

Columbia Gas of Pennsylvania, Inc.
2020 General Rate Case
Docket No. R-2020-3018835
Standard Filing Requirements
Exhibits 5-12
Volume 3 of 10

COLUMBIA GAS OF PENNSYLVANIA, INC.
STATEMENT OF ANNUAL DEPRECIATION EXPENSE AT PRESENT RATES
TWELVE MONTHS ENDED NOVEMBER 30, 2019

	\$
Annual Depreciation Accruals related to Gas Plant in Service at November 30, 2019	71,470,648
Plus: 5 Year Amortization of Negative Net Salvage at November 30, 2019	<u>4,658,835</u>
Total	<u><u>76,129,483</u></u>

COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 1. ESTIMATED SURVIVOR CURVES, ORIGINAL COST, BOOK RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AT NOVEMBER 30, 2019

Acct No.	DEPRECIABLE GROUP (1)	SURVIVOR CURVE (2)	ORIGINAL COST	BOOK	FUTURE	CALCULATED ANNUAL ACCRUAL		COMPOSITE
			AS OF NOVEMBER 30, 2019 (3)	RESERVE (4)	BOOK ACCRUAL (5)	AMOUNT (6)	RATE (7)=(6)/(3)	REMAINING LIFE (8)=(5)/(6)
DEPRECIABLE PLANT								
UNDERGROUND STORAGE PLANT								
350.2	RIGHTS OF WAY	SQUARE *	1,932.08	1,931	1	0	-	-
351	COMPRESSOR STATION STRUCTURES	65-R2.5 *	3,220,858.29	1,787,340	1,433,518	258,896	8.04	5.5
WELLS								
352	CONSTRUCTION	SQUARE *	738,941.36	738,926	15	3	-	5.0
352	EQUIPMENT	50-S2.5 *	168,031.87	168,032	0	0	-	-
	TOTAL ACCOUNT 352		906,973.23	906,958	15	3		
352.1	STORAGE LEASEHOLDS AND RIGHTS	SQUARE *	206,940.78	206,932	9	2	-	4.5
353	LINES	50-S1.5 *	389,345.13	388,711	634	123	0.03	5.2
354	COMPRESSOR STATION EQUIPMENT	55-R2.5 *	948,272.21	759,861	188,411	34,177	3.60	5.5
355	MEASURING AND REGULATING EQUIPMENT	37-R1.5 *	104,476.92	104,477	0	0	-	-
	TOTAL UNDERGROUND STORAGE PLANT		5,778,798.64	4,156,210	1,622,588	293,201	5.07	
DISTRIBUTION PLANT								
LAND AND LAND RIGHTS								
374.4	LAND RIGHTS	70-R2.5	3,177,646	767,255	2,410,391	52,722	1.66	45.7
374.5	RIGHTS OF WAY	80-S4	3,233,161	1,721,412	1,511,749	35,102	1.09	43.1
	TOTAL ACCOUNT 374		6,410,808	2,488,667	3,922,140	87,824	1.37	
STRUCTURES AND IMPROVEMENTS								
375.34	MEASURING AND REGULATING	60-R1	5,195,494.58	1,341,810	3,853,685	111,828	2.15	34.5
375.6	INDUSTRIAL MEASURING AND REGULATING	55-R1	86,228	74,740	11,488	536	0.62	21.4
375.7	OTHER DISTRIBUTION SYSTEMS							
	DISTRIBUTION SYSTEM STRUCTURES	90-R1.5 *	7,303,629.43	2,267,012	5,036,616	220,918	3.02	22.8
	OTHER BUILDINGS	35-R2	2,613,474.49	937,179	1,676,295	74,174	2.84	22.6
	TOTAL ACCOUNT 375.70		9,917,103.92	3,204,191	6,712,911	295,092	2.98	22.7
375.8	COMMUNICATION	45-R3	16,515.17	7,523	8,992	367	2.22	24.5
	TOTAL ACCOUNT 375		15,215,341.54	4,628,264	10,587,076	407,823	2.68	

COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 1. ESTIMATED SURVIVOR CURVES, ORIGINAL COST, BOOK RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AT NOVEMBER 30, 2019

Acct No.	DEPRECIABLE GROUP (1)	SURVIVOR CURVE (2)	ORIGINAL COST	BOOK RESERVE	FUTURE BOOK ACCRUAL	CALCULATED ANNUAL ACCRUAL		COMPOSITE REMAINING LIFE
			AS OF NOVEMBER 30, 2019 (3)	(4)	(5)	AMOUNT (6)	RATE (7)=(6)/(3)	(8)=(5)/(6)
376	MAINS							
	CAST IRON	71-R1 *	257,119.69	204,253	52,867	9,706	3.77	5.4
	BARE STEEL	71-R1 *	64,855,156.02	46,019,762	18,835,394	1,860,455	2.87	10.1
	OTHER	71-R1	1,712,522,873.35	215,685,728	1,496,837,145	37,017,626	2.16	40.4
	TOTAL ACCOUNT 376		1,777,635,149.06	261,909,743	1,515,725,406	38,887,787	2.19	
378	MEASURING AND REGULATING STATION EQUIPMENT - GENERAL	45-O1	95,152,289.01	13,923,477	81,228,812	3,865,467	4.06	21.0
379.1	MEASURING AND REGULATING STATION EQUIPMENT - CITY GATE	35-S2	135,966.90	23,396	112,571	11,564	8.51	9.7
380	SERVICES							
	BARE STEEL	50-R0.5 *	848,484.37	669,890	178,594	23,101	2.72	7.7
	OTHER	50-R0.5	579,939,518.91	124,429,518	455,510,001	17,258,270	2.98	26.4
	TOTAL ACCOUNT 380		580,788,003.28	125,099,408	455,688,595	17,281,371	2.98	
381	METERS	44-S1	39,176,296.30	16,692,236	22,484,060	939,195	2.40	23.9
381	METERS - AMR	15-S2.5	24,570,547.05	13,753,323	10,817,224	1,628,550	6.63	6.6
382	METER INSTALLATIONS	55-R3	40,589,166.28	13,740,052	26,849,114	764,801	1.88	35.1
383	HOUSE REGULATORS AND INSTALLATIONS	45-S2	17,171,583.11	7,229,368	9,942,215	341,058	1.99	29.2
385	INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT - OTHER THAN METERS	30-R0.5	7,942,941.17	2,475,154	5,467,787	407,818	5.13	13.4
	OTHER EQUIPMENT							
387	GENERAL	32-R0.5	136,698.14	68,409	68,289	6,804	4.98	10.0
387.4	COMMUNICATION EQUIPMENT	25-R2	10,525,792.35	1,762,268	8,763,524	541,999	5.15	16.2
387.5	GPS EQUIPMENT	10-S3	2,201,371.95	1,035,802	1,165,570	262,246	11.91	4.4
	TOTAL ACCOUNT 387		12,863,862.44	2,866,479	9,997,383	811,049	6.30	
	TOTAL DISTRIBUTION PLANT		2,617,651,953.90	464,829,567	2,152,822,383	65,434,307	2.50	
	GENERAL PLANT							
390.1	STRUCTURES AND IMPROVEMENTS - COMMUNICATION	45-R2	49,821.42	49,821	0	0	-	-
	OFFICE FURNITURE AND EQUIPMENT							
391.1	FURNITURE	20-SQ	2,383,980.24	1,033,246	1,350,734	88,519	3.71	15.3
391.11	EQUIPMENT	15-SQ	91,303.67	35,307	55,997	5,863	6.42	9.6
391.12	INFORMATION SYSTEMS	5-SQ	4,498,634.50	2,724,157	1,774,478	932,686	20.73	1.9
	TOTAL ACCOUNT 391		6,973,918.41	3,792,710	3,181,209	1,027,068	14.73	

COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 1. ESTIMATED SURVIVOR CURVES, ORIGINAL COST, BOOK RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AT NOVEMBER 30, 2019

Acct No.	DEPRECIABLE GROUP (1)	SURVIVOR CURVE (2)	ORIGINAL COST	BOOK	FUTURE	CALCULATED ANNUAL ACCRUAL		COMPOSITE
			AS OF NOVEMBER 30, 2019 (3)	RESERVE (4)	BOOK ACCRUAL (5)	AMOUNT (6)	RATE (7)=(6)/(3)	REMAINING LIFE (8)=(5)/(6)
392	TRANSPORTATION EQUIPMENT - TRAILERS	15-SQ	25,617	26,344	(727)	0	-	-
394	TOOLS, SHOP AND GARAGE EQUIPMENT	25-SQ	16,449,522	6,592,470	9,857,052	590,635	3.59	16.7
394.12	CNG FACILITIES	12-S1.5	2,414,785	2,414,378	407	310	0.01	1.3
	TOTAL ACCOUNT 394		18,864,307	9,006,848	9,857,459	590,945	3.13	
395	LABORATORY EQUIPMENT	20-SQ	269,030	58,966	210,064	14,206	5.28	14.8
396	POWER OPERATED EQUIPMENT	13-L2	948,698	937,267	11,431	2,411	0.25	4.7
397.5	COMMUNICATION EQUIPMENT - TELEMETERING	19-R2.5	792,133	784,415	7,718	613	0.08	12.6
398	MISCELLANEOUS EQUIPMENT	15-SQ	971,183	374,355	596,828	58,683	6.04	10.2
	TOTAL GENERAL PLANT		28,894,707	15,030,726	13,863,982	1,693,926	5.86	
	SUBTOTAL DEPRECIABLE PLANT		2,652,325,460	484,016,503	2,168,308,953	67,421,434	2.54	
AMORTIZABLE PLANT								
303	MISCELLANEOUS INTANGIBLE PLANT		29,383,486	13,551,909	15,831,577	3,557,804	**	
362.1	ENVIRONMENTAL REMEDIATION			(216,952)				
375.71	STRUCTURES AND IMPROVEMENTS - LEASED		5,487,917	1,917,220	3,570,697	491,410	**	
	SUBTOTAL AMORTIZABLE PLANT		34,871,403	15,252,177	19,402,274	4,049,214		
	NONDEPRECIABLE PLANT		649,241	209,923				
	TOTAL GAS PLANT		2,687,846,103	499,478,603	2,187,711,227	71,470,648		

* Indicates the use of an interim survivor curve and retirement date.

** Accrual rate based on individual asset amortization.

Note: New additions in Account 303.6 (Miscellaneous Intangible Plant - Cloud) as of December 1, 2019 will utilize an annual accrual rate of 20.00% consistent with a 5-SQ Survivor Curve.

COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 2. SUMMARY OF COST OF REMOVAL AND GROSS SALVAGE
AND AMORTIZATION OF EXPERIENCED NET SALVAGE

<u>Year</u>	<u>Cost of Removal</u> \$	<u>Gross Salvage</u> \$	<u>Net Salvage</u> \$
2014	6,493,118	0	(6,493,118)
2015	4,164,784	156,362	(4,008,422)
2016	4,171,396	271,675	(3,899,721)
2017	3,900,213	35,806	(3,864,407)
2018	<u>5,232,727</u>	<u>204,219</u>	<u>(5,028,508)</u>
Total	23,962,238	668,062	(23,294,176)
Five Year Amortization of Negative Net Salvage			(4,658,835)

COLUMBIA GAS OF PENNSYLVANIA, INC
53.53 III. BALANCE SHEET AND OPERATING STATEMENT
E. GAS UTILITIES

35. Submit a schedule showing Gross Receipts Tax Base used in computing Pennsylvania Gross Receipts Tax Adjustment.

Response: Effective January 1, 2000, the Utility Gross Receipts Tax is not imposed on sales of natural gas. Consequently, there were no amounts computed or included for gross receipts taxes.

COLUMBIA GAS OF PENNSYLVANIA, INC
53.53 III. BALANCE SHEET AND OPERATING STATEMENT
A. ALL UTILITIES

50. Provide a schedule of federal and Pennsylvania taxes, other than income taxes, calculated on the basis of test year per books, pro forma at present rates, and pro forma at proposed rates, to include the following categories:
- a. social security
 - b. unemployment.
 - c. capital stock.
 - d. public utility realty.
 - e. P.U.C. assessment.
 - f. other property.
 - g. any other appropriate categories.

Response:

Refer to Exhibit No. 6, Schedule 2, Pages 2 through 4. Please note Pennsylvania has eliminated the capital stock tax for all taxpayers effective for years beginning on or after January 1, 2016. Consequently, there were no amounts included for capital stock taxes. P.U.C assessment and fees are included in Exhibit No. 4, Schedule No. 1, Pages 2; Exhibit No. 4, Schedule No. 2, Page 19, and Exhibit No. 104, Schedule No. 1, Page 2.

Columbia Gas Pennsylvania, Inc.
Statement of Projected Taxes Other Than Income Taxes at Present Rates
Twelve Months Ended November 30, 2019

Line No.	<u>Description</u>	Per Books Twelve Months Ended <u>Nov. 30, 2019</u> \$	<u>Adjustments</u> \$	Normalized Twelve Months Ended <u>Nov. 30, 2019</u> \$
1	FICA	2,700,710	216,652	2,917,362
2	FUTA & SUTA	159,062	0	159,062
3	Property Tax	516,357	0	516,357
4	Capital Stock	0	0	0
5	License and Franchise	100	0	100
6	Sales and Use	138,661	0	138,661
7	Other	(126)	0	(126)
8	Total Taxes Other Than Income Taxes	<u>3,514,764</u>	<u>216,652</u>	<u>3,731,416</u>

Columbia Gas Pennsylvania, Inc.
Taxes Other Than Income Taxes
To Annualized Increase In FICA Tax
Twelve Months Ended November 30, 2019

<u>Line No.</u>	<u>Description</u>	<u>Amount</u> \$	<u>Reference</u>
<u>HTY Experience Ratio Calculation</u>			
1	Labor charged to O&M per Books	37,602,369	Exh 4, Sch 1, Pg 2, Ln 1+2
2	Total FICA charged per Books	<u>2,700,710</u>	Exh 6, Sch 2, Pg 2
3	FICA Experience Factor	7.1823%	Ln 2 / Ln 1
<u>HTY FICA Adjustment</u>			
4	O&M Payroll Adjustment	3,012,122	Exh 4, Sch 1, Pg 2, Ln 1
5	O&M Incentive Compensation Adjustment	<u>4,354</u>	Exh 4, Sch 1, Pg 2, Ln 2
6	Total O&M Payroll & Incentive Adjustment	3,016,476	Ln 4 + Ln 5
7	Annualized Payroll Tax FICA Adjustment	<u><u>216,652</u></u>	Ln 6 x Ln 3

Columbia Gas Pennsylvania, Inc.
Taxes Other Than Income Taxes
To Annualized Increase In Property Tax
Twelve Months Ended November 30, 2019

<u>Line No.</u>	<u>Description</u>	<u>Annualized Nov. 30, 2019 \$</u>
1	2018 PURTA Tax on property as of 12/31/2017	228,751
2	Locally Assessed PA Property Tax - Latest Paid	30,169
3	WV Tax Year as of 12/31/2017 Assessed Value on Stored Gas	12,100,962
4	2018 WV Tax Year Effective Tax Rate	<u>0.02127402</u>
5	Annualized WV Property Tax on Stored Gas	<u>257,436</u>
6	Total Property Tax Expense - Annualized	Line 1 + Line 2 + Line 5 516,357
7	Property Tax Expense - Per Books	<u>516,357</u>
8	Total Property Tax Adjustment	Line 6 - Line 7 <u><u>0</u></u>

COLUMBIA GAS OF PENNSYLVANIA, INC
53.53 III. BALANCE SHEET AND OPERATING STATEMENT
A. ALL UTILITIES

48. Provide a copy of the latest capital stock tax report and the latest capital stock tax settlement.

Response:

Pennsylvania has eliminated the capital stock tax for all taxpayers effective for years beginning on or after January 1, 2016. Consequently, there were no amounts included for capital stock taxes.

