	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SGDS	0.0	43.5	43.5	0.0	10.6	10.6	0.0	32.9	32.9	0.0	10.6
LDS	0.0	24.8	24.8	0.0	0.0	0.0	0.0	24.8	24.8	0.0	0.0
MLDS	0.0	0.8	0.8	0.0	0.0	0.0	0.0	0.8	0.8	0.0	0.0
SCD	0.0	15.6	15.6	0.0	15.6	15.6	0.0	0.0	0.0	0.0	15.6
NCS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SDS	0.0	35.5	35.5	0.0	0.0	0.0	0.0	35.5	35.5	5.6	5.6
EBS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1	4.1
Total Commercial	136.4	120.2	256.6	136.4	26.2	162.6	0.0	94.0	94.0	9.7	172.3
Industrial											
SGSS	0.5	0.0	0.5	0.5	0.0	0.5	0.0	0.0	0.0	0.0	0.5
LGSS	0.2	0.0	0.2	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.2
NSS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SDSS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MLSS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NGV	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SGDS	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.5	0.5	0.0	0.0
LDS	0.0	41.2	41.2	0.0	0.0	0.0	0.0	41.2	41.2	0.0	0.0
MLDS	0.0	19.2	19.2	0.0	0.0	0.0	0.0	19.2	19.2	0.0	0.0
SCD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NCS	0.0	15.6	15.6	0.0	0.0	0.0	0.0	15.6	15.6	0.0	0.0
SDS	0.0	9.4	9.4	0.0	0.0	0.0	0.0	9.4	9.4	0.0	0.0
EBS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.4	6.4
Total Industrial	0.7	85.9	86.6	0.7	0.0	0.7	0.0	85.9	85.9	6.4	7.1
Other	1.1	0.0	1.1	1.1	0.0	1.1	0.0	0.0	0.0	0.0	1.1
2014/15 Design Day	464.5	330.0	794.5	464.5	150.1	614.6	0.0	179.9	179.9	16.1	630.7

(1) Standby and Elective Balancing Service Quantities

Columbia Gas of Pennsylvania, Inc.

Standard Data Request

Cost of Service

Question No. GAS-COS-11:

Please provide copies of the Company's daily sendout sheets for November through March of the most recent heating season.

Response:

Please see GAS-COS-11 Attachment A showing the actual daily Dth sendout during the period November 1, 2013 through March 31, 2014.

**Columbia Gas of Pennsylvania
Heating Season November 2013 Through March 2014
Daily Dth Sendout**

Date	Dth
11/01/13	140,799
11/02/13	199,740
11/03/13	276,564
11/04/13	305,038
11/05/13	233,709
11/06/13	151,888
11/07/13	268,097
11/08/13	314,325
11/09/13	225,064
11/10/13	284,844
11/11/13	298,598
11/12/13	387,966
11/13/13	384,955
11/14/13	319,891
11/15/13	237,784
11/16/13	162,059
11/17/13	170,815
11/18/13	262,718
11/19/13	363,032
11/20/13	344,596
11/21/13	258,355
11/22/13	258,666
11/23/13	399,050
11/24/13	495,273
11/25/13	419,707
11/26/13	382,884
11/27/13	427,112
11/28/13	387,976
11/29/13	394,978
11/30/13	369,697
12/01/13	308,657
12/02/13	297,383
12/03/13	278,815
12/04/13	212,716
12/05/13	213,541
12/06/13	343,908
12/07/13	406,899
12/08/13	411,402
12/09/13	396,288
12/10/13	466,275
12/11/13	492,506
12/12/13	525,705
12/13/13	419,483
12/14/13	378,841
12/15/13	458,125

Columbia Gas of Pennsylvania
Heating Season November 2013 Through March 2014
Daily Dth Sendout

Date	Dth
12/16/13	461,372
12/17/13	443,869
12/18/13	452,642
12/19/13	321,405
12/20/13	231,320
12/21/13	149,428
12/22/13	160,472
12/23/13	325,597
12/24/13	457,158
12/25/13	418,087
12/26/13	416,341
12/27/13	362,389
12/28/13	271,789
12/29/13	319,078
12/30/13	444,868
12/31/13	451,640
01/01/14	405,818
01/02/14	520,757
01/03/14	586,908
01/04/14	465,069
01/05/14	372,008
01/06/14	680,730
01/07/14	733,227
01/08/14	561,193
01/09/14	433,382
01/10/14	327,147
01/11/14	294,450
01/12/14	382,566
01/13/14	290,872
01/14/14	351,809
01/15/14	426,098
01/16/14	418,912
01/17/14	415,767
01/18/14	504,303
01/19/14	428,636
01/20/14	439,599
01/21/14	625,117
01/22/14	635,745
01/23/14	656,887
01/24/14	607,255
01/25/14	546,845
01/26/14	512,394
01/27/14	635,468
01/28/14	688,891
01/29/14	643,400
01/30/14	494,152
01/31/14	399,517
02/01/14	311,394
02/02/14	378,485
02/03/14	489,851

**Columbia Gas of Pennsylvania
Heating Season November 2013 Through March 2014
Daily Dth Sendout**

Date	Dth
02/04/14	454,706
02/05/14	485,254
02/06/14	507,840
02/07/14	532,460
02/08/14	500,011
02/09/14	509,893
02/10/14	580,002
02/11/14	594,247
02/12/14	523,971
02/13/14	454,695
02/14/14	419,554
02/15/14	490,233
02/16/14	523,410
02/17/14	468,973
02/18/14	389,869
02/19/14	372,797
02/20/14	310,197
02/21/14	334,457
02/22/14	295,078
02/23/14	363,539
02/24/14	474,696
02/25/14	502,227
02/26/14	545,041
02/27/14	623,035
02/28/14	523,829
03/01/14	368,739
03/02/14	501,468
03/03/14	619,617
03/04/14	502,886
03/05/14	499,675
03/06/14	456,633
03/07/14	339,746
03/08/14	307,355
03/09/14	352,403
03/10/14	264,013
03/11/14	212,296
03/12/14	439,371
03/13/14	490,225
03/14/14	266,811
03/15/14	299,457
03/16/14	434,587
03/17/14	417,810
03/18/14	326,071
03/19/14	305,646
03/20/14	363,959
03/21/14	300,351
03/22/14	268,378
03/23/14	433,589
03/24/14	448,869
03/25/14	442,206
03/26/14	487,841
03/27/14	311,493
03/28/14	229,327
03/29/14	274,975
03/30/14	356,792
03/31/14	259,343

Columbia Gas of Pennsylvania, Inc.

Standard Data Request

Cost of Service

Question No. GAS-COS-12:

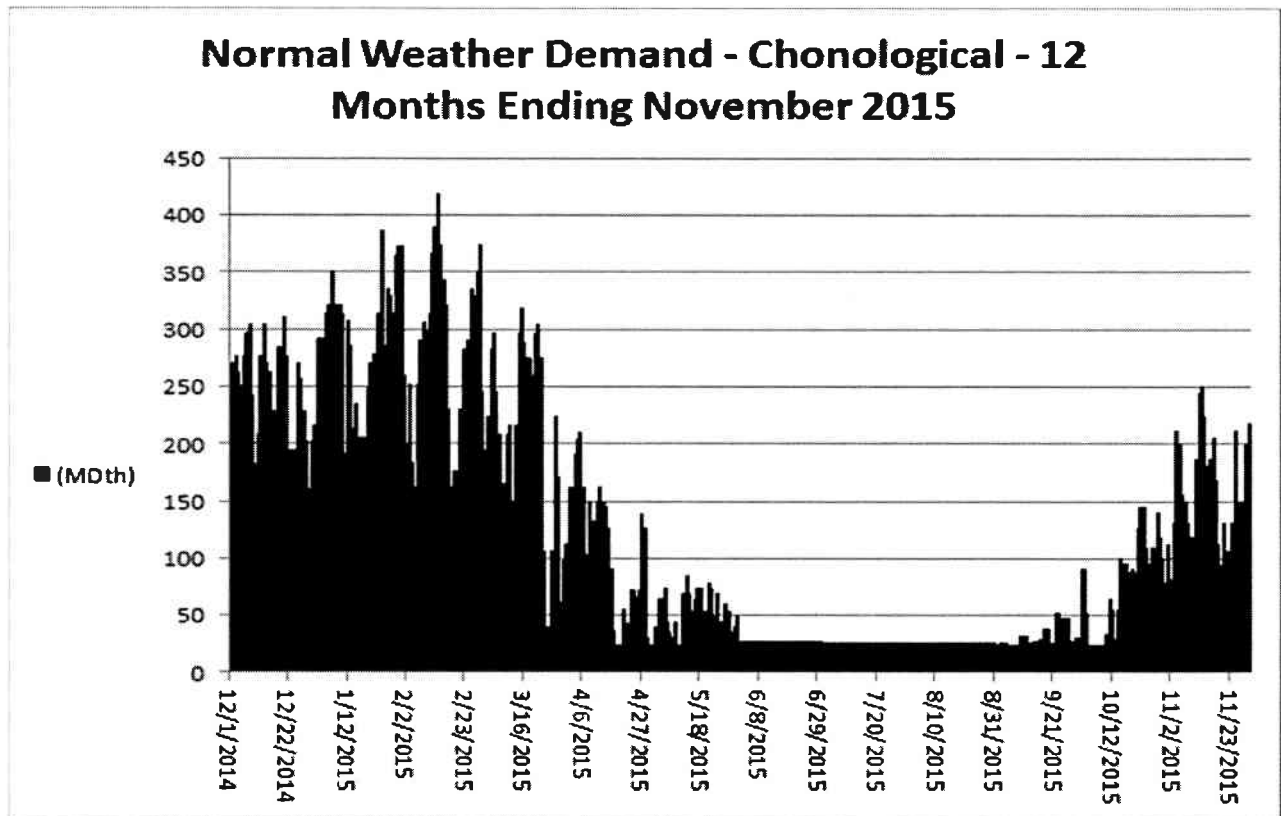
Please provide a copy of the load duration curve used by the Company for capacity planning purposes. Please also identify the numerical data points shown for each day on the curve.

Response:

The Company's basic supply and capacity analysis tool is the SENDOUT[®] Gas Planning System provided by Ventyx of Atlanta, Georgia. SENDOUT[®] determines the "optimum," time-dependent levels of pipeline transportation service and storage service to be utilized to meet the Company's prospective demand under various weather-related scenarios and meets that demand with a least cost mix of supplies. SENDOUT[®] recognizes specific demand regions within the Company's service territory and the pipeline capacity and supply sources available to each region. The Company updates supply prices, storage balances, and other input data in SENDOUT[®] on an ongoing basis from a variety of published and private sources. The Company utilizes SENDOUT[®] for both long-range and short term operational planning. The Normal Weather Firm Demands are shown in GAS-COS-12 Attachment A. The attachment shows the Normal Weather Firm Demands as follows:

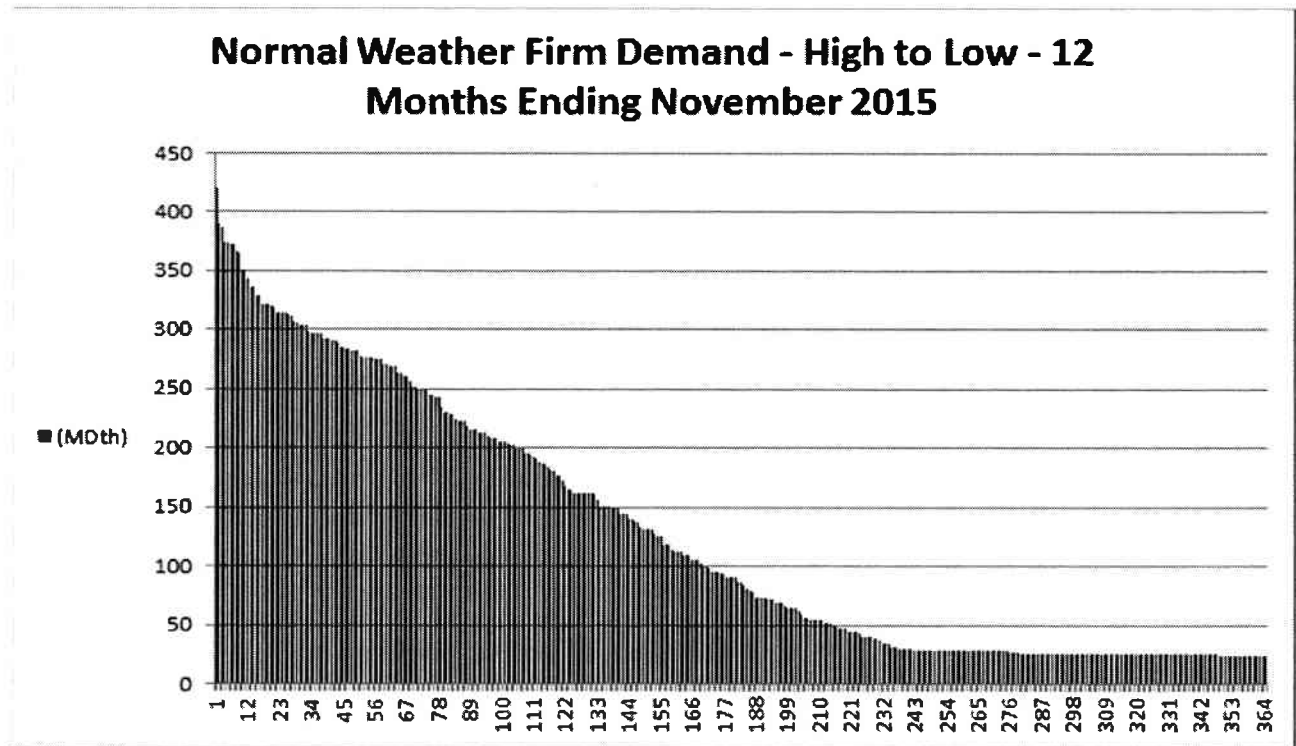
- Page 1. Chronological order for the 12 months ending November 2015,
- Page 2. Graphically for the 12 months ending November 2015,
- Page 3. Sorted high to low for the 12 months ending November 2015,
- Page 4. Graphically for the 12 months ending November 2015.

Firm		Firm		Firm		Firm		Firm		Firm	
Date	Demand (MDth)	Date	Demand (MDth)	Date	Demand (MDth)	Date	Demand (MDth)	Date	Demand (MDth)	Date	Demand (MDth)
1-Dec-2014	188.2	1-Feb-2015	260.0	1-Apr-2015	162.0	1-Jun-2015	27.8	1-Aug-2015	24.9	1-Oct-2015	91.2
2-Dec-2014	269.9	2-Feb-2015	199.3	2-Apr-2015	162.0	2-Jun-2015	27.8	2-Aug-2015	24.9	2-Oct-2015	91.2
3-Dec-2014	276.8	3-Feb-2015	252.4	3-Apr-2015	191.9	3-Jun-2015	27.8	3-Aug-2015	24.9	3-Oct-2015	51.3
4-Dec-2014	263.1	4-Feb-2015	184.1	4-Apr-2015	203.9	4-Jun-2015	27.8	4-Aug-2015	24.9	4-Oct-2015	24.6
5-Dec-2014	249.5	5-Feb-2015	161.3	5-Apr-2015	209.8	5-Jun-2015	27.8	5-Aug-2015	24.9	5-Oct-2015	24.6
6-Dec-2014	276.8	6-Feb-2015	252.4	6-Apr-2015	162.0	6-Jun-2015	27.8	6-Aug-2015	24.9	6-Oct-2015	24.6
7-Dec-2014	297.2	7-Feb-2015	290.4	7-Apr-2015	102.3	7-Jun-2015	27.8	7-Aug-2015	24.9	7-Oct-2015	24.6
8-Dec-2014	304.0	8-Feb-2015	305.6	8-Apr-2015	150.1	8-Jun-2015	27.8	8-Aug-2015	24.9	8-Oct-2015	24.6
9-Dec-2014	242.7	9-Feb-2015	298.0	9-Apr-2015	114.2	9-Jun-2015	27.8	9-Aug-2015	24.9	9-Oct-2015	24.6
10-Dec-2014	181.4	10-Feb-2015	313.1	10-Apr-2015	132.2	10-Jun-2015	27.8	10-Aug-2015	24.9	10-Oct-2015	33.5
11-Dec-2014	208.6	11-Feb-2015	366.3	11-Apr-2015	150.1	11-Jun-2015	27.8	11-Aug-2015	24.9	11-Oct-2015	64.6
12-Dec-2014	276.8	12-Feb-2015	389.1	12-Apr-2015	162.0	12-Jun-2015	27.8	12-Aug-2015	24.9	12-Oct-2015	55.7
13-Dec-2014	304.0	13-Feb-2015	419.4	13-Apr-2015	150.1	13-Jun-2015	27.8	13-Aug-2015	24.9	13-Oct-2015	29.1
14-Dec-2014	269.9	14-Feb-2015	373.9	14-Apr-2015	144.1	14-Jun-2015	27.8	14-Aug-2015	24.9	14-Oct-2015	55.7
15-Dec-2014	263.1	15-Feb-2015	343.5	15-Apr-2015	126.2	15-Jun-2015	27.8	15-Aug-2015	24.9	15-Oct-2015	100.1
16-Dec-2014	222.3	16-Feb-2015	320.7	16-Apr-2015	90.3	16-Jun-2015	27.8	16-Aug-2015	24.9	16-Oct-2015	95.7
17-Dec-2014	229.1	17-Feb-2015	229.6	17-Apr-2015	36.6	17-Jun-2015	27.8	17-Aug-2015	24.9	17-Oct-2015	95.7
18-Dec-2014	283.6	18-Feb-2015	161.3	18-Apr-2015	24.6	18-Jun-2015	27.8	18-Aug-2015	24.9	18-Oct-2015	86.8
19-Dec-2014	283.6	19-Feb-2015	176.5	19-Apr-2015	24.6	19-Jun-2015	27.8	19-Aug-2015	24.9	19-Oct-2015	91.2
20-Dec-2014	310.8	20-Feb-2015	176.5	20-Apr-2015	54.5	20-Jun-2015	27.8	20-Aug-2015	24.9	20-Oct-2015	86.8
21-Dec-2014	276.8	21-Feb-2015	229.6	21-Apr-2015	30.6	21-Jun-2015	27.8	21-Aug-2015	24.9	21-Oct-2015	126.8
22-Dec-2014	195.0	22-Feb-2015	282.8	22-Apr-2015	42.5	22-Jun-2015	27.8	22-Aug-2015	24.9	22-Oct-2015	144.5
23-Dec-2014	140.5	23-Feb-2015	282.8	23-Apr-2015	72.4	23-Jun-2015	27.8	23-Aug-2015	24.9	23-Oct-2015	144.5
24-Dec-2014	195.0	24-Feb-2015	290.4	24-Apr-2015	72.4	24-Jun-2015	27.8	24-Aug-2015	24.9	24-Oct-2015	109.0
25-Dec-2014	269.9	25-Feb-2015	335.9	25-Apr-2015	66.4	25-Jun-2015	27.8	25-Aug-2015	24.9	25-Oct-2015	95.7
26-Dec-2014	256.3	26-Feb-2015	328.3	26-Apr-2015	72.4	26-Jun-2015	27.8	26-Aug-2015	24.9	26-Oct-2015	109.0
27-Dec-2014	229.1	27-Feb-2015	351.1	27-Apr-2015	138.1	27-Jun-2015	27.8	27-Aug-2015	24.9	27-Oct-2015	109.0
28-Dec-2014	201.8	28-Feb-2015	373.9	28-Apr-2015	126.2	28-Jun-2015	27.8	28-Aug-2015	24.9	28-Oct-2015	140.1
29-Dec-2014	160.9	1-Mar-2015	245.3	29-Apr-2015	30.6	29-Jun-2015	27.8	29-Aug-2015	24.9	29-Oct-2015	117.9
30-Dec-2014	201.8	2-Mar-2015	193.8	30-Apr-2015	24.6	30-Jun-2015	27.8	30-Aug-2015	24.9	30-Oct-2015	100.1
31-Dec-2014	215.4	3-Mar-2015	223.2	1-May-2015	24.6	1-Jul-2015	25.8	31-Aug-2015	24.9	31-Oct-2015	77.9
1-Jan-2015	292.6	4-Mar-2015	282.0	2-May-2015	39.4	2-Jul-2015	25.8	1-Sep-2015	24.6	1-Nov-2015	112.1
2-Jan-2015	292.6	5-Mar-2015	296.7	3-May-2015	64.0	3-Jul-2015	25.8	2-Sep-2015	26.1	2-Nov-2015	80.8
3-Jan-2015	292.6	6-Mar-2015	245.3	4-May-2015	64.0	4-Jul-2015	25.8	3-Sep-2015	26.1	3-Nov-2015	130.8
4-Jan-2015	314.3	7-Mar-2015	208.5	5-May-2015	73.9	5-Jul-2015	25.8	4-Sep-2015	26.1	4-Nov-2015	212.0
5-Jan-2015	321.5	8-Mar-2015	164.4	6-May-2015	44.3	6-Jul-2015	25.8	5-Sep-2015	24.6	5-Nov-2015	199.5
6-Jan-2015	350.5	9-Mar-2015	164.4	7-May-2015	34.5	7-Jul-2015	25.8	6-Sep-2015	24.6	6-Nov-2015	155.8
7-Jan-2015	270.8	10-Mar-2015	208.5	8-May-2015	29.5	8-Jul-2015	25.8	7-Sep-2015	24.6	7-Nov-2015	149.5
8-Jan-2015	321.5	11-Mar-2015	215.8	9-May-2015	44.3	9-Jul-2015	25.8	8-Sep-2015	24.6	8-Nov-2015	130.8
9-Jan-2015	321.5	12-Mar-2015	149.6	10-May-2015	24.6	10-Jul-2015	25.8	9-Sep-2015	31.4	9-Nov-2015	118.3
10-Jan-2015	314.3	13-Mar-2015	215.8	11-May-2015	24.6	11-Jul-2015	25.8	10-Sep-2015	31.4	10-Nov-2015	118.3
11-Jan-2015	191.2	14-Mar-2015	296.7	12-May-2015	69.0	12-Jul-2015	25.8	11-Sep-2015	31.4	11-Nov-2015	187.0
12-Jan-2015	307.1	15-Mar-2015	318.8	13-May-2015	83.7	13-Jul-2015	25.8	12-Sep-2015	25.7	12-Nov-2015	243.2
13-Jan-2015	285.3	16-Mar-2015	289.4	14-May-2015	69.0	14-Jul-2015	25.8	13-Sep-2015	25.7	13-Nov-2015	249.5
14-Jan-2015	212.9	17-Mar-2015	274.7	15-May-2015	54.2	15-Jul-2015	25.8	14-Sep-2015	26.9	14-Nov-2015	224.5
15-Jan-2015	234.6	18-Mar-2015	274.7	16-May-2015	64.0	16-Jul-2015	25.8	15-Sep-2015	26.9	15-Nov-2015	180.8
16-Jan-2015	205.7	19-Mar-2015	260.0	17-May-2015	73.9	17-Jul-2015	25.8	16-Sep-2015	28.0	16-Nov-2015	187.0
17-Jan-2015	162.2	20-Mar-2015	296.7	18-May-2015	73.9	18-Jul-2015	25.8	17-Sep-2015	28.0	17-Nov-2015	205.8
18-Jan-2015	205.7	21-Mar-2015	304.1	19-May-2015	54.2	19-Jul-2015	25.8	18-Sep-2015	38.1	18-Nov-2015	168.3
19-Jan-2015	249.1	22-Mar-2015	274.7	20-May-2015	54.2	20-Jul-2015	25.8	19-Sep-2015	38.1	19-Nov-2015	112.1
20-Jan-2015	270.8	23-Mar-2015	105.5	21-May-2015	78.8	21-Jul-2015	25.8	20-Sep-2015	25.7	20-Nov-2015	93.3
21-Jan-2015	278.1	24-Mar-2015	39.3	22-May-2015	73.9	22-Jul-2015	25.8	21-Sep-2015	25.7	21-Nov-2015	130.8
22-Jan-2015	249.1	25-Mar-2015	39.3	23-May-2015	49.3	23-Jul-2015	25.8	22-Sep-2015	51.6	22-Nov-2015	105.8
23-Jan-2015	314.3	26-Mar-2015	105.5	24-May-2015	69.0	24-Jul-2015	25.8	23-Sep-2015	51.6	23-Nov-2015	93.3
24-Jan-2015	386.7	27-Mar-2015	223.2	25-May-2015	44.3	25-Jul-2015	25.8	24-Sep-2015	47.1	24-Nov-2015	130.8
25-Jan-2015	285.3	28-Mar-2015	171.7	26-May-2015	44.3	26-Jul-2015	25.8	25-Sep-2015	47.1	25-Nov-2015	212.0
26-Jan-2015	336.0	29-Mar-2015	61.4	27-May-2015	59.1	27-Jul-2015	25.8	26-Sep-2015	47.1	26-Nov-2015	149.5
27-Jan-2015	328.8	30-Mar-2015	98.2	28-May-2015	54.2	28-Jul-2015	25.8	27-Sep-2015	26.9	27-Nov-2015	149.5
28-Jan-2015	314.3	31-Mar-2015	112.9	29-May-2015	34.5	29-Jul-2015	25.8	28-Sep-2015	26.9	28-Nov-2015	137.0
29-Jan-2015	365.0			30-May-2015	39.4	30-Jul-2015	25.8	29-Sep-2015	30.2	29-Nov-2015	199.5
30-Jan-2015	372.2			31-May-2015	49.3	31-Jul-2015	25.8	30-Sep-2015	30.2	30-Nov-2015	218.2
31-Jan-2015	372.2										



Normal Weather Firm Demand - High to Low - 12 Months Ending November 2015

Day #	Firm Demand (MDth)	Day #	Firm Demand (MDth)	Day #	Firm Demand (MDth)	Day #	Firm Demand (MDth)	Day #	Firm Demand (MDth)	Day #	Firm Demand (MDth)
1	419.4	62	269.9	123	164.4	184	83.7	245	28.0	306	25.8
2	389.1	63	269.9	124	164.4	185	80.8	246	27.8	307	25.8
3	386.7	64	263.1	125	162.2	186	78.8	247	27.8	308	25.8
4	373.9	65	263.1	126	162.0	187	77.9	248	27.8	309	25.8
5	373.9	66	260.0	127	162.0	188	73.9	249	27.8	310	25.8
6	372.2	67	260.0	128	162.0	189	73.9	250	27.8	311	25.8
7	372.2	68	256.3	129	162.0	190	73.9	251	27.8	312	25.8
8	366.3	69	252.4	130	161.3	191	73.9	252	27.8	313	25.8
9	365.0	70	252.4	131	161.3	192	72.4	253	27.8	314	25.7
10	351.1	71	249.5	132	160.9	193	72.4	254	27.8	315	25.7
11	350.5	72	249.5	133	155.8	194	72.4	255	27.8	316	25.7
12	343.5	73	249.1	134	150.1	195	69.0	256	27.8	317	25.7
13	336.0	74	249.1	135	150.1	196	69.0	257	27.8	318	24.9
14	335.9	75	245.3	136	150.1	197	69.0	258	27.8	319	24.9
15	328.8	76	245.3	137	149.6	198	66.4	259	27.8	320	24.9
16	328.3	77	243.2	138	149.5	199	64.6	260	27.8	321	24.9
17	321.5	78	242.7	139	149.5	200	64.0	261	27.8	322	24.9
18	321.5	79	234.6	140	149.5	201	64.0	262	27.8	323	24.9
19	321.5	80	229.6	141	144.5	202	64.0	263	27.8	324	24.9
20	320.7	81	229.6	142	144.5	203	61.4	264	27.8	325	24.9
21	318.8	82	229.1	143	144.1	204	59.1	265	27.8	326	24.9
22	314.3	83	229.1	144	140.5	205	55.7	266	27.8	327	24.9
23	314.3	84	224.5	145	140.1	206	55.7	267	27.8	328	24.9
24	314.3	85	223.2	146	138.1	207	54.5	268	27.8	329	24.9
25	314.3	86	223.2	147	137.0	208	54.2	269	27.8	330	24.9
26	313.1	87	222.3	148	132.2	209	54.2	270	27.8	331	24.9
27	310.8	88	218.2	149	130.8	210	54.2	271	27.8	332	24.9
28	307.1	89	215.8	150	130.8	211	54.2	272	27.8	333	24.9
29	305.6	90	215.8	151	130.8	212	51.6	273	27.8	334	24.9
30	304.1	91	215.4	152	130.8	213	51.6	274	27.8	335	24.9
31	304.0	92	212.9	153	126.8	214	51.3	275	27.8	336	24.9
32	304.0	93	212.0	154	126.2	215	49.3	276	26.9	337	24.9
33	298.0	94	212.0	155	126.2	216	49.3	277	26.9	338	24.9
34	297.2	95	209.8	156	118.3	217	47.1	278	26.9	339	24.9
35	296.7	96	208.6	157	118.3	218	47.1	279	26.9	340	24.9
36	296.7	97	208.5	158	117.9	219	47.1	280	26.1	341	24.9
37	296.7	98	208.5	159	114.2	220	44.3	281	26.1	342	24.9
38	292.6	99	205.8	160	112.9	221	44.3	282	26.1	343	24.9
39	292.6	100	205.7	161	112.1	222	44.3	283	25.8	344	24.9
40	292.6	101	205.7	162	112.1	223	44.3	284	25.8	345	24.9
41	290.4	102	203.9	163	109.0	224	42.5	285	25.8	346	24.9
42	290.4	103	201.8	164	109.0	225	39.4	286	25.8	347	24.9
43	289.4	104	201.8	165	109.0	226	39.4	287	25.8	348	24.9
44	285.3	105	199.5	166	105.8	227	39.3	288	25.8	349	24.6
45	285.3	106	199.5	167	105.5	228	39.3	289	25.8	350	24.6
46	283.6	107	199.3	168	105.5	229	38.1	290	25.8	351	24.6
47	283.6	108	195.0	169	102.3	230	38.1	291	25.8	352	24.6
48	282.8	109	195.0	170	100.1	231	36.6	292	25.8	353	24.6
49	282.8	110	193.8	171	100.1	232	34.5	293	25.8	354	24.6
50	282.0	111	191.9	172	98.2	233	34.5	294	25.8	355	24.6
51	278.1	112	191.2	173	95.7	234	33.5	295	25.8	356	24.6
52	276.8	113	188.2	174	95.7	235	31.4	296	25.8	357	24.6
53	276.8	114	187.0	175	95.7	236	31.4	297	25.8	358	24.6
54	276.8	115	187.0	176	93.3	237	31.4	298	25.8	359	24.6
55	276.8	116	184.1	177	93.3	238	30.6	299	25.8	360	24.6
56	274.7	117	181.4	178	91.2	239	30.6	300	25.8	361	24.6
57	274.7	118	180.8	179	91.2	240	30.2	301	25.8	362	24.6
58	274.7	119	176.5	180	91.2	241	30.2	302	25.8	363	24.6
59	270.8	120	176.5	181	90.3	242	29.5	303	25.8	364	24.6
60	270.8	121	171.7	182	86.8	243	29.1	304	25.8	365	24.6
61	269.9	122	168.3	183	86.8	244	28.0	305	25.8		



Columbia Gas of Pennsylvania, Inc.