COLUMBIA GAS OF PENNSYLVANIA, INC
53.53 III. BALANCE SHEET AND OPERATING STATEMENT
A. ALL UTILITIES

49. Submit details of calculations for Taxes, Other than Income where a company is assessed taxes for doing business in another state, or on its property located in another state.

Response:

Columbia Gas of Pennsylvania, Inc. maintains several contracts for the storage of gas in states outside Pennsylvania. The current amounts include property tax for gas storage maintained in West Virginia as follows:

<u>Type of Tax</u>	<u>For the 12 Months Ended</u> <u>11/30/2019</u>
WV Property – Storage	257,436

COLUMBIA GAS OF PENNSYLVANIA, INC
53.53 II. RATE OF RETURN
A. ALL UTILITIES

8. State amount of debt interest utilized for income tax calculations, and details of debt interest computations, under each of the following rate case bases:

a.	Actual test year	\$38,438,882
b.	Annualized test year-end	\$37,936,024
c.	Proposed test year-end	\$37,936,024

Response: See Exhibit No. 2, Sch 3, Page 4 for detail of the debt interest computation.

9. State amount of debt interest utilized for income tax calculations which has been allocated from the debt interest of an affiliate, and details of the allocation, under each of the following rate case bases:

- a. Actual test year
- b. Annualized test year-end
- c. Proposed test year-end

Response: The Company is reflecting a Columbia Gas of Pennsylvania, Inc. capital structure in its claim. No interest has been allocated from an affiliate. See Exhibit No. 2, Sch 3, Page 4 for detail of the debt interest computation.

26. Provide the following income tax data:

- a. Consolidated income tax adjustment, if applicable.
- b. Interest for tax purposes (basis.)

Response: For the twelve months ended November 30, 2019:

- a. See Exhibit No. 7, Pages 2-4.
- b. See Exhibit No. 2, Schedule No. 3, Page 4 for interest calculation.

NiSource Inc. and Subsidiaries
Columbia Gas of Pennsylvania
Section 1301.1(b) Differential

Line No.	Description	Ref	(1) 2012	(2) 2013	(3) 2014	(4) 2015	(5) 2016	(6) Total	(7) Average
1	Columbia Gas of Pennsylvania Taxable Income		(39,340,808)	(6,012,965)	1,851,749	12,882,108	(24,798,164)	(55,418,080)	(11,083,616)
2	Consolidated Income Companies Taxable Income		514,042,882	182,977,538	149,833,954	61,349,567	35,292,078	943,496,019	188,699,204
3	Taxable Income Percentage to Columbia Gas of Pennsylvania	IF L1 > 0, L1 / L2, 0	0%	0%	1%	21%	0%	0%	0%
4	Consolidated Loss Companies Taxable Loss		340,822,761	312,811,935	347,406,855	545,841,776	369,332,866	1,916,216,193	383,243,239
5	Columbia Gas of Pennsylvania Allocation of Loss for 2012 to 2016	L3 * L4							-
6	Tax Rate								21%
7	Section 1301.1(b) Differential	L5 * L6							-
8	50% for reliability or infrastructure related capital investment	L7 * 50%							-
9	50% for general corporate purposes	L7 * 50%							-

NISource Inc. and Subsidiaries
Columbia Gas of Pennsylvania
Section 1301.1(b) Differential

<u>Company</u>	<u>2012 Taxable Income 1/</u>	<u>2013 Taxable Income 1/</u>	<u>2014 Taxable Income 1/</u>	<u>2012-2014 Taxable Income</u>
Regulated				
<u>Positive Regulated Companies</u>				
Columbia Gas of Kentucky, Inc.	4,693,457	502,062	144,816	5,340,335
Kokomo Gas and Fuel Company	-	-	-	-
Northern Indiana Public Service Company	210,808,733	80,743,430	86,682,322	378,234,485
NISource Corporate Services Company	(3,839,295)	12,140,384	3,157,437	11,458,526
Central Kentucky Transmission Company	48,440	48,493	46,860	143,793
Subtotal: Positive Regulated Companies	<u>211,711,335</u>	<u>93,434,369</u>	<u>90,031,435</u>	<u>395,177,139</u>
<u>Loss Regulated Companies</u>				
Columbia Gas of Ohio, Inc.	(3,779,440)	(48,856,838)	(26,148,630)	(78,784,908)
Northern Indiana Fuel and Light Company, Inc.	-	-	-	-
Columbia Gas of Maryland, Inc.	(1,502,899)	(5,843,279)	(4,980,590)	(12,326,768)
Columbia Gas of Virginia, Inc.	142,030	(17,631,341)	(26,663,345)	(44,152,656)
Bay State Gas Company	(20,010,181)	5,099,512	(15,278,640)	(30,189,309)
Columbia Gas of Pennsylvania, Inc.	(39,340,808)	(6,012,965)	1,851,749	(43,502,024)
Subtotal: Loss Regulated Companies	<u>(64,491,298)</u>	<u>(73,244,911)</u>	<u>(71,219,456)</u>	<u>(208,955,665)</u>
Total Regulated Companies	<u>147,220,037</u>	<u>20,189,458</u>	<u>18,811,979</u>	<u>186,221,474</u>
Non Regulated				
<u>Non Regulated Profitable Taxable Income Companies</u>				
Columbia Insurance Corporation	4,891,106	7,989,406	3,123,616	16,004,128
Northern Indiana Trading Company	94,343	-	-	94,343
NIPSCO Accounts Receivables Corporation	6,391,608	3,911,553	3,437,640	13,740,801
Columbia Gas of Ohio Receivables Corp.	942,530	1,058,770	1,592,736	3,594,036
Columbia Gas of Pennsylvania Receivables Corp	392,550	530,969	860,111	1,783,630
Subtotal: Positive Unregulated Companies	<u>12,712,137</u>	<u>13,490,698</u>	<u>9,014,103</u>	<u>35,216,938</u>
<u>Unregulated Loss Companies of Three Year Period</u>				
Eliminations (Inter-Company profit on Columbia Transmission)	(14,819,951)	19,640,967	(2,730,203)	2,090,813
EnergyUSA Inc. (MA)	-	-	-	-
Indianapolis Water Company	-	-	-	-
EnergyUSA Inc. (IN)	(775,856)	(688,801)	(585,654)	(2,050,311)
Lake Erie Land Company	(3,899,189)	(6,741,686)	(17,616,892)	(28,257,767)
NISource Energy Technologies, Inc.	(1,222,276)	(772,472)	(730,343)	(2,725,091)
NISource Capital Markets, Inc.	(2,455,687)	(2,986,342)	(3,455,004)	(8,897,033)
IWC Resources Corp.	(2,245,444)	(776,859)	(89,748)	(3,112,051)
NISource Finance Corp.	(5,683,810)	180,315	(7,058,074)	(12,561,569)
NISource Development Company, Inc.	(3,129,213)	(2,272,418)	(2,376,070)	(7,777,701)
Primary Energy, Inc.	-	(1,136,938)	(1,727,397)	(2,864,335)
EnergyUSA-TPC Corp.	(21,470,907)	(3,199,372)	(547,250)	(25,217,529)
NISource Inc.	(27,850,847)	(29,327,888)	(52,697,869)	(109,876,604)
NISource Corporate Group	-	(8,397,810)	-	(8,397,810)
NGD Holding Company	-	(8,603,910)	-	(8,603,910)
Subtotal: Loss Unregulated Companies	<u>(83,553,180)</u>	<u>(45,083,214)</u>	<u>(89,614,504)</u>	<u>(218,250,898)</u>
NISource Inc. Interest on Columbia Stock Purchase Allocated Under SEC Order	<u>(188,619,685)</u>	<u>(194,483,810)</u>	<u>(177,344,944)</u>	<u>(560,448,439)</u>
Subtotal: Interest on Columbia Stock Purchase	<u>(188,619,685)</u>	<u>(194,483,810)</u>	<u>(177,344,944)</u>	<u>(560,448,439)</u>
<u>Other Companies Sold or In Process of Being Sold/or Inactive</u>				
NDC Douglas Properties, Inc.	1,761,838	(539,820)	(407,489)	814,529 2/
Columbia Energy Services Corporation	-	-	-	- 3/
Service Protection Group LLC	-	-	-	- 4/
NISource Retail Services, Inc.	-	31,231,228	1,780,747	33,011,975 3/
Crossroads Pipeline Company	3,010,003	1,869,638	748,087	5,627,728 4/
Columbia Gulf Transmission Company	47,341,084	14,512,128	43,234,658	105,087,870 4/
Columbia Hardy Corp.	1,804,936	2,567,494	2,226,517	6,598,947 4/
Columbia Energy Group	230,871,449	(162,060,316)	(6,692,837)	62,118,296 4/
CNS Microwave, Inc.	848,775	951,189	946,658	2,746,622 4/
Columbia Remainder Corporation	(177,273)	(445,433)	(275,876)	(898,582) 4/
Subtotal: Unregulated Companies Sold or In Process of Being Sold/or Inactive	<u>285,460,812</u>	<u>(111,913,892)</u>	<u>41,560,465</u>	<u>215,107,385</u>
Total Consolidated Taxable Income	<u>173,220,121</u>	<u>(317,800,760)</u>	<u>(197,572,901)</u>	<u>(342,153,540)</u>
1/ Separate Return amount includes non-deductible Charitable Contributions as a result of Consolidated Net Operating Loss				
2/ Company in process of being sold. An investment in real estate for benefit of low income housing credits				
3/ Company sold in 2013				
4/ Company no longer part of the consolidated group pursuant to a spin off in 2015.				
Consolidated Income Companies Taxable Income	514,042,882	182,977,538	149,833,954	
Consolidated Loss Companies Taxable Loss	(340,822,761)	(500,778,298)	(347,406,855)	
	<u>173,220,121</u>	<u>(317,800,760)</u>	<u>(197,572,901)</u>	

NISource Inc. and Subsidiaries
Columbia Gas of Pennsylvania
Section 1301.1(b) Differential

<i>Company</i>	2014 Taxable Income 1/	2015 Taxable Income 1/	2016 Taxable Income 1/	2014-2016 Taxable Income
Regulated				
<u>Positive Regulated Companies</u>				
Kokomo Gas and Fuel Company	-	-	-	-
Northern Indiana Public Service Company	86,682,322	(27,042,518)	(18,374,119)	41,265,685
NIsource Corporate Services Company	3,157,437	2,956,022	21,087,381	27,200,840
Central Kentucky Transmission Company	46,860	33,631	58,729	139,220
Subtotal: Positive Regulated Companies	89,886,619	(24,052,865)	2,771,991	68,605,745
<u>Loss Regulated Companies</u>				
Columbia Gas of Ohio, Inc.	(26,148,630)	9,965,210	(66,018,630)	(82,202,050)
Northern Indiana Fuel and Light Company, Inc.	-	-	-	-
Columbia Gas of Kentucky, Inc.	144,816	(111,117)	(12,033,547)	(11,999,848)
Columbia Gas of Maryland, Inc.	(4,980,590)	(2,630,044)	(4,701,007)	(12,311,641)
Columbia Gas of Virginia, Inc.	(26,663,345)	1,262,838	(13,877,899)	(39,278,406)
Bay State Gas Company	(15,278,640)	(3,107,284)	(42,158,281)	(60,544,205)
Columbia Gas of Pennsylvania, Inc.	1,851,749	12,882,108	(24,798,164)	(10,064,307)
Subtotal: Loss Regulated Companies	(71,074,640)	18,261,711	(163,587,528)	(216,400,457)
Total Regulated Companies	18,811,979	(5,791,154)	(160,815,537)	(147,794,712)
Non Regulated				
<u>Non Regulated Profitable Taxable Income Companies</u>				
NIsource Insurance Corporation	3,123,616	8,073,063	9,537,830	20,734,509
Northern Indiana Trading Company	-	-	-	-
NIPSCO Accounts Receivables Corporation	3,437,640	3,033,138	2,106,266	8,577,044
Columbia Gas of Ohio Receivables Corp.	1,592,736	381,098	1,193,763	3,167,597
Columbia Gas of Pennsylvania Receivables Corp	860,111	758,446	715,432	2,333,989
Subtotal: Positive Unregulated Companies	9,014,103	12,245,745	13,553,291	34,813,139
<u>Unregulated Loss Companies of Three Year Period</u>				
Eliminations (Inter-Company profit on Columbia Transmission)	(2,730,203)	8,160,489	-	5,430,286
EnergyUSA Inc. (MA)	-	-	-	-
Indianapolis Water Company	-	-	-	-
EnergyUSA Inc. (IN)	(585,654)	(265,008)	(428,542)	(1,279,204)
Lake Erie Land Company	(17,616,892)	720,077	(386,767)	(17,283,582)
NIsource Energy Technologies, Inc.	(730,343)	(596,913)	225,256	(1,102,000)
NIsource Capital Markets, Inc.	(3,455,004)	(3,680,847)	(4,578,810)	(11,714,661)
IWC Resources Corp.	(89,748)	(92,022)	(90,552)	(272,322)
NIsource Finance Corp.	(7,058,074)	9,604,457	(10,250,156)	(7,703,773)
NIsource Development Company, Inc.	(2,376,070)	(2,268,585)	(2,387,190)	(7,031,845)
Primary Energy, Inc.	(1,727,397)	(1,368,627)	(2,348,188)	(5,444,212)
EnergyUSA-TPC Corp.	(547,250)	(476,070)	60,842	(962,478)
NIsource Inc.	(52,697,869)	(355,245,137)	(143,375,407)	(551,318,413)
NIsource Corporate Group	-	-	-	-
NGD Holding Company	-	-	-	-
Subtotal: Loss Unregulated Companies	(89,614,504)	(345,508,186)	(163,559,514)	(598,682,204)
NIsource Inc. Interest on Columbia Stock Purchase Allocated Under SEC Order	(177,344,944)	-	(23,440,522)	(200,785,466)
Subtotal: Interest on Columbia Stock Purchase	(177,344,944)	-	(23,440,522)	(200,785,466)
<u>Other Companies Sold or In Process of Being Sold/or Inactive</u>				
NDC Douglas Properties, Inc.	(407,489)	3,385,008	(85,085)	2,892,434 2/
Columbia Energy Services Corporation	-	-	-	- 3/
Service Protection Group LLC	-	-	-	- 4/
NIsource Retail Services, Inc.	1,780,747	133,982	306,579	2,221,308 3/
Crossroads Pipeline Company	748,087	-	-	748,087 4/
Columbia Gulf Transmission Company	43,234,658	-	-	43,234,658 4/
Columbia Hardy Corp.	2,226,517	-	-	2,226,517 4/
Columbia Energy Group	(6,692,837)	(148,957,604)	-	(155,650,441) 4/
CNS Microwave, Inc.	946,658	-	-	946,658 4/
Columbia Remainder Corporation	(275,876)	-	-	(275,876) 4/
Subtotal: Unregulated Companies Sold or In Process of Being Sold/or Inactive	41,560,465	(145,438,614)	221,494	(103,656,655)
Total Consolidated Taxable Income	(197,572,901)	(484,492,209)	(334,040,788)	(1,016,105,898)
1/ Separate Return amount includes non-deductible Charitable Contributions as a result of Consolidated Net Operating Loss				
2/ Company in process of being sold. An investment in real estate for benefit of low income housing credits				
3/ Company sold in 2013				
4/ Company no longer part of the consolidated group pursuant to a spin off in 2015.				
Consolidated Income Companies Taxable Income	149,833,954	61,349,567	35,292,078	
Consolidated Loss Companies Taxable Loss	(347,406,855)	(545,841,776)	(369,332,866)	
	(197,572,901)	(484,492,209)	(334,040,788)	

COLUMBIA GAS OF PENNSYLVANIA, INC
53.53 III. BALANCE SHEET AND OPERATING STATEMENT
A. ALL UTILITIES

51. Submit a schedule showing for the last five years the income tax refunds, plus interest (net of taxes), received from the federal government due to prior years' claims.