Standard Data Request

Cost of Service

Question No. GAS-COS-13:

Please provide the following for the Company's ten largest transportation customers during peak month of the most recent heating season:

- a. actual consumption
- b. volume delivered to the Company on their behalf, if applicable
- c. daily nomination

Response:

Please see GAS-COS-013 Attachment A.

Note:

- * Customer account within Aggregation Group
- ** Multiple customer accounts within Stand Alone Nomination Group

Columbia Gas of Pennsylvania, Inc.

Standard Data Request

Cost of Service

Question No. GAS-COS-14:

Please provide a summary identifying the salient features of each of the following. Salient features include contract party, effective term and applicable contract quantities (daily, annual, seasonal, etc.).

- a. All firm transportation agreements by type greater than one month in length. Indicate whether the capacity is available at the Company's citygate to meet design day requirements or is upstream capacity. Identify the downstream pipeline for each upstream arrangement.
- b. All firm storage, gathering and exchange agreements. Indicate if each agreement provides design day capacity at the citygate or requires separate transportation (identify) service to effectuate delivery. Include on-system storage and peak shaving facilities used by the Company and identify all ratcheting provisions applicable to the Company's contractual and on-system storage arrangements.

Response:

Please see GAS-COS-014 Attachment A for the requested information.

COLUMBIA GAS OF PENNSYLVANIA, INC.

FIRM CITY GATE TRANSPORTATION AGREEMENTS

TRANSPORTER	CONTRACT NUMBER	RATE SCHEDULE	EFFECTIVE DATE	PRIMARY TERMINATION DATE		CONTRACT QUANTITY DTH/D	RECEIPT POINT	REC POINT QUANTITY DTH/D	CITY GATE DELIVERY POINT	DEL POINT QUANTITY DTH/D
COLUMBIA GAS	80136	FTS	11/01/14	10/31/16		90,788	A05 DELMONT AGG A06 MCCLELL AGG LEACH B15 UNIONVILLE C16 DELMONT	8,641 21,596 39,496 12,283 8,772	CPA CITY GATE	90,788
			11/01/16	10/31/19		60,551	LEACH B15 UNIONVILLE C16 DELMONT	39,496 12,283 8,772	CPA CITY GATE	60,551
			11/01/19	10/31/22		21,055	B15 UNIONVILLE C16 DELMONT	12,283 8,772	CPA CITY GATE	21,055
COLUMBIA GAS	50675	FTS	11/01/97	10/31/16		18,334	DELMONT-TETCO BROADRUN	5,000 13,334	CPA CITY GATE	18,334
COLUMBIA GAS	56741	FTS	11/01/98	10/31/17		13,332	GRANT STATION BROADRUN	10,000 3,332	CPA CITY GATE	13,332
COLUMBIA GAS	56742	FTS	11/01/99	10/31/16		13,334	LEACH BROADRUN	10,000 3,334	CPA CITY GATE	13,334
COLUMBIA GAS	80264	FTS	11/01/04	10/31/19		1,800	LEACH	1,800	CPA CITY GATE	1,800
COLUMBIA GAS (4)	82610	SST	04/01/05	03/31/20	OCT-MAR APR-SEPT	456,876 228,438	STORAGE O-M STORAGE A-S	456,876 228,438	CPA CITY GATE	456,876
DOMINION TRANSMISSION	700034	FTNN-GSS	06/01/05	03/31/18(1)	NOV-MAR	6,000	GSS STORAGE	6,000	CPA @ WARRENDALE CPA @ DARLINGTON	6,000 6,000
DOMINION TRANSMISSION	200539	FT	11/01/09	10/31/19(1)	NOV-MAR APR-OCT	3,000 2,000	OAKFORD	3,000	CPA @ WARRENDALE	3,000
DOMINION TRANSMISSION	100121	FTNN-GSS	4/1/2014	3/31/24(1)	NOV-OCT	4,800	GSS STORAGE	4,800	PLEASANT GAP	4,800
EQUITRANS	EQTR10375-391	FTS	04/01/14	03/31/17(1)	NOV-MAR APR-OCT	14,348 7,500	STORAGE RHINEHART	14,348 7,500	CPA @ GROVETON	14,348
NATIONAL FUEL (3)	F02091	FT	11/01/98	10/31/04(2)		4,304	TRANSCO LEIDY	4,304	CPA @ WARREN	4,304
TENNESSEE GAS	30920	FT-A	11/01/00	10/31/19		16,000	500 LINE 800 LINE	7,600 8,400	CPA @ NEW CASTLE	16,000
TENNESSEE GAS	63409	FT-A	11/01/12	10/31/17		7,600	ZONE 4 POOL	7,600	CPA @ PITT TERMINAL	7,600
TEXAS EASTERN	800387R2	CDS	11/01/06	10/31/08(1)		2,342	VENICE ST LANDRY	941 1,401	CPA @ ROCKWOOD CPA @ ST COLLEGE CPA @ EMIGSVILLE CPA @ CHAMBERSBURG COL GAS @ EAGLE (6)	287 2,342 2,342 219 2,342
TEXAS EASTERN	910464R1	CDS	11/01/06	10/31/12(1)		5,000	MRPL	5,000	CPA @ ROCKWOOD CPA @ CHAMBERSBURG	2,758 2,242
TEXAS EASTERN	910463R1	CDS	11/01/06	10/31/12(1)		158	MRPL	158	CPA @ CHAMBERSBURG	158
TEXAS EASTERN	910951R1	FT-1	11/01/12	10/31/17(1)		11,753	WLA, ELA, STX	11,753	CPA @ UNIONTOWN (5)	11,753
TEXAS EASTERN (4)	830049R1	FT	12/01/98	03/31/02(1)	DEC-MAR	10,000	COL GAS @ EAGLE	10,000	CPA @ ST COLLEGE CPA @ ROCKWOOD CPA @ CHAMBERSBURG	1,658 8,242 100

(1) YEAR TO YEAR THEREAFTER

(2) MONTH TO MONTH THEREAFTER

(3) NET CITY GATE DELIVERY IS 4,281 DTH/D

(4) CPA HAS THE ABILITY TO DELIVER 10,000 DTH PER DAY TO TEXAS EASTERN AT EAGLE UNDER COLUMBIA GAS CONTRACT NO. 82610 WHICH IS THEN DELIVERED BY TEXAS EASTERN UNDER CONTRACT NO. 830049R1 TO THE CPA CITY GATE.

COLUMBIA GAS OF PENNSYLVANIA, INC.

FIRM UPSTREAM TRANSPORTATION AGREEMENTS

TRANSPORTER	CONTRACT NUMBER	RATE SCHEDULE	EFFECTIVE DATE	PRIMARY TERMINATION DATE	CONTRACT QUANTITY DTH/D	RECEIPT POINT	REC POINT QUANTITY DTH/D	DELIVERY POINT INTO DOWNSTREAM PIPELINE	DEL POINT QUANTITY DTH/D
COLUMBIA GULF	79919	FTS-I	11/01/04	10/31/19	43,632	RAYNE	43,632	COL GAS @ LEACH	43,632
TENNESSEE GAS	63408	FT-A	11/01/12	10/31/16	12,500	ZONE 4 POOL	12,500	COL GAS @ UNIONVILLE	12,500
TEXAS EASTERN	910951R1	FT-1	11/01/12	10/31/17(1)	3,082	WLA, ELA, STX	3,082	COL GAS @ DELMONT	3,082

(1) YEAR TO YEAR THEREAFTER

STORAGE

COUNTERPARTY	CONTRACT NUMBER	RATE SCHEDULE	EFFECTIVE DATE	PRIMARY TERMINATION DATE	CONTRACT QUANTITY DTH/D	
COLUMBIA GAS	82512	FSS	04/01/05	03/31/20	MDQ SCQ	456,876 25,341,126
DOMINION TRANSMISSION	600037	GSS	06/01/05	03/31/18(1)	MDQ SCQ	9,000 941,176
DOMINION TRANSMISSION	300195	GSS	3/31/2024	03/31/22 (1)	MDQ SCQ	4,800 240,000
EQUITRANS	EQTR10379-390	115SS	04/01/14	03/31/17(1)	INJ WTH ANN	7,500 14,348 1,500,000
BLACKHAWK					MDQ SCQ	10,000 30,000

(1) YEAR TO YEAR THEREAFTER

EXCHANGES

COUNTERPARTY	EFFECTIVE DATE	PRIMARY TERMINATION DATE	CONTRACT QUANTITY DTH/D
PEOPLES NATURAL	10/08/93	10/07/03(1)	NOT SPEC
NATIONAL FUEL DIST	12/02/74	(2)	CITY GATE EXCHANGE NOT SPEC CITY GATE EXCHANGE

(1) YEAR TO YEAR THEREAFTER (2) THEREAFTER UNTIL TERMINATED

STORAGE RATCHET PROVISIONS

COLUMBIA FSS	SCQ LEVEL 100% TO 30% <30% TO 20% <20% TO 10% <10% TO 0%	MDQ 100 % OF MDQ 80% OF MDQ 65% OF MDQ 50% OF MDQ	EQUITRANS 115SS	SCQ LEVEL 100% TO 35% <35% TO 16% <16% TO 10% <10% TO 0%	MDQ 100 % OF MDQ 92% OF MDQ 70% OF MDQ 63% OF MDQ
DTI GSS	SCQ LEVEL 100% TO 35% <35% TO 16% <16% TO 10% <10% TO 0%	MDQ 100 % OF MDQ 92% OF MDQ 70% OF MDQ 63% OF MDQ	BLACKHAWK	RATCHETS DO NOT APPLY	

LIMITED ON A MONTHLY BASIS TO 87.5% OF
THE TOTAL MONTHLY WITHDRAWAL CAPABILITY.

Columbia Gas of Pennsylvania, Inc.

Standard Data Request

Cost of Service

Question No. GAS-COS-015:

For the most recent annual period available, please identify the applicable monthly volumes and revenues under each rate schedule which were:

- a. Sold under a negotiated or market-based rate
- b. Transported under a negotiated or market based rate
- c. Transported at full margin transportation rates

Response:

- a. Please see the attached spreadsheet (GAS-COS-015 Attachment A) showing actual billed (invoiced) quantities and revenue sold under a negotiated or market-based rate for the 12 Months Ended November 30, 2014.
- b. Please see the attached spreadsheet (GAS-COS-015 Attachment B) showing actual billed (invoiced) quantities and revenue transported under a negotiated or market based rate for the 12 Months Ended November 30, 2014.
- c. Please see the attached spreadsheet (GAS-COS-015 Attachment C) showing actual billed (invoiced) quantities and revenue transported at full margin transportation rates for the 12 Months Ended November 30, 2014.

Columbia Gas of Pennsylvania, Inc.

Actual Billed Volumes and Revenues Billed - Sold Under a Negotiated or Market Based Rate

For the 12 Months Ending November 30, 2014

Volumes											
Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14
DTH	DTH	DTH	DTH	DTH	DTH	DTH	DTH	DTH	DTH	DTH	DTH
NSS 9,495.0	10,108.0	11,530.0	9,171.0	8,644.0	5,129.0	2,746.0	2,540.0	2,387.0	2,449.0	3,953.0	7,154.0

Revenues											
Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14
\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
NSS 50,453.35	59,051.78	80,401.27	57,831.64	52,255.27	32,720.93	18,166.78	15,986.04	13,711.07	14,559.22	22,757.90	37,443.30

Columbia Gas of Pennsylvania, Inc.

Actual Billed Volumes and Revenues Billed - Transported Under a Negotiated or Market Based Rate

For the 12 Months Ending November 30, 2014

Volumes												
	Dec-13 DTH	Jan-14 DTH	Feb-14 DTH	Mar-14 DTH	Apr-14 DTH	May-14 DTH	Jun-14 DTH	Jul-14 DTH	Aug-14 DTH	Sep-14 DTH	Oct-14 DTH	Nov-14 DTH
LDS FLEX	827,110.0	837,842.0	813,940.0	821,310.0	728,387.0	674,936.0	618,983.0	558,738.0	654,370.0	670,614.0	636,672.0	732,861.0
MLDS I FLEX	218,113.0	277,500.0	276,047.0	239,363.0	238,973.0	168,907.0	219,059.0	211,644.0	215,765.0	211,696.0	214,472.0	241,534.0
MLDS II FLEX	146,173.0	237,492.0	244,998.0	236,795.0	222,043.0	186,431.0	183,809.0	160,449.0	173,588.0	182,149.0	182,416.0	202,578.0
SDS FLEX	24,780.0	30,911.0	35,350.0	29,977.0	20,584.0	15,274.0	12,191.0	11,906.0	10,934.0	10,020.0	10,977.0	17,085.0
SGDS FLEX	3,793.0	5,632.0	5,941.0	5,374.0	3,123.0	1,396.0	492.0	318.0	344.0	362.0	666.0	2,029.0

Revenues												
	Dec-13 \$	Jan-14 \$	Feb-14 \$	Mar-14 \$	Apr-14 \$	May-14 \$	Jun-14 \$	Jul-14 \$	Aug-14 \$	Sep-14 \$	Oct-14 \$	Nov-14 \$
LDS FLEX	336,379.30	352,317.08	353,750.80	356,255.97	315,938.22	314,831.84	308,521.01	288,919.86	326,834.63	336,490.23	306,277.38	311,837.46
MLDS I FLEX	27,715.57	33,268.25	33,132.39	29,702.44	29,665.98	23,114.80	27,804.02	27,110.71	27,496.03	27,115.58	27,375.13	29,905.43
MLDS II FLEX	57,645.86	86,177.58	87,417.87	86,339.65	83,852.24	71,213.75	70,549.44	64,518.60	67,004.51	70,105.55	72,127.90	76,439.20
SDS FLEX	23,138.97	27,519.30	30,862.65	25,064.75	18,065.14	13,627.43	11,580.41	10,746.60	10,718.66	11,005.51	11,697.55	16,684.15
SGDS FLEX	5,374.85	7,475.08	7,665.55	7,099.23	4,270.51	2,327.87	1,176.90	984.77	1,018.72	1,037.26	1,358.31	2,758.91

Columbia Gas of Pennsylvania, Inc.

Actual Billed Volumes and Revenues Billed - Transported at Full Margin Transportation Rates

For the 12 Months Ending November 30, 2014

	Volumes											
	Dec-13 DTH	Jan-14 DTH	Feb-14 DTH	Mar-14 DTH	Apr-14 DTH	May-14 DTH	Jun-14 DTH	Jul-14 DTH	Aug-14 DTH	Sep-14 DTH	Oct-14 DTH	Nov-14 DTH
LDS	883,656.0	992,740.0	1,036,108.0	1,104,820.0	942,764.0	834,853.0	774,474.0	730,450.0	769,709.0	822,976.0	868,697.0	904,184.0
MLDS I	22,172.0	27,521.0	23,641.0	18,438.0	15,530.0	12,042.0	10,223.0	11,021.0	9,678.0	14,204.0	12,744.0	16,586.0
MLDS II	21,993.0	19,908.0	21,187.0	20,643.0	18,817.0	16,987.0	16,848.0	23,436.0	8,294.0	20,684.0	21,217.0	20,305.0
RDGDS	143.8	194.7	206.0	164.4	97.3	40.0	16.5	18.6	12.6	10.7	19.5	65.3
RDS	1,272,000.0	1,743,605.0	1,844,378.2	1,571,729.1	971,548.5	445,210.4	189,833.3	133,853.8	127,125.4	134,249.9	206,041.7	535,726.5
CAP	378,299.0	509,327.8	545,892.5	482,329.6	312,064.5	154,970.8	60,837.9	38,785.2	37,452.8	41,259.4	75,461.1	189,267.3
SCD	305,760.3	437,759.7	478,239.9	411,210.3	247,227.4	108,525.3	51,949.5	41,202.8	40,732.2	41,640.6	56,159.0	130,337.1
SDS	705,887.0	858,658.0	976,446.0	780,045.0	550,587.0	371,391.0	282,782.0	246,928.0	272,845.0	274,263.0	320,266.0	512,459.0
SGDS	618,562.0	753,726.0	821,912.0	688,249.0	441,048.0	238,186.0	119,620.0	96,466.0	95,120.0	100,339.0	135,064.0	283,376.0

	Revenues											
	Dec-13 \$	Jan-14 \$	Feb-14 \$	Mar-14 \$	Apr-14 \$	May-14 \$	Jun-14 \$	Jul-14 \$	Aug-14 \$	Sep-14 \$	Oct-14 \$	Nov-14 \$
LDS	897,430.56	1,124,815.92	1,050,189.13	1,058,550.20	915,262.24	811,061.62	759,947.28	726,302.78	767,277.32	803,244.65	837,653.13	908,066.21
MLDS I	19,663.28	24,742.17	5,660.94	5,179.46	4,902.10	4,848.06	4,645.38	5,146.46	4,354.58	9,344.84	8,731.37	5,000.89
MLDS II	11,883.07	10,956.13	11,529.85	11,286.48	10,469.57	9,650.87	9,588.68	12,536.01	5,761.82	11,304.82	11,543.27	11,135.27
RDGDS	757.21	1,003.70	1,038.28	815.41	539.67	284.30	184.45	195.75	165.32	155.54	197.30	426.73
RDS	7,363,243.73	9,784,545.42	9,789,679.29	8,452,135.45	5,918,827.85	3,617,952.53	2,426,616.90	2,131,677.14	2,092,063.95	2,118,266.79	2,429,821.34	4,102,767.95
CAP	1,863,192.05	2,452,095.58	2,455,446.42	2,179,754.65	1,564,986.07	976,052.37	622,562.21	528,610.83	521,584.30	538,804.92	666,575.18	1,153,953.99
SCD	1,258,720.76	1,724,150.63	1,864,194.28	1,629,491.79	1,051,360.67	560,795.37	360,122.21	323,647.99	323,728.53	326,737.53	377,152.12	637,388.22
SDS	1,213,483.11	1,503,580.19	1,637,432.07	1,338,235.50	983,713.87	750,916.72	580,189.25	523,137.20	558,759.02	562,034.65	634,563.26	927,260.51
SGDS P1	1,769,633.90	2,140,325.21	2,327,402.49	1,963,175.05	1,285,867.15	727,861.39	404,049.54	342,552.03	338,808.77	353,887.99	448,825.18	855,427.79

Columbia Gas of Pennsylvania, Inc.

Standard Data Request

Cost of Service

Question No. GAS-COS-16:

Please provide the following for each curtailment during the last three years:

- a. Dates of curtailment
- b. Type of curtailment (firm service, interruptible service, both)
- c. Whether curtailment was related to amount of capacity on the Company's system, other capacity or supply related
- d. Rate schedule that curtailed volumes would have been billed under
- e. Curtailed volumes by rate schedule
- f. Actual volumes moved by rate schedule

Response:

As described in the Gas Emergency Rules section of the Company's tariff, curtailment is an action the Company may take regarding Company provided services in the event of an "emergency." As further defined in the Company's tariff, an emergency is a situation wherein the aggregate customer demand on the Company's system, or confined segment of the system, exceeds or threatens to exceed the gas supply or capacity that is actually and lawfully available to the Company to meet the demands, and the actual or threatened excess in demand creates an immediate threat to the Company's system operating integrity with respect to Priority 1 customers. While the Company has asked several customers to voluntarily reduce their load on cold days in the past to avoid the necessity of a curtailment, there has only been one incident during the last three years requiring the Company to curtail its services or customers. The information pertaining to this curtailment is set forth below by subpart.

- a.) January 3, 2013 through January 7, 2013
- b.) Firm service curtailment

Columbia Gas of Pennsylvania, Inc.

Standard Data Request

Cost of Service

- c.) The curtailment was required due to a Force Majeure event on the upstream pipeline feeding this isolated market
- d.) Rate Schedule LDS
- e.) Unable to determine what volumes would have flown had it not been curtailed
- f.) Unable to determine the daily volumes that flowed for these particular customers on the days in question

Columbia Gas of Pennsylvania, Inc.

Standard Data Request

Cost of Service

Question No. GAS-COS-17:

Please identify the Company's design day planning criteria and the probability of design day occurrence. Include any available documentation supporting the Company's claimed probability of occurrence.

Response:

Columbia's design day planning criteria are based on Design Current Day Temperature, Design Prior Day Temperature, Design Current Day Wind Speed, and assume occurrence on a weekday.

The aforementioned design day weather conditions are premised upon all available historical weather data through the winter of 2007/08. COS-17 Attachment A shows the Design Temperatures, Design Wind Speed, the historical temperature period considered and the weights of the National Weather Service locations used to arrive at the Design Weather Conditions for each of Columbia's market areas. The weather stations used for this determination are those located at Hagerstown, Maryland, Morgantown, West Virginia, and Harrisburg, Pittsburgh, and Bradford, Pennsylvania. These weather stations are used because of length of available, consistent weather history and their proximity to Columbia's customers. The following paragraphs provide detail on the development of GAS-COS-17 Attachment A.

Columbia's Design Current Day Temperature is that temperature having a 1 in 15 probability or a 6.7 percent risk level. That is, the probability is 1 in 15, or 6.7 percent that any given winter will have one or more days with an average daily temperature equal to or colder than the Design Temperature. Columbia uses the Gumbel, or double exponential, distribution to calculate the probabilities. This skewed distribution is selected because the distribution of historical coldest temperatures is skewed.

Columbia has developed temperature probability distributions for eight Pipeline Scheduling Points (PSP) in Pennsylvania. These PSPs correspond to

Columbia Gas of Pennsylvania, Inc.

Standard Data Request

Cost of Service

geographically defined markets in Columbia Gas Transmission's (TCO) FERC-approved Tariff. The development of a Design PSP Temperature is a two-step process. First, for each weather station within the PSP, all available history is used to develop an associated design temperature. Next, the design temperatures for each weather station are weighted based on the firm demand associated with each weather station. The weighted temperatures are then summed to arrive at the PSP design average temperature. Columbia's system wide Design Current Day Temperature is minus 5 degrees Fahrenheit. The same method is used to develop design prior day temperature and design current day wind speed by PSP and for Columbia in total.

GAS-COS-17 Attachment B is the supporting probability of occurrence analyses for the weather station Design Temperatures. For each analysis, the heating season's days are ranked coldest to warmest. Shown are the twenty coldest days of each season. The coldest day of each season, denoted by "Rank 1" on the "20 Coldest" Report, is used in the Gumbel Analysis. Provided for each analysis are the Gumbel Curve parameters and probabilities considered.

The condition of Design Prior Day Temperature results from the mean temperature difference between historical "cold days" and their associated prior days. A "Cold Day" is defined as a day as cold as or colder than the Design Current Day Temperature, plus 5 degrees Fahrenheit. Using the Pittsburgh, Pennsylvania Design Current Day Temperature of minus 7 degrees Fahrenheit as an example, a "Cold Day" would be any day having an average temperature of minus 2 degrees Fahrenheit or colder. The average difference, prior day temperature less current day temperature, is added to the Design Current Day Temperature to provide Design Prior Day Temperature. The Pittsburgh, Pennsylvania average difference is 12 degrees Fahrenheit, so the Design Prior Day Temperature is $-7 + 12 = 5$ degrees Fahrenheit. To obtain the total company Design Prior Day Temperature, weather station weighting is then applied to each weather station's Design Prior Day Temperature and summed for a total company design. Columbia's system wide Design Prior Day Temperature is 6 degrees Fahrenheit.

Consistent with the Prior Day Design Temperature methodology, the approach to use an average of "Cold Days" is used to establish Design Wind Speed. However,

Columbia Gas of Pennsylvania, Inc.

Standard Data Request

Cost of Service

because Wind Speed data has only been available since 1991/92, a "Cold Day" is defined as Design Current Day Temperature plus 15 degrees Fahrenheit. Again, the design is developed at the weather station level, and then weighted for the total company design. Columbia's system wide Design Wind speed is 11 mph.

1-IN-15 DESIGN
Peak Day Design Conditions

PSP	Pipeline Area	Historical Period	Design Temperatures: Degrees F		Wind Speed	Station	
			Current Day	Prior Day		Location	Weight
25E-25	Lancaster	1925-2008	1	9	13	Harrisburg, PA Hagerstown, MD Total	95.3481 4.6519 100.0000
25-26	Bedford	1949-2008	-7	5	8	Morgantown, WV	100.0000
25E-29	Downingtown	1925-2008	1	9	13	Harrisburg, PA	100.0000
25-35	Pittsburgh	1949-2008	-7	5	10	Pittsburgh, PA Morgantown, WV Total	82.9855 17.0145 100.0000
25-36	Olean	1941-2008	-15	-2	11	Pittsburgh, PA Bradford, PA Total	2.8259 97.1741 100.0000
25-38	Rimersburg	1941-2008	-11	2	11	Pittsburgh, PA Bradford, PA Total	50.1558 49.8442 100.0000
25-39	New Castle	1925-2008	-7	5	11	Pittsburgh, PA	100.0000
25-40	PA/WV Misc.	1949-2008	-7	5	8	Pittsburgh, PA Morgantown, WV Total	3.4720 96.5280 100.0000
CPA Total		1949-2008	-5	6	11	Harrisburg Pittsburgh Hagerstown Bradford Morgantown Total	24.6195 52.1039 1.2012 6.1968 15.8787 100.0000

Weather station weights based on actual firm customer demand from December 2008 through February 2009.