Response: See Exhibit No. 7, Page 6.

52. Provide detailed computations showing the deferred income taxes derived by using accelerated tax depreciation applicable to post-1969 utility property increases productive capacity and ADR rates on property. (Separate between state and federal; also, rate used).
- a. State whether tax depreciation is based on all rate base items claimed as of the end of the test year, and whether it is the annual tax depreciation at the end of the test year.
- b. Reconcile any difference between the deferred tax balance, as shown as a reduction to measures of value (rate base), and the deferred tax balance as shown on the balance sheet.

Response: See Exhibit No. 7, Page 7, showing the computation of deferred income taxes. See also Attachments 1 and 2, reports showing by vintage the estimated tax depreciation used for the 2018 and 2019 accrual. Additional detailed reports are too voluminous to attach.

- a. Tax depreciation is based on all rate base items claimed at the end of the test year. Federal tax depreciation (including Bonus) of \$50,864,203 is the annual tax depreciation at the end of the test year.
- b. See Exhibit No. 7, Page 7.

COLUMBIA GAS OF PENNSYLVANIA, INC.

IRS REFUNDS RECEIVED IN PAST FIVE YEARS

PRIOR YEARS' CLAIMS

Tax Year Ending	Year Settled	Tax	Interest	Total
12/31/14		-	-	-
12/31/15		-	-	-
12/31/16		-	-	-
12/31/17		-	-	-
12/31/18		-	-	-
		-	-	-
		-	-	-

COLUMBIA GAS OF PENNSYLVANIA, INC.
Tax & Book Depreciation Expense

Exhibit No. 7
Witness: J. Harding
Page 7 of 47

	2018			Fiscal Year Ending 11/2018			
	Basis	Composite Depr Rate	Tax Depr	Book Depr	Difference	Tax Rate	Deferred Taxes
Class Life ADR (Pre-1971)	88,028,732	0.000074169	6,529	1,395,925	(1,389,396)		N/A
Book Depr. On Basis Diff				17,758,931	(17,758,931)		N/A
ADR	84,327,594	0.000003961	334	N/A	334	0.21	70
ACRS	74,728,134	0.000046154	3,449	N/A	3,449	0.21	724
MACRS	623,650,506	0.062516821	38,988,647	N/A	38,988,647	0.21	8,187,616
Other-MAPCO	-	-	-	N/A	-	0.21	-
Book Depr. Normalized	-	-	-	41,890,436	(41,890,436)	0.21	(8,796,992)
Total	870,734,966		38,998,959	61,045,292	(2,898,006)	0.21	(608,582)
	Allocation		0.0833	Less: 11 mos.	2,656,506		557,867
	Tax Depreciation		3,249,913		(241,501)	0.21	(50,715)
	2019			Fiscal Year Ending 11/2019			
	Basis	Composite Depr Rate	Tax Depr	Book Depr	Difference	Tax Rate	Deferred Taxes
Class Life ADR (Pre-1971)	87,546,919	-	-	1,238,788	(1,238,788)		N/A
Book Depr. On Basis Diff				16,491,066	(16,491,066)		N/A
ADR	84,327,594	0.000003961	334	N/A	334	0.21	70
ACRS	72,836,942	0.000047352	3,449	N/A	3,449	0.21	724
MACRS	777,297,466	0.066820079	51,939,078	N/A	51,939,078	0.21	10,907,206
Other-MAPCO	-	-	-	N/A	-	0.21	-
Book Depr. Normalized	-	-	-	44,476,838	(44,476,838)	0.21	(9,340,136)
Total	1,022,008,921		51,942,861	62,206,692	7,466,023	0.21	1,567,864
	Allocation		0.9167	Less: 1 mo.	(622,169)		(130,655)
	Tax Depreciation		47,614,289		6,843,854	0.21	1,437,209
				Pro Forma Adjustments	(20,705,123)	0.21	(4,348,076)
Total Test Year Tax Depreciation			50,864,203	Total Test Year	(14,102,769)	0.21	(2,961,581)

COLUMBIA GAS OF PENNSYLVANIA, INC
53.53 III. BALANCE SHEET AND OPERATING STATEMENT
A. ALL UTILITIES

53. Submit a schedule showing a breakdown of the deferred income taxes by state and federal per books, pro-forma existing rates, and under proposed rates.

Response:

See Exhibit No. 7, Page 9.

COLUMBIA GAS OF PENNSYLVANIA, INC.

CALCULATION OF DEFERRED TAX BALANCES

Sub Account	(1) Book Balances 11/30/19	(2) Pro-Forma Adjustments Existing Rates	(3) Pro-Forma Balance 11/30/19	(4) Pro-Forma Adjustments Proposed Rates	(5) Pro-Forma Balance 11/30/19
<u>Account 190 - Deferred Income Taxes</u>					
19005000	Tax Inventory Adj - Fed	6,222,864	-	6,222,864	6,222,864
19006000	Tax Inventory Adj - St	3,288,863	-	3,288,863	3,288,863
19005000	Capitalized Inventory - Fed	991,536	-	991,536	991,536
19006000	Capitalized Inventory - St	524,039	-	524,039	524,039
19005000	Customer Advances - Fed	798,649	-	798,649	798,649
19006000	Customer Advances - St	422,096	-	422,096	422,096
19005000	Federal Net Operating Loss	34,820,033	-	34,820,033	34,820,033
19005000	Deficient Deferred Taxes 190- NOL, Inventory & Customer Advances	29,097,704	-	29,097,704	29,097,704
	Subtotal Rate Base	76,165,784	-	76,165,784	76,165,784
19005400	SFAS 109 Offset - Fed	40,445,513	(40,445,513)	-	-
19006400	SFAS 109 Offset - St	15,290,806	(15,290,806)	-	-
9005400/1900640	Reclass to 282	-	-	-	-
19006000	Pennsylvania Net Operating Loss	12,385,286	(12,385,286)	-	-
	All Other Deferred 190 Income Taxes	(20,286,567)	20,286,567	-	-
	Subtotal Non Rate Base	47,835,038	(47,835,038)	-	-
	Total Account 190	124,000,822	(47,835,038)	76,165,784	76,165,784
<u>Account 255 - Deferred Investment Tax Credits</u>					
	Investment Tax Credits (1962-1969)	-	-	-	-
	Job Development Tax Credits (1971-1988)	(1,554,726)	1,554,726	-	-
	Total Account 255 (Non Rate Base)	(1,554,726)	1,554,726	-	-
<u>Account 282 - Deferred Income Taxes-Depreciation</u>					
Various	Excess Accelerated Tax Depreciation - Fed	(462,673,593)	(136,494)	(462,810,087)	(462,810,087)
	Subtotal Rate Base	(462,673,593)	(136,494)	(462,810,087)	(462,810,087)
28205000	SFAS 109 Offset - Fed	70,048,495	(70,048,495)	-	-
28206000	SFAS 109 Offset - St	(117,783,240)	117,783,240	-	-
28205000	Reclass to 190	-	-	-	-
28205000	Non-Utility Book Gain on Sale Property - Fed	-	-	-	-
	Subtotal Non Rate Base	(47,734,745)	47,734,745	-	-
	Total Account 282	(510,408,338)	47,598,251	(462,810,087)	(462,810,087)
28305000	Pennsylvania Net Operating Loss: Federal Offset	(2,600,910)	2,600,910	-	-
	All Other Deferred 283 Income Taxes	(2,305,542)	2,305,542	-	-
	Subtotal Non Rate Base	(4,906,452)	4,906,452	-	-
	Total Account 283	(4,906,452)	4,906,452	-	-
	Total Accumulated Deferred Taxes	(392,868,694)	6,224,391	(386,644,303)	(386,644,303)

COLUMBIA GAS OF PENNSYLVANIA, INC
53.53 III. BALANCE SHEET AND OPERATING STATEMENT
A. ALL UTILITIES

54. Submit a schedule showing a breakdown of accumulated investment tax credits (3 percent, 4 percent, 7 percent, 10 percent and 11 percent), together with details of methods used to write-off the unamortized balances.

Response: See Exhibit No. 7, Page 11.

COLUMBIA GAS OF PENNSYLVANIA, INC.
 ACCUMULATED UNAMORTIZED INVESTMENT TAX CREDIT
 AS OF NOVEMBER 30, 2019

<u>Line No.</u>	<u>Vintage Year</u>	<u>J.D.C. 4%</u>	1/	<u>J.D.C. 10%</u>	1/	<u>J.D.C. 8%</u>	1/	<u>Amortizable Credit</u>	<u>Amortization</u>
	(1)	(2)		(3)		(4)		(5)	
	\$	\$		\$		\$		\$	
1	1971	0		0		0		0	-
2	1973	10,961		0		0		10,961	4,236
3	1974	40,089		0		0		40,089	5,280
4	1978	2		38,762		0		38,764	24,492
5	1979	0		17,436		0		17,436	29,904
6	1980	0		404,977		0		404,977	34,956
7	1981	0		195,171		0		195,171	42,576
8	1982	0		286,074		0		286,074	43,452
9	1983	0		30,995		188,581		219,576	33,360
10	1984	0		762		155,186		155,948	34,032
11	1985	0		0		140,207		140,207	39,120
12	1986	0		45,523		0		45,523	8,160
13	Total	<u>51,052</u>		<u>1,019,700</u>		<u>483,974</u>		<u>1,554,726</u>	<u>299,568</u>

1/ The Job Development Credit balances are amortized to income over the weighted average book service life of the property which generated the credit. The average life is computed separately for each vintage year.

COLUMBIA GAS OF PENNSYLVANIA, INC
53.53 III. BALANCE SHEET AND OPERATING STATEMENT
A. ALL UTILITIES

55. Submit a schedule showing the adjustments for taxable net income per books (including below-the-line items) and pro forma under existing rates together with an explanation of any difference between the adjustments. Indicate charitable donations and contributions in the tax calculation for rate making purpose.

Response:

See Exhibit No. 7, Pages 13 & 14.

COLUMBIA GAS OF PENNSYLVANIA, INC.

**RECONCILIATION OF TAXABLE NET INCOME PER BOOKS
 AND TAXABLE NET INCOME PRO FORMA TEST YEAR BASE RATES
 TWELVE MONTHS ENDED NOVEMBER 30, 2019**

Line No.	Description	Per Books (1) \$	Pro Forma Reference (2)	Adjustments @ Present Rates (3) \$	Pro Forma Test Year @ Present Rates (4 = 1+3) \$	Adjustments @ Proposed Rates (5)	Pro Forma Test Year @ Proposed Rates (6 = 4+5)
1	Operating Revenues	607,919,184	(1)	(35,382,641)	572,536,543	21,420,955	593,957,498
2	Net Gas Purchased for Resale	(171,635,226)	(1)	30,088,095	(141,547,131)	0	(141,547,131)
3	Operation and Maintenance Expense	(188,447,880)	(2)	(1,178,920)	(189,626,800)	(243,207)	(189,870,007)
4	Depreciation & Amortization Expense	(71,245,117)	(3)	(4,884,366)	(76,129,483)	0	(76,129,483)
5	Taxes Other Than Income Taxes	(3,514,764)	(4)	(216,652)	(3,731,416)	0	(3,731,416)
6	Net Operating Income Before Income Taxes	173,076,197		(11,574,484)	161,501,713	21,177,748	182,679,461
7	Investment in Subsidiary Income	0		0	0	0	0
8	Non-Utility Income - Net	0	(5)	0	0	0	0
9	Interest Charges	0	(5)	0	0	0	0
10	Net Income Before Income Taxes	173,076,197		(11,574,484)	161,501,713	21,177,748	182,679,461
11	Less: Investment in Subsidiary Income	0		0	0	0	0
12	Net Income Before Income Taxes	173,076,197		(11,574,484)	161,501,713	21,177,748	182,679,461
13	Statutory Adjustments (Page 14, Line 35)	(70,153,787)		(25,686,764)	(95,840,551)	0	(95,840,551)
14	Deductible State Income Tax	(4,213,377)		1,201,880	(3,011,497)	(1,269,394)	(4,280,891)
15	Taxable Income	98,709,033		(36,059,368)	62,649,665	19,908,354	82,558,019
16	Federal Income Tax	20,728,897		(7,572,467)	13,156,430	4,180,754	17,337,184
17	Federal Net Operating Loss Carryforward	(760,064)		760,064	0	0	0
18	Prior Year Adjustments	4,052,032	(8)	(4,052,032)	0	0	0
19	Job Development Credit Allowance	0		0	0	0	0
20	Federal Income Tax	24,020,865		(10,864,435)	13,156,430	4,180,754	17,337,184
21	Deferred Federal Income Tax - Net	15,890,026		(2,523,939)	13,366,087	0	13,366,087
22	Other Direct Federal Deferred Adjustments	(28,836,977)	(8)	28,836,977	0	0	0
23	Amortization of Tax Refund	0		0	0	0	0
24	Federal Net Operating Loss Carryforward	760,064		(760,064)	0	0	0
25	Flow Back of Excess Deferred Income Taxes	(258,209)	(9)	0	(258,209)	0	(258,209)
26	Effect of CNIT Deferred Tax	(406,363)	(10)	252,143	(154,220)	0	(154,220)
27	Total Federal Income Tax	11,169,406		14,940,682	26,110,088	4,180,754	30,290,842
28	Deferral of Current Job Development Credit	0		0	0	0	0
29	Amortization of Investment Tax Credits	(299,568)		0	(299,568)	0	(299,568)
30	Net Federal Income Tax Expense	10,869,838		14,940,682	25,810,520	4,180,754	29,991,274
31	State Income Tax Expense	13,691,325		(9,945,447)	3,745,878	1,269,394	5,015,272
32	Total Income Tax Expense	24,561,163		4,995,235	29,556,398	5,450,148	35,006,546
33	NET INCOME	148,515,034		(16,569,719)	131,945,315	15,727,600	147,672,915

COLUMBIA GAS OF PENNSYLVANIA, INC.

**RECONCILIATION OF TAXABLE NET INCOME PER BOOKS
 AND TAXABLE NET INCOME PRO FORMA TEST YEAR BASE RATES
 TWELVE MONTHS ENDED NOVEMBER 30, 2019**

Line No.	Description	Per	Pro Forma Adjustments		Pro Forma
		Books	Reference	Amount	at Test Year Base Rates
		(1)	(2)	(3)	(4=1+3)
		\$		\$	\$
1	<u>Flow Through Adjustments</u>				
2	Book/Tax Depreciation, Net	3,657,627		-	3,657,627
3	Book Depreciation- Net Salvage Amts	4,559,315		-	4,559,315
4	Property Removal Costs - ADR Property	(591,798)		-	(591,798)
5	Loss on Retirement - ACRS/MACRS Removal Costs	(2,655,399)		-	(2,655,399)
6	Interest on Debt	-	(7)	(37,936,024)	(37,936,024)
7	Political Action Expenses (Sec. 162E)	62,203	(6)	(62,203)	-
8	Employee Business Expense Disallowance	248,639		-	248,639
9	Employee Stock Purchase Plan	22,213		-	22,213
10	NCS Allocation- Perm Taxes	397,985		-	397,985
11	Parking	104,926		-	104,926
12	AFUDC Equity	(301,610)	(6)	301,610	-
13	Penalties	8,902	(8)	(8,902)	-
14	Total Flow Through Adjustments	5,513,003		(37,705,519)	(32,192,516)
15	<u>Deferred Adjustments</u>				
16	Excess Tax Depreciation Over Book	14,102,769		-	14,102,769
17	Repairs on Gas Pipeline	(70,352,808)		-	(70,352,808)
18	Bonus Depreciation	-		-	-
19	Sec 263A Mixed Service Costs	(1,148,256)		-	(1,148,256)
20	Avoided Cost Interest	164,243		-	164,243
21	Loss on Retirement - ACRS/MACRS Property Basis	(1,915,231)		-	(1,915,231)
22	Builder Incentives Capitalized	(27,874)		-	(27,874)
23	Stored Gas Losses	2,024		-	2,024
24	Contributions In Aid of Construction	2,878,283		-	2,878,283
25	Tax Inventory Adj	(6,409,233)		-	(6,409,233)
26	Capitalized Inventory	(157,677)		-	(157,677)
27	Customer Advances	(784,275)		-	(784,275)
28	Deferred Compensation	155,063		(155,063)	-
29	Off System Sales	(1,445,530)		1,445,530	-
30	Customer Assistance Plan (Cap)	3,123,263		(3,123,263)	-
31	CSRR Overcollection	(20,870,931)		20,870,931	-
32	Rate Reserve	10,403,910		(10,403,910)	-
33	Accrued Interest Income	(363,605)		363,605	-
34	Other	(3,020,925)		3,020,925	-
35	Total Deferred Adjustments	(75,666,790)		12,018,755	(63,648,035)
36	Total Statutory Adjustments	(70,153,787)		(25,686,764)	(95,840,551)

() Denotes Credit

COLUMBIA GAS OF PENNSYLVANIA, INC

DESCRIPTION OF PRO FORMA ADJUSTMENTS
AS REFERENCED ON PAGES 13 AND 14, HEREIN

- (1) See Exhibit No. 3.
- (2) See Exhibit No. 4.
- (3) See Exhibit No. 5.
- (4) This adjustment represents the annualized payroll tax adjustment for FICA. See Exhibit No. 6, Schedule 2, Page 3, Line 7.
- (5) This adjustment has been eliminated because it is a non-operating income item and, therefore, not applicable for rate purposes. See adjustment (7) for interest expense imputed for tax calculation purposes.
- (6) This statutory adjustment has been eliminated as inappropriate for recovery from the Pennsylvania ratepayer.
- (7) Interest has been included as a deduction in calculating tax expense to reflect the imputed level of interest based on the Company's debt/capitalization ratio and embedded cost of debt included in rate of return claim. See Exhibit No. 7, page 1, for details.

COLUMBIA GAS OF PENNSYLVANIA, INC

DESCRIPTION OF PRO FORMA ADJUSTMENTS
AS REFERENCED ON PAGES 13 AND 14, HEREIN

- (8) Adjusted as inappropriate to the rate proceeding.
- (9) To recognize flow back of excess deferred income taxes related to accelerated depreciation using the “average rate assumption” method for the test year.
- (10) Adjustment reflects the pro forma level of deferred state income taxes.

COLUMBIA GAS OF PENNSYLVANIA, INC
53.53 III. BALANCE SHEET AND OPERATING STATEMENT
A. ALL UTILITIES

56. Submit detailed calculations supporting taxable income before state and federal income taxes where the income tax is subject to allocation due to operations in another state, or due to operation of other taxable utility or non-utility business, or by operating divisions or areas.

Response:

Columbia Gas of Pennsylvania has a proprietary interest in gas stored underground in other states. The Company also makes off-system gas sales that in some instances are allocated for tax purposes to states other than Pennsylvania.

The ownership of the stored gas and the off-system gas sales noted above have created certain tax liabilities in the state jurisdictions where the gas is located or the sale allocated. This, in turn, has created a decrease in taxable income apportioned to the Commonwealth of Pennsylvania for state income tax calculations. The overall impact on the company's state income tax effective rate is not material compared to the 9.99% Pennsylvania rate that is included in base rates.

COLUMBIA GAS OF PENNSYLVANIA, INC
53.53 III. BALANCE SHEET AND OPERATING STATEMENT
A. ALL UTILITIES

57. Submit detailed calculations showing the derivation of deferred income taxes for amortization of repair allowance if such policy is followed.

Response: Not applicable. The company has not elected the ADR repair allowance for federal income tax purposes.

58. Furnish a breakdown of major items comprising prepaid and deferred income tax charges and other deferred income tax credits and reserves by accounting areas.

Response: Please refer to Exhibit No. 7, Pages 13, 14, 19 and 20 for a complete breakdown of the income tax calculation including deferred tax charges and credits.

59. Provide details of the Federal Surtax Credit allocated to the Pennsylvania jurisdictional area, if applicable.

Response: Not applicable.

COLUMBIA GAS OF PENNSYLVANIA, INC.

**CALCULATION OF FEDERAL AND STATE INCOME TAXES
 PRO FORMA AT TEST YEAR BASE RATES AND PROPOSED BASE RATES
 TWELVE MONTHS ENDED NOVEMBER 30, 2019**

Line No.	Description	Pro Forma	Pro Forma
		At Test Year Base Rates	At Proposed Base Rates
		(1)	(2)
		\$	\$
1	Operating Income Before Income Taxes (Exhibit No. 2, Sch 3, Pg 3)	161,501,713	182,679,461
2	Pennsylvania Corporate Net Income Tax Deductible (P20, L8)	<u>(3,011,497)</u>	<u>(4,280,891)</u>
3	<u>Statutory Adjustments</u>		
4	<u>Flow-Through Adjustments</u>		
5	Book/ Tax Depreciation, Net	3,657,627	3,657,627
6	Book Depreciation- Net Salvage Amts	4,559,315	4,559,315
7	Property Removal Costs - ADR	(591,798)	(591,798)
8	Loss on Retirement - ACRS/MACRS Removal Costs	(2,655,399)	(2,655,399)
9	Interest on Debt (1)	(37,936,024)	(37,936,024)
10	Employee Business Expense Disallowance	248,639	248,639
11	AFUDC Equity	0	0
12	Employee Stock Purchase Plan	22,213	22,213
13	NCS Allocation- Perm Taxes	397,985	397,985
14	Parking	<u>104,926</u>	<u>104,926</u>
15	Total Flow Through Adjustments	(32,192,516)	(32,192,516)
16	<u>Deferred Adjustments</u>		
17	Excess Tax Depreciation Over Book	14,102,769	14,102,769
18	Repairs on Gas Pipeline	(70,352,808)	(70,352,808)
19	Bonus Depreciation	0	0
20	Sec 263A Mixed Service Costs	(1,148,256)	(1,148,256)
21	Loss On Retirement - ACRS/MACRS Property Basis	(1,915,231)	(1,915,231)
22	Avoided Cost Interest	164,243	164,243
23	Builder Incentives Capitalized	(27,874)	(27,874)
24	Stored Gas Losses	2,024	2,024
25	Contributions In Aid of Construction	2,878,283	2,878,283
26	Tax Inventory Adj	(6,409,233)	(6,409,233)
27	Capitalized Inventory	(157,677)	(157,677)
28	Customer Advances	<u>(784,275)</u>	<u>(784,275)</u>
29	Total Deferred Adjustments	(63,648,035)	(63,648,035)
30	Taxable Income (Lines 1,2,14,28)	62,649,665	82,558,019
31	Federal Income Tax Payable @ 21%	13,156,430	17,337,184
32	Deferred Income Taxes (Line 28 @ 21%)	13,366,087	13,366,087
33	Amortization of Tax Refund	0	0
34	Flow Back Of Excess Deferred Taxes	(258,209)	(258,209)
35	Effect of CNIT Deferred Tax on FIT (P20, Lines 9-12 @21%)	<u>(154,220)</u>	<u>(154,220)</u>
36	Net Federal Income Tax Expense (Lines 31-35)	26,110,088	30,290,842
37	State Income Tax Expense (P20, L13)	<u>3,745,880</u>	<u>5,015,274</u>
38	Total Income Tax Expense	<u>29,855,968</u>	<u>35,306,116</u>

(1) Interest expense for rate purposes has been calculated as follows: 2.05% weighted cost of short-term and long-term debt x original cost rate base of \$1,850,537,758 = \$37,936,024

COLUMBIA GAS OF PENNSYLVANIA, INC.

**CALCULATION OF FEDERAL AND STATE INCOME TAXES
 PRO FORMA AT TEST YEAR BASE RATES AND PROPOSED BASE RATES
TWELVE MONTHS ENDED NOVEMBER 30, 2019**

Line No.	Description	Pro Forma At Test Year Base Rates	Pro Forma At Proposed Base Rates
		(1)	(2)
		\$	\$
1	<u>Calculation of Pennsylvania Corporate Net Income Tax</u>		
2	Operating Income Before Income Taxes (Page 19, Line 1)	161,501,713	182,679,461
3	Statutory Adjustments (Page 19, Lines 15 & 29)	(95,840,551)	(95,840,551)
4	Pennsylvania Bonus Depreciation Adj	<u>(15,419,310)</u>	<u>(15,419,310)</u>
5	CNIT Taxable Income	50,241,852	71,419,600
6	Net Operating Loss Deduction	20,096,741	28,567,840
7	PA Taxable Income	30,145,111	42,851,760
8	CNIT Payable at Base Rate of 9.99%	3,011,497	4,280,891
9	Deferred Tax On Net Operating Loss Deduction (amounts from above @ 9.99%)	0	0
10	Deferred Tax on Inventory Adj (\$6,4094,233 @ 9.99%)	640,282	640,282
11	Deferred Tax on Capitalized Inventory (\$157,677 @ 9.99%)	15,752	15,752
12	Deferred Tax on Customer Advances (\$784,275 @ 9.99%)	<u>78,349</u>	<u>78,349</u>
13	Pennsylvania Corporate Income Tax Expense	<u><u>3,745,880</u></u>	<u><u>5,015,274</u></u>

COLUMBIA GAS OF PENNSYLVANIA, INC
53.53 III. BALANCE SHEET AND OPERATING STATEMENT
A. ALL UTILITIES

60. Explain the reason for the use of cost of removal of any retired plant figures in the income tax calculations.

Response:

For retired plant which was originally installed prior to 1971, the cost of removal has been used to make a reducing adjustment to the reserve for depreciation for tax reporting purposes under the mass asset accounting provisions of the Internal Revenue Code. For plant installed after vintage year 1970, cost of removal has been deducted as a current expense as required under the Asset Depreciation Range and the Accelerated Cost Recovery System (ACRS) regulations, including the modified ACRS prescribed by the Tax Reform Act of 1986. The income tax effect of the deductible removal costs has been flowed through for book purposes in accordance with the final opinion and order in Case No. R-832493.

61. Submit the corresponding data applicable to Pennsylvania Corporate Income Tax deferment.
- a. Show the amounts of straight line tax depreciation and accelerated tax depreciation, the difference between which gave rise to the normalizing tax charged back to the test year operating statement.
 - b. Show normalization for both Federal and State Income Taxes.
 - c. Show tax rates used to calculate tax deferment amount.

Response:

See Exhibit No. 7, Page 7. This response to Regulation 53.53 III A. 52 details the deferred federal income tax and tax rate used to calculate the normalization of accelerated depreciation. State accelerated depreciation is not normalized.

COLUMBIA GAS OF PENNSYLVANIA, INC
53.53 III. BALANCE SHEET AND OPERATING STATEMENT
A. ALL UTILITIES

62. Provide the accelerated tax depreciation and the book depreciation used to calculate test year deferrals in amounts segregated as follows: For:
- a. Property installed prior to 1970.
 - b. Property installed subsequent to 1969 (indicate increasing capacity additions and non increasing capacity additions).

Response:

- a. No tax deferrals have been booked, or included in the filing, for property installed prior to 1970.
- b. See Exhibit No.7, Page 7. This response to Regulation 53.53 III A,52 details the tax and book depreciation on property installed subsequent to 1969.

63. State whether all tax savings due to accelerated depreciation on property installed prior to 1970 have been passed through to income. (If not, explain).

Response:

All tax savings due to accelerated depreciation on property installed prior to 1970 have been passed through to income.

64. Show any income tax loss/gain carryovers from previous year that may effect test year income taxes or future year income taxes. Show loss/gain carryovers by years of origin and amounts remaining by years at the end of the test year.

Response:

The Company incurred a tax loss for federal purposes in tax years 2008, 2010, 2011, 2012, 2013, 2016 and 2017. Some of the loss for federal purposes offset income from prior years and some has been carried forward. For state income purposes losses were incurred in tax years 2008, 2010, 2011 and 2019, see Exhibit No.7, Page 23.

	ORIGINAL NOL INCURRED IN:											
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Original NOL Amount (Enter as positive)	144,975,996		3,663,502	69,764,304								6,321,835
Year Utilized (Enter as negative)												
2009		(3,282,934)										
2010			-									
2011				-								
2012					(3,000,000)							
2013						(8,917,559)						
2014							(17,621,904)					
2015								(20,264,264)				
2016									(13,096,855)			
2017										(8,070,124)		
2018											(26,495,177)	
2019												
Cumulative NOL used:	-	(3,282,934)	(3,282,934)	(3,282,934)	(6,282,934)	(15,200,493)	(32,822,397)	(53,086,661)	(66,183,516)	(74,253,640)	(100,748,817)	(94,426,982)
NOL Carryforward	144,975,996	141,693,062	145,356,564	215,120,868	212,120,868	203,203,309	185,581,405	165,317,141	152,220,286	144,150,162	117,654,985	123,976,820

COLUMBIA GAS OF PENNSYLVANIA, INC
53.53 III. BALANCE SHEET AND OPERATING STATEMENT
A. ALL UTILITIES

65. State whether the company eliminates any tax savings by the payment of actual interest on construction work in progress not in rate base claim.
If response is affirmative:
- a. Set forth amount of construction claimed in the tax savings reduction. Explain the basis for this amount.
 - b. Explain the manner in which the debt portion of this construction is determined for purposes of the deferral calculation.
 - c. State the interest rate used to calculate interest on this construction debt portion, and the manner in which it is derived.
 - d. Provide details of calculation to determine tax savings reduction. State whether state taxes are increased to reflect the construction interest elimination.