Gumbel Analysis

Table 1

May 27, 2008

Weather Station 06-HARRISBURG, PA. Using Temperature Variable MID_MID_AVG_TMP

20 Coldest Daily Temperatures Per Period, Ranked

Overall Range Beginning Years: 1925 to 2007; Period Range: 11-01 to 03-31

Period Begins	N days	Rank 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1925	151	13	15	15	17	19	19	20	20	21	21	21	22	23	23	23	23	24	24	24	24
1926	151	14	14	14	18	18	19	19	19	20	20	21	21	22	24	24	25	25	25	26	26
1927	152	14	16	17	17	18	19	19	20	21	22	22	22	23	23	23	24	24	24	25	26
1928	151	13	17	18	22	22	23	23	23	23	24	24	24	24	25	25	25	25	25	25	26
1929	151	13	14	15	16	18	19	19	20	20	20	20	21	21	21	21	22	23	24	24	24
1930	151	18	19	20	21	21	21	23	23	23	24	24	24	25	26	27	27	27	27	27	28
1931	152	17	20	21	22	22	25	25	26	26	26	27	29	29	30	30	30	31	31	31	31
1932	151	14	15	15	16	18	18	19	22	22	23	23	23	23	25	25	25	25	26	26	26
1933	151	1	7	10	10	11	11	11	14	16	16	16	17	17	17	18	18	18	19	19	19
1934	151	9	11	11	12	13	13	13	14	15	19	19	19	21	22	22	23	23	23	24	24
1935	152	2	7	8	10	11	11	12	12	12	14	14	14	14	14	14	16	17	17	18	18
1936	151	20	23	24	24	24	25	26	26	26	26	27	27	27	28	29	29	29	29	29	30
1937	151	13	17	20	20	20	22	22	22	22	22	23	23	23	24	24	25	25	26	26	26
1938	151	12	18	18	19	21	21	21	21	22	24	24	24	25	25	25	25	25	25	25	26
1939	152	10	10	14	14	16	16	17	19	19	19	20	20	20	20	20	20	21	21	21	21
1940	151	20	21	21	22	22	23	23	24	24	24	24	25	25	26	26	26	26	26	27	27
1941	151	7	9	10	11	11	15	17	19	20	20	21	23	23	24	25	25	25	26	26	26
1942	151	8	9	13	14	15	19	19	19	20	22	22	23	23	23	23	23	24	24	24	24
1943	152	16	19	19	20	20	20	20	20	22	23	23	23	24	24	24	24	24	24	25	25
1944	151	11	13	14	15	15	17	18	18	20	20	21	21	21	21	21	22	22	22	22	22
1945	151	15	16	17	17	18	19	20	20	21	21	21	22	22	22	22	22	23	23	23	23
1946	151	8	15	17	18	18	21	22	22	22	22	23	23	24	24	25	25	26	26	26	26
1947	152	11	11	12	13	13	13	13	14	14	15	15	15	15	17	18	19	19	20	21	21
1948	151	15	19	20	22	22	23	26	26	26	27	27	28	28	29	29	29	29	29	29	30
1949	151	18	18	19	20	21	22	24	24	25	25	25	26	26	27	27	27	27	27	28	28
1950	151	13	14	14	14	16	19	19	20	20	21	22	22	23	23	23	23	23	24	24	24
1951	152	11	12	18	19	20	21	23	23	23	24	25	25	25	26	27	27	27	28	28	28
1952	151	22	25	25	26	28	28	28	29	29	29	29	29	29	29	30	30	30	30	31	31
1953	151	16	18	18	19	19	19	20	21	21	21	23	24	24	25	25	25	26	26	27	28
1954	151	10	14	14	17	18	19	19	19	20	20	21	21	23	24	24	25	26	26	26	26
1955	152	16	17	19	21	22	22	23	23	23	24	24	24	24	25	26	26	26	26	26	26
1956	151	7	10	11	16	19	21	22	22	23	23	24	25	25	26	26	26	27	27	27	28
1957	151	7	12	13	13	16	16	16	17	17	19	20	22	23	23	23	23	23	24	24	24
1958	151	14	14	15	15	16	16	16	17	18	18	19	20	20	20	21	21	21	21	22	22
1959	152	17	18	20	21	21	22	22	22	22	23	23	24	25	26	26	26	26	26	26	26
1960	151	5	6	7	9	10	10	10	10	11	11	12	13	13	15	15	16	16	16	17	18

Gumbel Analysis

Table 1

May 27, 2008

Weather Station 06-HARRISBURG, PA. Using Temperature Variable MID_MID_AVG_TMP

20 Coldest Daily Temperatures Per Period, Ranked

Overall Range Beginning Years: 1925 to 2007; Period Range: 11-01 to 03-31

Period Begins	N days	Rank	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1961	151	10	14	14	15	16	16	17	18	19	19	19	19	20	20	21	21	22	22	23	23	23
1962	151	5	9	10	11	12	14	14	14	16	17	17	17	18	18	18	18	19	19	20	20	20
1963	152	9	11	14	14	15	17	17	18	18	18	19	19	19	19	19	20	21	21	22	22	22
1964	151	7	8	15	15	15	16	17	18	19	19	19	21	21	21	21	21	22	22	24	24	24
1965	151	6	7	12	14	16	18	18	18	19	20	20	20	20	21	21	23	23	23	23	23	24
1966	151	10	12	13	14	16	17	18	19	20	20	20	21	21	22	22	23	23	24	24	24	24
1967	152	6	8	10	10	11	11	13	14	15	16	18	18	18	18	18	19	19	20	20	20	21
1968	151	17	17	18	18	19	20	20	20	22	22	22	22	23	23	24	24	25	25	25	25	25
1969	151	5	7	11	12	13	13	14	14	15	15	16	18	18	18	18	19	19	19	19	21	22
1970	151	11	12	16	16	17	17	18	18	19	20	20	22	22	22	23	24	24	25	25	25	25
1971	152	13	18	20	20	21	22	22	23	24	24	24	25	25	25	27	27	27	27	27	28	28
1972	151	13	17	19	20	21	23	23	23	24	24	24	24	24	25	25	26	26	26	27	27	27
1973	151	20	21	22	23	23	24	24	24	24	24	24	25	25	25	26	27	27	27	27	28	28
1974	151	14	16	22	23	23	24	25	25	25	26	26	26	26	27	27	27	27	27	28	28	28
1975	152	14	15	17	19	19	21	21	22	22	22	23	23	23	24	25	25	25	25	26	26	26
1976	151	4	8	8	11	13	14	14	14	15	16	16	17	17	17	18	19	19	20	20	20	20
1977	151	13	14	15	15	17	18	18	18	18	19	19	19	19	19	19	19	20	20	20	20	20
1978	151	2	8	8	8	9	10	11	15	16	16	17	18	18	18	19	19	19	20	20	20	20
1979	152	15	18	19	20	20	21	22	22	22	22	22	22	23	23	24	24	25	25	25	25	26
1980	151	7	8	8	9	10	12	12	13	15	16	16	16	16	17	17	17	17	18	19	19	19
1981	151	0	6	7	11	12	17	17	18	18	18	18	19	19	19	19	19	21	21	21	22	23
1982	151	19	21	22	22	22	22	22	23	25	25	25	25	26	27	27	27	28	29	29	30	30
1983	152	2	5	6	8	10	10	13	14	15	15	16	17	17	17	18	18	19	19	19	19	21
1984	151	0	7	18	18	20	20	20	21	21	22	22	22	22	23	24	24	25	25	26	26	26
1985	151	12	13	15	18	19	19	19	19	20	20	20	20	21	21	21	22	22	22	22	22	23
1986	151	13	15	16	17	17	19	20	21	24	25	26	26	26	26	27	27	27	27	28	28	28
1987	152	12	13	13	14	14	14	15	15	16	17	18	18	19	20	20	20	20	20	21	21	22
1988	151	13	17	17	18	18	18	20	21	21	22	22	22	23	24	24	24	25	25	27	27	27
1989	151	11	12	12	14	14	15	16	16	17	17	17	17	18	19	19	21	21	21	23	23	25
1990	151	17	21	21	21	22	23	24	25	25	26	26	26	27	27	28	28	28	28	28	29	29
1991	152	14	17	22	22	22	23	23	23	24	24	24	24	24	25	25	26	26	27	27	27	27
1992	151	13	17	19	19	19	20	20	21	21	21	21	21	23	23	24	25	26	26	26	26	26
1993	151	-8	-2	0	5	6	9	12	14	15	15	16	17	17	17	17	17	18	18	18	19	19
1994	151	13	15	16	18	18	19	19	23	23	24	24	24	25	25	25	26	26	26	27	27	27
1995	152	9	10	14	15	15	15	16	16	17	17	17	17	18	19	19	19	19	20	20	21	21
1996	151	11	12	13	19	20	21	21	22	23	24	24	24	25	25	26	26	26	27	28	29	29

Gumbel Analysis

Table 1

May 27, 2008

Weather Station 06-HARRISBURG, PA. Using Temperature Variable MID_MID_AVG_TMP

20 Coldest Daily Temperatures Per Period, Ranked

Overall Range Beginning Years: 1925 to 2007; Period Range: 11-01 to 03-31

Period Begins	N days	Rank 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1997	151	22	26	26	26	28	28	29	30	30	31	31	31	32	32	32	32	32	32	33	33
1998	151	15	17	18	21	21	21	21	21	21	21	22	23	23	23	25	25	25	26	26	26
1999	152	14	16	16	16	17	20	20	20	20	22	22	23	23	23	25	25	25	25	26	26
2000	151	17	19	19	19	19	20	21	21	21	21	21	22	23	23	23	23	23	24	25	25
2001	151	22	23	24	25	26	26	27	27	27	27	27	27	28	28	29	29	29	30	30	30
2002	151	13	13	14	14	16	16	16	16	16	17	18	19	20	21	21	21	22	22	22	22
2003	152	9	12	14	16	16	16	16	16	17	18	19	19	20	20	20	21	21	21	22	22
2004	151	12	14	16	16	16	17	18	18	20	22	22	22	22	24	24	25	25	25	26	26
2005	151	14	17	20	21	23	25	26	26	26	27	27	27	27	27	28	28	28	28	28	29
2006	151	11	13	16	16	18	18	19	19	19	21	21	21	22	23	23	24	24	24	25	25
2007	152	16	19	20	20	22	23	23	24	25	25	26	27	27	27	27	28	28	28	28	29

Gumbel Analysis

Table 2

May 27, 2008

Weather Station 06-HARRISBURG, PA. Using Temperature Variable MID_MID_AVG_TMP
Temperature with the Indicated Probability of Occurrence for each period, per the Gumbel Distribution
Overall Range Beginning Years: 1925 to 2007; Period Range: 11-01 to 03-31

Rank	Gumbel Curve parameters and probabilities		↓					
	Alpha	Gamma	1/5.0	1/7.0	1/10.0	1/15.0	1/20.0	1/25.0
①	14.12593	0.2106439	6.9	5.2	3.4	1.4	0.0	-1.1
2	15.79971	0.1464982	9.7	8.2	6.8	5.1	4.0	3.1
3	17.01137	0.1292602	11.7	10.5	9.3	7.9	7.0	6.2
4	17.90658	0.1180965	13.1	12.0	10.9	9.6	8.8	8.1
5	18.62162	0.1068132	14.0	13.0	11.9	10.7	9.9	9.3
6	19.53654	0.1002437	15.2	14.1	13.1	12.0	11.2	10.7
7	20.09049	0.0929133	15.8	14.8	13.8	12.7	11.9	11.4
8	20.61504	0.0896764	16.5	15.5	14.6	13.5	12.8	12.3
9	21.18557	0.0903157	17.4	16.5	15.6	14.6	14.0	13.5
10	21.71197	0.0867211	18.0	17.1	16.2	15.3	14.7	14.2

Gumbel Analysis

Table 1

May 27, 2008

Weather Station 14-PITTSBURGH, PA. Using Temperature Variable MID_MID_AVG_TMP

20 Coldest Daily Temperatures Per Period, Ranked

Overall Range Beginning Years: 1925 to 2007; Period Range: 11-01 to 03-31

Period Begins	N days	Rank 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1925	151	4	8	13	14	14	14	14	16	16	17	17	18	18	19	19	19	20	21	21	21
1926	151	10	11	13	17	18	19	19	20	21	21	21	22	22	22	23	23	23	24	25	25
1927	152	7	8	12	12	12	13	14	14	15	17	17	17	18	18	19	20	20	21	23	23
1928	151	13	15	16	17	17	17	18	19	20	20	20	21	22	22	23	23	23	23	23	24
1929	151	8	8	8	11	13	15	16	16	16	17	17	17	18	18	18	18	19	19	20	21
1930	151	13	13	16	17	19	19	19	21	22	22	23	23	23	23	24	24	24	24	25	25
1931	152	9	12	14	17	18	18	18	18	22	22	25	26	26	29	29	29	29	30	30	30
1932	151	3	7	14	14	15	16	16	18	19	20	20	21	21	21	23	24	24	24	24	25
1933	151	-1	4	5	5	5	6	9	9	10	12	14	14	15	15	15	17	17	17	18	18
1934	151	9	13	15	15	17	17	18	20	21	21	21	22	22	23	23	23	24	24	25	25
1935	152	-9	-2	-2	1	2	4	5	6	7	8	9	9	9	10	10	10	11	11	11	11
1936	151	16	18	18	20	20	20	21	21	21	22	23	23	23	24	24	24	24	25	25	26
1937	151	9	13	13	14	15	15	16	16	16	17	17	17	17	18	19	20	23	23	23	23
1938	151	14	14	15	15	15	16	18	18	19	21	21	21	21	22	22	23	24	24	24	24
1939	152	-3	5	7	8	10	11	11	11	11	12	13	13	13	14	15	16	16	17	17	17
1940	151	11	12	12	13	14	15	15	19	19	19	19	19	20	20	20	20	20	22	22	22
1941	151	-1	5	7	9	10	10	11	12	12	13	13	17	18	19	21	21	22	22	23	23
1942	151	2	5	8	8	10	11	11	12	12	14	15	16	17	17	17	18	19	19	19	19
1943	152	10	11	14	15	15	15	16	16	16	17	17	19	19	20	20	20	21	21	22	22
1944	151	6	9	9	11	13	13	14	16	17	17	17	17	18	18	19	19	19	19	20	20
1945	151	9	10	11	13	13	14	14	17	17	18	19	20	20	20	20	20	21	21	21	22
1946	151	3	4	9	10	15	16	17	17	17	18	19	19	19	21	21	21	21	21	21	22
1947	152	5	7	9	9	10	10	11	11	12	12	13	13	13	15	16	16	17	19	20	21
1948	151	14	16	18	20	20	22	23	24	24	24	25	25	25	26	26	26	26	27	27	27
1949	151	13	13	15	16	17	19	20	21	21	22	22	22	25	26	26	26	26	26	26	27
1950	151	6	8	11	12	13	14	14	14	15	16	17	18	18	18	19	20	20	21	21	21
1951	152	1	13	13	13	19	19	20	20	21	22	23	23	24	24	25	25	26	26	26	26
1952	151	18	19	21	22	22	23	23	23	24	24	25	25	25	25	25	25	25	25	26	26
1953	151	12	13	13	15	17	17	18	20	21	21	21	21	21	22	22	22	22	22	23	23
1954	151	6	7	7	8	9	10	13	13	15	17	17	17	19	19	20	20	21	21	22	22
1955	152	14	15	16	17	18	18	18	19	19	19	20	21	21	21	21	22	22	22	22	23
1956	151	3	8	12	12	14	15	17	18	18	18	19	21	21	22	23	23	23	23	23	24
1957	151	-1	7	7	8	9	9	11	12	13	14	15	16	16	17	17	17	18	18	20	20
1958	151	0	3	6	6	9	9	10	10	10	10	10	11	13	14	14	15	16	16	16	17
1959	152	13	14	14	14	15	16	16	16	16	16	17	18	18	18	18	18	18	19	19	20
1960	151	0	2	5	5	5	5	7	7	8	8	10	10	11	12	12	14	17	17	17	17

Gumbel Analysis

Table 1

May 27, 2008

Weather Station 14-PITTSBURGH, PA. Using Temperature Variable MID_MID_AVG_TMP

20 Coldest Daily Temperatures Per Period, Ranked

Overall Range Beginning Years: 1925 to 2007; Period Range: 11-01 to 03-31

Period Begins	N days	Rank	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1961	151	3	8	8	9	9	10	12	13	13	14	14	16	16	17	17	18	18	19	19	20	
1962	151	-9	0	0	2	3	3	4	5	5	6	7	7	8	9	10	12	13	13	13		
1963	152	4	6	8	9	11	11	12	12	13	13	14	15	15	16	16	18	18	19	19	20	
1964	151	5	9	10	10	11	11	12	12	12	13	14	14	15	16	17	17	17	18	18	19	
1965	151	-1	0	6	10	12	12	13	14	15	15	16	16	17	18	19	19	19	19	19	20	
1966	151	8	9	9	11	11	12	13	13	14	14	15	15	20	21	21	21	22	22	22	22	
1967	152	1	3	4	6	6	6	11	11	12	12	12	13	14	14	14	15	15	16	17	17	
1968	151	7	8	9	11	12	12	13	15	15	16	16	16	16	16	17	17	17	18	18	18	
1969	151	-2	1	4	4	5	8	8	9	12	12	12	13	14	14	15	15	16	16	16	17	
1970	151	0	2	3	5	9	11	11	11	12	13	13	14	14	17	17	17	18	18	18	18	
1971	152	-1	6	7	10	10	11	12	12	14	14	16	17	18	19	19	19	20	20	20	21	
1972	151	5	12	14	14	15	15	15	15	16	16	16	16	17	17	19	21	21	22	22	22	
1973	151	15	16	16	16	18	18	19	19	20	20	20	20	21	21	21	22	22	23	23	23	
1974	151	11	12	15	17	18	21	21	21	22	22	22	22	23	23	24	24	25	25	25	26	
1975	152	3	5	9	9	13	14	14	16	16	16	17	17	18	18	20	20	21	21	21	22	
1976	151	-9	-1	0	1	2	3	4	5	6	6	6	6	7	7	7	7	8	8	9	9	
1977	151	6	8	10	11	12	12	13	13	13	13	14	14	14	15	15	15	15	15	16	16	
1978	151	0	0	2	2	3	3	4	5	6	6	7	7	8	12	13	13	13	13	14	15	
1979	152	8	8	9	11	12	13	13	13	15	16	16	16	16	16	17	17	17	17	17	19	
1980	151	-1	3	5	5	5	6	6	6	9	9	10	10	10	11	11	11	13	14	15	15	
1981	151	-10	-4	-1	6	8	9	9	10	10	10	12	14	14	15	16	16	17	18	18	18	
1982	151	14	15	17	19	19	19	21	21	21	22	23	23	23	23	24	24	25	25	26	26	
1983	152	-5	-4	1	3	3	5	8	9	9	11	12	12	13	14	16	16	16	17	17	17	
1984	151	-8	-5	10	11	11	12	13	13	14	14	14	15	15	16	16	17	17	18	18	19	
1985	151	6	10	11	12	12	13	13	13	14	15	15	15	16	16	16	16	18	18	18	19	
1986	151	5	11	13	16	16	18	19	20	20	21	21	22	23	24	24	25	26	27	27	28	
1987	152	4	5	5	9	11	12	13	14	15	16	17	17	17	17	18	18	19	19	20	20	
1988	151	13	13	15	15	16	16	17	17	18	19	20	20	20	20	21	21	21	22	22	23	
1989	151	-1	0	3	3	7	9	9	10	10	11	11	15	16	17	18	20	20	20	20	21	
1990	151	13	14	15	15	15	17	18	18	19	21	22	23	23	24	24	25	26	27	27	28	
1991	152	8	10	14	18	18	19	19	19	19	21	21	21	22	22	22	22	23	23	23	23	
1992	151	8	11	13	13	15	17	17	19	20	20	22	22	23	23	23	24	24	24	24	25	
1993	151	-12	-4	-1	1	1	5	11	12	13	13	13	14	14	15	16	16	16	16	16	17	
1994	151	4	6	6	9	12	12	13	13	18	19	20	20	21	21	22	22	22	22	23	23	
1995	152	1	5	8	10	10	11	11	12	13	13	14	15	15	15	15	16	16	16	16	18	
1996	151	3	4	9	10	10	12	13	15	19	19	20	20	21	21	22	22	25	25	25	25	

Gumbel Analysis

Table 1

May 27, 2008

Weather Station 14-PITTSBURGH, PA. Using Temperature Variable MID_MID_AVG_TMP
20 Coldest Daily Temperatures Per Period, Ranked
Overall Range Beginning Years: 1925 to 2007; Period Range: 11-01 to 03-31

Period Begins	N days	Rank 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1997	151	18	19	20	22	23	24	24	25	26	27	27	27	28	28	28	28	28	28	29	29
1998	151	4	11	12	14	15	15	16	17	17	17	18	18	19	19	19	20	21	21	21	22
1999	152	9	10	12	13	15	16	17	18	18	18	19	20	20	21	21	22	24	24	24	24
2000	151	10	11	12	12	15	15	16	17	18	18	18	18	19	19	19	20	20	20	20	21
2001	151	15	16	17	17	19	20	21	21	21	21	22	22	22	23	24	25	25	26	26	26
2002	151	7	8	9	11	12	14	14	15	16	16	16	16	17	18	18	18	18	18	18	18
2003	152	7	8	9	10	10	11	14	14	15	15	16	17	17	18	18	18	19	19	20	22
2004	151	7	8	9	10	11	12	14	15	15	17	18	18	18	19	19	20	21	21	21	22
2005	151	12	16	16	16	17	18	19	20	20	20	21	21	23	23	23	23	23	23	24	24
2006	151	2	4	7	9	10	11	12	13	13	14	16	16	16	17	17	18	18	19	19	20
2007	152	10	10	15	15	16	16	17	17	18	19	20	21	21	21	21	23	23	23	23	23

Gumbel Analysis

Table 2

May 27, 2008

Weather Station 14-PITTSBURGH, PA. Using Temperature Variable MID_MID_AVG_TMP
Temperature with the Indicated Probability of Occurrence for each period, per the Gumbel Distribution
Overall Range Beginning Years: 1925 to 2007; Period Range: 11-01 to 03-31

Rank	Gumbel Curve parameters and probabilities		1/5.0	1/7.0	1/10.0	1/15.0	1/20.0	1/25.0
	Alpha	Gamma						
1	8.41767	0.1706713	-0.5	-2.6	-4.8	-7.3	-9.0	-10.4
2	9.96551	0.1384696	3.5	1.9	0.4	-1.4	-2.5	-3.5
3	11.52852	0.1213768	5.9	4.6	3.3	1.8	0.8	0.0
4	12.59399	0.1055687	7.3	6.0	4.7	3.3	2.4	1.7
5	13.61259	0.0965709	8.6	7.4	6.2	4.8	4.0	3.3
6	14.33205	0.0887802	9.4	8.2	7.1	5.8	5.0	4.3
7	15.15813	0.0872389	10.6	9.5	8.4	7.2	6.5	5.9
8	15.81326	0.0806405	11.3	10.2	9.1	7.9	7.2	6.5
9	16.54230	0.0768619	12.1	11.0	10.0	8.8	8.1	7.5
10	17.08294	0.0731035	12.7	11.6	10.6	9.4	8.7	8.1

Gumbel Analysis

Table 1

May 27, 2008

Weather Station 44-HAGERSTOWN, MD Using Temperature Variable MID_MID_AVG_TMP
 20 Coldest Daily Temperatures Per Period, Ranked
 Overall Range Beginning Years: 1925 to 2007; Period Range: 11-01 to 03-31

Period Begins	N days	Rank 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1925	151	11	17	17	19	20	20	20	21	21	21	21	21	22	22	22	23	23	24	25	25
1926	151	14	14	17	19	20	20	20	20	22	23	24	24	24	25	25	25	25	26	26	26
1927	152	13	15	15	15	17	17	18	18	20	20	21	22	23	23	23	24	24	25	25	26
1928	151	17	18	19	20	21	21	21	21	22	23	23	23	24	24	24	25	25	25	25	25
1929	151	10	10	14	14	15	18	19	19	19	20	20	20	21	22	22	22	23	24	24	24
1930	151	17	18	21	21	21	21	22	22	22	22	23	23	23	23	24	25	26	26	26	26
1931	152	18	20	22	22	22	25	26	26	27	27	28	30	30	30	30	31	31	33	33	33
1932	151	14	16	17	18	18	20	22	24	24	24	24	25	26	27	27	27	28	28	29	29
1933	151	4	5	12	12	14	15	16	16	16	17	18	18	19	19	20	20	20	21	21	21
1934	151	4	11	11	11	15	17	17	18	18	19	20	20	21	24	25	25	26	26	26	26
1935	152	6	6	7	10	10	12	12	13	13	13	13	15	16	16	16	18	17	18	18	18
1936	151	21	24	24	25	25	25	26	26	27	27	27	28	28	28	29	29	29	30	30	30
1937	151	20	20	20	20	21	22	23	23	23	23	23	24	24	24	24	24	24	25	25	25
1938	151	17	19	20	20	20	20	23	23	23	23	24	24	25	26	26	26	27	27	27	27
1939	152	7	11	12	15	16	16	17	17	17	17	18	19	20	20	20	20	20	21	21	21
1940	151	20	21	21	22	22	23	23	23	24	24	24	24	25	26	26	26	26	26	26	26
1941	151	5	10	12	13	15	16	16	18	21	22	23	24	25	25	26	26	27	28	28	28
1942	151	7	9	12	17	17	21	21	21	21	22	22	22	23	24	24	24	24	25	26	27
1943	152	13	18	19	20	22	22	22	23	23	23	23	23	24	24	24	25	25	26	26	26
1944	151	13	13	15	16	16	17	18	18	18	19	19	19	19	19	20	21	21	21	21	22
1945	151	13	13	13	17	17	18	18	18	20	20	20	20	20	21	21	22	22	22	22	22
1946	151	8	14	16	17	20	20	21	21	21	21	22	22	23	23	24	24	24	24	24	25
1947	152	6	8	8	10	10	12	12	12	14	15	15	16	17	17	18	20	20	21	21	22
1948	151	17	19	20	21	21	22	24	25	25	25	26	27	27	27	27	28	28	28	29	29
1949	151	19	20	21	22	24	24	25	25	25	26	26	26	26	26	26	26	27	27	28	28
1950	151	10	12	14	15	16	16	17	17	18	19	19	21	21	21	22	22	22	23	24	24
1951	152	8	10	15	16	18	18	22	23	23	23	23	24	24	24	25	26	26	26	26	26
1952	151	23	23	24	25	25	25	26	26	27	27	28	28	28	28	29	29	29	29	30	30
1953	151	15	16	17	17	18	19	19	19	20	21	22	22	24	25	25	26	26	26	26	26
1954	151	11	11	12	16	16	17	19	19	20	20	21	22	22	22	23	23	24	24	25	25
1955	152	17	18	18	18	20	20	20	21	21	21	22	23	23	24	24	24	24	24	25	25
1956	151	6	7	10	18	18	21	21	22	22	23	23	23	24	24	26	27	27	28	28	28
1957	151	4	10	12	12	15	16	17	18	18	18	20	20	22	22	22	22	22	23	23	23
1958	151	10	12	14	14	16	16	16	17	17	17	18	18	19	19	20	20	21	21	22	22
1959	152	15	16	16	16	19	19	20	20	21	21	22	22	22	22	23	23	23	24	24	24
1960	151	3	3	3	8	8	8	9	10	11	11	12	12	13	13	14	14	15	15	15	17

Gumbel Analysis

Table 1

May 27, 2008

Weather Station 44-HAGERSTOWN, MD Using Temperature Variable MID_MID_AVG_TMP

20 Coldest Daily Temperatures Per Period, Ranked

Overall Range Beginning Years: 1925 to 2007; Period Range: 11-01 to 03-31

Period Begins	N days	Rank 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1961	151	11	13	14	15	16	16	17	17	18	18	19	21	22	22	22	23	23	23	23	24
1962	151	6	7	8	9	11	13	13	13	14	16	16	18	18	18	18	18	19	19	19	19
1963	152	9	13	14	14	15	15	17	17	18	18	19	19	20	20	20	20	20	21	21	21
1964	151	7	10	12	13	14	15	16	16	17	18	20	20	20	20	21	22	22	23	23	23
1965	151	3	10	10	15	16	16	18	19	19	20	21	22	22	22	23	24	24	24	25	25
1966	151	10	13	14	15	15	17	19	19	19	20	21	22	22	23	23	23	23	23	24	24
1967	152	2	2	6	8	9	9	11	12	13	15	16	16	17	19	19	19	20	20	20	21
1968	151	15	16	16	17	19	20	21	21	21	21	21	22	22	22	22	23	23	23	23	24
1969	151	4	5	9	11	13	13	14	14	14	15	17	18	18	18	19	19	20	21	21	21
1970	151	9	10	11	11	12	13	15	15	16	16	17	18	19	19	19	20	20	20	21	21
1971	152	6	15	18	18	20	20	21	21	22	23	24	24	24	24	24	25	25	26	26	26
1972	151	15	17	19	20	20	21	21	21	21	22	23	23	23	24	24	26	26	26	27	27
1973	151	17	24	24	24	24	25	25	26	26	27	27	27	27	28	28	28	28	29	29	29
1974	151	11	17	20	23	25	25	26	27	27	27	27	28	28	28	28	29	29	29	29	29
1975	152	14	16	17	18	20	20	21	21	21	22	23	23	23	24	25	25	26	25	26	26
1976	151	4	11	11	12	13	14	15	15	16	17	17	18	18	18	19	19	19	19	19	20
1977	151	12	15	15	15	15	16	16	16	18	19	19	19	19	20	20	20	20	20	20	21
1978	151	3	8	9	10	11	14	16	16	16	16	17	18	18	18	19	19	19	20	20	20
1979	152	12	13	17	19	20	20	21	22	23	23	23	24	24	24	25	25	25	26	26	27
1980	151	6	7	7	9	12	12	13	13	13	13	14	14	14	14	15	16	18	18	20	20
1981	151	-6	2	4	8	10	13	14	15	15	16	17	18	19	19	19	19	20	22	22	23
1982	151	15	15	17	17	19	20	23	23	23	23	23	24	24	25	25	26	26	26	26	26
1983	152	-3	6	6	7	7	11	12	13	15	16	16	16	16	17	17	18	18	18	19	19
1984	151	0	3	13	17	17	18	19	19	19	20	21	21	22	22	22	23	23	23	23	24
1985	151	11	12	13	14	14	18	18	19	19	19	20	20	20	21	21	21	22	23	23	23
1986	151	9	10	10	12	19	19	20	22	23	23	23	25	25	26	26	27	27	27	27	27
1987	152	10	12	14	14	15	16	16	17	18	19	19	19	19	20	21	22	23	23	24	24
1988	151	12	13	18	20	21	22	22	22	22	22	23	23	24	24	24	24	24	24	26	27
1989	151	7	12	12	12	13	13	13	13	15	16	17	17	18	19	20	21	21	22	22	22
1990	151	17	17	20	21	21	23	23	25	25	25	25	26	27	28	28	28	29	30	30	30
1991	152	14	18	21	23	23	24	24	24	25	25	25	25	25	26	26	26	26	26	27	27
1992	151	15	18	18	19	20	20	21	21	21	21	23	23	23	24	25	25	25	25	26	26
1993	151	-5	2	3	5	6	9	16	16	17	18	18	18	18	19	19	19	19	19	20	22
1994	151	11	14	15	15	18	19	20	22	22	25	25	25	25	26	26	26	27	27	27	27
1995	152	8	9	14	14	15	17	17	18	19	19	20	20	21	21	21	21	21	22	22	23
1996	151	12	12	13	17	19	19	20	21	24	26	26	26	27	27	28	28	28	28	29	29

Gumbel Analysis

Table 1

May 27, 2008

Weather Station 44-HAGERSTOWN, MD Using Temperature Variable MID_MID_AVG_TMP

20 Coldest Daily Temperatures Per Period, Ranked

Overall Range Beginning Years: 1925 to 2007; Period Range: 11-01 to 03-31

Period Begins	N days	Rank 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1997	151	21	25	25	26	29	29	30	30	30	31	31	32	32	32	32	33	33	33	33	33
1998	151	17	17	20	20	21	22	23	23	23	24	24	24	25	25	25	25	26	26	26	27
1999	152	17	17	18	18	21	23	23	23	23	24	24	25	25	25	25	27	28	28	28	28
2000	151	15	18	18	18	18	18	19	19	19	21	21	22	22	22	23	23	23	23	23	24
2001	151	21	22	22	23	24	25	26	26	27	27	27	28	28	28	28	29	29	29	30	30
2002	151	10	11	12	13	14	18	18	18	19	19	20	20	21	21	21	21	22	22	22	22
2003	152	10	10	13	14	14	15	16	16	17	18	18	18	20	20	20	20	20	21	21	22
2004	151	13	14	14	16	16	17	17	17	19	20	20	22	22	22	23	24	24	24	25	25
2005	151	16	18	19	21	23	23	24	24	25	25	26	27	27	27	27	27	27	28	28	28
2006	151	9	12	14	17	17	18	18	19	20	20	21	21	21	21	21	22	22	23	23	23
2007	152	16	17	18	20	21	21	21	22	22	23	25	26	27	27	27	27	28	28	29	30

Gumbel Analysis

Table 2

May 27, 2008

Weather Station 44-HAGERSTOWN, MD Using Temperature Variable MID_MID_AVG_TMP
 Temperature with the Indicated Probability of Occurrence for each period, per the Gumbel Distribution
 Overall Range Beginning Years: 1925 to 2007; Period Range: 11-01 to 03-31

Rank	Gumbel Curve parameters and probabilities							
	Alpha	Gamma	1/5.0	1/7.0	1/10.0	1/15.0	1/20.0	1/25.0
1	13.61455	0.1888092	5.5	3.7	1.7	-0.6	-2.1	-3.4
2	15.11480	0.1382872	8.6	7.1	5.5	3.8	2.6	1.7
3	16.27164	0.1233032	10.8	9.5	8.1	6.7	5.7	4.9
4	17.36019	0.1137113	12.4	11.2	10.1	8.8	7.9	7.2
5	18.36212	0.1026603	13.6	12.5	11.3	10.1	9.3	8.6
6	19.18770	0.1005861	14.8	13.8	12.8	11.6	10.9	10.3
7	19.98103	0.0953807	15.8	14.8	13.8	12.7	12.1	11.5
8	20.35825	0.0888337	16.2	15.2	14.3	13.2	12.5	11.9
9	20.89058	0.0875578	17.0	16.1	15.1	14.1	13.5	12.9
10	21.40447	0.0839897	17.6	16.7	15.8	14.8	14.1	13.6

Gumbel Analysis

Table 1

May 27, 2008

Weather Station 37-BRADFORD, PA. Using Temperature Variable MID_MID_AVG_TMP

20 Coldest Daily Temperatures Per Period, Ranked

Overall Range Beginning Years: 1941 to 2007; Period Range: 11-01 to 03-31

Period Begins	N days	Rank 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1941	151	-8	0	0	2	5	5	6	9	9	9	11	12	13	14	15	15	17	17	17	18
1942	151	-13	-4	1	1	5	6	6	7	9	9	11	11	11	12	13	13	14	15	15	15
1943	152	-1	2	5	6	8	9	9	9	10	10	10	12	13	13	14	14	15	15	16	17
1944	151	-10	-3	0	1	3	4	8	8	8	8	9	9	9	11	12	12	13	13	13	14
1945	151	4	5	6	6	7	8	8	9	9	10	11	11	12	12	13	14	15	15	15	16
1946	151	2	6	6	9	10	10	13	13	13	14	14	14	15	15	15	15	15	17	17	18
1947	152	-5	-3	-2	-2	1	1	1	2	5	5	6	6	7	8	9	10	10	11	12	13
1948	151	2	11	11	15	16	17	18	19	19	19	20	20	20	20	21	22	22	22	22	22
1949	151	5	7	7	8	8	8	11	13	13	14	15	15	16	17	17	18	18	19	19	19
1950	151	-1	1	3	3	6	9	10	11	11	11	11	12	13	13	14	16	16	17	17	18
1951	152	3	4	4	7	8	9	10	12	12	12	13	13	13	14	15	15	16	16	17	17
1952	151	7	11	13	14	15	17	19	19	19	20	20	20	20	20	20	20	20	21	21	21
1953	151	4	4	6	9	10	10	11	12	12	12	12	13	14	14	15	16	16	17	18	18
1954	151	-2	-1	0	0	3	4	5	7	8	8	8	10	12	13	14	14	14	14	14	15
1955	152	2	9	9	10	10	11	11	13	13	13	13	13	13	13	14	14	14	15	15	15
1956	151	-7	-5	-3	-1	6	9	11	11	14	15	15	16	16	16	16	16	18	18	18	18
1957	151	-4	0	1	1	2	3	3	4	4	6	6	7	9	9	9	10	11	11	12	13
1958	151	0	3	3	4	4	4	4	4	4	6	6	6	7	7	8	8	8	8	8	9
1959	152	6	6	7	8	8	9	9	10	10	10	11	11	12	12	12	12	12	13	14	14
1960	151	-3	-2	0	1	1	2	2	2	3	3	3	4	4	4	4	5	6	7	8	10
1961	151	-1	3	4	4	4	5	7	7	7	8	8	9	9	9	10	10	12	12	13	13
1962	151	-13	-4	-2	-2	-1	0	0	0	0	1	2	2	3	4	4	6	7	7	7	7
1963	152	1	2	5	5	6	6	7	8	8	8	10	10	11	11	11	11	12	12	12	12
1964	151	-3	-1	-1	0	0	0	2	2	6	6	6	7	7	9	10	10	12	12	12	12
1965	151	-3	0	1	4	5	5	6	7	8	10	11	11	11	12	12	13	14	14	14	15
1966	151	2	2	3	3	3	4	6	7	8	8	8	9	10	10	11	14	15	15	16	16
1967	152	-1	-1	0	0	2	2	4	5	5	6	7	7	7	8	8	8	8	9	9	10
1968	151	-2	1	2	5	5	6	6	6	8	9	9	9	10	10	11	11	11	12	12	12
1969	151	-4	-2	1	1	2	2	3	4	4	4	8	8	9	9	10	10	10	10	12	13
1970	151	-4	-4	-2	0	3	4	4	5	6	7	8	8	9	9	9	10	11	11	12	12
1971	152	-4	0	1	3	3	4	5	6	7	7	7	9	9	9	9	10	10	10	10	11
1972	151	-2	2	3	4	4	4	5	6	7	8	9	9	10	10	11	11	12	12	14	14
1973	151	2	6	7	10	10	11	11	11	12	13	13	13	13	14	14	14	15	15	16	16
1974	151	1	6	7	7	8	8	9	12	13	14	14	16	16	16	16	16	16	16	17	17
1975	152	-5	-3	0	0	2	3	6	6	6	7	8	9	10	11	11	12	13	13	13	13
1976	151	-15	-15	-9	-7	-4	-3	-3	-3	-3	-3	-2	-1	1	2	2	3	4	4	4	4

Gumbel Analysis

Table 1

May 27, 2008

Weather Station 37-BRADFORD, PA. Using Temperature Variable MID_MID_AVG_TMP

20 Coldest Daily Temperatures Per Period, Ranked

Overall Range Beginning Years: 1941 to 2007; Period Range: 11-01 to 03-31

Period Begins	N days	Rank	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1977	151	-2	0	3	3	3	4	4	4	5	5	5	5	6	6	6	6	6	6	7	7	8
1978	151	-12	-11	-10	-9	-8	-8	-4	-4	-3	-2	0	0	1	2	2	2	3	3	6	7	7
1979	152	-6	-6	-5	3	3	5	5	6	6	7	7	9	9	9	9	10	10	11	11	12	12
1980	151	-9	-8	-5	-4	-4	-1	-1	0	0	0	1	1	2	2	3	4	4	4	6	7	7
1981	151	-21	-7	-7	-6	3	4	5	5	5	6	7	7	7	7	8	8	9	9	9	9	10
1982	151	5	5	6	7	10	12	12	13	14	14	15	15	15	15	15	16	16	16	16	18	18
1983	152	-11	-7	-3	0	0	0	2	2	2	3	3	4	5	5	5	6	6	6	6	6	6
1984	151	-10	-9	4	5	5	6	8	8	10	11	11	12	12	12	13	13	13	13	14	15	15
1985	151	1	2	3	4	4	6	7	7	8	8	9	9	10	10	11	11	11	11	12	12	12
1986	151	-2	-1	3	7	7	9	9	11	11	12	15	15	16	17	17	17	17	18	18	19	19
1987	152	-1	0	1	2	2	4	6	8	10	10	11	11	12	12	12	13	13	14	15	15	15
1988	151	-4	5	8	8	10	10	10	11	11	12	13	13	13	14	14	14	14	15	15	15	15
1989	151	0	1	2	2	4	4	6	6	7	7	8	9	9	10	10	11	12	12	13	14	14
1990	151	0	5	7	9	11	12	13	15	15	16	16	16	17	17	17	18	18	18	19	19	19
1991	152	2	5	7	8	8	8	11	12	13	13	13	14	14	14	14	14	15	15	15	15	15
1992	151	1	6	6	7	9	9	10	10	11	11	12	12	13	13	14	14	15	15	15	16	16
1993	151	-15	-8	-5	-3	-3	-2	2	4	4	6	6	7	7	7	8	8	8	8	9	10	10
1994	151	-1	0	2	3	6	7	8	8	11	11	13	13	13	14	14	14	15	15	15	16	16
1995	152	-5	-1	-1	1	3	4	4	4	4	5	6	6	7	7	7	8	8	8	8	10	10
1996	151	-3	-2	4	6	7	8	10	11	11	12	12	14	14	16	16	17	17	17	17	18	18
1997	151	11	13	15	15	17	20	21	21	21	21	21	21	21	22	22	23	23	23	23	23	23
1998	151	3	6	7	8	8	9	9	10	11	11	11	11	11	11	12	13	14	14	15	15	15
1999	152	1	3	4	5	7	9	9	11	12	13	13	13	14	14	14	15	15	17	17	17	17
2000	151	8	9	12	12	12	13	13	13	13	14	14	15	15	15	15	15	16	16	16	16	16
2001	151	14	14	14	15	16	17	17	17	18	18	18	19	19	19	19	20	20	20	21	21	21
2002	151	1	1	2	3	4	5	6	6	6	7	7	7	7	9	9	9	9	10	10	10	10
2003	152	-5	0	2	2	2	3	4	5	6	7	8	9	9	10	12	12	12	12	13	13	13
2004	151	-1	0	0	2	4	5	5	5	8	9	9	11	11	13	14	14	14	15	15	15	15
2005	151	5	7	8	10	10	12	13	13	15	15	15	15	15	15	15	16	17	17	17	17	17
2006	151	-2	0	0	3	4	5	7	7	7	8	9	10	10	10	10	10	11	11	11	12	12
2007	152	0	4	5	8	9	9	10	11	11	12	12	13	13	13	13	14	15	15	16	16	16

Gumbel Analysis

Table 2

May 27, 2008

Weather Station 37-BRADFORD, PA. Using Temperature Variable MID_MID_AVG_TMP
 Temperature with the Indicated Probability of Occurrence for each period, per the Gumbel Distribution
 Overall Range Beginning Years: 1941 to 2007; Period Range: 11-01 to 03-31

Rank	Gumbel Curve parameters and probabilities							
	Alpha	Gamma	1/5.0	1/7.0	1/10.0	1/15.0	1/20.0	1/25.0
1	0.67390	0.1682600	-8.4	-10.5	-12.7	-15.3	-17.0	-18.4
2	2.90277	0.1306198	-4.0	-5.6	-7.2	-9.1	-10.3	-11.3
3	4.17767	0.1153921	-1.7	-3.1	-4.5	-6.1	-7.1	-7.9
4	5.33023	0.1004762	-0.3	-1.6	-2.9	-4.4	-5.4	-6.1
5	6.40965	0.0940484	1.2	-0.0	-1.3	-2.6	-3.5	-4.2
6	7.32384	0.0823818	2.0	0.8	-0.5	-1.9	-2.8	-3.5
7	8.26092	0.0770964	3.1	1.9	0.7	-0.7	-1.6	-2.2
8	8.96852	0.0723054	3.9	2.7	1.5	0.2	-0.7	-1.4
9	9.57851	0.0702994	4.7	3.6	2.4	1.1	0.3	-0.3
10	10.09616	0.0676579	5.4	4.2	3.1	1.8	1.1	0.4

Gumbel Analysis

Table 1

May 27, 2008

Weather Station 38-MORGANTOWN, WV. Using Temperature Variable MID_MID_AVG_TMP

20 Coldest Daily Temperatures Per Period, Ranked

Overall Range Beginning Years: 1949 to 2007; Period Range: 11-01 to 03-31

Period Begins	N days	Rank	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1949	151	15	15	17	17	19	20	20	21	21	21	22	23	25	26	26	26	26	26	28	28	28
1950	151	7	8	8	8	13	14	14	14	15	15	17	18	18	19	19	19	20	21	22	22	22
1951	152	6	12	14	16	19	21	21	22	23	24	24	24	25	26	26	26	27	27	27	27	27
1952	151	19	21	23	23	24	24	24	24	24	24	25	25	26	26	27	27	27	27	28	28	29
1953	151	13	14	15	16	17	18	18	20	20	22	23	23	24	24	24	24	24	24	24	25	25
1954	151	5	8	11	12	12	13	14	14	16	17	19	20	20	20	20	20	20	21	22	22	24
1955	152	14	16	17	17	19	19	19	20	20	20	21	21	21	22	22	22	22	23	23	24	24
1956	151	3	11	12	14	15	16	18	18	19	20	21	22	23	23	25	26	26	26	26	27	27
1957	151	0	6	7	8	12	12	12	14	14	15	16	16	16	16	16	16	16	17	17	19	20
1958	151	5	8	9	9	10	11	11	11	13	14	14	15	16	17	17	17	17	17	18	18	19
1959	152	14	15	16	16	17	17	17	18	18	19	19	19	20	20	20	21	21	21	21	22	22
1960	151	3	7	7	8	9	9	9	10	10	14	14	15	16	17	18	18	19	19	19	19	20
1961	151	5	6	10	12	12	13	15	16	16	17	17	20	21	22	22	22	22	23	23	23	24
1962	151	-5	4	5	6	7	8	9	9	10	11	11	11	11	12	14	15	15	15	16	16	16
1963	152	7	9	10	11	14	14	15	15	16	16	18	18	19	19	20	20	20	20	21	21	21
1964	151	4	6	7	8	8	9	11	13	14	15	15	16	16	16	16	17	17	17	18	18	19
1965	151	3	6	12	12	17	18	18	18	19	20	20	21	21	21	21	21	21	21	22	22	23
1966	151	7	10	11	12	14	15	15	17	19	19	19	20	20	21	21	22	22	23	25	25	25
1967	152	0	3	6	6	9	10	10	13	13	14	14	14	14	15	17	17	18	18	18	18	18
1968	151	11	11	13	13	13	13	15	15	15	16	16	17	18	19	19	19	19	19	20	20	20
1969	151	-6	-3	3	5	5	7	9	12	13	13	15	17	17	17	18	18	19	19	19	19	20
1970	151	2	3	8	9	9	12	12	12	14	14	14	15	15	15	18	19	19	21	21	21	21
1971	152	-8	4	4	11	12	12	12	12	15	15	15	17	19	19	20	20	21	21	21	21	21
1972	151	2	10	10	10	11	12	12	12	12	12	13	14	14	16	16	16	16	17	18	19	21
1973	151	12	13	14	15	16	16	17	18	19	19	20	21	21	22	22	22	22	22	23	23	23
1974	151	11	13	17	20	20	20	21	22	22	22	23	23	23	23	24	24	25	25	25	25	25
1975	152	3	7	8	11	12	13	14	16	16	17	18	18	18	21	21	23	23	23	23	23	24
1976	151	-5	4	5	7	8	8	10	10	10	11	12	12	12	12	13	13	15	15	16	16	16
1977	151	6	9	10	10	11	12	13	13	13	14	14	15	15	15	15	15	15	15	16	16	16
1978	151	7	7	8	10	12	12	12	13	14	15	15	15	16	16	17	18	18	19	19	19	19
1979	152	12	14	15	16	16	17	17	17	17	18	20	21	21	22	23	23	23	24	24	24	26
1980	151	3	4	6	7	7	7	8	9	11	11	11	12	14	15	15	16	19	19	19	19	19
1981	151	-8	-1	-1	9	13	13	14	15	16	16	17	17	17	20	21	21	21	21	22	22	22
1982	151	13	14	15	19	20	21	22	23	23	23	24	24	26	26	26	26	27	27	27	27	27
1983	152	-8	-2	2	5	6	7	10	11	12	13	15	15	16	17	17	18	19	20	20	20	20
1984	151	-7	-6	8	10	11	13	13	14	15	17	17	17	17	17	18	18	18	19	20	20	21

Gumbel Analysis

Table 1

May 27, 2008

Weather Station 38-MORGANTOWN, WV. Using Temperature Variable MID_MID_AVG_TMP

20 Coldest Daily Temperatures Per Period, Ranked

Overall Range Beginning Years: 1949 to 2007; Period Range: 11-01 to 03-31

Period Begins	N days	Rank	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1985	151	6	12	12	12	13	14	15	15	16	16	16	16	17	18	19	19	19	20	21	21	21
1986	151	8	11	13	16	16	17	21	22	22	23	23	23	25	26	27	28	28	28	28	29	29
1987	152	7	7	9	10	14	14	15	16	17	17	18	18	19	19	20	21	22	22	22	22	22
1988	151	12	12	16	16	18	19	21	21	21	21	22	22	22	22	23	23	23	24	24	24	25
1989	151	-2	4	6	6	8	12	12	13	14	15	15	16	17	18	22	23	23	23	24	24	24
1990	151	13	16	17	20	22	22	23	24	25	25	26	26	26	26	27	27	28	28	28	28	28
1991	152	12	12	17	19	20	20	21	22	22	22	23	23	23	23	24	24	24	24	25	25	25
1992	151	13	15	16	17	17	18	19	20	22	23	24	24	25	25	25	26	26	27	27	27	27
1993	151	-10	0	2	4	4	6	15	15	15	16	18	18	18	18	19	19	20	20	21	21	21
1994	151	9	9	11	12	15	16	16	17	20	21	22	23	24	24	24	24	25	25	25	27	27
1995	152	3	7	9	12	12	14	15	15	16	17	17	17	18	18	20	20	21	21	21	21	21
1996	151	5	7	11	12	12	13	15	18	21	21	22	22	22	23	24	25	26	26	27	27	27
1997	151	20	21	22	23	24	26	27	27	28	28	28	28	28	29	29	29	30	30	30	30	30
1998	151	11	17	18	19	20	20	20	21	21	21	21	21	21	22	23	23	24	24	24	25	25
1999	152	11	12	12	13	17	18	18	18	19	19	21	21	21	23	24	24	25	25	26	26	26
2000	151	12	12	13	13	14	16	17	18	18	18	18	19	20	21	21	21	22	22	22	22	22
2001	151	16	17	17	18	18	21	22	22	22	23	23	24	24	24	24	26	26	27	28	29	29
2002	151	9	9	9	12	14	16	17	17	17	17	18	19	19	20	20	20	20	20	21	22	22
2003	152	7	9	11	11	13	13	13	15	16	17	17	17	19	21	22	22	22	23	23	23	23
2004	151	8	9	10	12	14	16	16	19	20	20	21	22	22	22	23	24	24	24	24	24	25
2005	151	13	19	20	20	21	24	24	24	24	24	24	24	25	25	26	26	26	26	26	26	26
2006	151	5	7	13	13	14	15	15	16	16	17	17	18	19	20	21	21	22	23	23	23	23
2007	152	12	14	15	16	17	18	19	19	20	20	21	22	23	24	25	26	26	26	26	26	26

Gumbel Analysis

Table 2

May 27, 2008

Weather Station 38-MORGANTOWN, WV. Using Temperature Variable MID_MID_AVG_TMP
Temperature with the Indicated Probability of Occurrence for each period, per the Gumbel Distribution
Overall Range Beginning Years: 1949 to 2007; Period Range: 11-01 to 03-31

Rank	Gumbel Curve parameters and probabilities							
	Alpha	Gamma	1/5.0	1/7.0	1/10.0	1/15.0	1/20.0	1/25.0
1	9.42820	0.1666778	0.3	-1.8	-4.1	-6.7	-8.4	-9.8
2	11.13870	0.1322378	4.3	2.7	1.1	-0.7	-1.9	-2.9
3	12.61943	0.1162669	6.8	5.4	4.0	2.4	1.4	0.6
4	13.74515	0.1069291	8.5	7.2	6.0	4.6	3.7	3.0
5	15.02100	0.0978226	10.0	8.8	7.7	6.3	5.5	4.8
6	15.91028	0.0889637	11.0	9.8	8.7	7.4	6.6	5.9
7	16.69601	0.0858901	12.1	11.0	9.9	8.7	7.9	7.3
8	17.45678	0.0831191	13.0	12.0	10.9	9.8	9.1	8.5
9	18.13676	0.0811158	13.9	12.9	11.9	10.8	10.1	9.5
10	18.66165	0.0811353	14.7	13.8	12.8	11.8	11.1	10.6

Columbia Gas of Pennsylvania, Inc.
Standard Data Request
Cost of Service

Question No. GAS-COS-018:

For each customer class contained in the cost of service study, please provide monthly throughput by class.

Response:

Please see the attached spreadsheet COS-18 Attachment A for the forecasted quantities by rate schedule by customer class by month. In addition, please see Exhibit No. 103, Schedule No. 4, Pages 7 through 9, for the monthly quantities pertaining to new customers and customer attrition. Together, the monthly quantities sum to the total fully forecasted rate year volumes shown in Exhibit No. 103, Page 15, Line 29, for the cost of service.

Columbia Gas of Pennsylvania, Inc.
Forecasted Volumes By Rate Schedule by Customer Class by Month
For the 12 Months Ending December 31, 2016

		January DTH	February DTH	March DTH	April DTH	May DTH	June DTH	July DTH	August DTH	September DTH	October DTH	November DTH	December DTH	Total
CAP	RES	456,402.4	450,785.3	397,984.4	263,029.6	139,680.5	67,223.5	38,188.2	36,863.3	40,902.1	84,434.7	200,998.5	336,481.2	2,512,973.7
LDS	COM	269,501.8	265,350.3	225,612.6	196,203.4	164,351.0	143,537.3	127,271.7	135,495.3	142,219.9	162,406.7	213,694.2	245,082.1	2,290,726.3
LDS	IND	685,303.2	693,283.8	755,219.8	681,029.7	655,899.3	630,014.0	599,479.0	620,498.6	630,394.6	658,682.1	620,853.0	650,799.2	7,881,456.3
LDS FLEX	COM	240,500.0	226,600.0	171,000.0	125,800.0	109,900.0	95,100.0	117,300.0	96,400.0	84,900.0	120,400.0	148,300.0	220,800.0	1,757,000.0
LDS FLEX	IND	609,500.0	631,500.0	593,000.0	589,000.0	613,000.0	646,200.0	650,900.0	640,600.0	581,000.0	578,700.0	612,500.0	599,100.0	7,345,000.0
LGSS	COM	149,723.2	155,851.3	121,883.9	81,717.3	42,161.8	36,306.1	24,290.1	18,533.4	23,207.0	36,348.8	82,162.4	128,486.8	900,672.1
LGSS	IND	9,395.4	8,543.1	8,546.1	9,514.5	9,740.3	10,054.9	9,938.9	10,608.1	9,314.4	8,580.0	10,421.5	9,411.2	114,068.4
MLDS I	COM	6,000.0	6,000.0	5,000.0	4,000.0	2,000.0	1,000.0	1,000.0	1,000.0	2,000.0	2,000.0	2,000.0	3,000.0	35,000.0
MLDS I	IND	4,900.0	5,400.0	4,300.0	4,200.0	4,000.0	13,900.0	33,700.0	19,100.0	8,700.0	4,000.0	4,400.0	4,400.0	111,000.0
MLDS I FLEX	IND	250,000.0	275,000.0	255,000.0	240,000.0	235,000.0	185,000.0	205,000.0	215,000.0	200,000.0	200,000.0	225,000.0	225,000.0	2,710,000.0
MLDS II	IND	24,000.0	22,000.0	18,000.0	18,000.0	18,000.0	22,000.0	22,000.0	22,000.0	22,000.0	24,000.0	24,000.0	24,000.0	260,000.0
MLDS II FLEX	IND	221,000.0	223,000.0	229,000.0	217,000.0	200,000.0	190,000.0	169,400.0	173,500.0	182,900.0	194,000.0	201,800.0	200,400.0	2,402,000.0
NSS	COM	10,000.0	10,000.0	8,000.0	6,000.0	3,500.0	2,500.0	2,500.0	2,500.0	2,500.0	3,500.0	6,000.0	8,000.0	65,000.0
PRDGDS	RES	174.5	170.1	135.7	82.0	36.1	18.2	18.3	12.4	10.6	21.8	69.3	127.9	876.9
PRDGDS	RES	488.4	516.1	381.8	229.4	114.8	82.8	67.3	48.0	46.4	66.2	165.1	386.4	2,592.7
RDS	RES	1,562,423.1	1,523,044.6	1,296,880.0	818,888.4	401,283.4	209,758.3	131,793.5	125,124.3	133,087.3	230,543.5	568,932.1	1,131,390.9	8,133,149.4
RSS	RES	4,368,479.3	4,337,421.4	3,803,578.1	2,346,770.6	1,145,885.2	596,917.2	378,932.7	367,952.0	376,953.6	603,933.8	1,610,834.9	3,192,613.6	23,130,272.4
SCD	COM	357,004.9	362,000.0	301,998.3	202,999.9	114,991.5	82,022.5	66,993.3	63,014.5	65,023.4	91,004.3	165,989.7	276,002.1	2,149,044.4
SDS	COM	521,082.0	546,355.7	431,048.3	355,406.7	242,027.1	188,569.2	152,045.7	163,515.7	167,269.4	217,134.6	349,482.5	448,631.4	3,782,568.3
SDS	IND	190,102.6	199,414.5	177,530.4	174,540.3	163,610.0	154,820.3	155,098.6	159,264.9	155,202.1	161,669.8	169,227.4	178,135.4	2,038,616.3
SDS FLEX	COM	21,200.0	21,100.0	16,500.0	13,400.0	8,500.0	6,900.0	5,400.0	5,300.0	6,200.0	8,700.0	12,900.0	16,600.0	142,700.0
SDS FLEX	IND	3,400.0	3,900.0	5,000.0	4,100.0	3,600.0	2,900.0	3,100.0	2,900.0	2,800.0	2,900.0	2,000.0	1,400.0	38,000.0
SGDS FLEX	COM	4,300.0	4,000.0	3,250.0	2,350.0	900.0	340.0	320.0	320.0	420.0	1,000.0	2,000.0	3,000.0	22,200.0
SGDS	COM	604,416.3	603,595.1	502,585.6	379,840.7	231,320.5	148,559.9	119,660.9	121,963.6	124,990.5	168,356.3	299,623.2	474,886.1	3,779,798.7
SGDS	IND	11,794.2	11,501.8	10,949.6	8,130.2	5,890.7	4,165.5	4,321.9	4,136.6	4,003.2	4,048.0	5,219.4	8,766.0	82,927.1
SGSS	COM	1,782,304.4	1,819,218.1	1,565,167.6	893,291.2	355,345.0	212,240.8	123,213.5	90,044.4	109,305.6	199,156.7	560,717.3	1,242,276.3	8,952,280.9
SGSS	IND	13,604.7	14,457.2	13,453.7	11,485.8	9,259.9	7,945.2	7,060.8	7,391.9	7,686.0	10,419.9	10,578.8	12,569.0	125,932.9
Total		12,377,000.4	12,420,008.4	10,921,005.9	7,647,009.7	4,879,997.1	3,658,075.7	3,148,994.4	3,103,087.0	3,083,036.1	3,776,007.2	6,109,869.3	9,641,765.6	80,765,856.8

Columbia Gas of Pennsylvania, Inc.
Docket No. R-2015-2468056

Standard Data Request

Cost Of Service

Question No. GAS-COS-019:

Please provide workpapers showing the development of each allocation factor reflected in the Company's cost of service study. Include a description of each allocation factor, all calculations performed to develop the allocators and all supporting documentation, studies or other information relied upon to determine the allocators.