Response: The Company does not eliminate tax savings by payment of actual interest on CWIP. The Company capitalizes interest under section 263A of the Internal Revenue Code for tax purposes. This may result in more or less interest capitalized compared to the books. Deferred income taxes are recorded.

COLUMBIA GAS OF PENNSYLVANIA, INC
53.53 III. BALANCE SHEET AND OPERATING STATEMENT
A. ALL UTILITIES

66. Provide a detailed analysis of Taxes Accrued per books as of the test year date. Also supply the basis for the accrual and the amount of taxes accrued monthly.

Response:

Refer to Exhibit No.7, Pages 26 through 28.

COLUMBIA GAS OF PENNSYLVANIA, INC.
ACCRUED TAXES AND BASIS FOR ACCRUALS
AS OF NOVEMBER 30, 2019

<u>Taxes Accrued Balance</u>	<u>Amount</u> \$	<u>Basis for Accrued Tax</u>
Federal Income Tax	17,732,859	Tax is based on the taxable net income generated from Company operations as defined by and reported to the Internal Revenue Service. The tax rate at the end of the historic test year is 21%. The monthly accrual is based on the taxable income or loss achieved from that month's operations.
Social Security Taxes (FICA)	277,117	Social Security tax for 2019 is based on the first \$132,900 of taxable wages paid to an employee at a rate of 6.20% compared to \$128,400 wage base and rate of 6.20% in 2018). The wage base for the 1.45% Medicare tax was applied to total taxable wages.
Federal Unemployment Insurance (FUTA)	-	Tax is based on the first \$7,000 of wages paid to an employee at a rate of 6.0%. A credit is allowed for state unemployment taxes paid for the first 5.4%, thus making the effective federal rate .8%. Taxes are accrued monthly based on taxable wages paid.
Pennsylvania Corporate Net Income Tax	(1,292,575)	Tax is based on the taxable net income as defined by the Federal Income Tax Code before the deduction for Pennsylvania State Income Taxes. To this taxable income, adjustments are made as provided by the Commonwealth of Pennsylvania Tax Code. The tax rate is 9.99% of taxable income. The monthly accrual is based on the taxable income or loss achieved from that month's operations.
Pennsylvania PURTA (Public Utility Realty Tax Act), local property tax and WV stored gas property tax	349,229	PURTA is based on the market value of public utility land, buildings, and other structures. One-twelfth (1/12) of the total amount of estimated annual PURTA plus local property tax is amortized to the property tax expense. WV stored gas property tax is based on the assessed value per the property tax return. One-twelfth (1/12) of the total amount of estimated WV stored gas property tax is expensed per month.

COLUMBIA GAS OF PENNSYLVANIA, INC.
ACCRUED TAXES AND BASIS FOR ACCRUALS
AS OF NOVEMBER 30, 2019

<u>Taxes Accrued Balance</u>	<u>Amount</u>	<u>Basis for Accrued Tax</u>
	\$	
Federal Corporate Net Income Tax Prior Years' Adjustment Non-Current	-	Federal tax accrual for prior year returns due to adjustments to the return as filed. Amounts are settled with IRS during federal income tax audits.
Pennsylvania Corporate Net Income Tax Prior Years' Adjustment Non-Current	-	State tax accrual for prior year returns due to adjustments to the return as filed. Amounts are settled with the state after the federal return is settled.
Pennsylvania Unemployment Compensation Tax (SUTA)	-	Tax is based on the first \$10,000 of wages paid to an employee in a calendar year. Taxes are accrued at various rates depending upon experience. The monthly accrual is based on payroll data for the period.
Pennsylvania Sales and Use tax	986,538	Tax is based on the value of a product or service sold at retail for users as defined by the State. The current tax rate is 6% of the sales price. Monthly accrual is based on the analysis of the Company's actual purchases. Quarterly accrual for current sales tax audit.
License and Franchise and Other Local Taxes	-	The Company pays miscellaneous local taxes such as franchise and license fees as assessed by local governments. The accrual is made for these taxes when the taxes are paid.
TOTAL ACCRUED TAXES	<u><u>18,053,168</u></u>	

COLUMBIA GAS OF PENNSYLVANIA, INC.
 MONTHLY TAX ACCRUALS
 TWELVE MONTHS ENDED NOVEMBER 30, 2019

Line No.	Month	Federal Taxes				Pennsylvania State and Other Taxes							
		Income Tax		Social Security FICA (3)	Unemployment FUTA (4)	Corporate Net Income		Property (7)	Capital Stock Tax (8)	Unemployment SUTA (9)	Sales and Use (10)	License & Franchise (11)	All Other (12)
		Current (1)	Prior Years (2)			Current (5)	Prior Years (6)						
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
1	December-2018	9,410,538	-	190,975	58	3,061,199	-	35,858	-	320	35,865	-	0
2	January-2019	0	-	223,678	14,195	0	-	35,125	-	76,938	0	-	-
3	February	12,076,087	-	213,314	2,556	3,709,231	-	35,125	-	37,155	-	100	-
4	March	3,675,937	-	209,935	442	1,102,596	-	41,844	-	3,906	35,865	-	-
5	April	(153,256)	-	213,281	161	(116,495)	-	35,125	-	1,269	-	-	-
6	May	(2,372,913)	-	218,800	263	(823,164)	-	35,125	-	1,556	-	-	-
7	June	(3,297,255)	-	234,677	511	(1,117,444)	-	35,125	-	3,021	33,465	-	-
8	July	(3,109,455)	-	248,424	1,024	(1,057,655)	-	35,125	-	4,384	-	-	-
9	August	(3,125,561)	-	229,698	620	(1,070,221)	-	102,978	-	3,694	-	-	-
10	September	(3,267,202)	-	233,970	274	(626,848)	-	37,763	-	2,246	33,465	-	-
11	October	3,540,842	-	252,383	323	1,099,166	-	37,763	-	1,995	-	-	(126)
12	November	851,301	-	231,575	215	(1,099,166)	1,099,166	49,398	-	1,937	-	-	-
13	TOTAL	<u>14,229,063</u>	<u>0</u>	<u>2,700,711</u>	<u>20,642</u>	<u>3,061,199</u>	<u>1,099,166</u>	<u>516,357</u>	<u>0</u>	<u>138,420</u>	<u>138,661</u>	<u>100</u>	<u>(126)</u>

COLUMBIA GAS OF PENNSYLVANIA, INC
53.53 III. BALANCE SHEET AND OPERATING STATEMENT
A. ALL UTILITIES

67. For the test year as recorded on test year operating statement:
- a. Supply the amount of federal income taxes actually paid.
 - b. Supply the amount of the federal income tax normalizing charge to tax expense due to excess of accelerated tax depreciation over book depreciation.
 - c. Supply the normalizing tax charge to federal income taxes for the 10% Job Development Credit during test year.
 - d. Provide the amount of the credit of federal income taxes due to the amortization or normalizing yearly debit to the reserve for the 10% Job Development Credit.
 - e. Provide the amount of the credit to federal income taxes for the normalizing of any 3% Investment Tax Credit Reserve that may remain on the utility books.

Response:

- a. The amount of Federal Income Taxes paid during the test year was \$0.
- b. Federal Income Tax expense for the normalization of the excess of accelerated tax depreciation over book depreciation is (\$2,961,581). See Exhibit No. 7, Page 7.
- c. None.
- d. For the twelve months ended November 30, 2019 the amount of the credit to federal income taxes due to the yearly amortization debit to the reserve for the Job Development Credit (JDC) is \$299,568. (Note: This amortization includes portions of JDC accrued at 4%, 10%, and 8%) on Exhibit No. 7, Page 11.
- e. None.

COLUMBIA GAS OF PENNSYLVANIA, INC
53.53 III. BALANCE SHEET AND OPERATING STATEMENT
A. ALL UTILITIES

68. Provide the debit and credit in the test year to the Deferred Taxes due to Accelerated Depreciation for federal income tax, and provide the debit and credit for the Job Development Credits (whatever account) for test year.

Response:

DATA FOR 12-MONTH PERIOD ENDED NOVEMBER 30, 2019

Accounting entries per Books for:

a. Accelerated Depreciation Deferred

Dr. 28250000 Deferred Federal Income Tax	\$2,961,581
Cr. 41111000 Accumulated Deferred Income Taxes	\$2,961,581

b. Amortization of Job Development Credits

Dr. 25500000 Deferred Investment Tax Credit	\$ 299,568
Cr. 41141000 Deferred Federal Income Tax	\$ 299,568

69. Reconcile all data given in answers to questions on income taxes charged on the test year operating statement with regard to income taxes paid, income taxes charged because of normalization and credits due to yearly write-offs of past years' income tax deferrals, and from normalization of investment tax and development credits. (Both state and federal income taxes.)

Response: Refer to the following schedules which detail the requirements of these items:

<u>Schedule No.</u>	<u>Description</u>
Exhibit No. 7, Pages 19 and 20	Calculation of Income Taxes
Exhibit No. 7, Pages 13 and 14	Reconciliation of Taxable Net Income Per Books and Pro Forma
Exhibit No. 7, Page 29 (question 67a)	Income Taxes Paid

COLUMBIA GAS OF PENNSYLVANIA, INC
53.53 III. BALANCE SHEET AND OPERATING STATEMENT
A. ALL UTILITIES

70. With respect to determination of income taxes, federal and state:
- a. Show income tax results of the annualizing and normalizing adjustments to the test year record before any rate increase.
 - b. Show income taxes for the annualized and normalized test year.
 - c. Show income tax effect of the rate increase requested.
 - d. Show income taxes for the normalized and annualized test year after application of the full rate increase.

[It is imperative that continuity exists between the income tax calculations as recorded for the test year and the final income tax calculation under proposed rates. If the company has more than one accounting area, then additional separate worksheets must be provided in addition to those for total company.]

Response: See Exhibit No. 2 and Exhibit No. 7, Pages 19 and 20, for the income tax results of the various annualization and adjustments made to the historic test year twelve months ended November 30, 2019.

71. In adjusting the test year to an annualized year under present rates, explain any changes that may be due to book or tax depreciation change and to debits and credits to income tax expense due to accelerated depreciation, deferred taxes, job development credits, tax refunds or other items. (The above refers only to the adjustments going from recorded test year to annualized test year).

Response: Refer to Exhibit No. 7, Pages 13, 14, 19 and 20, for explanation of the adjustments to the twelve months ended November 30, 2019.

COLUMBIA GAS OF PENNSYLVANIA, INC
53.53 II. RATE OF RETURN
A. ALL UTILITIES

10. Under Section 1552 of the Internal Revenue Code and Regulations 1.1552-1 thereunder, if applicable, Parent Company, in filing a consolidated income tax return for the group, must choose one of four options by which it must allocate total income tax liability of the group to the participating members to determine each member's tax liability to the federal government. (If this interrogatory is not applicable, so state.)
 - a. State what option has been chosen by the group.
 - b. Provide, in summary form, the amount of tax liability that has been allocated to each of the participating members in the consolidated income tax return.
 - c. Provide a schedule, in summary form, of contributions, which were determined on the basis of separate tax return calculations, made by each of the participating members to the tax liability indicated in the consolidated group tax return. Provide total amounts of actual payments to the tax depository for the tax year, as computed on the basis of separate returns of members.
 - d. Provide annual income tax return for group, and if income tax return shows net operating loss; provide details of amount of net operating loss allocated to the income tax returns of each of the members of the consolidated group.

COLUMBIA GAS OF PENNSYLVANIA, INC
53.53 II. RATE OF RETURN
A. ALL UTILITIES

Response:

- a. For Earnings and Profits purposes under Section 1552, the company has not made an election. Under the law, if no election is made the tax liability shall be apportioned among the members of the group in accordance with the ratio which that portion of the consolidated taxable income attributable to each member of the group having taxable income bears to the consolidated taxable income. The company would only use this allocation for earnings and profits purposes.
- b. The amended and restated intercompany income tax allocation agreement approved by state regulatory commissions dictate the terms of the allocation of tax liability which is in effect beginning with the Historic Test Year. Under the agreement each company is allocated tax based on a standalone return tax liability. Attached is the companies' tax sharing agreement (Exhibit No. 7, pages 34 - 47) which was revised effective April 6, 2016, and amended effective August 17, 2016, as approved by the Commission in Docket No. G-2016-2531552. In 2016, Act 40 was passed which eliminated the consolidated tax savings adjustment. Please see schedule for the participating members updated for requirements under Section 1301.1 in Exhibit No. 7, Pages 2 – 4.
- c. In 2016, Act 40 was passed which eliminated the consolidated tax savings adjustment. Please see schedule for the participating members updated for requirements under Section 1301.1 in Exhibit No. 7, Pages 2 – 4 discussed in b, above.
- d. The income tax return(s) for 2016, 2017 and 2018 were provided with response to SDR-GASRR-055.

April 7, 2016

NISOURCE INC., AND SUBSIDIARY COMPANIES

AMENDED AND RESTATED

INTERCOMPANY INCOME TAX ALLOCATION AGREEMENT

WHEREAS, NiSource Inc., a corporation organized under the laws of the State of Delaware ("NiSource") and a holding company under the Public Utility Holding Company Act of 2005 ("Act"), together with its subsidiary companies, direct and indirect, listed as parties hereto, comprise the members of the NiSource consolidated group which will join annually in the filing of a consolidated U.S. federal income tax return, and it is now the intention of NiSource and its subsidiaries, direct and indirect, to enter into an agreement for the allocation of current U.S. federal income taxes; and

WHEREAS, certain members of the Consolidated Group (as defined below) will join annually in the filing of certain consolidated state income tax returns (to the extent permitted or required under applicable state income tax laws), and it is now the intention of the Consolidated Group to enter into an agreement for the allocation of current state income taxes; and

WHEREAS, the members of the Consolidated Group as of September 30, 2002 entered into that Intercompany Income Tax Allocation Agreement dated September 30, 2002, for the allocation of U.S. federal income taxes (the "2002 Agreement"); and

WHEREAS, NiSource entered into that Separation and Distribution Agreement with Columbia Pipeline Group, Inc., dated as of June 30, 2015; and

WHEREAS, the Parties desire to amend and restate the 2002 Agreement as set forth herein in order to amend certain provisions therein, including, but not limited to, adopting certain obligations with respect to the allocation of income taxes among the Members; and

NOW THEREFORE, each member of the Consolidated Group does hereby covenant and agree with one another that the current consolidated income tax liabilities of the Consolidated Group shall be allocated as follows:

ARTICLE I.

Definitions and Interpretation

Section 1.1 Definitions. For all purposes of this Agreement, except as otherwise expressly provided, the following terms shall have the following respective meanings:

“Code” means the Internal Revenue Code of 1986, as amended.

“Consolidated Group” means NiSource and all of its subsidiaries which, from time to time, may be included in any (i) U.S. federal income tax return filed by NiSource in accordance with Sections 1501 and 1502 of the Code or (ii) Other Return.

“Consolidated Return” means, with reference to any Taxable Period, any consolidated U.S. federal income tax return or Other Return filed by NiSource whether before or after the date hereof, which includes one or more Members of the Consolidated Group in a consolidated, combined, composite or unitary group of which NiSource is a common parent.

“Consolidated Return Year” means any Taxable Period for which NiSource files a Consolidated Return or Other Return that includes one or more Members of the Consolidated Group in a consolidated, combined, composite or unitary group of which NiSource is a common parent.

“Consolidated Tax Liability” means, with reference to any Taxable Period, the consolidated, combined, composite or unitary U.S. federal income tax liability or liability relating to Other Taxes, as the case may be (including any interest, additions to tax and penalties), of the Consolidated Group for such Taxable Period.

“Designated Official” means the Vice President, Corporate Tax of NiSource Corporate Services Company or such other official assigned the responsibilities of Vice President, Corporate Tax of NiSource Corporate Services Company.

“Includible Corporation” has the meaning attributed to that term in Section 1504(b) of the Code.

“Member” means, for any Taxable Period, any entity that is treated as a corporation for federal tax purposes (or any predecessor or successor in interest to such corporation under Section 381 of the Code which was or is, as the case may be, an Includible Corporation) which at any time during such Taxable Period is an Includible Corporation that is included in the Consolidated Group, including NiSource.

“Other Return” means any consolidated, combined, composite or unitary tax return of Other Taxes filed by NiSource or another Member of the Consolidated Group, whether before or after the date hereof, which includes the operations, income or assets of one or more Members of the Consolidated Group.

“Other Taxes” means any taxes (including any interest and penalties) payable by NiSource or another Member of the Consolidated Group to any taxing authority of any state, municipal or other political subdivision, including all agencies and instrumentalities of such taxing authority, other than those taxes subject to Section 2.1.

“Person” means any individual, partnership, firm, corporation, limited liability company, joint stock company, unincorporated association, joint venture, trust or other entity or enterprise, or any government or political subdivision or agency, department or instrumentality thereof.

“Regulations” means the Treasury Regulations promulgated under the Code.

“Standalone” means, with reference to any Member’s tax items or attributes, such tax items or attributes shall be taken into consideration as though such Member were not a Member of the Consolidated Group.

“Standalone Return Tax Liability” means, in the case of each Member of the Consolidated Group for any Taxable Period of the Consolidated Group, the U.S. federal income tax liability of such Member for such Taxable Period computed on a Standalone basis as though such Member were not a Member of the Consolidated Group, except that in making such computation for any such Taxable Period, such liability shall be determined: (1) on the assumption that the "exemption amount" specified in Section 55(d)(2) of the Code which is applicable to such Member for such Taxable Period is zero, and (2) on the further assumption that any tax credit or tax deduction will only be taken into account to the extent allowed on a consolidated basis.

“Taxable Period” shall mean any (i) period of 12 consecutive months or (ii) period of less than 12 consecutive months, for which a Consolidated Return is or will be filed by the Consolidated Group.

Section 1.2 Reference, Etc. The words ‘*hereof*’, ‘*herein*’ and ‘*hereafter*’ and words of similar import when used in this Agreement shall refer to this Agreement as a whole and not to any particular provision of this Agreement. All terms defined herein in the singular shall have the same meanings in the plural and *vice versa*. All References herein to any Person includes such Person’s successors and assigns. All references herein to Articles and Sections shall, unless the context requires a different construction, be deemed to be references to the Articles and Sections of this Agreement. In this Agreement, unless a clear contrary intention appears the word “*including*” (and with correlative meaning “*include*”) means “including but not limited to”.

ARTICLE II.

Preparation and Filing of Tax Returns; Allocation of Taxes

Section 2.1 Federal Returns.

(a) A Consolidated Return shall be prepared and filed by NiSource for each Taxable Period in respect of which this Agreement is in effect and for which the Consolidated Group is required or permitted to file a consolidated U.S. federal income tax return. NiSource

and all its Members shall execute and file such consents, elections and other documents that may be required or appropriate for the proper filing of such returns.

(b) The U.S. federal Consolidated Tax Liability of the Consolidated Group for each Taxable Period of the Consolidated Group shall be borne by the Members in an amount equal to each Member's Standalone Return Tax Liability. If any Member's Standalone Return Tax Liability does not result in a positive tax liability, the amount of such Standalone Return Tax Liability will be treated as zero. The general effect of the foregoing is that each Member will pay its Standalone Return Tax Liability.

(c) The amounts determined for each Member under Section 2.1(b) shall be used in determining the amounts to be paid (as provided in Sections 3.2(a) and 3.4 of this Agreement) by each Member to NiSource with respect to each Member's share of the Consolidated Group's U.S. federal Consolidated Tax Liability.

(d) In the case of any Member whose Standalone Return Tax Liability for such Taxable Period is greater than zero, such Member shall make a payment of its Standalone Return Tax Liability for such Taxable Period to NiSource, pursuant to Section 3.2(a) hereof.

(e) For purposes of calculating a Member's Standalone net operating loss ("NOL") for any Taxable Period under this Agreement, such NOL shall be determined by taking such Member's NOL determined on a Standalone basis as of the beginning of the Taxable Period (determined by computing NOLs by reference to only such Member's items of income, gain, deduction and loss). To the extent any NOL of the Consolidated Group may be carried back or carried forward, a Member shall be allocated for use by such Member the percentage of such carryback or carryforward, as the case may be, in the amount calculated by dividing such Member's Standalone NOL by the NOL of the Consolidated Group as of the beginning of the Taxable Period. Notwithstanding the language in Section 4.2 herein, each Member's Standalone NOL as of the relevant effective date of this Agreement shall be equal to the amount allocated to such Member under the 2002 Agreement immediately prior to the time such 2002 Agreement is superseded by this Agreement.

(f) To the extent of a tax refund, NOL carryback or other adjustment that subsequently reduces a Member's tax liability as calculated under Section 2.1(b), NiSource shall credit such amount to future payments due from the affected Member. To the extent of audits and other upward adjustments in a Member's tax liability as calculated under Section 2.1(b), such Member is required to make a corresponding payment (as provided in Section 3.4 of this Agreement) to NiSource taking into account such adjustments. Any tax carryforward shall be carried forward for use by the respective Member in calculating its Standalone Return Tax Liability in the subsequent year, and no payment shall be made to NiSource by such Member until such carryforward is fully utilized.

Section 2.2 Other Taxes.

(a) Wherever appropriate, Other Taxes shall be shared among the applicable Members of the Consolidated Group in a manner that is consistent with the method set forth in Section 2.1 hereof, and amounts due to NiSource, with respect to Other Taxes, shall be determined in a manner consistent with Section 2.1. NiSource will prepare and file (or cause to be prepared and filed) all returns of Other Taxes which are required to be filed with respect to the operations of NiSource, the Consolidated Group and its Members (as Members of the Consolidated Group). In the event any taxing authority permits, but does not require, that a consolidated, combined, composite or unitary return be filed for Other Taxes, which return includes both NiSource and a Member, NiSource may elect to file such return and shall have the right to require any Member to be included in such return. NiSource will notify each of its Members included in each Other Return.

(b) Each Member of the Consolidated Group that is included on a return other than pursuant to an Other Return with any other Member of the Consolidated Group shall be solely responsible and obligated to pay the tax liability with respect to such return from its own funds. Such returns shall be prepared and filed by NiSource or the Member included on such Other Return, as determined by NiSource.

(c) If any Member of the Consolidated Group is required to file a consolidated, combined, composite or unitary return for Other Taxes with another Member of the Consolidated Group, but not with NiSource, then NiSource shall be required to prepare and file such tax returns and shall apportion among and, collect and remit from, the applicable Members such Other Taxes in a manner consistent with Section 2.1. If the right to file a consolidated, combined, composite, or unitary return for such Other Taxes is optional, then NiSource shall decide which of the Members should, to the extent permitted by law, join in filing each such return.

Section 2.3 Member Tax Information. The Members of the Consolidated Group shall submit or make available the tax information requested by the Designated Official of NiSource in the manner and by the date requested, in order to enable the Designated Official to fulfill its rights and obligations pursuant to Article 2 hereof.

ARTICLE III.

Responsibility for Tax; Intercompany Payments

Section 3.1 Responsibility. NiSource will be solely responsible for, and will indemnify and hold each Member of the Consolidated Group harmless, to the extent such Member has complied with its rights and obligations hereunder (including its payment obligations under this Article III), with respect to the payment of: (a) the Consolidated Tax

Liability for each Taxable Period for which, as determined under Section 2.1 hereof, NiSource did file, elected to file or was required to file a Consolidated Return for U.S. federal income taxes; and (b) any and all Other Taxes for each Taxable Period for which, as determined under Section 2.2 hereof, NiSource did file, elected to file or was required to file any Other Return. No Member shall at any time be required pursuant to this Agreement to remit, as part of any payment that such Member makes pursuant to this Agreement, any amount of penalty or interest that the Consolidated Group may incur for any Taxable Period by reason of NiSource's failure to properly calculate or timely pay any Consolidated Tax Liability of the Consolidated Group for such Taxable Period or to file timely the Consolidated Group's Consolidated Return for any such Taxable Period.

Section 3.2 Federal Tax Payments. (a) With respect to each Consolidated Return Year, the Designated Official of NiSource shall estimate each Member's share of quarterly estimated U.S. federal tax payments to be made for each Consolidated Return Year. In making this determination, NiSource shall elect a reasonable method for determining estimated tax and each Member shall follow that method. At the direction of the Designated Official, such Members will pay to NiSource such estimates not later than the 15th day of the 4th, 6th, 9th, and 12th months of such Consolidated Return Year, or at such intervals as directed by the Designated Official. The difference between (1) a Member's estimated tax payments used for computation of the quarterly estimated payments and (2) such Member's actual tax liability for any Consolidated Return Year as determined under Section 2.1 hereof, shall be paid to NiSource within sixty (60) days after the filing of the U.S. federal Consolidated Return, or applied as a credit against such Member's next estimated tax payment due under this Section 3.2(a), as the case may be.

(b) NiSource shall have sole authority, to the exclusion of all other Members of the Consolidated Group, to agree to any adjustment proposed by the Internal Revenue Service or any other taxing authority with respect to any U.S. federal Consolidated Return, including interest or penalties, attributable to any Member of the Consolidated Group during any Consolidated Return Year in which such Member was a Member of the Consolidated Group notwithstanding that such adjustment may increase the amounts payable by Members of the Consolidated Group under this Agreement. In the event of any adjustment to the U.S. federal Consolidated Tax Liability attributable to any Member of the Consolidated Group by reason of an amended return, claim for refund or audit by the Internal Revenue Service or any other taxing authority, the liability of all other Members of the Consolidated Group hereunder shall be redetermined to give effect to such adjustment as if such adjustment had been made as a part of the original computation of such liability, and payment by a Member to NiSource (or credit against such Member's next estimated tax payment due under Section 3.2(a), as the case may be) shall be promptly made (or applied as a credit, as the case may be) after any payments are made to the Internal Revenue Service or any other taxing authority, refund is received or final determination of the matter is made in the case of contested proceedings. In such event, any payments between the parties shall bear interest at the then prevailing rate or rates on deficiencies assessed by the Internal Revenue Service or any other relevant taxing authority,

during the period from the due date of such Consolidated Return (determined without regard to extensions of time for the filing thereof) for the Consolidated Return Year to which the adjustments were made to the date of payment.

Section 3.3 Other Tax Payments. Wherever appropriate, payments by a Member with respect to Other Taxes and required estimates thereof shall be calculated and made by such Member in a manner consistent with the method set forth in Section 3.2. The principles set forth in Section 3.2 governing the determination and adjustment of payments as well as the method of payment by such Member with respect to U.S. federal income taxes shall be equally applicable in determining and adjusting the amount of and due date of payments to be made by such Member with respect to Other Taxes and estimates thereof. Wherever appropriate, each Member shall pay, directly to the appropriate taxing authority, all taxes for which such Member is liable and for which no other Member has joint and several liability.

Section 3.4 Payment Mechanics. (a) Any payments to be made by a Member of the Consolidated Group pursuant to this Agreement shall be made by such Member to NiSource by either promptly crediting as an offset against amounts owed to such Member by NiSource or to the extent no amounts are owed to such Member by NiSource, by cash payments to NiSource.

(b) Tax payments by NiSource with respect to any Consolidated Tax Liability shall be paid by NiSource and shall be debited to the Member of the Consolidated Group for their respective shares of such Consolidated Tax Liability as determined pursuant to Articles II and III hereof. Tax refunds received by NiSource with respect to any Consolidated Tax Liability shall be credited by NiSource against the future tax liability of the Member entitled to such tax refund, as determined pursuant to Articles II.

(c) NiSource shall be responsible for maintaining the books and records reflecting the intercompany accounts reflecting the amounts owned, collected and paid with respect to taxes pursuant to this Agreement.

(d) NiSource may delegate to other Members of the Consolidated Group responsibilities for the collection and disbursement of funds as required under this Agreement as well as responsibilities for maintaining books and records as required under this Agreement.

Section 3.5 Departing Members. In the event that any Member of the Consolidated Group at any time leaves the Consolidated Group and, under any applicable statutory provision or regulation, NiSource shall, to the extent required or permitted by applicable statutory provision or regulation, file the appropriate tax returns with respect to such departing Member or the Consolidated Group, as the case may be, and shall calculate the applicable Consolidated Tax Liability of the Members included in such return in the manner as set forth in this Agreement, in each case as reasonably determined by NiSource. If, under applicable statutory provision or regulation, such departing Member is deemed to take with it all or a portion of any of the tax attributes of the Consolidated Group (including but not limited to NOLs, alternative minimum

tax credit carry forwards under Section 55, and other applicable credit carry forwards), then the departing Member shall make a payment to NiSource if such tax attributes of the departing Member differ from the attributes previously allocated to such Member under this Agreement. Such settlement shall consist of payment (1) on a dollar for dollar basis for all differences in credits, and, (2) in the case of NOL differences (or other differences related to other deductions), in a dollar amount computed by reference to the amount of NOL (or other deduction) multiplied by the applicable tax rate relating to such NOL (or other deduction). The settlement payment shall be paid to NiSource within sixty days after the Member leaves the Consolidated Group. The settlement amounts shall be allocated among the remaining Members of the Consolidated Group in proportion to the relative attributes possessed by each Member.

Section 3.6 Administration. The provisions of this Agreement shall be administered by the Designated Official of NiSource. The interpretations of this Agreement by the Designated Official of NiSource shall be conclusive.

ARTICLE IV.