Response:

Statement No. 7 with related attachments contains a description of the allocation factors and assignment to the various components of the Studies. Exhibit No. 111, Schedule No. 4 as well as within each study, Schedules 1, 2 & 3, contains a legend of the allocation factors.

COS-019 Attachment A contains the development of the O&M Expenses by FERC Account used in the Studies. O&M Expense for the fully forecasted rate year and presented in Exhibit No. 104 was based on cost element data, i.e., labor, benefits, insurance, etc. Attachment A shows the conversion of the forecasted O&M by description (cost element) to the FERC account, based on allocation percentages representative of the historical test year data (twelve months ending November 30, 2014).

COS-019 Attachment B is a workpaper related to Direct Plant Services, and COS-019 Attachment C is a workpaper related to Direct Plant Meters. COS-019 Attachment D is a workpaper related to the Direct Assignment of Mainline Customers.

Columbia Gas of Pennsylvania
O&M Actuals
Twelve Months Ended Nov 30, 2014

Gen	CE	Sum Of Amount	Budget Description
801	3819	622,457.60	Gas Cost
803	3801	(4,956,030.30)	Gas Cost
803	3803	3.51	Gas Cost
803	3820	50,232,835.11	Gas Cost
803	3821	139,134,686.80	Gas Cost
803	3823	733.87	Gas Cost
803	3825	(2,258,803.77)	Gas Cost
803	3828	-	Gas Cost
803	3836	354,109.84	Gas Cost
803	3838	8,504,062.19	Gas Cost
803	3839	8,994,847.14	Gas Cost
803	3840	353,079.70	Gas Cost
803	3844	43,848,265.93	Gas Cost
803	3845	1,643,154.20	Gas Cost
803	3847	8,895.47	Gas Cost
803	3853	(1,256,962.39)	Gas Cost
803	3856	(3,009,387.60)	Gas Cost
803	3858	(1,391,381.95)	Gas Cost
804	3820	23,292,249.80	Gas Cost
804	3821	266,175.00	Gas Cost
805	3807	1,101,009.06	Gas Cost
805	3808	(1,502,075.55)	Gas Cost
805	3809	(983,000.00)	Gas Cost
806	3810	(1,964,196.84)	Gas Cost
806	3811	(14,400,860.23)	Gas Cost
806	3825	12,731.17	Gas Cost
807	7001	873,279.10	System Services
807	9240	5,181.94	Gas Cost
808	3834	(104,007,775.84)	Gas Cost
808	3837	101,786,922.13	Gas Cost
812	3813	-	Utilities and Fuel Used in Company Operations
813	3825	450.00	Gas Cost
816	1003	280.10	Labor
816	3016	2,002.09	Outside Services
816	5030	231.74	Fleet & Other Clearing
817	1003	2,254.97	Labor
817	3016	5,159.34	Outside Services
817	5030	512.15	Fleet & Other Clearing
818	1003	27,514.06	Labor
818	2017	185,048.23	Materials & Supplies
818	2503	1,140.70	Materials & Supplies
818	3014	8,474.98	Outside Services
818	3015	9,158.07	Outside Services
818	3016	137,453.01	Outside Services
818	3102	1,711.51	Employee Expenses
818	3105	2,937.42	Employee Expenses
818	3921	6,545.02	Utilities and Fuel Used in Company Operations
818	5030	16,975.93	Fleet & Other Clearing
820	1003	6,298.48	Labor
820	3016	3,707.90	Outside Services
820	5030	666.22	Fleet & Other Clearing
821	1003	3,191.36	Labor
821	3016	2,589.42	Outside Services
821	5030	481.75	Fleet & Other Clearing
823	3813	3,774.51	Utilities and Fuel Used in Company Operations
825	9201	5,975.63	Rent and Leases
832	1003	470.01	Labor
832	1006	30.65	Labor
832	1007	0.24	Labor
832	3016	8,751.21	Outside Services
832	5030	904.24	Fleet & Other Clearing

Columbia Gas of Pennsylvania
O&M Actuals
Twelve Months Ended Nov 30, 2014

Gen	CE	Sum Of Amount	Budget Description
834	1003	4,224.89	Labor
834	1006	8.50	Labor
834	1007	0.07	Labor
834	3016	5,550.29	Outside Services
834	5030	536.75	Fleet & Other Clearing
836	1003	830.23	Labor
836	3016	7,388.40	Outside Services
836	5030	629.29	Fleet & Other Clearing
903	2010	3,162.97	Materials & Supplies
870	1003	2,443,733.48	Labor
870	1006	139,950.99	Labor
870	1007	93,488.47	Labor
870	2004	826.50	Materials & Supplies
870	2010	3.90	Materials & Supplies
870	2012	180.54	Materials & Supplies
870	2015	2.68	Materials & Supplies
870	2017	73,009.81	Materials & Supplies
870	2020	5.55	Materials & Supplies
870	2501	586.30	Materials & Supplies
870	2503	14,333.93	Materials & Supplies
870	3000	1,642,968.08	Outside Services
870	3004	16,304.46	Outside Services
870	3007	1.20	Outside Services
870	3008	4,376.90	Outside Services
870	3009	1,899.90	Outside Services
870	3011	-	Outside Services
870	3015	41,466.00	Outside Services
870	3016	16,420.45	Outside Services
870	3018	-	Outside Services
870	3019	4.43	Outside Services
870	3021	5.73	Outside Services
870	3033	862.58	Outside Services
870	3037	19.87	Outside Services
870	3080	20.94	Outside Services
870	3089	1,018,984.08	Outside Services
870	3091	723.60	Outside Services
870	3092	17,715.68	Outside Services
870	3098	-	Outside Services
870	3099	(4,140.25)	Outside Services
870	3100	53,172.77	Employee Expenses
870	3101	19,520.10	Employee Expenses
870	3102	84,049.79	Employee Expenses
870	3103	2,407.25	Employee Expenses
870	3105	20,357.93	Employee Expenses
870	3500	-	Charitable Contributions
870	3501	685.40	Company Memberships
870	3502	893.29	Employee Expenses
870	3600	17,813.11	Other O&M
870	3601	87.93	Materials & Supplies
870	3637	6,880.62	Misc & Other Expenses
870	3638	11,218.35	Misc & Other Expenses
870	3921	344.95	Utilities and Fuel Used in Company Operations
870	3923	18.53	Utilities and Fuel Used in Company Operations
870	3924	1,028.95	Utilities and Fuel Used in Company Operations
870	3926	334.00	Utilities and Fuel Used in Company Operations
870	5001	10,032.59	Outside Services
870	5010	1,494.46	Outside Services
870	5014	639.24	Outside Services
870	5015	135.00	Outside Services
870	5020	181,244.39	Fleet & Other Clearing
870	5030	91,785.59	Fleet & Other Clearing

Columbia Gas of Pennsylvania
O&M Actuals
Twelve Months Ended Nov 30, 2014

Gen	CE	Sum Of Amount	Budget Description
870	5040	2,045.77	Fleet & Other Clearing
870	7001	2,578,288.98	System Services
870	9011	1.20	OPEB
870	9020	22.35	Labor
870	9215	1,981.65	Rent and Leases
870	9220	232.92	Rent and Leases
870	9235	2,801.58	Rent and Leases
871	1003	185,060.39	Labor
871	1006	3,431.84	Labor
871	1007	2,965.33	Labor
871	2004	7.85	Materials & Supplies
871	2010	1,859.17	Materials & Supplies
871	2017	102.05	Materials & Supplies
871	3007	45.00	Outside Services
871	3015	135.00	Outside Services
871	3021	180.00	Outside Services
871	3102	-	Employee Expenses
871	3105	-	Employee Expenses
871	5020	884.79	Fleet & Other Clearing
871	5030	58,675.66	Fleet & Other Clearing
871	5040	768.78	Fleet & Other Clearing
874	1000	544.71	Labor
874	1003	4,696,054.22	Labor
874	1006	239,229.19	Labor
874	1007	201,286.10	Labor
874	2001	1,375.55	Materials & Supplies
874	2003	1,776.50	Materials & Supplies
874	2004	6,438.51	Materials & Supplies
874	2008	15.57	Materials & Supplies
874	2009	267.38	Materials & Supplies
874	2010	1,320.19	Materials & Supplies
874	2012	2,601.22	Materials & Supplies
874	2013	1,375.48	Materials & Supplies
874	2015	5,412.46	Materials & Supplies
874	2016	948.30	Materials & Supplies
874	2017	774,009.30	Materials & Supplies
874	2018	11,826.16	Materials & Supplies
874	2019	4,446.94	Materials & Supplies
874	2503	5,073.72	Materials & Supplies
874	3001	310.30	Advertising
874	3002	1,000.00	Outside Services
874	3004	11,012.47	Outside Services
874	3006	294.79	Outside Services
874	3009	12,034.75	Outside Services
874	3014	202.50	Outside Services
874	3015	63,025.06	Outside Services
874	3016	33,019.65	Outside Services
874	3017	119,618.79	Outside Services
874	3018	6.67	Outside Services
874	3019	35,758.30	Outside Services
874	3021	418.95	Outside Services
874	3022	600.00	Outside Services
874	3026	-	Outside Services
874	3080	8,636.68	Outside Services
874	3086	2,904.73	Outside Services
874	3087	3,926.58	Outside Services
874	3088	554,161.25	Outside Services
874	3089	2,166,327.92	Outside Services
874	3090	(404.00)	Outside Services
874	3092	181,929.16	Outside Services
874	3096	(2,852.01)	Outside Services

Columbia Gas of Pennsylvania
O&M Actuals
Twelve Months Ended Nov 30, 2014

Gen	CE	Sum Of Amount	Budget Description
874	3098	519.40	Outside Services
874	3099	(98,777.58)	Outside Services
874	3100	19,194.08	Employee Expenses
874	3101	4,848.92	Employee Expenses
874	3102	332,848.50	Employee Expenses
874	3105	141,676.18	Employee Expenses
874	3600	17,109.39	Other O&M
874	3601	98.60	Materials & Supplies
874	3637	250.00	Misc & Other Expenses
874	3638	51,274.35	Misc & Other Expenses
874	3920	249.80	Utilities and Fuel Used in Company Operations
874	3921	382.21	Utilities and Fuel Used in Company Operations
874	3923	-	Utilities and Fuel Used in Company Operations
874	3924	23.84	Utilities and Fuel Used in Company Operations
874	4515	550.00	Misc & Other Expenses
874	4524	326.42	Misc & Other Expenses
874	5015	1,684,381.77	Outside Services
874	5020	69,234.17	Fleet & Other Clearing
874	5030	1,157,682.09	Fleet & Other Clearing
874	5040	207,020.68	Fleet & Other Clearing
874	7001	436,686.51	System Services
874	9235	40,895.04	Rent and Leases
875	1003	227,862.66	Labor
875	1006	10,543.81	Labor
875	1007	8,848.80	Labor
875	2004	101.42	Materials & Supplies
875	2010	2,858.89	Materials & Supplies
875	2017	5,795.49	Materials & Supplies
875	2018	1,615.81	Materials & Supplies
875	3004	1,450.00	Outside Services
875	3007	495.00	Outside Services
875	3015	38,864.90	Outside Services
875	3016	44,006.00	Outside Services
875	3019	525.84	Outside Services
875	3021	7,352.41	Outside Services
875	3080	1,072.70	Outside Services
875	3092	-	Outside Services
875	3099	-	Outside Services
875	3100	5,938.06	Employee Expenses
875	3102	1,584.48	Employee Expenses
875	3105	5,593.00	Employee Expenses
875	3600	475.00	Other O&M
875	3638	90.99	Misc & Other Expenses
875	3813	44,991.99	Utilities and Fuel Used in Company Operations
875	3921	12.47	Utilities and Fuel Used in Company Operations
875	5015	2,811.70	Outside Services
875	5020	1,225.74	Fleet & Other Clearing
875	5030	64,393.08	Fleet & Other Clearing
875	5040	2,069.76	Fleet & Other Clearing
875	7001	70,327.19	System Services
875	9235	300.00	Rent and Leases
876	1003	127,673.12	Labor
876	1006	6,600.21	Labor
876	1007	5,693.98	Labor
876	2017	1,504.83	Materials & Supplies
876	3015	136.23	Outside Services
876	3099	-	Outside Services
876	3102	-	Employee Expenses
876	3105	-	Employee Expenses
876	5020	596.04	Fleet & Other Clearing
876	5030	36,812.99	Fleet & Other Clearing

Columbia Gas of Pennsylvania
O&M Actuals
Twelve Months Ended Nov 30, 2014

Gen	CE	Sum Of Amount	Budget Description
876	5040	1,010.28	Fleet & Other Clearing
876	7001	57,540.51	System Services
878	1003	1,314,068.08	Labor
878	1006	77,633.93	Labor
878	1007	66,561.89	Labor
878	2004	50.00	Materials & Supplies
878	2010	50.09	Materials & Supplies
878	2012	431.40	Materials & Supplies
878	2015	11,887.22	Materials & Supplies
878	2017	53,049.30	Materials & Supplies
878	2503	2.70	Materials & Supplies
878	3004	10,571.00	Outside Services
878	3008	-	Outside Services
878	3015	4,856.10	Outside Services
878	3016	-	Outside Services
878	3018	12.67	Outside Services
878	3033	-	Outside Services
878	3087	350.00	Outside Services
878	3090	2,000.00	Outside Services
878	3091	350.00	Outside Services
878	3092	1,404.26	Outside Services
878	3098	-	Outside Services
878	3099	55.00	Outside Services
878	3100	7,986.13	Employee Expenses
878	3102	4,435.22	Employee Expenses
878	3105	26,960.94	Employee Expenses
878	3621	(40,300.96)	Misc & Other Expenses
878	3638	2,212.63	Misc & Other Expenses
878	4524	330.00	Misc & Other Expenses
878	5020	4,827.73	Fleet & Other Clearing
878	5030	314,478.23	Fleet & Other Clearing
878	5040	4,256.24	Fleet & Other Clearing
878	7001	288,914.39	System Services
878	9001	105.38	Other Employee Benefits
878	9235	-	Rent and Leases
879	1003	2,845,443.87	Labor
879	1006	137,754.23	Labor
879	1007	116,741.89	Labor
879	2004	413.91	Materials & Supplies
879	2010	34.77	Materials & Supplies
879	2012	120.00	Materials & Supplies
879	2015	3,625.76	Materials & Supplies
879	2017	29,395.38	Materials & Supplies
879	2503	2.25	Materials & Supplies
879	3015	9,183.70	Outside Services
879	3016	-	Outside Services
879	3037	120.25	Outside Services
879	3086	(784.50)	Outside Services
879	3088	779,727.09	Outside Services
879	3092	161.00	Outside Services
879	3098	-	Outside Services
879	3099	4,811.65	Outside Services
879	3100	1,500.46	Employee Expenses
879	3102	1,321.47	Employee Expenses
879	3105	2,381.69	Employee Expenses
879	3600	126.00	Other O&M
879	3621	(23,745.00)	Misc & Other Expenses
879	3638	198.59	Misc & Other Expenses
879	4524	274.36	Misc & Other Expenses
879	5020	17,486.28	Fleet & Other Clearing
879	5030	658,246.85	Fleet & Other Clearing

Columbia Gas of Pennsylvania
O&M Actuals
Twelve Months Ended Nov 30, 2014

Gen	CE	Sum Of Amount	Budget Description
879	5040	12,203.98	Fleet & Other Clearing
879	7001	275,558.08	System Services
879	9235	1,373.84	Rent and Leases
880	1003	2,988,678.58	Labor
880	1006	137,309.39	Labor
880	1007	114,719.41	Labor
880	2001	1,683.50	Materials & Supplies
880	2003	417.76	Materials & Supplies
880	2004	4,781.45	Materials & Supplies
880	2010	3,968.93	Materials & Supplies
880	2012	1,448.35	Materials & Supplies
880	2017	306,003.13	Materials & Supplies
880	2020	23,375.26	Materials & Supplies
880	2503	89,589.05	Materials & Supplies
880	3000	25,998.35	Outside Services
880	3007	58,505.30	Outside Services
880	3008	181.80	Outside Services
880	3009	402.48	Outside Services
880	3011	113,074.34	Outside Services
880	3012	8,690.36	Outside Services
880	3014	-	Outside Services
880	3015	118,464.43	Outside Services
880	3016	106,801.13	Outside Services
880	3017	1,076.51	Outside Services
880	3018	7,177.38	Outside Services
880	3019	-	Outside Services
880	3021	1,777.53	Outside Services
880	3022	1,508.99	Outside Services
880	3037	90.60	Outside Services
880	3076	55.95	Outside Services
880	3080	36,620.75	Outside Services
880	3086	9,286.03	Outside Services
880	3087	-	Outside Services
880	3088	-	Outside Services
880	3089	-	Outside Services
880	3090	-	Outside Services
880	3091	-	Outside Services
880	3092	-	Outside Services
880	3093	-	Outside Services
880	3094	-	Outside Services
880	3098	787.50	Outside Services
880	3099	(895.33)	Outside Services
880	3100	12,350.04	Employee Expenses
880	3101	40,902.07	Employee Expenses
880	3102	64,723.38	Employee Expenses
880	3105	64,454.73	Employee Expenses
880	3500	200.00	Charitable Contributions
880	3600	3,612.35	Other O&M
880	3601	12,461.45	Materials & Supplies
880	3604	28.67	Misc & Other Expenses
880	3632	17,832.95	Misc & Other Expenses
880	3633	(4,536.53)	Misc & Other Expenses
880	3637	10,532.37	Misc & Other Expenses
880	3638	4,218.24	Misc & Other Expenses
880	3813	(99,852.81)	Utilities and Fuel Used in Company Operations
880	3920	3,652.40	Utilities and Fuel Used in Company Operations
880	3921	38,807.41	Utilities and Fuel Used in Company Operations
880	3923	27,091.86	Utilities and Fuel Used in Company Operations
880	3924	624.44	Utilities and Fuel Used in Company Operations
880	3925	7,226.99	Utilities and Fuel Used in Company Operations
880	3926	43.57	Utilities and Fuel Used in Company Operations

Columbia Gas of Pennsylvania
O&M Actuals
Twelve Months Ended Nov 30, 2014

Gen	CE	Sum Of Amount	Budget Description
880	4522	106.25	Misc & Other Expenses
880	5001	-	Outside Services
880	5005	385.74	Outside Services
880	5008	1,168.75	Outside Services
880	5010	6,709.59	Outside Services
880	5013	6,688.46	Outside Services
880	5020	138,029.65	Fleet & Other Clearing
880	5030	513,008.86	Fleet & Other Clearing
880	5040	210,179.67	Fleet & Other Clearing
880	7001	54,619.30	System Services
880	9001	739.09	Other Employee Benefits
880	9020	(592.50)	Labor
880	9021	182,946.14	Other Employee Benefits
880	9022	80.00	Other Employee Benefits
880	9215	4,407.23	Rent and Leases
880	9220	138,071.26	Rent and Leases
880	9231	78,993.41	Rent and Leases
880	9235	16,500.48	Rent and Leases
881	2017	1,738.40	Materials & Supplies
881	3080	1,757.50	Outside Services
881	3099	-	Outside Services
881	3600	57,818.50	Other O&M
881	9220	113,660.34	Rent and Leases
881	9231	420.00	Rent and Leases
881	9235	99,464.52	Rent and Leases
885	1003	29,548.77	Labor
885	1006	1,604.05	Labor
885	1007	1,321.93	Labor
885	2015	2.68	Materials & Supplies
885	2017	270.47	Materials & Supplies
885	2020	5.55	Materials & Supplies
885	2501	579.64	Materials & Supplies
885	2503	514.62	Materials & Supplies
885	3008	5.23	Outside Services
885	3009	28.22	Outside Services
885	3011	-	Outside Services
885	3018	-	Outside Services
885	3019	4.44	Outside Services
885	3100	1,519.80	Employee Expenses
885	3101	83.88	Employee Expenses
885	3102	992.73	Employee Expenses
885	3105	341.34	Employee Expenses
885	3500	-	Charitable Contributions
885	3501	2.00	Company Memberships
885	3502	2.75	Employee Expenses
885	3600	39.71	Other O&M
885	3601	0.66	Materials & Supplies
885	3637	20.67	Misc & Other Expenses
885	3638	70.58	Misc & Other Expenses
885	3923	0.40	Utilities and Fuel Used in Company Operations
885	3924	1.15	Utilities and Fuel Used in Company Operations
885	5030	89.02	Fleet & Other Clearing
885	7001	39,564.61	System Services
885	9020	9.16	Labor
885	9235	-	Rent and Leases
886	1003	8,609.08	Labor
886	1006	505.26	Labor
886	1007	506.28	Labor
886	2004	305.03	Materials & Supplies
886	2010	2,200.50	Materials & Supplies
886	2017	1,084.43	Materials & Supplies

Columbia Gas of Pennsylvania
O&M Actuals
Twelve Months Ended Nov 30, 2014

Gen	CE	Sum Of Amount	Budget Description
886	3004	594.00	Outside Services
886	3009	-	Outside Services
886	3011	3,400.00	Outside Services
886	3015	70.00	Outside Services
886	3016	1,325.65	Outside Services
886	3080	340.00	Outside Services
886	3099	-	Outside Services
886	3600	34.30	Other O&M
886	3621	7.16	Misc & Other Expenses
886	3921	1,291.01	Utilities and Fuel Used in Company Operations
886	3925	184.24	Utilities and Fuel Used in Company Operations
886	5015	9,418.90	Outside Services
886	5020	49.46	Fleet & Other Clearing
886	5030	2,557.55	Fleet & Other Clearing
887	1000	23.26	Labor
887	1003	3,496,286.28	Labor
887	1006	170,809.72	Labor
887	1007	149,132.80	Labor
887	2001	1,195.77	Materials & Supplies
887	2002	410.56	Materials & Supplies
887	2003	148.50	Materials & Supplies
887	2004	11,559.18	Materials & Supplies
887	2009	96.69	Materials & Supplies
887	2010	3,661.41	Materials & Supplies
887	2012	265,326.34	Materials & Supplies
887	2013	301.23	Materials & Supplies
887	2015	3,562.55	Materials & Supplies
887	2017	721,437.34	Materials & Supplies
887	2018	9,957.06	Materials & Supplies
887	2019	4,991.01	Materials & Supplies
887	2020	384.05	Materials & Supplies
887	2503	1,169.77	Materials & Supplies
887	3000	345,285.93	Outside Services
887	3004	139,430.09	Outside Services
887	3006	266,355.04	Outside Services
887	3007	16,850.00	Outside Services
887	3008	168.90	Outside Services
887	3009	3,486.95	Outside Services
887	3011	867.82	Outside Services
887	3012	8,014.56	Outside Services
887	3015	285,284.01	Outside Services
887	3016	730,403.15	Outside Services
887	3017	14,363.07	Outside Services
887	3018	70.07	Outside Services
887	3019	529.84	Outside Services
887	3021	6,990.00	Outside Services
887	3026	2,853.49	Outside Services
887	3033	-	Outside Services
887	3037	-	Outside Services
887	3080	57,709.00	Outside Services
887	3086	19,350.24	Outside Services
887	3087	47,838.77	Outside Services
887	3088	2,116.00	Outside Services
887	3089	994.86	Outside Services
887	3090	1,814,841.77	Outside Services
887	3091	2,819.25	Outside Services
887	3092	3,040,498.61	Outside Services
887	3095	-	Outside Services
887	3096	1,417,969.78	Outside Services
887	3098	6,083.35	Outside Services
887	3099	(156,895.68)	Outside Services

Columbia Gas of Pennsylvania
O&M Actuals
Twelve Months Ended Nov 30, 2014

Gen	CE	Sum Of Amount	Budget Description
887	3100	4,802.26	Employee Expenses
887	3101	-	Employee Expenses
887	3102	3,346.45	Employee Expenses
887	3105	1,038.70	Employee Expenses
887	3502	1,746.00	Employee Expenses
887	3600	232,686.47	Other O&M
887	3601	118.47	Materials & Supplies
887	3621	(187,965.17)	Misc & Other Expenses
887	3637	3,447.84	Misc & Other Expenses
887	3638	753.01	Misc & Other Expenses
887	3921	26,736.08	Utilities and Fuel Used in Company Operations
887	3924	3.30	Utilities and Fuel Used in Company Operations
887	3925	-	Utilities and Fuel Used in Company Operations
887	4524	906.51	Misc & Other Expenses
887	5015	3,261.70	Outside Services
887	5020	100,138.94	Fleet & Other Clearing
887	5030	671,937.81	Fleet & Other Clearing
887	5040	404,731.68	Fleet & Other Clearing
887	7001	144,815.94	System Services
887	9001	861.91	Other Employee Benefits
887	9231	11.85	Rent and Leases
887	9235	94,328.01	Rent and Leases
889	1003	242,171.50	Labor
889	1006	15,596.99	Labor
889	1007	13,319.07	Labor
889	2004	106.71	Materials & Supplies
889	2010	6,845.19	Materials & Supplies
889	2012	58.43	Materials & Supplies
889	2013	39.91	Materials & Supplies
889	2015	3,535.30	Materials & Supplies
889	2017	25,108.53	Materials & Supplies
889	3007	135.00	Outside Services
889	3009	172.00	Outside Services
889	3011	-	Outside Services
889	3015	915.24	Outside Services
889	3016	208.00	Outside Services
889	3019	-	Outside Services
889	3021	135.00	Outside Services
889	3026	-	Outside Services
889	3080	2,940.30	Outside Services
889	3086	-	Outside Services
889	3092	-	Outside Services
889	3099	-	Outside Services
889	3100	12.11	Employee Expenses
889	3102	-	Employee Expenses
889	3105	32.50	Employee Expenses
889	3600	-	Other O&M
889	3925	(389.66)	Utilities and Fuel Used in Company Operations
889	5015	377.30	Outside Services
889	5020	135.68	Fleet & Other Clearing
889	5030	69,643.29	Fleet & Other Clearing
889	5040	2,165.30	Fleet & Other Clearing
889	7001	70,326.64	System Services
890	1003	50,802.22	Labor
890	1006	2,187.28	Labor
890	1007	1,841.93	Labor
890	2004	-	Materials & Supplies
890	2010	105.97	Materials & Supplies
890	2017	19,950.80	Materials & Supplies
890	3007	120.20	Outside Services
890	3009	-	Outside Services

Columbia Gas of Pennsylvania
O&M Actuals
Twelve Months Ended Nov 30, 2014

Gen	CE	Sum Of Amount	Budget Description
890	3015	3,045.00	Outside Services
890	3016	-	Outside Services
890	3019	-	Outside Services
890	3094	-	Outside Services
890	3102	-	Employee Expenses
890	3105	-	Employee Expenses
890	5020	87.52	Fleet & Other Clearing
890	5030	11,912.60	Fleet & Other Clearing
890	5040	623.61	Fleet & Other Clearing
890	7001	72,309.26	System Services
892	1003	1,015,954.57	Labor
892	1006	46,140.75	Labor
892	1007	38,350.43	Labor
892	2004	580.21	Materials & Supplies
892	2010	690.23	Materials & Supplies
892	2012	8,914.42	Materials & Supplies
892	2013	113.63	Materials & Supplies
892	2015	7,670.53	Materials & Supplies
892	2017	106,232.18	Materials & Supplies
892	2018	450.54	Materials & Supplies
892	2503	34.78	Materials & Supplies
892	3000	-	Outside Services
892	3004	2,580.26	Outside Services
892	3006	171.59	Outside Services
892	3009	1,189.20	Outside Services
892	3015	(958,680.22)	Outside Services
892	3016	-	Outside Services
892	3018	53.43	Outside Services
892	3021	188.04	Outside Services
892	3026	183.00	Outside Services
892	3080	287.50	Outside Services
892	3087	1,623.04	Outside Services
892	3088	220.00	Outside Services
892	3090	141,439.18	Outside Services
892	3091	126,137.76	Outside Services
892	3092	444,583.04	Outside Services
892	3098	2,270.55	Outside Services
892	3099	(7,557.33)	Outside Services
892	3100	1,062.64	Employee Expenses
892	3102	688.30	Employee Expenses
892	3105	68.44	Employee Expenses
892	3600	40,772.02	Other O&M
892	3601	15.86	Materials & Supplies
892	3621	(121,660.84)	Misc & Other Expenses
892	3637	1,024.29	Misc & Other Expenses
892	3638	131.89	Misc & Other Expenses
892	3924	1.10	Utilities and Fuel Used in Company Operations
892	4524	60.00	Misc & Other Expenses
892	5015	107.80	Outside Services
892	5020	32,283.46	Fleet & Other Clearing
892	5030	177,248.23	Fleet & Other Clearing
892	5040	133,148.53	Fleet & Other Clearing
892	7001	45,270.09	System Services
892	9001	104.37	Other Employee Benefits
892	9235	1,317.17	Rent and Leases
893	1000	-	Labor
893	1003	25,333.56	Labor
893	1006	1,240.21	Labor
893	1007	1,042.51	Labor
893	2004	8.35	Materials & Supplies
893	2015	95.19	Materials & Supplies

Columbia Gas of Pennsylvania
O&M Actuals
Twelve Months Ended Nov 30, 2014

Gen	CE	Sum Of Amount	Budget Description
893	2017	144,718.22	Materials & Supplies
893	3015	6,481.26	Outside Services
893	3080	539.00	Outside Services
893	3099	-	Outside Services
893	3601	-	Materials & Supplies
893	5015	1,650.00	Outside Services
893	5020	81.03	Fleet & Other Clearing
893	5030	5,694.11	Fleet & Other Clearing
893	5040	18.97	Fleet & Other Clearing
893	7001	36,917.44	System Services
894	1003	364,245.82	Labor
894	1006	14,282.49	Labor
894	1007	11,867.34	Labor
894	2001	7,607.60	Materials & Supplies
894	2004	2,336.71	Materials & Supplies
894	2009	86.25	Materials & Supplies
894	2010	11,602.10	Materials & Supplies
894	2017	101,618.13	Materials & Supplies
894	2019	172.30	Materials & Supplies
894	2020	10.60	Materials & Supplies
894	2503	263.39	Materials & Supplies
894	3004	2,850.40	Outside Services
894	3009	6,741.18	Outside Services
894	3012	-	Outside Services
894	3015	173.40	Outside Services
894	3016	4,091.24	Outside Services
894	3018	43.17	Outside Services
894	3019	96,539.19	Outside Services
894	3021	2,956.87	Outside Services
894	3022	733.00	Outside Services
894	3087	-	Outside Services
894	3600	360.00	Other O&M
894	3601	143.93	Materials & Supplies
894	3638	201.92	Misc & Other Expenses
894	5013	2,680.45	Outside Services
894	5020	2,305.44	Fleet & Other Clearing
894	5030	108,593.21	Fleet & Other Clearing
894	5040	19,098.37	Fleet & Other Clearing
894	7001	159,554.28	System Services
894	9235	4,458.79	Rent and Leases
894	9602	-	Outside Services
902	1003	299,041.94	Labor
902	1006	14,477.50	Labor
902	1007	12,236.70	Labor
902	2017	677.80	Materials & Supplies
902	2503	118.71	Materials & Supplies
902	3008	14.61	Outside Services
902	3009	12,800.00	Outside Services
902	3011	774.03	Outside Services
902	3016	34,091.18	Outside Services
902	3018	37.39	Outside Services
902	3021	12.11	Outside Services
902	3079	333,287.69	Outside Services
902	3099	(215.00)	Outside Services
902	3100	658.64	Employee Expenses
902	3102	94.06	Employee Expenses
902	3105	1,532.75	Employee Expenses
902	3601	36.19	Materials & Supplies
902	3921	(147.66)	Utilities and Fuel Used in Company Operations
902	5020	9,602.09	Fleet & Other Clearing
902	5030	47,069.68	Fleet & Other Clearing

Columbia Gas of Pennsylvania
O&M Actuals
Twelve Months Ended Nov 30, 2014

Gen	CE	Sum Of Amount	Budget Description
902	5040	1,673.76	Fleet & Other Clearing
903	1003	685,735.61	Labor
903	1006	47,144.24	Labor
903	1007	42,165.89	Labor
903	2017	4,535.11	Materials & Supplies
903	2503	52.55	Materials & Supplies
903	3008	3,013.45	Outside Services
903	3009	20,936.50	Outside Services
903	3011	64,788.81	Outside Services
903	3015	3,201.57	Outside Services
903	3018	6,283.69	Outside Services
903	3037	2,076.37	Outside Services
903	3078	-	Outside Services
903	3100	2.65	Employee Expenses
903	3102	0.97	Employee Expenses
903	3105	82.50	Employee Expenses
903	3601	1,935,196.96	Materials & Supplies
903	3621	(672.00)	Misc & Other Expenses
903	3638	584.94	Misc & Other Expenses
903	5020	1,855.23	Fleet & Other Clearing
903	5030	178,300.87	Fleet & Other Clearing
903	5040	848.99	Fleet & Other Clearing
903	7001	5,666,958.51	System Services
903	7033	(44,021.53)	System Services
904	3250	6,649,450.00	Uncollectible Accounts
904	3251	16,393,436.92	Uncollectible CAP-Rider USP
904	3252	116,579.55	Uncollectible Accounts
905	3016	-	Outside Services
905	3601	12,992.07	Materials & Supplies
905	3638	3,272.75	Misc & Other Expenses
905	9215	8,006.43	Rent and Leases
908	2017	378.49	Materials & Supplies
908	2503	1,100.19	Materials & Supplies
908	3000	32,068.67	Outside Services
908	3081	196,247.43	Outside Services
908	3084	4,569,850.44	Outside Services
908	3100	3,381.26	Employee Expenses
908	3101	356.62	Employee Expenses
908	3102	542.17	Employee Expenses
908	3105	601.90	Employee Expenses
908	3600	4,243.67	Other O&M
908	3638	18.50	Misc & Other Expenses
908	3654	(4,337,059.34)	Outside Services
908	6016	7,517,255.51	Rider USP - LIURP/Energy Efficiency
908	7001	91,275.01	System Services
909	7001	64,826.07	System Services
910	7001	976,471.17	System Services
912	7001	599,921.32	System Services
913	7001	17,275.77	System Services
920	1003	2,064,967.97	Labor
920	1006	97,752.13	Labor
920	1007	82,398.88	Labor
920	2017	6,056.66	Materials & Supplies
920	2503	860.37	Materials & Supplies
920	3011	-	Outside Services
920	3015	242.58	Outside Services
920	3100	23,101.43	Employee Expenses
920	3102	30,674.87	Employee Expenses
920	3105	8,120.05	Employee Expenses
920	3502	310.00	Employee Expenses
920	3637	2,457.34	Misc & Other Expenses

Columbia Gas of Pennsylvania
O&M Actuals
Twelve Months Ended Nov 30, 2014

Gen	CE	Sum Of Amount	Budget Description
920	3638	311.25	Misc & Other Expenses
920	3654	(193,418.71)	Outside Services
920	3924	331.85	Utilities and Fuel Used in Company Operations
920	7001	-	System Services
920	9004	1,963,563.00	Incentive Compensation
920	9020	18,095.53	Labor
920	9109	215,899.86	Labor
920	9111	(5,081.99)	Labor
920	9185	29,324.74	Labor
921	2004	70.00	Materials & Supplies
921	2017	144,527.92	Materials & Supplies
921	2020	2,936.99	Materials & Supplies
921	2503	37,571.98	Materials & Supplies
921	3001	4,867.25	Advertising
921	3008	770.98	Outside Services
921	3009	2,423.29	Outside Services
921	3011	85.98	Outside Services
921	3012	591.02	Outside Services
921	3015	30,900.60	Outside Services
921	3016	14,079.39	Outside Services
921	3019	-	Outside Services
921	3021	50.56	Outside Services
921	3100	60,856.76	Employee Expenses
921	3101	31,033.64	Employee Expenses
921	3102	93,266.80	Employee Expenses
921	3103	3,550.00	Employee Expenses
921	3105	21,688.82	Employee Expenses
921	3300	90,313.08	Amortization
921	3500	-	Charitable Contributions
921	3501	125,809.66	Company Memberships
921	3502	7,622.03	Employee Expenses
921	3600	-	Other O&M
921	3601	4,916.27	Materials & Supplies
921	3637	10,507.87	Misc & Other Expenses
921	3638	5,512.29	Misc & Other Expenses
921	3654	(235,730.61)	Outside Services
921	3813	14,092.25	Utilities and Fuel Used in Company Operations
921	3920	864.74	Utilities and Fuel Used in Company Operations
921	3921	64,748.93	Utilities and Fuel Used in Company Operations
921	3922	838.68	Utilities and Fuel Used in Company Operations
921	3923	636,205.68	Utilities and Fuel Used in Company Operations
921	3924	5,879.05	Utilities and Fuel Used in Company Operations
921	3925	11,019.23	Utilities and Fuel Used in Company Operations
921	5001	8,176.98	Outside Services
921	5010	6,062.64	Outside Services
921	6015	218,000.00	Rider USP - LIURP/Energy Efficiency
921	9018	2,351.96	Other Employee Benefits
921	9020	9,674.02	Labor
921	9220	108,495.23	Rent and Leases
921	9231	325,079.69	Rent and Leases
921	9235	320.02	Rent and Leases
923	1003	29,126.49	Labor
923	1006	-	Labor
923	1007	(4,870.58)	Labor
923	2017	57,278.94	Materials & Supplies
923	3000	1,583,077.90	Outside Services
923	3001	7,303.22	Advertising
923	3002	120,837.95	Outside Services
923	3003	432,208.10	Outside Services
923	3007	35,631.53	Outside Services
923	3008	5,557.23	Outside Services

Columbia Gas of Pennsylvania
O&M Actuals
Twelve Months Ended Nov 30, 2014

Gen	CE	Sum Of Amount	Budget Description
923	3011	74,549.39	Outside Services
923	3012	757.75	Outside Services
923	3014	(226.69)	Outside Services
923	3015	968,549.89	Outside Services
923	3016	12,022.58	Outside Services
923	3018	1,402.91	Outside Services
923	3019	8,217.71	Outside Services
923	3021	90.00	Outside Services
923	3077	35.00	Outside Services
923	3081	381,213.00	Outside Services
923	3082	489,215.00	Outside Services
923	3083	22,010.00	Outside Services
923	3084	21,621.70	Outside Services
923	3099	-	Outside Services
923	3100	454.74	Employee Expenses
923	3102	-	Employee Expenses
923	3300	434,678.52	Amortization
923	3503	25,440.00	Outside Services
923	3600	80.00	Other O&M
923	3601	30,574.15	Materials & Supplies
923	3638	(50,557.72)	Misc & Other Expenses
923	3654	(604,121.70)	Outside Services
923	4522	(1,991.83)	Misc & Other Expenses
923	5001	(2,856.36)	Outside Services
923	5010	2,066.70	Outside Services
923	7001	40,174,192.40	System Services
923	7033	(2,614,681.23)	System Services
924	4000	131,525.00	Corporate Insurance
924	4018	46,745.00	Corporate Insurance
925	4000	1,464,439.52	Corporate Insurance
925	4015	318,491.66	Corporate Insurance
925	4017	(84,886.01)	Corporate Insurance
925	4018	1,025,793.00	Corporate Insurance
925	4524	1,459.98	Misc & Other Expenses
925	4531	324,404.83	Injuries and Damages
925	9066	(200,702.73)	Corporate Insurance
926	3024	372,201.04	Outside Services
926	3300	(303,696.48)	Amortization
926	9006	197,745.67	Other Employee Benefits
926	9007	1,318,157.46	Other Employee Benefits
926	9008	305,655.20	Other Employee Benefits
926	9009	105,873.01	Other Employee Benefits
926	9010	319,260.50	Other Employee Benefits
926	9011	(1,104,532.44)	OPEB
926	9012	14,811.74	Other Employee Benefits
926	9014	55,586.56	Other Employee Benefits
926	9015	95,749.50	Other Employee Benefits
926	9017	345,036.95	Other Employee Benefits
926	9022	1,841,261.07	Other Employee Benefits
926	9023	1,850,618.01	Other Employee Benefits
926	9025	(113,359.00)	Other Employee Benefits
926	9026	92,395.00	Other Employee Benefits
926	9032	531,781.62	Other Employee Benefits
926	9033	3,856,441.00	Other Employee Benefits
926	9035	654,551.39	Other Employee Benefits
926	9036	557.46	Other Employee Benefits
926	9039	2,327.08	Other Employee Benefits
926	9061	(2,085,323.53)	Other Employee Benefits
926	9062	351,367.37	OPEB
926	9063	36,875.89	OPEB
926	9064	(1,705,279.89)	Pension

Columbia Gas of Pennsylvania
O&M Actuals
Twelve Months Ended Nov 30, 2014

Gen	CE	Sum Of Amount	Budget Description
926	9065	(779,030.50)	Other Employee Benefits
928	3608	111,416.67	PUC, OCA, OSBA Fees
928	3609	16,024.09	PUC, OCA, OSBA Fees
928	9617	160,479.58	PUC, OCA, OSBA Fees
928	9635	1,435,964.56	PUC, OCA, OSBA Fees
928	9636	43,550.33	PUC, OCA, OSBA Fees
930	2004	83.53	Materials & Supplies
930	3001	274,219.06	Advertising
930	3004	207,674.00	Outside Services
930	3015	-	Outside Services
930	3100	3.05	Employee Expenses
930	3501	145,556.63	Company Memberships
930	3600	100.00	Other O&M
930	3925	163.20	Utilities and Fuel Used in Company Operations
931	2017	239.66	Materials & Supplies
931	3015	1,404.86	Outside Services
931	3018	1,503.56	Outside Services
931	3601	3,534.68	Materials & Supplies
931	9220	173,139.20	Rent and Leases
931	9256	354,501.24	Rent and Leases
931	9305	56,467.64	Rent and Leases
932	2016	1,859.95	Materials & Supplies
932	2017	108.01	Materials & Supplies
932	2020	1,337.08	Materials & Supplies
932	3009	7,689.90	Outside Services
932	3012	500.00	Outside Services
932	3015	19,385.82	Outside Services
932	3016	51,548.16	Outside Services
932	3021	283.75	Outside Services
932	3813	985.79	Utilities and Fuel Used in Company Operations
932	3921	2,565.59	Utilities and Fuel Used in Company Operations
932	3925	234.31	Utilities and Fuel Used in Company Operations
932	5010	92,532.26	Outside Services
932	5013	341.22	Outside Services
932	5014	1,058.00	Outside Services
990	1000	119.17	Labor
990	1003	11,348,472.55	Labor
990	1006	1,015,819.37	Labor
990	1007	(252,875.54)	Labor
990	7001	5,802,677.61	System Services
999	1000	(119.17)	Labor
999	1003	(11,348,472.55)	Labor
999	1006	(1,015,819.37)	Labor
999	1007	252,875.54	Labor
999	7033	(5,802,677.61)	System Services

Columbia Gas of Pennsylvania, Inc.
Summary Statement of Operations and Maintenance Expense at Present Rates
FTY = Future Test Year TME November 30, 2015, FFRY = Fully Forecasted Rate Year Period TME December 31, 2016

Line No.	Cost Element Description	Normalized HTY Twelve Months Ended November 30, 2014 (1) \$ Exh 4, Sch1, Pg 2 Column 6	Budget & Rate Making Adjustments (2) \$ Exh 104, Sch1, Pg 3 Columns 2 & 5	Normalized FTY Twelve Months Ended November 30, 2015 (3)=(1)+(2) \$ Exh 104, Sch1, Pg 3 Column 7	Budget & Rate Making Adjustments (4) \$ Exh 104, Sch1, Pg 4 Columns 2 & 5	Normalized FFRY Twelve Months Ended December 31, 2016 (5)=(3)+(4) \$ Exh 104, Sch1, Pg 4 Column 7	Other Adjustments (Line 31) O&M to Allocate
1	Labor	26,669,437	1,734,764	28,404,201	2,035,098	30,439,299	30,439,299
2	Incentive Compensation	1,708,891	(132,891)	1,576,000	159,000	1,735,000	1,735,000
3	Pension	2,151,161	(422,286)	1,728,875	(910,033)	818,842	818,842
4	OPEB	-	-	-	-	-	0
5	Other Employee Benefits	5,081,412	(370,412)	4,711,000	379,000	5,090,000	5,090,000
6	Outside Services	22,176,244	(309,244)	21,867,000	262,000	22,129,000	100000 22,229,000
7	Rent and Leases	1,845,329	1,085,504	2,930,833	1,698,562	4,629,395	4,629,395
8	Corporate Insurance	2,928,556	235,444	3,164,000	63,000	3,227,000	3,227,000
9	Injuries and Damages	413,698	7,606	421,304	7,846	429,150	429,150
10	Employee Expenses	1,226,899	152,101	1,379,000	(14,000)	1,365,000	1,365,000
11	Company Memberships	271,191	(3,191)	268,000	0	268,000	268,000
12	Utilities and Fuel Used in Company Operations	800,909	(10,670)	790,239	(4,022)	786,217	786,217
13	Advertising	49,501	910	50,411	939	51,350	51,350
14	Fleet & Other Clearing	5,751,000	63,000	5,814,000	281,000	6,095,000	6,095,000
15	Materials & Supplies	5,362,859	303,141	5,666,000	112,000	5,778,000	5,778,000
16	Other O&M	85,073	(57,073)	28,000	62,000	90,000	90,000
17	PUC, OCA, OSBA Fees	2,100,840	38,160	2,139,000	191,000	2,330,000	2,330,000
18	NCSC - Shared Services	30,149,560	367,158	30,516,719	1,129,571	31,646,290	31,646,290
19	NCSC - Shared NGD Operations	19,096,453	2,696,764	21,793,217	3,159,585	24,952,802	24,952,802
20	Deferred OPEB Refund Amortization	(303,697)	74,413	(229,284)	114,644	(114,640)	47648 (66,992)
21	NCSC OPEB Costs Amortization	90,313	(313)	90,000	0	90,000	90,000
22	NIFIT Expense	-	-	-	-	-	0
23	NIFIT Amortization	405,840	-	405,840	14,415	420,255	420,255
24	Lobbying	(143,950)	(2,646)	(146,596)	(2,730)	(149,326)	(149,326)
25	Operation and Maintenance Expense from Budget	127,917,518	5,450,241	133,367,758	8,738,875	142,106,634	142,254,282
							0
26	Rate Case Expense	1,030,000	-	1,030,000	-	1,030,000	1,030,000
27	Uncollectible Accounts	4,605,855	(84,444)	4,521,411	7,023	4,528,434	4,528,434
28	Uncollectible Accounts -Unbundled-gas	1,824,502	(66,354)	1,758,148	(5,454)	1,752,694	1,752,694
29	Uncollectible CAP-Rider USP	19,566,759	(805,961)	18,760,797	(152,495)	18,412,353	18,412,353
30	Rider USP - LIURP/Energy Efficiency	9,232,585	(253,035)	8,979,551	(72,989)	9,232,585	9,232,585
31	Interest on Customer Deposits	89,468	-	89,468	-	89,468	89,468
32	Other Adjustments	-	-	-	147,648	147,648	(147,648) 0
33	Total Operation and Maintenance Expense	163,922,435	4,591,739	168,514,173	7,837,029	177,299,816	0 177,299,816

Allocation Table for O&M -- Percentages Shown Below Are To Be Used to Allocate Amounts Budgeted, By Description, To FERC Accounts, Based On Historical Data

Sum of Sum Of Amount Row Labels	Column Labels 801	803	804	805	806	807	808	812	813	816	817	818	820
Advertising	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Fleet & Other Clearing	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0040%	0.0089%	0.2952%	0.0116%
Gas Cost	0.2547%	98.2698%	9.6381%	-0.5662%	-6.6900%	0.0021%	-0.9086%	0.0000%	0.0002%	0.0000%	0.0000%	0.0000%	0.0000%
Labor	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0011%	0.0088%	0.1076%	0.0246%
Materials & Supplies	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	3.4613%	0.0000%
OPEB	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Other Employee Benefits	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Pension	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
System Services	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	1.7418%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Uncollectible Accounts	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Utilities and Fuel Used in Company Operations	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.8172%	0.0000%
Outside Services	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0091%	0.0234%	0.7035%	0.0168%
Charitable Contributions	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Misc & Other Expenses	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Incentive Compensation	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Amortization	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Employee Expenses	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.3788%	0.0000%
Rent and Leases	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Company Memberships	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Other O&M	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Uncollectible CAP-Rider USP	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Rider USP - LIURP/Energy Efficiency	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Corporate Insurance	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Injuries and Damages	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
PUC, OCA, OSBA Fees	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Grand Total	0.2547%	98.2698%	9.6381%	-0.5662%	-6.6900%	1.7439%	-0.9086%	0.0000%	0.0002%	0.0142%	0.0411%	5.7635%	0.0530%

Allocation Table for O&M -- Percentages Sho

Sum of Sum Of Amount													
Row Labels	821	823	825	832	834	836	870	871	874	875	876	878	879
Advertising	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.1082%	0.0000%	0.0000%	0.0000%	0.0000%
Fleet & Other Clearing	0.0084%	0.0000%	0.0000%	0.0157%	0.0093%	0.0109%	4.7831%	1.0490%	24.9337%	1.1770%	0.6681%	5.6262%	11.9620%
Gas Cost	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Labor	0.0125%	0.0000%	0.0000%	0.0020%	0.0166%	0.0033%	10.4671%	0.7486%	20.0847%	0.9667%	0.5472%	5.7014%	12.1199%
Materials & Supplies	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	1.6552%	0.0366%	15.1879%	0.1928%	0.0280%	1.2171%	0.6245%
OPEB	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	-0.0002%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Other Employee Benefits	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0012%	0.0000%
Pension	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
System Services	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	5.1426%	0.0000%	0.8710%	0.1403%	0.1148%	0.5763%	0.5496%
Uncollectible Accounts	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Utilities and Fuel Used in Company Operations	0.0000%	0.4713%	0.0000%	0.0000%	0.0000%	0.0000%	0.2156%	0.0000%	0.0819%	5.6192%	0.0000%	0.0000%	0.0000%
Outside Services	0.0118%	0.0000%	0.0000%	0.0397%	0.0252%	0.0335%	12.5649%	0.0016%	21.6727%	0.4381%	0.0006%	0.0889%	3.5982%
Charitable Contributions	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Misc & Other Expenses	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	-6.1487%	0.0000%	-17.8018%	-0.0309%	0.0000%	12.8274%	7.9061%
Incentive Compensation	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Amortization	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Employee Expenses	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	14.6976%	0.0000%	40.6191%	1.0685%	0.0000%	3.2085%	0.4240%
Rent and Leases	0.0000%	0.0000%	0.3663%	0.0000%	0.0000%	0.0000%	0.3075%	0.0000%	2.5071%	0.0184%	0.0000%	0.0000%	0.0842%
Company Memberships	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.2519%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Other O&M	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	4.7467%	0.0000%	4.5592%	0.1266%	0.0000%	0.0000%	0.0336%
Uncollectible CAP-Rider USP	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Rider USP - LIURP/Energy Efficiency	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Corporate Insurance	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Injuries and Damages	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
PUC, OCA, OSBA Fees	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Grand Total	0.0326%	0.4713%	0.3663%	0.0574%	0.0511%	0.0477%	48.6833%	1.8358%	112.8236%	9.7166%	1.3587%	29.2470%	37.3021%

Allocation Table for O&M – Percentages Sho

Sum of Sum Of Amount Row Labels	880	881	885	886	887	889	890	892	893	894	902	903	904
Advertising	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Fleet & Other Clearing	14.9751%	0.0000%	0.0016%	0.0453%	20.4627%	1.2510%	0.2195%	5.9586%	0.1008%	2.2604%	1.0145%	3.1474%	0.0000%
Gas Cost	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Labor	12.6680%	0.0000%	0.1270%	0.0376%	14.9205%	1.0599%	0.2144%	4.3024%	0.1080%	1.5263%	1.2736%	3.0302%	0.0000%
Materials & Supplies	8.2490%	0.0323%	0.0255%	0.0667%	19.0423%	0.6636%	0.3729%	2.3182%	2.6923%	2.3022%	0.0155%	36.1197%	0.0000%
OPEB	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Other Employee Benefits	2.0889%	0.0000%	0.0000%	0.0000%	0.0098%	0.0000%	0.0000%	0.0012%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Pension	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
System Services	0.1089%	0.0000%	0.0789%	0.0000%	0.2889%	0.1403%	0.1442%	0.0903%	0.0736%	0.3182%	0.0000%	11.2153%	0.0000%
Uncollectible Accounts	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	100.0000%
Utilities and Fuel Used in Company Operations	-2.7976%	0.0000%	0.0002%	0.1842%	3.3386%	-0.0487%	0.0000%	0.0001%	0.0000%	0.0000%	-0.0184%	0.0000%	0.0000%
Outside Services	2.2888%	0.0080%	0.0002%	0.0687%	36.6411%	0.0222%	0.0144%	-1.1123%	0.0393%	0.5299%	1.7274%	0.4550%	0.0000%
Charitable Contributions	100.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Misc & Other Expenses	-9.5741%	0.0000%	-0.0310%	-0.0024%	62.1212%	0.0000%	0.0000%	40.9180%	0.0000%	-0.0686%	0.0000%	0.0296%	0.0000%
Incentive Compensation	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Amortization	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Employee Expenses	14.8629%	0.0000%	0.2396%	0.0000%	0.8908%	0.0036%	0.0000%	0.1482%	0.0000%	0.0000%	0.1862%	0.0070%	0.0000%
Rent and Leases	14.5888%	13.0913%	0.0000%	0.0000%	5.7835%	0.0000%	0.0000%	0.0808%	0.0000%	0.2733%	0.0000%	0.0000%	0.0000%
Company Memberships	0.0000%	0.0000%	0.0007%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Other O&M	0.9626%	15.4072%	0.0106%	0.0091%	62.0050%	0.0000%	0.0000%	10.8647%	0.0000%	0.0959%	0.0000%	0.0000%	0.0000%
Uncollectible CAP-Rider USP	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	100.0000%
Rider USP - LIURP/Energy Efficiency	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Corporate Insurance	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Injuries and Damages	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
PUC, OCA, OSBA Fees	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Grand Total	158.4212%	28.5387%	0.4533%	0.4093%	225.5042%	3.0918%	0.9653%	63.5703%	3.0139%	7.2378%	4.1988%	54.0042%	200.0000%