Miscellaneous Provisions

Section 4.1 Effect. The provisions hereof shall fix the rights and obligations of the parties as to the matters covered hereby whether or not such are followed for U.S. federal income tax or other purposes by the Consolidated Group, including the computation of earnings and profits for U.S. federal income tax purposes.

Section 4.2 Effective Date. This Agreement shall be effective with respect to all Taxable Periods ending on or after July 1, 2015 for the portion of such Taxable Period beginning on such date, in which any subsidiary of NiSource is a Member of the Consolidated Group for any portion of such Taxable Period, and thereafter the 2002 Agreement shall be deemed to have been superseded and replaced in its entirety by this Agreement. It is the intent of the parties hereto that any payments previously made or received by the Members under the 2002 Agreement shall not be taken into account under this Agreement including for purposes of determining each Member's obligations under this Agreement, and that the rights and obligations of the parties under the 2002 Agreement shall survive only with respect to Taxable Periods or portions thereof ending prior to July 1, 2015, except as otherwise noted in this Agreement. In the event that a party to this Agreement ceases to be a Member of the Consolidated Group, the rights and obligations of such party and each other party to this Agreement shall survive, but only with respect to Taxable Periods including or ending before the date such party ceases to be a Member of the Consolidated Group.

Section 4.3 Notices. Any and all notices, requests or other communications hereunder shall be given in writing (a) if to NiSource to Attention: Vice President, Tax, Facsimile Number 614-460-8415 and (b) if to any other person, at such other address as shall be furnished by such person by like notice to the other parties.

Section 4.4 Expenses. Each party hereto shall pay its own expenses incident to this Agreement and the transactions contemplated hereby, including all legal and accounting fees and disbursements.

Section 4.5 Benefit and Burden. This Agreement shall inure to the benefit of, and shall be binding upon, the parties hereto and their respective successors.

Section 4.6 Amendments and Waiver. No amendment, modification, change or cancellation of this Agreement shall be valid unless the same is in writing and signed by the parties hereto. No waiver of any provision of this Agreement shall be valid unless in writing and signed by the person against whom that waiver is sought to be enforced. The failure of any party at any time to insist upon strict performance of any condition, promise, agreement or understanding set forth herein shall not be construed as a waiver or relinquishment of the right to insist upon strict performance of the same or any other condition, promise, agreement or understanding at the future time.

Section 4.7 Assignments. Neither this Agreement nor any right, interest or obligation hereunder may be assigned by any party hereto and any attempt to do so shall be null and void.

Section 4.8 Tax Reporting. Notwithstanding the terms of this Agreement, earnings and profits of the Consolidated Group shall be allocated to the Members pursuant to the methods under Sections 1.1552-1(a)(2) and 1.1502-33(d)(3) of the Treasury Regulations, and stock basis shall be determined pursuant to Section 1.1502-32 of the Treasury Regulations.

Section 4.9 Severability. The invalidity or unenforceability of any particular provision of this Agreement shall not affect the other provisions hereof, and this Agreement shall be construed in all respects as if such invalid or unenforceable provision were omitted.

Section 4.10 Entire Agreement. **THIS AGREEMENT SETS FORTH ALL OF THE PROMISES, AGREEMENTS, CONDITIONS, UNDERSTANDINGS, WARRANTIES AND REPRESENTATIONS AMONG THE PARTIES WITH RESPECT TO THE TRANSACTIONS CONTEMPLATED HEREBY, AND SUPERSEDES ALL PRIOR AGREEMENTS, ARRANGEMENTS AND UNDERSTANDINGS BETWEEN THE PARTIES HERETO, WHETHER WRITTEN, ORAL OR OTHERWISE, THERE ARE NO PROMISES, AGREEMENTS, CONDITIONS, UNDERSTANDINGS, WARRANTIES OR REPRESENTATIONS, ORAL OR WRITTEN, EXPRESS OR IMPLIED, AMONG THE PARTIES EXCEPT AS SET FORTH HEREIN.**

Section 4.11 Applicable Law. **THIS AGREEMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF INDIANA.**

Section 4.12 Counterparts. This Agreement may be executed in one or more counterparts, each of which shall constitute an original and together which shall constitute one instrument. The parties hereto specifically recognize that from time to time other corporations may become Members of the Consolidated Group and thereby agree that such new Members may become Members to this Agreement by executing a copy of this Agreement and it will be effective as if all the Members had re-signed.

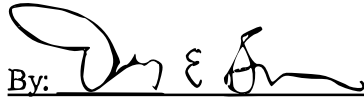
Section 4.13 Attorneys' Fees. If any Member or former member hereto commences an action against another party to enforce any of the terms, covenants, conditions or provisions of this Agreement, or because of a default by a party under this Agreement, the prevailing party in any such action shall be entitled to recover its costs, expenses and losses, including attorneys' fees, incurred in connection with the prosecution or defense of such action from the losing party.

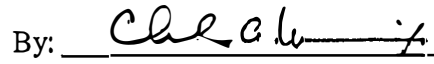
Section 4.14 No Third Party Rights. Nothing in this Agreement shall be deemed to create any right in any creditor or other person or entity not a party hereto and this Agreement shall not be construed in any respect to be a contract in whole or in part of the benefit of any third party.

Section 4.15 Further Documents. The parties agree to execute any and all documents, and to perform any and all other acts, reasonably necessary to accomplish the purposes of this Agreement.

Section 4.16 Headings and Captions. The headings and captions contained in this Agreement are inserted and included solely for convenience and shall not be considered or given any effect in construing the provisions hereof if any question of intent should arise.

EXECUTED as of the date and year first above written.

By: 
Printed Name: Donald E. Brown
Title: Executive Vice President
NiSource Inc.

By: 
Printed Name: Charles A. Mannix
Title: Vice President, Tax Services
[List of companies attached as Exhibit A]

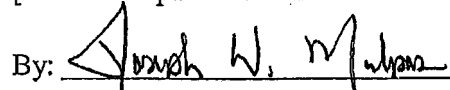
By: 
Printed Name: Joseph W. Mulpas
Title: Vice President
NiSource Insurance Corporation, Inc.

Exhibit A

Bay State Gas Company (dba Columbia Gas of Massachusetts)
Columbia Gas of Kentucky, Inc.
Central Kentucky Transmission Company
Columbia Gas of Maryland, Inc.
Columbia Gas of Ohio, Inc.
Columbia Gas of Ohio Receivables Corporation
Columbia Gas of Pennsylvania, Inc.
Columbia Gas of Pennsylvania Receivables Corporation
Columbia Gas of Virginia, Inc.
The Darlington Water Works Company
Energy USA, Inc.
Energy USA-TPC Corp.
Harbour Water Corporation
Indianapolis Water Company
Irishman's Run Acquisition Corp.
IWC Morgan Water Company
IWC Resources Corporation
Lake Erie Land Company
Liberty Water Corporation
NDC Douglas Properties, Inc.
NiSource Capital Markets, Inc.
NiSource Corporate Group, Inc.
NiSource Corporate Services Company
NiSource Development Company, Inc.
NiSource Energy Technologies, Inc.
NiSource Finance Corp.
NiSource Gas Distribution Group, Inc.
NiSource Insurance Corporation, Inc.
NiSource Retail Services, Inc.
Northern Indiana Public Service Company
NIPSCO Accounts Receivable Corporation
PEI Holdings, Inc.

August 17, 2016

NISOURCE INC. AND SUBSIDIARY COMPANIES

FIRST AMENDMENT TO AMENDED & RESTATED
INTERCOMPANY INCOME TAX ALLOCATION AGREEMENT

Whereas, NISource Inc. and Subsidiary Companies (collectively the "Parties") have entered into the Amended and Restated InterCompany Income Tax Allocation Agreement ("Agreement"), which Agreement is an affiliate interest agreement that has been approved by the Virginia State Corporation Commission on March 3, 2016 and by the Pennsylvania Public Utility Commission on May 5, 2016; and

Whereas, the Parties desire to amend the Agreement in order to comply with the 5 year term limit required under the General Administrative Order of The Indiana Utility Regulatory Commission 2016-1; and

Whereas, the Agreement, in Section 4.6, provides that any amendment shall be valid only if the amendment is in writing and signed by the Parties; and

Whereas, all capitalized terms in this First Amendment to the Agreement (the "First Amendment") shall have the same meaning as set forth in the Agreement; and

Whereas, this First Amendment, upon signature by the Parties will become part of the Agreement; and

Now, therefore, the Parties hereby covenant and agree with one another that the Agreement will terminate on the date five years from the Effective Date per Section 4.2 of the Agreement.

Subject to all necessary regulatory approvals this First Amendment is executed and made part of the Agreement as of the date and year first above written.

By: 

Printed Name: Donald E. Brown

Title: Executive Vice President

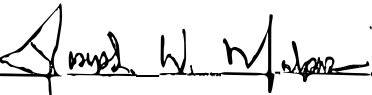
NISource Inc.

By: 

Printed Name: Charles A. Mannix

Title: Vice President, Tax Services


[List of companies attached as Exhibit A to Agreement]

By: 

Printed Name: Joseph W. Mulpas

Title: Vice President

NISource Insurance Corporation, Inc.

By: 

Printed Name: Violet Sistovaris

Title: Executive Vice President

Northern Indiana Public Service Company

PowerTax
Depreciation Summary Report 7
NiSource

Tax Year: 2018
Tax Book: Federal
Columbia Gas of Pennsylvania
Grouped By: Total Tax Classes

Vintage	Beginning Asset Balance	Additions/Retirements	Depreciable Base	Beginning Reserve	Depreciation	Capitalized Depreciation	Gain/(Loss)	Salvage	Cost of Removal	Ending Asset Balance	Ending Reserve
V1953	\$13,043,019.32	(\$49,765.11)	\$13,043,019.32	\$13,038,534.75	\$4,484.57	\$0.00	\$0.00	\$0.00	\$0.00	\$12,993,254.21	\$12,993,254.21
V1954	\$2,064,055.44	(\$9,210.70)	\$2,064,055.44	\$2,064,055.44	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,054,844.74	\$2,054,844.74
V1955	\$4,734,785.49	(\$5,632.48)	\$4,734,785.49	\$4,734,785.49	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$4,729,153.01	\$4,729,153.01
V1956	\$2,964,592.08	(\$14,423.09)	\$2,964,592.08	\$2,964,592.08	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,950,168.99	\$2,950,168.99
V1957	\$3,824,606.62	(\$20,511.46)	\$3,824,606.62	\$3,824,606.62	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,804,095.16	\$3,804,095.16
V1958	\$4,411,439.38	(\$12,782.24)	\$4,411,439.38	\$4,411,439.38	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$4,398,657.14	\$4,398,657.14
V1959	\$4,002,197.41	(\$9,518.51)	\$4,002,197.41	\$4,002,197.41	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,992,678.90	\$3,992,678.90
V1960	\$4,210,886.85	(\$19,712.05)	\$4,210,886.85	\$4,210,886.85	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$4,191,174.80	\$4,191,174.80
V1961	\$4,625,885.78	(\$35,682.98)	(\$17.50)	\$4,625,885.78	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$4,590,202.80	\$4,590,202.80
V1962	\$4,208,829.93	(\$10,199.65)	\$0.00	\$4,208,829.93	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$4,198,630.28	\$4,198,630.28
V1963	\$5,004,655.18	(\$16,442.12)	\$0.00	\$5,004,655.18	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$4,988,213.06	\$4,988,213.06
V1964	\$5,239,334.11	(\$18,200.51)	\$0.00	\$5,239,334.11	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,221,133.60	\$5,221,133.60
V1965	\$4,421,422.65	(\$29,642.15)	\$0.00	\$4,421,422.65	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$4,391,780.50	\$4,391,780.50
V1966	\$5,982,323.98	(\$48,092.41)	\$0.00	\$5,982,323.98	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,934,231.57	\$5,934,231.57
V1967	\$6,002,154.82	(\$44,950.76)	\$0.00	\$6,002,154.82	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,957,204.06	\$5,957,204.06
V1968	\$5,529,921.11	(\$41,925.65)	\$2,043.79	\$5,527,877.32	\$2,043.79	\$0.00	\$0.00	\$0.00	\$0.00	\$5,487,995.46	\$5,487,995.46
V1969	\$4,259,199.46	(\$45,504.24)	\$0.36	\$4,259,199.10	\$0.24	\$0.00	\$0.00	\$0.00	\$0.00	\$4,213,695.22	\$4,213,695.10
V1970	\$3,499,422.38	(\$49,616.59)	\$0.64	\$3,499,421.74	\$0.26	\$0.00	\$0.00	\$0.00	\$0.00	\$3,449,805.79	\$3,449,805.41
V1971	\$9,434,564.80	(\$65,239.71)	\$44,735.72	\$9,447,223.64	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$9,434,564.80	\$9,447,223.64
V1972	\$5,775,199.74	(\$61,599.30)	(\$11,546.27)	\$5,790,010.32	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,775,199.74	\$5,790,010.32
V1973	\$4,866,019.98	(\$226,302.58)	\$13,423.00	\$4,866,019.98	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$4,866,019.98	\$4,866,019.98
V1974	\$6,670,943.99	(\$65,282.46)	\$0.00	\$6,670,943.99	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$6,670,943.99	\$6,670,943.99
V1975	\$6,249,648.70	(\$112,838.37)	\$6,007.66	\$6,248,509.72	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$6,249,648.70	\$6,248,509.72
V1976	\$5,570,313.67	(\$212,225.07)	\$91,085.06	\$5,497,197.27	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,570,313.67	\$5,497,197.27
V1977	\$9,828,321.03	(\$254,837.65)	\$54,037.80	\$9,775,016.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$9,828,321.03	\$9,775,016.50
V1978	\$10,299,560.20	(\$277,342.36)	\$148,528.65	\$10,151,031.55	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$10,299,560.20	\$10,151,031.55
V1979	\$13,288,569.13	(\$313,087.63)	\$80,393.06	\$13,324,841.03	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$13,288,569.13	\$13,324,841.03
V1980	\$12,344,452.59	(\$123,251.37)	(\$49,447.43)	\$12,426,857.00	\$334.31	\$0.00	\$0.00	\$0.00	\$0.00	\$12,344,452.59	\$12,427,191.31
V1981	\$13,387,491.46	(\$475,841.92)	\$12,911,649.54	\$13,361,193.62	\$767.64	\$0.00	\$0.00	\$0.00	\$0.00	\$12,911,649.54	\$12,886,119.34

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 Grouped By: Total Tax Classes