Allocation Table for O&M – Percentages Sho

Sum of Sum Of Amount	905	908	909	910	912	913	920	921	923	924	925	926	928
Row Labels													
Advertising	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	1.6977%	2.5473%	0.0000%	0.0000%	0.0000%	0.0000%
Fleet & Other Clearing	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Gas Cost	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Labor	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	9.7874%	0.0378%	0.0948%	0.0000%	0.0000%	0.0000%	0.0000%
Materials & Supplies	0.2415%	0.0275%	0.0000%	0.0000%	0.0000%	0.0000%	0.1286%	3.5326%	1.6332%	0.0000%	0.0000%	0.0000%	0.0000%
OPEB	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	100.0002%	0.0000%
Other Employee Benefits	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0267%	0.0000%	0.0000%	0.0000%	97.8722%	0.0000%
Pension	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	100.0000%	0.0000%
System Services	0.0000%	0.1821%	0.1293%	1.9476%	1.1966%	0.0345%	0.0000%	0.0000%	74.9150%	0.0000%	0.0000%	0.0000%	0.0000%
Uncollectible Accounts	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Utilities and Fuel Used in Company Operations	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0414%	91.6019%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Outside Services	0.0000%	2.0917%	0.0000%	0.0000%	0.0000%	0.0000%	-0.8763%	-0.7829%	16.2272%	0.0000%	0.0000%	1.6884%	0.0000%
Charitable Contributions	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Misc & Other Expenses	-1.1118%	-0.0063%	0.0000%	0.0000%	0.0000%	0.0000%	-0.9406%	-5.4424%	17.8524%	0.0000%	-0.4960%	0.0000%	0.0000%
Incentive Compensation	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	100.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Amortization	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	40.8112%	196.4248%	0.0000%	0.0000%	-137.2360%	0.0000%
Employee Expenses	0.0000%	0.3977%	0.0000%	0.0000%	0.0000%	0.0000%	5.0680%	17.7623%	0.0371%	0.0000%	0.0000%	0.0000%	0.0000%
Rent and Leases	0.4908%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	26.5997%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Company Memberships	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	46.2444%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Other O&M	0.0000%	1.1308%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0213%	0.0000%	0.0000%	0.0000%	0.0000%
Uncollectible CAP-Rider USP	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Rider USP - LIURP/Energy Efficiency	0.0000%	97.1817%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	2.8183%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Corporate Insurance	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	6.5992%	93.4008%	0.0000%	0.0000%
Injuries and Damages	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	100.0000%	0.0000%	0.0000%
PUC, OCA, OSBA Fees	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	100.0000%
Grand Total	-0.3795%	101.0052%	0.1293%	1.9476%	1.1966%	0.0345%	113.2087%	224.9072%	309.7531%	6.5992%	192.9049%	162.3248%	100.0000%

Allocation Table for O&M – Percentages Sho

Sum of Sum Of Amount						
Row Labels	930	931	932	990	999	Grand Total
Advertising	95.6468%	0.0000%	0.0000%	0.0000%	0.0000%	100.0000%
Fleet & Other Clearing	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	100.0000%
Gas Cost	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	100.0000%
Labor	0.0000%	0.0000%	0.0000%	47.3528%	-47.3528%	100.0000%
Materials & Supplies	0.0016%	0.0702%	0.0614%	0.0000%	0.0000%	100.0000%
OPEB	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	100.0000%
Other Employee Benefits	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	100.0000%
Pension	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	100.0000%
System Services	0.0000%	0.0000%	0.0000%	11.5738%	-11.5738%	100.0000%
Uncollectible Accounts	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	100.0000%
Utilities and Fuel Used in Company Operations	0.0204%	0.0000%	0.4727%	0.0000%	0.0000%	100.0000%
Outside Services	0.9420%	0.0132%	0.7863%	0.0000%	0.0000%	100.0000%
Charitable Contributions	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	100.0000%
Misc & Other Expenses	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	100.0000%
Incentive Compensation	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	100.0000%
Amortization	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	100.0000%
Employee Expenses	0.0003%	0.0000%	0.0000%	0.0000%	0.0000%	100.0000%
Rent and Leases	0.0000%	35.8084%	0.0000%	0.0000%	0.0000%	100.0000%
Company Memberships	53.5029%	0.0000%	0.0000%	0.0000%	0.0000%	100.0000%
Other O&M	0.0267%	0.0000%	0.0000%	0.0000%	0.0000%	100.0000%
Uncollectible CAP-Rider USP	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	100.0000%
Rider USP - LIURP/Energy Efficiency	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	100.0000%
Corporate Insurance	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	100.0000%
Injuries and Damages	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	100.0000%
PUC, OCA, OSBA Fees	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	100.0000%
Grand Total	150.1405%	35.8918%	1.3204%	58.9266%	-58.9266%	2500.0001%

Allocated O&M - Amounts Shown Below Are The Budgeted O&M Totals, Split To The Various FERC Accounts, Based On The Allocation Table Above

Row Labels	801	803	804	805	806	807	808	812	813	816	817	818	820
Labor	0	0	0	0	0	0	0	0	0	335	2,685	32,744	7,497
Incentive Compensation	0	0	0	0	0	0	0	0	0	0	0	0	0
Pension	0	0	0	0	0	0	0	0	0	0	0	0	0
OPEB	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Employee Benefits	0	0	0	0	0	0	0	0	0	0	0	0	0
Outside Services	0	0	0	0	0	0	0	0	0	2,018	5,202	156,381	3,739
Rent and Leases	0	0	0	0	0	0	0	0	0	0	0	0	0
Corporate Insurance	0	0	0	0	0	0	0	0	0	0	0	0	0
Injuries and Damages	0	0	0	0	0	0	0	0	0	0	0	0	0
Employee Expenses	0	0	0	0	0	0	0	0	0	0	0	5,170	0
Company Memberships	0	0	0	0	0	0	0	0	0	0	0	0	0
Utilities and Fuel Used in Company Operation:	0	0	0	0	0	0	0	0	0	0	0	6,425	0
Advertising	0	0	0	0	0	0	0	0	0	0	0	0	0
Fleet & Other Clearing	0	0	0	0	0	0	0	0	0	246	543	17,991	706
Materials & Supplies	0	0	0	0	0	0	0	0	0	0	0	199,993	0
Other O&M	0	0	0	0	0	0	0	0	0	0	0	0	0
PUC, OCA, OSBA Fees	0	0	0	0	0	0	0	0	0	0	0	0	0
NCSC - Shared Services	0	0	0	0	0	551,218	0	0	0	0	0	0	0
NCSC - Shared NGD Operations	0	0	0	0	0	434,630	0	0	0	0	0	0	0
Deferred OPEB Refund Amortization	0	0	0	0	0	0	0	0	0	0	0	0	0
NCSC OPEB Costs Amortization	0	0	0	0	0	0	0	0	0	0	0	0	0
NIFIT Expense	0	0	0	0	0	0	0	0	0	0	0	0	0
NIFIT Amortization	0	0	0	0	0	0	0	0	0	0	0	0	0
Uncollectible Accounts	0	0	0	0	0	0	0	0	0	0	0	0	0
Uncollectible Accounts -Unbundled-gas	0	0	0	0	0	0	0	0	0	0	0	0	0
Uncollectible CAP-Rider USP	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	985,848	0	0	0	2,599	8,430	418,704	11,942

Allocated O&M - Amounts Shown Below A

Row Labels	821	823	825	832	834	836	870	871	874	875	876	878	879
Labor	3,799	0	0	597	5,038	989	3,186,112	227,853	6,113,645	294,257	166,573	1,735,469	3,689,219
Incentive Compensation	0	0	0	0	0	0	0	0	0	0	0	0	0
Pension	0	0	0	0	0	0	0	0	0	0	0	0	0
OPEB	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Employee Benefits	0	0	0	0	0	0	0	0	0	0	0	61	0
Outside Services	2,612	0	0	8,825	5,597	7,451	2,793,049	362	4,817,616	97,385	138	19,762	799,839
Rent and Leases	0	0	16,959	0	0	0	14,236	0	116,061	851	0	0	3,899
Corporate Insurance	0	0	0	0	0	0	0	0	0	0	0	0	0
Injuries and Damages	0	0	0	0	0	0	0	0	0	0	0	0	0
Employee Expenses	0	0	0	0	0	0	200,622	0	554,450	14,586	0	43,796	5,787
Company Memberships	0	0	0	0	0	0	675	0	0	0	0	0	0
Utilities and Fuel Used in Company Operation:	0	3,705	0	0	0	0	1,695	0	644	44,179	0	0	0
Advertising	0	0	0	0	0	0	0	0	56	0	0	0	0
Fleet & Other Clearing	511	0	0	958	569	667	291,529	63,938	1,519,709	71,738	40,718	342,916	729,086
Materials & Supplies	0	0	0	0	0	0	95,638	2,115	877,556	11,141	1,617	70,325	36,082
Other O&M	0	0	0	0	0	0	4,272	0	4,103	114	0	0	30
PUC, OCA, OSBA Fees	0	0	0	0	0	0	0	0	0	0	0	0	0
NCSC - Shared Services	0	0	0	0	0	0	1,627,433	0	275,639	44,390	36,320	182,365	173,934
NCSC - Shared NGD Operations	0	0	0	0	0	0	1,283,215	0	217,339	35,001	28,638	143,793	137,146
Deferred OPEB Refund Amortization	0	0	0	0	0	0	0	0	0	0	0	0	0
NCSC OPEB Costs Amortization	0	0	0	0	0	0	0	0	0	0	0	0	0
NIFIT Expense	0	0	0	0	0	0	0	0	0	0	0	0	0
NIFIT Amortization	0	0	0	0	0	0	0	0	0	0	0	0	0
Uncollectible Accounts	0	0	0	0	0	0	0	0	0	0	0	0	0
Uncollectible Accounts -Unbundled-gas	0	0	0	0	0	0	0	0	0	0	0	0	0
Uncollectible CAP-Rider USP	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	6,922	3,705	16,959	10,380	11,204	9,107	9,498,476	294,268	14,496,818	613,642	274,004	2,538,487	5,575,022

Allocated O&M - Amounts Shown Below A

Row Labels	880	881	885	886	887	889	890	892	893	894	902	903	904
Labor	3,856,038	0	38,658	11,448	4,541,696	322,620	65,256	1,309,633	32,865	464,607	387,681	922,378	0
Incentive Compensation	0	0	0	0	0	0	0	0	0	0	0	0	0
Pension	0	0	0	0	0	0	0	0	0	0	0	0	0
OPEB	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Employee Benefits	106,325	0	0	0	499	0	0	61	0	0	0	0	0
Outside Services	508,766	1,772	38	15,276	8,144,946	4,924	3,192	(247,249)	8,743	117,783	383,979	101,138	0
Rent and Leases	675,371	606,046	0	0	267,739	0	0	3,738	0	12,654	0	0	0
Corporate Insurance	0	0	0	0	0	0	0	0	0	0	0	0	0
Injuries and Damages	0	0	0	0	0	0	0	0	0	0	0	0	0
Employee Expenses	202,878	0	3,270	0	12,159	50	0	2,023	0	0	2,542	96	0
Company Memberships	0	0	2	0	0	0	0	0	0	0	0	0	0
Utilities and Fuel Used in Company Operation:	(21,995)	0	1	1,448	26,249	(382)	0	1	0	0	(145)	0	0
Advertising	0	0	0	0	0	0	0	0	0	0	0	0	0
Fleet & Other Clearing	912,732	0	94	2,763	1,247,200	76,248	13,379	363,178	6,141	137,773	61,836	191,832	0
Materials & Supplies	476,626	1,867	1,476	3,856	1,100,262	38,340	21,544	133,948	155,559	133,022	894	2,086,995	0
Other O&M	866	13,866	10	8	55,805	0	0	9,778	0	86	0	0	0
PUC, OCA, OSBA Fees	0	0	0	0	0	0	0	0	0	0	0	0	0
NCSC - Shared Services	34,475	0	24,972	0	91,410	44,390	45,643	28,573	23,301	100,711	0	3,549,236	0
NCSC - Shared NGD Operations	27,184	0	19,690	0	72,076	35,001	35,989	22,530	18,373	79,410	0	2,798,539	0
Deferred OPEB Refund Amortization	0	0	0	0	0	0	0	0	0	0	0	0	0
NCSC OPEB Costs Amortization	0	0	0	0	0	0	0	0	0	0	0	0	0
NIFIT Expense	0	0	0	0	0	0	0	0	0	0	0	0	0
NIFIT Amortization	0	0	0	0	0	0	0	0	0	0	0	0	0
Uncollectible Accounts	0	0	0	0	0	0	0	0	0	0	0	0	4,528,434
Uncollectible Accounts -Unbundled-gas	0	0	0	0	0	0	0	0	0	0	0	0	1,752,694
Uncollectible CAP-Rider USP	0	0	0	0	0	0	0	0	0	0	0	0	18,412,353
Total	6,779,266	623,551	88,211	34,799	15,560,041	521,191	185,003	1,626,214	244,982	1,046,046	836,787	9,650,214	24,693,481

Allocated O&M - Amounts Shown Below A

Row Labels	905	908	909	910	912	913	920	921	923	924	925	926	928
Labor	0	0	0	0	0	0	2,979,228	11,512	28,866	0	0	0	0
Incentive Compensation	0	0	0	0	0	0	1,735,000	0	0	0	0	0	0
Pension	0	0	0	0	0	0	0	0	0	0	0	818,842	0
OPEB	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Employee Benefits	0	0	0	0	0	0	0	1,361	0	0	0	4,981,695	0
Outside Services	0	464,955	0	0	0	0	(194,788)	(174,029)	3,607,151	0	0	375,308	0
Rent and Leases	22,722	0	0	0	0	0	0	1,231,405	0	0	0	0	0
Corporate Insurance	0	0	0	0	0	0	0	0	0	212,955	3,014,045	0	0
Injuries and Damages	0	0	0	0	0	0	0	0	0	0	429,150	0	0
Employee Expenses	0	5,429	0	0	0	0	69,179	242,455	506	0	0	0	0
Company Memberships	0	0	0	0	0	0	0	123,935	0	0	0	0	0
Utilities and Fuel Used in Company Operation:	0	0	0	0	0	0	326	720,190	0	0	0	0	0
Advertising	0	0	0	0	0	0	0	872	1,308	0	0	0	0
Fleet & Other Clearing	0	0	0	0	0	0	0	0	0	0	0	0	0
Materials & Supplies	13,955	1,588	0	0	0	0	7,430	204,111	94,366	0	0	0	0
Other O&M	0	1,018	0	0	0	0	0	0	19	0	0	0	0
PUC, OCA, OSBA Fees	0	0	0	0	0	0	0	0	0	0	0	2,330,000	0
NCSC - Shared Services	0	57,612	40,919	616,356	378,673	10,905	0	0	23,707,809	0	0	0	0
NCSC - Shared NGD Operations	0	45,427	32,264	485,991	298,580	8,599	0	0	18,693,384	0	0	0	0
Deferred OPEB Refund Amortization	0	0	0	0	0	0	0	(27,340)	(131,589)	0	0	91,937	0
NCSC OPEB Costs Amortization	0	0	0	0	0	0	0	36,730	176,782	0	0	(123,512)	0
NIFIT Expense	0	0	0	0	0	0	0	0	0	0	0	0	0
NIFIT Amortization	0	0	0	0	0	0	0	171,511	825,485	0	0	(576,741)	0
Uncollectible Accounts	0	0	0	0	0	0	0	0	0	0	0	0	0
Uncollectible Accounts -Unbundled-gas	0	0	0	0	0	0	0	0	0	0	0	0	0
Uncollectible CAP-Rider USP	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	36,677	576,029	73,183	1,102,347	677,253	19,504	4,596,375	2,542,713	47,004,087	212,955	3,443,195	5,567,529	2,330,000

Allocated O&M - Amounts Shown Below Are The Budgeted O&M Totals:Allocated O&M - Amounts Shown Below Are The Budgeted O&M Totals, Split To The Various FERC Accounts, Based On The Allocation Table Above

Row Labels	930	931	932	990	999	Grand Total
Labor	0	0	0	14,413,860	(14,413,860)	30,439,298
Incentive Compensation	0	0	0	0	0	1,735,000
Pension	0	0	0	0	0	818,842
OPEB	0	0	0	0	0	0
Other Employee Benefits	0	0	0	0	0	5,090,002
Outside Services	209,406	2,932	174,787	0	0	22,229,006
Rent and Leases	0	1,657,713	0	0	0	4,629,394
Corporate Insurance	0	0	0	0	0	3,227,000
Injuries and Damages	0	0	0	0	0	429,150
Employee Expenses	3	0	0	0	0	1,365,001
Company Memberships	143,388	0	0	0	0	268,000
Utilities and Fuel Used in Company Operations	160	0	3,716	0	0	786,217
Advertising	49,115	0	0	0	0	51,351
Fleet & Other Clearing	0	0	0	0	0	6,095,001
Materials & Supplies	90	4,054	3,550	0	0	5,778,000
Other O&M	24	0	0	0	0	89,999
PUC, OCA, OSBA Fees	0	0	0	0	0	2,330,000
NCSC - Shared Services	0	0	0	3,662,688	(3,662,688)	31,646,284
NCSC - Shared NGD Operations	0	0	0	2,887,995	(2,887,995)	24,952,799
Deferred OPEB Refund Amortization	0	0	0	0	0	(66,992)
NCSC OPEB Costs Amortization	0	0	0	0	0	90,000
NIFIT Expense	0	0	0	0	0	0
NIFIT Amortization	0	0	0	0	0	420,255
Uncollectible Accounts	0	0	0	0	0	4,528,434
Uncollectible Accounts -Unbundled-gas	0	0	0	0	0	1,752,694
Uncollectible CAP-Rider USP	0	0	0	0	0	18,412,353
Total	402,186	1,664,699	182,053	20,964,543	(20,964,543)	167,097,088

(9,965,612) Difference
1,030,000 Rate Case Exp (Alt Allocation)
(149,325) Lobbying Exp (Alt Allocation)
9,232,585 Rider USP - LIURP/Energy Efficiency (Alt Allocation)

147,648 Unaccounted For
89,468 Interest
177,299,816 Total O&M Per Exh 104
0 Unexplained Difference

Allocation Table for 903, 904, and 908

Sum of Amount	Column Labels			
Row Labels	903	904	908	Grand Total
Billing and Accounting	66.61%	0.00%	0.00%	7.96%
Collecting - Current Accounts	0.17%	0.00%	0.00%	0.02%
Collecting - Delinquent Accounts	11.47%	0.00%	0.00%	1.37%
Customer Assistance	0.00%	0.00%	100.00%	7.67%
Rendering Bills	21.75%	0.00%	0.00%	2.60%
Uncollectible Accounts - DIS	0.00%	25.18%	0.00%	20.24%
Uncollectible Accounts - GMB	0.00%	0.63%	0.00%	0.50%
Uncollectible CAP-Rider USP	0.00%	74.19%	0.00%	59.64%
Grand Total	100.00%	100.00%	100.00%	100.00%

Row Labels	904	908
Billing and Accounting	0	0
Collecting - Current Accounts	0	0
Collecting - Delinquent Accounts	0	0
Customer Assistance	0	73,183
Rendering Bills	0	0
Uncollectible Accounts - DIS	9,235	0
Uncollectible Accounts - GMB	230	0
Uncollectible CAP-Rider USP	27,212	0
Total	36,677	73,183

This allocator is for the allocation of Uncollectibles (904) as shown on Exh 104

Uncollectibles - Allocation Factor Based on Historical Actuals

GEN	904
-----	-----

Row Labels	Sum of Amount
Uncollectible Accounts - DIS	98.28%
Uncollectible Accounts - GMB	1.72%
Grand Total	100.00%

Allocation of Budgeted Costs

Row Labels	Sum of Amount
Uncollectible Accounts - DIS	4,450,409
Uncollectible Accounts - GMB	78,025
Uncollectible Accounts - Unbund.- Gas DIS	1,722,495
Uncollectible Accounts - Unbund.- Gas GMB	30,199
Uncollectible CAP-Rider USP	18,412,353
Grand Total	24,693,481

Allocation Table for Lobbying Expenses
Table Below Provided by Cost of Service Witness

Columbia Gas of Pennsylvania, Inc.
Lobbying Expenses Adjustment
Twelve Months Ended November 30, 2014

Line No.	Description	Amount \$
1	Internal Labor	(16,480)
2	Overheads	(5,452)
3	Memberships	(20,258) 1_
4	Consultants	(101,760)
5	Total Lobbying Expense to be Removed	<u>(143,950)</u>

1_ Includes AGA lobbying expense, Exhibit No. 4, Schedule No. 2, Page 11 (\$143,933 x 2.50% = \$3,598)

Description	FERC Account	Amount	%
Internal Labor	920	16,480	11.448%
Overheads	926	5,452	3.787%
Memberships	921	20,258	14.073%
Consultants	923	101,760	70.691%
Total		<u>143,950</u>	<u>99.999%</u>

Allocation of Lobby Expenses

FERC Account	Amount	%
920	(17,095)	11.448%
926	(5,655)	3.787%
921	(21,015)	14.073%
923	(105,560)	70.691%
	<u>(149,325)</u>	<u>99.999%</u>

Rate Case Expense Allocation
Historical Actuals TME 11/30/14

Allocation Table Based on HTY End 11/30/2014

FERC Account	Alloc %
921.00	0.2483%
923.00	99.7517%
	<u>100.0000%</u>

Allocation of Rate Case Expense

921.00	2,557	Linked directly to the O&M Expense tab; does not go through allocation main allocation table
923.00	<u>1,027,443</u>	Linked directly to the O&M Expense tab; does not go through allocation main allocation table
Total	<u>1,030,000</u>	

Source: Exhibit No. 104 Schedule No. 2 Page 24 of 25

Columbia Gas of Pennsylvania, Inc..

FTY = Future Test Year TME 11/30/15, FFRY = Fully Forecasted Rate Year Period Ended December 31, 2016

Summary of Other Adjustments to the FFRY

<u>Line No.</u>	<u>Adjustment</u>	<u>Reference</u>	<u>Amount (1) \$</u>
	<u>FFRY Adjustments</u>		
1	Rider Customer Choice (Rider CC) Adjustment	Witness Krajovic, Statement 6	47,648 Amortizations
2	Increase Emergency Repairs Program	Witness Krajovic, Statement 6	<u>100,000</u> Outside Services
6	Total Other Adjustments to the FFRY	Line 1 + Line 4	<u>147,648</u>

Columbia Gas of Pennsylvania, Inc.
R-2015-2468056
Master Code Summation Statistics
As of November, 2014

GAS-COS-019
Attachment B
Page 1 of 2

<u>COSS CLASS</u>	<u>Rate Schedule</u>	<u>Under 3" (1)</u>	<u>COSS CLASS</u>	<u>Rate Schedule</u>	<u>3" & Over (2)</u>
RS/RDS	RSS	2,831	RS/RDS	RSS	0
	RCC CAP	16,582		RCC CAP	10
	RGC RDGDS	6		RS RSS	60
	RGS RDGSS	23		RTC RDS	17
	RS RSS	232,000			
	RTC RDS	75,356			
RS/RDS		<u>326,798</u>	RS/RDS		<u>87</u>
SGS/SGDS	SCC SCD	5,854	SGS/SGDS	SGSS	2
	SGS SGSS	16,272		SCC SCD	33
	SGT2 SGDS	0		SC2 SCD	20
		SGSS		SGS SGSS	151
	SC2 SCD	512		SG2 SGSS	185
	SG2 SGSS	2,486		TAG1 SGDS	1
	TAG1 SGDS	56		TAG2 SGDS	37
	TAG2 SGDS	203		TAG5 SGDS	23
	TAG5 SGDS	442		TAG6 SGDS	130
	TAG6 SGDS	1,027		848 SGDS	1
	841 SGDS	1		852 SGDS	4
	852 SGDS	2		857 SGDS	1
	853 SGDS	2		SG3 SGSS	4
	854 SGDS	15		SG4 SGSS	11
	855 SGDS	1			
	860 SGDS	1			
	862 SGDS	1			
	863 SGDS	1			
	864 SGDS	1			
	865 SGDS	1			
	866 SGDS	1			
	877 SGDS	1			
	SG3 SGSS	17			
	SG4 SGSS	22			
SGS/SGDS		<u>27,059</u>	SGS/SGDS		<u>603</u>
LGS	LG1	0	LGS	LG1	0
	LG2	0		LG2	0
	LG3	0		LG3	0
	LG4	0			
LGS		<u>0</u>	LGS		<u>0</u>
SDS	TIB	117	SDS	TIB	93
	T14	111		T14	53
	806	1		806	2
	839	1		847	1
	861	1		856	1
	874	1		858	1
	876	1		LG1	8
	LG1	38		LG2	16
	LG2	51			
SDS		<u>322</u>	SDS		<u>175</u>

Columbia Gas of Pennsylvania, Inc.
R-2015-2468056
Master Code Summation Statistics
As of November, 2014

GAS-COS-019
Attachment B
Page 2 of 2

<u>COSS</u> <u>CLASS</u>	<u>Rate</u> <u>Schedule</u>	<u>Under 3"</u> <u>(1)</u>	<u>COSS</u> <u>CLASS</u>	<u>Rate</u> <u>Schedule</u>	<u>3" & Over</u> <u>(2)</u>
LDS	TIF	48	LDS	LIS	0
	TIG	2		TIF	24
				TI8-EFACT	1
	TI8	20		TIG	4
	830	1		TIG-EFACT	0
	LG3	2		TIH	1
	LG4	1		TI8	28
				838	1
				875	3
				808	1
				809	2
				810	1
				815	0
				819	1
				830	1
				840	1
				845	1
				859	1
				867	1
				873	1
				LG3	1
LDS		<u>74</u>	LDS		<u>74</u>
MDS	TM2	MLDS I	MDS	872	MLDS II FLEX
	TM1	MLDS I		802	MLDS II FLEX
		0		821	MLDS II FLEX
				850	MLDS II FLEX
				TM2	MLDS I
				NSI	MLDS II
				878	MLDS II FLEX
MDS		<u>1</u>	MDS		<u>8</u>
Under 3" Total		<u>354,254</u>	3" & Over Total		<u>947</u>
TOTAL		<u>355,201</u>			

COLUMBIA GAS OF PENNSYLVANIA, INC.
ACCOUNT 381 - JURISDICTIONAL
AS OF 11/2014

RATE CODE (1)	SIZE (CFH) (2)	----RESIDENTIAL----		----COMMERCIAL----		----INDUSTRIAL----		-----TOTAL-----	
		QTY (3)	AMOUNT(A) (4)	QTY (5)	AMOUNT(A) (6)	QTY (7)	AMOUNT(A) (8)	QTY (9)	AMOUNT (10)
R	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	1.	449.19	0.	0.00	0.	0.00	1.	449.19
		1.	\$ 449.19	0.	\$ 0.00	0.	\$ 0.00	1.	\$ 449.19
LG1	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	9.	4465.37	0.	0.00	9.	4465.37
	1001-1500	0.	0.00	4.	916.80	0.	0.00	4.	916.80
	OVER 1500	0.	0.00	37.	16620.02	13.	5839.47	50.	22459.49
		0.	\$ 0.00	50.	\$ 22002.19	13.	\$ 5839.47	63.	\$ 27841.66
LG2	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	34.	16869.20	0.	0.00	34.	16869.20
	1001-1500	0.	0.00	7.	1604.38	0.	0.00	7.	1604.38
	OVER 1500	0.	0.00	23.	10331.37	11.	4941.09	34.	15272.46
		0.	\$ 0.00	64.	\$ 28804.95	11.	\$ 4941.09	75.	\$ 33746.04
LG3	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	2.	898.38	1.	449.19	3.	1347.57
		0.	\$ 0.00	2.	\$ 898.38	1.	\$ 449.19	3.	\$ 1347.57
LG4	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	0.	0.00	3.	1347.57	3.	1347.57
		0.	\$ 0.00	0.	\$ 0.00	3.	\$ 1347.57	3.	\$ 1347.57
LG5	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	0.	0.00	1.	449.19	1.	449.19
		0.	\$ 0.00	0.	\$ 0.00	1.	\$ 449.19	1.	\$ 449.19
LOF	0-500	54.	\$ 2676.35	2.	\$ 99.12	0.	\$ 0.00	56.	\$ 2775.47
	501-1000	0.	0.00	1.	496.15	0.	0.00	1.	496.15
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	1.	449.19	0.	0.00	1.	449.19
		54.	\$ 2676.35	4.	\$ 1044.46	0.	\$ 0.00	58.	\$ 3720.81
NSI	0-500	0.	\$ 0.00	1.	\$ 49.56	0.	\$ 0.00	1.	\$ 49.56
	501-1000	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
		0.	\$ 0.00	1.	\$ 49.56	0.	\$ 0.00	1.	\$ 49.56

(A) AMOUNT = QUANTITY X UNIT PRICE(B)

(B) UNIT PRICE = TOTAL CPR DOLLARS / TOTAL DIS QUANTITIES

0- 500 \$ 21549836.38 / 434802. = 49.56241319 \$/METER
1001-1500 \$ 1066451.87 / 4653. = 229.19661939 \$/METER

501-1000 \$ 4725357.82 / 9524. = 496.15264805 \$/METER
OVER 1500 \$ 6368604.29 / 14178. = 449.18918677 \$/METER

COLUMBIA GAS OF PENNSYLVANIA, INC.
ACCOUNT 381 - JURISDICTIONAL
AS OF 11/2014

RATE CODE (1)	SIZE (CFH) (2)	----RESIDENTIAL----		----COMMERCIAL----		----INDUSTRIAL----		-----TOTAL-----	
		QTY (3)	AMOUNT(A) (4)	QTY (5)	AMOUNT(A) (6)	QTY (7)	AMOUNT(A) (8)	QTY (9)	AMOUNT (10)
RCC	0-500	20489.	\$ 1015484.26	0.	\$ 0.00	0.	\$ 0.00	20489.	\$ 1015484.26
	501-1000	7.	3473.07	0.	0.00	0.	0.00	7.	3473.07
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
		20496.	\$ 1018957.33	0.	\$ 0.00	0.	\$ 0.00	20496.	\$ 1018957.33
RGC	0-500	4.	\$ 198.25	0.	\$ 0.00	0.	\$ 0.00	4.	\$ 198.25
	501-1000	2.	992.31	0.	0.00	0.	0.00	2.	992.31
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
		6.	\$ 1190.56	0.	\$ 0.00	0.	\$ 0.00	6.	\$ 1190.56
RGS	0-500	10.	\$ 495.62	0.	\$ 0.00	0.	\$ 0.00	10.	\$ 495.62
	501-1000	10.	4961.52	0.	0.00	0.	0.00	10.	4961.52
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
		20.	\$ 5457.14	0.	\$ 0.00	0.	\$ 0.00	20.	\$ 5457.14
RS	0-500	274941.	\$ 13626739.39	1.	\$ 49.56	1.	\$ 49.56	274943.	\$ 13626838.51
	501-1000	694.	344329.94	0.	0.00	0.	0.00	694.	344329.94
	1001-1500	8.	1833.58	0.	0.00	0.	0.00	8.	1833.58
	OVER 1500	26.	11678.93	0.	0.00	0.	0.00	26.	11678.93
		275669.	\$ 13984581.84	1.	\$ 49.56	1.	\$ 49.56	275671.	\$ 13984680.96
RTC	0-500	83488.	\$ 4137866.73	0.	\$ 0.00	0.	\$ 0.00	83488.	\$ 4137866.73
	501-1000	210.	104192.05	0.	0.00	0.	0.00	210.	104192.05
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	7.	3144.33	0.	0.00	0.	0.00	7.	3144.33
		83705.	\$ 4245203.11	0.	\$ 0.00	0.	\$ 0.00	83705.	\$ 4245203.11
SCC	0-500	1.	\$ 49.56	6409.	\$ 317645.47	0.	\$ 0.00	6410.	\$ 317695.03
	501-1000	0.	0.00	991.	491687.27	0.	0.00	991.	491687.27
	1001-1500	0.	0.00	57.	13064.21	0.	0.00	57.	13064.21
	OVER 1500	0.	0.00	90.	40427.05	0.	0.00	90.	40427.05
		1.	\$ 49.56	7547.	\$ 862824.00	0.	\$ 0.00	7548.	\$ 862873.56
SC2	0-500	0.	\$ 0.00	84.	\$ 4163.22	0.	\$ 0.00	84.	\$ 4163.22
	501-1000	0.	0.00	289.	143388.10	0.	0.00	289.	143388.10
	1001-1500	0.	0.00	37.	8480.29	0.	0.00	37.	8480.29
	OVER 1500	0.	0.00	143.	64234.06	0.	0.00	143.	64234.06
		0.	\$ 0.00	553.	\$ 220265.67	0.	\$ 0.00	553.	\$ 220265.67
SGS	0-500	16.	\$ 792.98	19233.	\$ 953233.77	1.	\$ 49.56	19250.	\$ 954076.31
	501-1000	0.	0.00	3382.	1677988.28	1.	496.15	3383.	1678484.43
	1001-1500	0.	0.00	206.	47214.51	3.	687.59	209.	47902.10
	OVER 1500	0.	0.00	472.	212017.32	7.	3144.33	479.	215161.65
		16.	\$ 792.98	23293.	\$ 2890453.88	12.	\$ 4377.63	23321.	\$ 2895624.49

(A) AMOUNT = QUANTITY X UNIT PRICE(B)

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COLUMBIA GAS OF PENNSYLVANIA, INC.
ACCOUNT 381 - JURISDICTIONAL
AS OF 11/2014

RATE CODE (1)	SIZE (CFH) (2)	---RESIDENTIAL---		---COMMERCIAL---		---INDUSTRIAL---		-----TOTAL-----	
		QTY (3)	AMOUNT(A) (4)	QTY (5)	AMOUNT(A) (6)	QTY (7)	AMOUNT(A) (8)	QTY (9)	AMOUNT (10)
SG2	0-500	0.	\$ 0.00	348.	\$ 17247.68	5.	\$ 247.81	353.	\$ 17495.49
	501-1000	0.	0.00	1630.	808728.83	4.	1984.61	1634.	810713.44
	1001-1500	0.	0.00	247.	56611.59	12.	2750.37	259.	59361.96
	OVER 1500	0.	0.00	930.	417746.00	40.	17967.59	970.	435713.59
		0.	\$ 0.00	3155.	\$ 1300334.10	61.	\$ 22950.38	3216.	\$ 1323284.48
SG3	0-500	0.	\$ 0.00	0.	\$ 0.00	1.	\$ 49.56	1.	\$ 49.56
	501-1000	0.	0.00	0.	0.00	4.	1984.62	4.	1984.62
	1001-1500	0.	0.00	0.	0.00	2.	458.40	2.	458.40
	OVER 1500	0.	0.00	0.	0.00	16.	7187.04	16.	7187.04
		0.	\$ 0.00	0.	\$ 0.00	23.	\$ 9679.62	23.	\$ 9679.62
SG4	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	0.	0.00	10.	4961.52	10.	4961.52
	1001-1500	0.	0.00	0.	0.00	1.	229.20	1.	229.20
	OVER 1500	0.	0.00	0.	0.00	25.	11229.75	25.	11229.75
		0.	\$ 0.00	0.	\$ 0.00	36.	\$ 16420.47	36.	\$ 16420.47
TAG1	0-500	0.	\$ 0.00	39.	\$ 1932.90	0.	\$ 0.00	39.	\$ 1932.90
	501-1000	0.	0.00	38.	18853.78	0.	0.00	38.	18853.78
	1001-1500	0.	0.00	6.	1375.19	0.	0.00	6.	1375.19
	OVER 1500	0.	0.00	5.	2245.95	0.	0.00	5.	2245.95
		0.	\$ 0.00	88.	\$ 24407.82	0.	\$ 0.00	88.	\$ 24407.82
TAG2	0-500	0.	\$ 0.00	29.	\$ 1437.30	0.	\$ 0.00	29.	\$ 1437.30
	501-1000	0.	0.00	110.	54576.80	0.	0.00	110.	54576.80
	1001-1500	0.	0.00	28.	6417.51	0.	0.00	28.	6417.51
	OVER 1500	0.	0.00	154.	69175.18	0.	0.00	154.	69175.18
		0.	\$ 0.00	321.	\$ 131606.79	0.	\$ 0.00	321.	\$ 131606.79
TAG5	0-500	0.	\$ 0.00	331.	\$ 16405.15	1.	\$ 49.56	332.	\$ 16454.71
	501-1000	0.	0.00	226.	112130.50	3.	1488.45	229.	113618.95
	1001-1500	0.	0.00	27.	6188.32	1.	229.20	28.	6417.52
	OVER 1500	0.	0.00	70.	31443.28	8.	3593.52	78.	35036.80
		0.	\$ 0.00	654.	\$ 166167.25	13.	\$ 5360.73	667.	\$ 171527.98
TAG6	0-500	0.	\$ 0.00	43.	\$ 2131.17	0.	\$ 0.00	43.	\$ 2131.17
	501-1000	0.	0.00	369.	183080.34	4.	1984.61	373.	185064.95
	1001-1500	0.	0.00	85.	19481.72	3.	687.60	88.	20169.32
	OVER 1500	0.	0.00	714.	320721.13	21.	9432.99	735.	330154.12
		0.	\$ 0.00	1211.	\$ 525414.36	28.	\$ 12105.20	1239.	\$ 537519.56
T1B	0-500	0.	\$ 0.00	2.	\$ 99.12	5.	\$ 247.80	7.	\$ 346.92
	501-1000	0.	0.00	8.	3969.22	1.	496.15	9.	4465.37
	1001-1500	0.	0.00	2.	458.40	1.	229.20	3.	687.60
	OVER 1500	0.	0.00	152.	68276.80	86.	38630.34	238.	106907.14
		0.	\$ 0.00	164.	\$ 72803.54	93.	\$ 39603.49	257.	\$ 112407.03

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COLUMBIA GAS OF PENNSYLVANIA, INC.
ACCOUNT 381 - JURISDICTIONAL
AS OF 11/2014

RATE CODE (1)	SIZE (CFH) (2)	-----RESIDENTIAL-----		-----COMMERCIAL-----		-----INDUSTRIAL-----		-----TOTAL-----	
		QTY (3)	AMOUNT(A) (4)	QTY (5)	AMOUNT(A) (6)	QTY (7)	AMOUNT(A) (8)	QTY (9)	AMOUNT (10)
TIF	0-500	0.	\$ 0.00	14.	\$ 693.86	1.	\$ 49.56	15.	\$ 743.42
	501-1000	0.	0.00	7.	3473.06	0.	0.00	7.	3473.06
	1001-1500	0.	0.00	3.	687.59	0.	0.00	3.	687.59
	OVER 1500	0.	0.00	31.	13924.89	22.	9882.18	53.	23807.07
		0.	\$ 0.00	55.	\$ 18779.40	23.	\$ 9931.74	78.	\$ 28711.14
TIG	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	1001-1500	0.	0.00	0.	0.00	1.	229.20	1.	229.20
	OVER 1500	0.	0.00	0.	0.00	7.	3144.33	7.	3144.33
		0.	\$ 0.00	0.	\$ 0.00	8.	\$ 3373.53	8.	\$ 3373.53
T14	0-500	0.	\$ 0.00	1.	\$ 49.56	2.	\$ 99.12	3.	\$ 148.68
	501-1000	0.	0.00	0.	0.00	1.	496.15	1.	496.15
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	97.	43571.38	14.	6288.66	111.	49860.04
		0.	\$ 0.00	98.	\$ 43620.94	17.	\$ 6883.93	115.	\$ 50504.87
T18	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	1.	496.15	1.	496.15	2.	992.30
	1001-1500	0.	0.00	0.	0.00	1.	229.20	1.	229.20
	OVER 1500	0.	0.00	14.	6288.66	35.	15721.65	49.	22010.31
		0.	\$ 0.00	15.	\$ 6784.81	37.	\$ 16447.00	52.	\$ 23231.81
TMA	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	0.	0.00	1.	449.19	1.	449.19
		0.	\$ 0.00	0.	\$ 0.00	1.	\$ 449.19	1.	\$ 449.19
TM1	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	1001-1500	0.	0.00	0.	0.00	1.	229.20	1.	229.20
	OVER 1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
		0.	\$ 0.00	0.	\$ 0.00	1.	\$ 229.20	1.	\$ 229.20
TM2	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	1001-1500	0.	0.00	1.	229.20	0.	0.00	1.	229.20
	OVER 1500	0.	0.00	0.	0.00	1.	449.19	1.	449.19
		0.	\$ 0.00	1.	\$ 229.20	1.	\$ 449.19	2.	\$ 678.39
801	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	0.	0.00	1.	449.19	1.	449.19
		0.	\$ 0.00	0.	\$ 0.00	1.	\$ 449.19	1.	\$ 449.19

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COLUMBIA GAS OF PENNSYLVANIA, INC.
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RATE CODE (1)	SIZE (CFH) (2)	----RESIDENTIAL----		----COMMERCIAL----		----INDUSTRIAL----		-----TOTAL-----	
		QTY (3)	AMOUNT(A) (4)	QTY (5)	AMOUNT(A) (6)	QTY (7)	AMOUNT(A) (8)	QTY (9)	AMOUNT (10)
802	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	0.	0.00	2.	898.38	2.	898.38
		0.	\$ 0.00	0.	\$ 0.00	2.	\$ 898.38	2.	\$ 898.38
803	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	0.	0.00	1.	449.19	1.	449.19
		0.	\$ 0.00	0.	\$ 0.00	1.	\$ 449.19	1.	\$ 449.19
806	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	1.	496.15	0.	0.00	1.	496.15
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	2.	898.38	0.	0.00	2.	898.38
		0.	\$ 0.00	3.	\$ 1394.53	0.	\$ 0.00	3.	\$ 1394.53
808	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	0.	0.00	2.	898.38	2.	898.38
		0.	\$ 0.00	0.	\$ 0.00	2.	\$ 898.38	2.	\$ 898.38
809	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	0.	0.00	2.	898.38	2.	898.38
		0.	\$ 0.00	0.	\$ 0.00	2.	\$ 898.38	2.	\$ 898.38
810	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	0.	0.00	1.	449.19	1.	449.19
		0.	\$ 0.00	0.	\$ 0.00	1.	\$ 449.19	1.	\$ 449.19
816	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	0.	0.00	1.	449.19	1.	449.19
		0.	\$ 0.00	0.	\$ 0.00	1.	\$ 449.19	1.	\$ 449.19
819	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	0.	0.00	1.	449.19	1.	449.19
		0.	\$ 0.00	0.	\$ 0.00	1.	\$ 449.19	1.	\$ 449.19

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RATE CODE (1)	SIZE (CFH) (2)	-----RESIDENTIAL-----		-----COMMERCIAL-----		-----INDUSTRIAL-----		-----TOTAL-----	
		QTY (3)	AMOUNT(A) (4)	QTY (5)	AMOUNT(A) (6)	QTY (7)	AMOUNT(A) (8)	QTY (9)	AMOUNT (10)
820	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	0.	0.00	1.	449.19	1.	449.19
		0.	\$ 0.00	0.	\$ 0.00	1.	\$ 449.19	1.	\$ 449.19
821	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	0.	0.00	1.	449.19	1.	449.19
		0.	\$ 0.00	0.	\$ 0.00	1.	\$ 449.19	1.	\$ 449.19
830	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	0.	0.00	1.	496.15	1.	496.15
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	0.	0.00	1.	449.19	1.	449.19
		0.	\$ 0.00	0.	\$ 0.00	2.	\$ 945.34	2.	\$ 945.34
831	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	0.	0.00	1.	449.19	1.	449.19
		0.	\$ 0.00	0.	\$ 0.00	1.	\$ 449.19	1.	\$ 449.19
833	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	0.	0.00	1.	449.19	1.	449.19
		0.	\$ 0.00	0.	\$ 0.00	1.	\$ 449.19	1.	\$ 449.19
838	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	1.	449.19	0.	0.00	1.	449.19
		0.	\$ 0.00	1.	\$ 449.19	0.	\$ 0.00	1.	\$ 449.19
839	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	1.	449.19	0.	0.00	1.	449.19
		0.	\$ 0.00	1.	\$ 449.19	0.	\$ 0.00	1.	\$ 449.19
840	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	0.	0.00	2.	898.38	2.	898.38
		0.	\$ 0.00	0.	\$ 0.00	2.	\$ 898.38	2.	\$ 898.38

(A) AMOUNT = QUANTITY X UNIT PRICE(B)

(B) UNIT PRICE = TOTAL CPR DOLLARS / TOTAL DIS QUANTITIES

0- 500 \$ 21549836.38 / 434802. = 49.56241319 \$/METER
1001-1500 \$ 1066451.87 / 4653. = 229.19661939 \$/METER

501-1000 \$ 4725357.82 / 9524. = 496.15264805 \$/METER
OVER 1500 \$ 6368604.29 / 14178. = 449.18918677 \$/METER

COLUMBIA GAS OF PENNSYLVANIA, INC.
ACCOUNT 381 - JURISDICTIONAL
AS OF 11/2014

RATE CODE (1)	SIZE (CFH) (2)	----RESIDENTIAL----		----COMMERCIAL----		----INDUSTRIAL----		-----TOTAL-----	
		QTY (3)	AMOUNT(A) (4)	QTY (5)	AMOUNT(A) (6)	QTY (7)	AMOUNT(A) (8)	QTY (9)	AMOUNT (10)
841	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	1.	449.19	0.	0.00	1.	449.19
		0.	\$ 0.00	1.	\$ 449.19	0.	\$ 0.00	1.	\$ 449.19
845	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	0.	0.00	1.	449.19	1.	449.19
		0.	\$ 0.00	0.	\$ 0.00	1.	\$ 449.19	1.	\$ 449.19
846	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	0.	0.00	2.	898.38	2.	898.38
		0.	\$ 0.00	0.	\$ 0.00	2.	\$ 898.38	2.	\$ 898.38
847	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	1.	449.19	0.	0.00	1.	449.19
		0.	\$ 0.00	1.	\$ 449.19	0.	\$ 0.00	1.	\$ 449.19
848	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	1.	449.19	0.	0.00	1.	449.19
		0.	\$ 0.00	1.	\$ 449.19	0.	\$ 0.00	1.	\$ 449.19
850	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	0.	0.00	1.	449.19	1.	449.19
		0.	\$ 0.00	0.	\$ 0.00	1.	\$ 449.19	1.	\$ 449.19
852	0-500	0.	\$ 0.00	2.	\$ 99.12	0.	\$ 0.00	2.	\$ 99.12
	501-1000	0.	0.00	3.	1488.45	0.	0.00	3.	1488.45
	1001-1500	0.	0.00	1.	229.20	0.	0.00	1.	229.20
	OVER 1500	0.	0.00	16.	7187.04	0.	0.00	16.	7187.04
		0.	\$ 0.00	22.	\$ 9003.81	0.	\$ 0.00	22.	\$ 9003.81
853	0-500	0.	\$ 0.00	1.	\$ 49.56	0.	\$ 0.00	1.	\$ 49.56
	501-1000	0.	0.00	7.	3473.07	0.	0.00	7.	3473.07
	1001-1500	0.	0.00	5.	1145.98	0.	0.00	5.	1145.98
	OVER 1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
		0.	\$ 0.00	13.	\$ 4668.61	0.	\$ 0.00	13.	\$ 4668.61

(A) AMOUNT = QUANTITY X UNIT PRICE(B)

(B) UNIT PRICE = TOTAL CPR DOLLARS / TOTAL DIS QUANTITIES

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COLUMBIA GAS OF PENNSYLVANIA, INC.
ACCOUNT 381 - JURISDICTIONAL
AS OF 11/2014

RATE CODE (1)	SIZE (CFH) (2)	----RESIDENTIAL----		----COMMERCIAL----		----INDUSTRIAL----		-----TOTAL-----	
		QTY (3)	AMOUNT(A) (4)	QTY (5)	AMOUNT(A) (6)	QTY (7)	AMOUNT(A) (8)	QTY (9)	AMOUNT (10)
854	0-500	0.	\$ 0.00	1.	\$ 49.56	0.	\$ 0.00	1.	\$ 49.56
	501-1000	0.	0.00	2.	992.31	0.	0.00	2.	992.31
	1001-1500	0.	0.00	5.	1145.98	0.	0.00	5.	1145.98
	OVER 1500	0.	0.00	8.	3593.52	0.	0.00	8.	3593.52
		0.	\$ 0.00	16.	\$ 5781.37	0.	\$ 0.00	16.	\$ 5781.37
855	0-500	0.	\$ 0.00	6.	\$ 297.37	0.	\$ 0.00	6.	\$ 297.37
	501-1000	0.	0.00	2.	992.30	0.	0.00	2.	992.30
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	1.	449.19	0.	0.00	1.	449.19
		0.	\$ 0.00	9.	\$ 1738.86	0.	\$ 0.00	9.	\$ 1738.86
856	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	1.	449.19	0.	0.00	1.	449.19
		0.	\$ 0.00	1.	\$ 449.19	0.	\$ 0.00	1.	\$ 449.19
857	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	1.	449.19	0.	0.00	1.	449.19
		0.	\$ 0.00	1.	\$ 449.19	0.	\$ 0.00	1.	\$ 449.19
858	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	0.	0.00	1.	449.19	1.	449.19
		0.	\$ 0.00	0.	\$ 0.00	1.	\$ 449.19	1.	\$ 449.19
859	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	0.	0.00	1.	449.19	1.	449.19
		0.	\$ 0.00	0.	\$ 0.00	1.	\$ 449.19	1.	\$ 449.19
860	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	1.	449.19	0.	0.00	1.	449.19
		0.	\$ 0.00	1.	\$ 449.19	0.	\$ 0.00	1.	\$ 449.19
861	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	1.	449.19	0.	0.00	1.	449.19
		0.	\$ 0.00	1.	\$ 449.19	0.	\$ 0.00	1.	\$ 449.19

(A) AMOUNT = QUANTITY X UNIT PRICE(B)

(B) UNIT PRICE = TOTAL CPR DOLLARS / TOTAL DIS QUANTITIES

0- 500 \$ 21549836.38 / 434802. = 49.56241319 \$/METER
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COLUMBIA GAS OF PENNSYLVANIA, INC.
ACCOUNT 381 - JURISDICTIONAL
AS OF 11/2014

RATE CODE (1)	SIZE (CFH) (2)	---RESIDENTIAL---		---COMMERCIAL---		---INDUSTRIAL---		-----TOTAL-----	
		QTY (3)	AMOUNT(A) (4)	QTY (5)	AMOUNT(A) (6)	QTY (7)	AMOUNT(A) (8)	QTY (9)	AMOUNT (10)
862	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	1.	496.15	0.	0.00	1.	496.15
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
		0.	\$ 0.00	1.	\$ 496.15	0.	\$ 0.00	1.	\$ 496.15
863	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	1.	496.15	0.	0.00	1.	496.15
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
		0.	\$ 0.00	1.	\$ 496.15	0.	\$ 0.00	1.	\$ 496.15
864	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	1.	496.15	0.	0.00	1.	496.15
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
		0.	\$ 0.00	1.	\$ 496.15	0.	\$ 0.00	1.	\$ 496.15
865	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	1.	449.19	0.	0.00	1.	449.19
		0.	\$ 0.00	1.	\$ 449.19	0.	\$ 0.00	1.	\$ 449.19
866	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	1.	496.15	0.	0.00	1.	496.15
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
		0.	\$ 0.00	1.	\$ 496.15	0.	\$ 0.00	1.	\$ 496.15
867	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	0.	0.00	1.	449.19	1.	449.19
		0.	\$ 0.00	0.	\$ 0.00	1.	\$ 449.19	1.	\$ 449.19
868	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	0.	0.00	2.	898.38	2.	898.38
		0.	\$ 0.00	0.	\$ 0.00	2.	\$ 898.38	2.	\$ 898.38
872	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	0.	0.00	1.	449.19	1.	449.19
		0.	\$ 0.00	0.	\$ 0.00	1.	\$ 449.19	1.	\$ 449.19

(A) AMOUNT = QUANTITY X UNIT PRICE(B)

(B) UNIT PRICE = TOTAL CPR DOLLARS / TOTAL DIS QUANTITIES

0- 500 \$ 21549836.38 / 434802. = 49.56241319 \$/METER
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COLUMBIA GAS OF PENNSYLVANIA, INC.
ACCOUNT 381 - JURISDICTIONAL
AS OF 11/2014

RATE CODE (1)	SIZE (CFH) (2)	----RESIDENTIAL----		----COMMERCIAL----		----INDUSTRIAL----		-----TOTAL-----	
		QTY (3)	AMOUNT(A) (4)	QTY (5)	AMOUNT(A) (6)	QTY (7)	AMOUNT(A) (8)	QTY (9)	AMOUNT (10)
873	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	0.	0.00	1.	449.19	1.	449.19
		0.	\$ 0.00	0.	\$ 0.00	1.	\$ 449.19	1.	\$ 449.19
874	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	1.	449.19	0.	0.00	1.	449.19
		0.	\$ 0.00	1.	\$ 449.19	0.	\$ 0.00	1.	\$ 449.19
875	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	4.	1796.76	0.	0.00	4.	1796.76
		0.	\$ 0.00	4.	\$ 1796.76	0.	\$ 0.00	4.	\$ 1796.76
876	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	1.	449.19	0.	0.00	1.	449.19
		0.	\$ 0.00	1.	\$ 449.19	0.	\$ 0.00	1.	\$ 449.19
877	0-500	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00	0.	\$ 0.00
	501-1000	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	1001-1500	0.	0.00	0.	0.00	0.	0.00	0.	0.00
	OVER 1500	0.	0.00	1.	449.19	0.	0.00	1.	449.19
		0.	\$ 0.00	1.	\$ 449.19	0.	\$ 0.00	1.	\$ 449.19
TOTAL COMPANY		379968.	19259358.06	37361.	6348748.87	414.	174860.03	417743.	25782966.96

(A) AMOUNT = QUANTITY X UNIT PRICE(B)

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0- 500 \$ 21549836.38 / 434802. = 49.56241319 \$/METER
1001-1500 \$ 1066451.87 / 4653. = 229.19661939 \$/METER

501-1000 \$ 4725357.82 / 9524. = 496.15264805 \$/METER
OVER 1500 \$ 6368604.29 / 14178. = 449.18918677 \$/METER

Columbia Gas of Pennsylvania, Inc.
R-2015-2468056
Direct Assignment
As of November 30, 2014

CUSTOMER TOTALS

Line No.	Customer Number	<u>Depreciation</u>		
		<u>Book Cost</u>	<u>Reserve</u>	<u>Expense</u>
		\$	\$	\$
1	1	289,867.49	35,681.28	9,297.53
2	2	8,569.26	1,232.05	166.85
3	3	0.00	0.00	0.00
4	4	1,948.48	1,016.96	40.93
5	5	111,144.33	81,343.63	3,159.29
6	6	58,115.68	44,412.31	1,581.37
7	7	20,725.44	18,305.52	537.32
8	8	30,552.37	13,318.06	1,066.47
9	9	79,290.54	40,500.13	1,364.53
10	10	0.00	0.00	0.00
11	Totals	600,213.59	235,809.94	17,214.29

GENERAL ACCOUNTING TOTALS

	<u>General Account</u>	<u>Depreciation</u>		
		<u>Book Cost</u>	<u>Reserve</u>	<u>Expense</u>
		\$	\$	\$
12	374.40	2.56	1.26	0.04
13	374.50	1,195.25	706.61	15.90
14	375.40	27,226.73	1,222.15	414.84
15	376.00	47,434.48	19,707.13	858.59
16	376.30	147,819.12	119,814.58	3,555.89
17	378.20	1,178.47	719.98	26.99
18	380.00	37,630.04	23,464.52	970.86
19	385.00	299,289.36	69,254.32	10,475.15
20	387.45	38,292.08	919.39	896.03
21	387.46	145.50	0.00	0.00
22	Total	600,213.59	235,809.94	17,214.29

Columbia Gas of Pennsylvania, Inc.

Standard Data Request

Cost of Service

Question No. GAS-COS-20:

Please provide all workpapers, calculations and supporting documentation for the functionalization and classification performed for the Company's cost of service study.

Response:

Columbia Gas of Pennsylvania ("Company") follows the Federal Energy Regulatory Commission ("FERC") chart of accounts for accounting purposes. The FERC chart of accounts establishes specific functional accounts for natural gas companies, i.e., Other Gas Supply Expenses, Underground Storage Expense, Distribution Expense, Customer Accounts Expense, Customer Service & Information Expense, Sales Expense and Administrative and General Expenses. The Company's Cost of Service studies as provided in Exhibit No. 111 were prepared based on the Company's accounting records which functionalized and classified its costs consistent with the FERC chart of accounts. No specific work papers were prepared to functionalize and classify the Company's costs beyond the Company's accounting records.

Columbia Gas of Pennsylvania, Inc.

Standard Data Request

Cost of Service

Question No. GAS-COS-021:

If not provided elsewhere, please provide a detailed proof of revenues at both present and proposed rates.

Response:

Please see Exhibit No. 103, Pages 8 through 9.