Vintage	Beginning Asset Balance	Additions/Retirements	Depreciable Base	Beginning Reserve	Depreciation	Capitalized Depreciation	Gain/(Loss)	Salvage	Cost of Removal	Ending Asset Balance	Ending Reserve
V1982	\$12,380,217.42	(\$458,738.89)	\$11,921,478.53	\$12,355,952.84	\$660.18	\$0.00	\$0.00	\$0.00	\$0.00	\$11,921,478.53	\$11,897,874.13
V1983	\$10,544,273.28	(\$235,144.74)	\$10,309,128.54	\$10,529,640.41	\$377.27	\$0.00	\$0.00	\$0.00	\$0.00	\$10,309,128.54	\$10,294,872.94
V1984	\$12,395,954.93	(\$275,383.77)	\$12,120,571.16	\$12,379,138.21	\$422.12	\$0.00	\$0.00	\$0.00	\$0.00	\$12,120,571.16	\$12,104,176.56
V1985	\$12,327,480.20	(\$218,326.80)	\$12,109,153.40	\$12,287,757.59	\$977.81	\$0.00	\$0.00	\$0.00	\$0.00	\$12,109,153.40	\$12,070,408.60
V1986	\$13,692,717.04	(\$227,756.00)	\$13,464,961.04	\$13,682,503.72	\$243.72	\$0.00	\$0.00	\$0.00	\$0.00	\$13,464,961.04	\$13,454,991.44
V1987	\$237,569.09	\$0.00	\$237,569.09	\$219,091.56	\$5,039.30	\$0.00	\$0.00	\$0.00	\$0.00	\$237,569.09	\$224,130.86
V1987 Q1	\$2,699,180.71	(\$41,695.02)	\$18,261.00	\$2,699,180.71	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,657,485.69	\$2,657,485.69
V1987 Q2	\$3,382,103.49	(\$51,788.49)	\$0.00	\$3,382,103.49	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,330,315.00	\$3,330,315.00
V1987 Q3	\$3,772,329.26	(\$59,442.48)	\$0.00	\$3,772,329.26	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,712,886.78	\$3,712,886.78
V1987 Q4	\$4,691,800.24	(\$70,867.35)	\$3,710.00	\$4,691,800.24	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$4,620,932.89	\$4,620,932.89
V1988	(\$404,843.01)	\$0.00	(\$404,843.01)	(\$419,361.07)	\$1,147.11	\$0.00	\$0.00	\$0.00	\$0.00	(\$404,843.01)	(\$418,213.96)
V1988 Q1	\$2,704,443.03	(\$52,684.38)	\$0.00	\$2,704,443.03	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,651,758.65	\$2,651,758.65
V1988 Q2	\$2,909,076.59	(\$81,552.37)	\$0.00	\$2,909,076.59	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,827,524.22	\$2,827,524.22
V1988 Q3	\$939,824.99	(\$73,441.35)	\$0.00	\$939,824.99	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$866,383.64	\$866,383.64
V1988 Q4	\$779,189.02	(\$58,373.51)	\$0.00	\$779,189.02	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$720,815.51	\$720,815.51
V1989	(\$309,354.51)	\$0.00	(\$309,354.51)	(\$357,091.72)	\$2,130.62	\$0.00	\$0.00	\$0.00	\$0.00	(\$309,354.51)	(\$354,961.10)
V1989 Q1	\$1,733,922.88	(\$38,660.49)	\$0.00	\$1,733,922.88	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,695,262.39	\$1,695,262.39
V1989 Q2	\$1,548,341.10	(\$48,277.58)	\$0.00	\$1,548,341.10	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,500,063.52	\$1,500,063.52
V1989 Q3	\$1,785,861.78	(\$66,652.14)	\$13,618.89	\$1,785,861.78	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,719,209.64	\$1,719,209.64
V1989 Q4	\$1,194,373.31	(\$49,782.08)	\$0.00	\$1,194,373.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,144,591.23	\$1,144,591.23
V1990	\$5,472,558.19	(\$256,876.85)	(\$345,467.06)	\$5,445,317.33	\$626.06	\$0.00	\$0.00	\$0.00	\$0.00	\$5,215,681.34	\$5,189,066.54
V1991	(\$308,260.90)	\$0.00	(\$308,260.90)	(\$336,081.22)	\$606.28	\$0.00	\$0.00	\$0.00	\$0.00	(\$308,260.90)	(\$335,474.94)
V1991 Q1	\$1,641,590.66	(\$61,646.89)	\$0.00	\$1,641,590.66	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,579,943.77	\$1,579,943.77
V1991 Q2	\$1,168,178.63	(\$57,379.15)	\$0.00	\$1,168,178.63	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,110,799.48	\$1,110,799.48
V1991 Q3	\$590,791.11	(\$26,581.70)	\$0.00	\$590,791.11	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$564,209.41	\$564,209.41
V1991 Q4	\$2,232,535.99	(\$48,934.80)	\$11,138.00	\$2,232,535.99	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,183,601.19	\$2,183,601.19
V1992	(\$328,999.17)	\$0.00	(\$328,999.17)	(\$376,036.66)	\$1,861.25	\$0.00	\$0.00	\$0.00	\$0.00	(\$328,999.17)	(\$374,175.41)
V1992 Q1	\$1,173,705.47	(\$36,904.76)	\$0.00	\$1,173,705.47	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,136,800.71	\$1,136,800.71
V1992 Q2	\$1,811,718.16	(\$49,649.43)	\$0.00	\$1,811,718.16	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,762,068.73	\$1,762,068.73

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 Grouped By: Total Tax Classes

Vintage	Beginning Asset Balance	Additions/Retirements	Depreciable Base	Beginning Reserve	Depreciation	Capitalized Depreciation	Gain/(Loss)	Salvage	Cost of Removal	Ending Asset Balance	Ending Reserve
V1992 Q3	\$1,443,728.67	(\$47,395.09)	\$0.00	\$1,443,728.67	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,396,333.58	\$1,396,333.58
V1992 Q4	\$1,583,120.55	(\$55,926.50)	\$0.00	\$1,583,120.55	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,527,194.05	\$1,527,194.05
V1993	(\$404,066.58)	\$0.00	(\$404,066.58)	(\$444,560.99)	\$916.49	\$0.00	\$0.00	\$0.00	\$0.00	(\$404,066.58)	(\$443,644.50)
V1993 Q1	\$1,398,594.85	(\$189,770.74)	\$0.00	\$1,398,594.85	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,208,824.11	\$1,208,824.11
V1993 Q2	\$1,793,083.84	(\$188,716.45)	\$0.00	\$1,793,083.84	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,604,367.39	\$1,604,367.39
V1993 Q3	\$1,952,919.15	(\$309,876.37)	\$0.00	\$1,952,919.15	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,643,042.78	\$1,643,042.78
V1993 Q4	\$1,665,272.48	(\$125,755.58)	\$1,507.00	\$1,665,272.48	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,539,516.90	\$1,539,516.90
V1994	(\$303,206.34)	\$0.00	(\$350,167.35)	(\$440,102.35)	\$4,257.00	\$0.00	\$0.00	\$0.00	\$0.00	(\$303,206.34)	(\$435,845.35)
V1994 Q1	\$2,446,617.82	(\$48,371.73)	\$0.00	\$2,446,617.82	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,398,246.09	\$2,398,246.09
V1994 Q2	\$1,863,012.02	(\$54,640.80)	\$0.00	\$1,863,012.02	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,808,371.22	\$1,808,371.22
V1994 Q3	\$1,657,577.22	(\$55,464.72)	\$0.00	\$1,657,577.22	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,602,112.50	\$1,602,112.50
V1994 Q4	\$2,653,855.85	(\$69,736.82)	\$0.00	\$2,653,855.85	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,584,119.03	\$2,584,119.03
V1995	(\$237,457.13)	\$0.00	(\$237,457.13)	(\$465,657.33)	\$4,617.51	\$0.00	\$0.00	\$0.00	\$0.00	(\$237,457.13)	(\$461,039.82)
V1995 Q1	\$127.91	(\$12.67)	\$0.00	\$127.91	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$115.24	\$115.24
V1995 Q2	\$2,130,872.63	(\$130,099.26)	\$0.00	\$2,130,872.63	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,000,773.37	\$2,000,773.37
V1995 Q3	\$1,394,227.49	(\$88,477.04)	\$0.00	\$1,394,227.49	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,305,750.45	\$1,305,750.45
V1995 Q4	\$4,013,496.35	(\$269,232.17)	\$0.00	\$4,013,496.35	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,744,264.18	\$3,744,264.18
V1996	\$8,273,910.68	(\$206,028.61)	(\$449,492.97)	\$8,198,969.71	\$3,843.98	\$0.00	\$0.00	\$0.00	\$0.00	\$8,067,882.07	\$7,996,785.08
V1997	(\$227,386.05)	\$0.00	(\$258,547.65)	(\$552,635.53)	\$7,312.22	\$0.00	\$0.00	\$0.00	\$0.00	(\$227,386.05)	(\$545,323.31)
V1997 Q1	\$1,205,088.32	(\$51,594.89)	\$0.00	\$1,205,088.32	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,153,493.43	\$1,153,493.43
V1997 Q2	\$1,574,455.95	(\$68,265.45)	\$0.00	\$1,574,455.95	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,506,190.50	\$1,506,190.50
V1997 Q3	\$2,340,456.51	(\$89,745.47)	\$0.00	\$2,340,456.51	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,250,711.04	\$2,250,711.04
V1997 Q4	\$4,802,419.24	(\$176,619.60)	\$0.00	\$4,802,419.24	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$4,625,799.64	\$4,625,799.64
V1998	(\$325,231.84)	\$0.00	(\$325,231.84)	(\$411,585.49)	(\$5,594.06)	\$0.00	\$0.00	\$0.00	\$0.00	(\$325,231.84)	(\$417,179.55)
V1998 Q1	\$3,318,278.93	(\$118,997.81)	\$16,212.73	\$3,301,844.63	\$16,212.73	\$0.00	(\$221.57)	\$0.00	\$0.00	\$3,199,281.12	\$3,199,281.12
V1998 Q2	\$2,715,162.25	(\$117,419.88)	\$42,278.45	\$2,672,262.85	\$42,278.45	\$0.00	(\$620.96)	\$0.00	\$0.00	\$2,597,742.37	\$2,597,742.37
V1998 Q3	\$1,343,031.66	(\$65,521.03)	\$35,410.89	\$1,307,142.87	\$35,410.89	\$0.00	(\$477.90)	\$0.00	\$0.00	\$1,277,510.63	\$1,277,510.63
V1998 Q4	\$1,789,864.75	(\$278,912.99)	\$63,544.70	\$1,725,059.47	\$63,544.70	\$0.00	(\$1,260.59)	\$0.00	\$0.00	\$1,510,951.76	\$1,510,951.76
V1999	\$9,246,940.04	(\$433,609.34)	\$159,768.06	\$8,551,548.16	\$386,099.57	\$0.00	(\$15,249.49)	\$0.00	\$0.00	\$8,813,330.70	\$8,519,287.89

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Vintage	Beginning Asset Balance	Additions/Retirements	Depreciable Base	Beginning Reserve	Depreciation	Capitalized Depreciation	Gain/(Loss)	Salvage	Cost of Removal	Ending Asset Balance	Ending Reserve
V2000	(\$658,705.40)	\$0.00	(\$642,714.74)	(\$569,490.20)	(\$28,713.64)	\$0.00	\$0.00	\$0.00	\$0.00	(\$658,705.40)	(\$598,203.84)
V2000 Q1	\$1,459,851.75	(\$62,751.68)	\$129,014.37	\$1,329,940.71	\$58,654.65	\$0.00	(\$3,158.03)	\$0.00	\$0.00	\$1,397,100.07	\$1,329,001.72
V2000 Q2	\$1,385,614.37	(\$55,552.13)	\$143,097.26	\$1,240,336.62	\$59,154.32	\$0.00	(\$4,592.55)	\$0.00	\$0.00	\$1,330,062.24	\$1,248,531.36
V2000 Q3	\$2,963,441.29	(\$81,302.07)	\$406,534.28	\$2,565,899.81	\$132,542.41	\$0.00	(\$9,624.35)	\$0.00	\$0.00	\$2,882,139.22	\$2,626,764.50
V2000 Q4	\$2,931,593.46	(\$112,193.95)	\$382,928.34	\$2,542,210.59	\$133,423.74	\$0.00	(\$10,660.11)	\$0.00	\$0.00	\$2,819,399.51	\$2,574,100.48
V2001	\$9,245,544.58	(\$199,936.78)	\$1,505,288.53	\$7,799,481.92	\$399,352.39	\$0.00	(\$26,760.72)	\$0.00	\$0.00	\$9,045,607.80	\$8,025,658.27
V2001 30% Bonu:	(\$251,670.24)	(\$2,480.01)	(\$469,463.37)	(\$231,479.09)	(\$16,535.57)	\$0.00	(\$331.94)	\$0.00	\$0.00	(\$254,150.25)	(\$250,162.73)
V2002	\$3,531,265.49	(\$60,669.83)	\$2,838,531.54	\$1,690,454.56	\$87,915.68	\$0.00	(\$11,784.12)	\$0.00	\$0.00	\$3,470,595.66	\$1,729,484.52
V2002 30% Bonu:	\$4,373,964.62	(\$75,144.51)	\$594,471.06	\$3,525,856.44	\$195,121.37	\$0.00	(\$13,410.40)	\$0.00	\$0.00	\$4,298,820.11	\$3,659,243.68
COR	\$9.00	\$0.00	\$9.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$9.00	\$0.00
V2003	\$566,073.89	(\$4,654.53)	\$217,218.23	\$399,203.43	\$25,318.99	\$0.00	(\$1,038.82)	\$0.00	\$0.00	\$561,419.36	\$420,906.71
V2003 30% Bonu:	(\$604,765.98)	(\$50,120.07)	(\$123,933.44)	(\$486,981.89)	(\$22,533.59)	\$0.00	(\$11,180.64)	\$0.00	\$0.00	(\$654,886.05)	(\$548,454.93)
V2003 50% Bonu:	\$2,497,451.23	(\$86,238.99)	\$474,289.70	\$1,884,610.47	\$109,503.72	\$0.00	(\$19,237.92)	\$0.00	\$0.00	\$2,411,212.24	\$1,927,113.11
V2004	\$760,313.41	(\$49,255.06)	\$31,762.28	\$707,608.69	\$32,006.29	\$0.00	(\$12,861.08)	\$0.00	\$0.00	\$711,058.35	\$703,221.00
V2004 30%	\$1,078,718.31	(\$23,893.90)	\$309,338.44	\$765,915.28	\$47,588.60	\$0.00	(\$6,396.19)	\$0.00	\$0.00	\$1,054,824.41	\$796,006.17
V2004 50% Bonu:	\$5,875,091.45	(\$90,721.91)	\$1,484,826.96	\$4,182,401.92	\$258,401.35	\$0.00	(\$24,004.19)	\$0.00	\$0.00	\$5,784,369.55	\$4,374,085.55
V2005	\$7,982,211.51	(\$558,534.32)	\$4,279,021.77	\$6,392,460.61	\$420,624.67	\$0.00	(\$103,119.02)	\$0.00	\$0.00	\$7,423,677.19	\$6,357,669.96
V2005 50% Bonu:	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
V2006	\$10,620,511.81	(\$539,701.92)	\$10,306,544.53	\$8,370,008.59	\$613,294.29	\$0.00	(\$95,746.08)	\$0.00	\$0.00	\$10,080,809.89	\$8,539,347.05
V2007	\$19,881,925.94	(\$1,059,891.48)	\$19,320,797.05	\$15,260,811.78	\$1,203,175.27	\$0.00	(\$250,341.94)	\$0.00	\$0.00	\$18,822,034.46	\$15,654,437.51
V2008	(\$8,087,027.41)	(\$90,370.77)	(\$8,250,806.84)	(\$4,640,040.75)	(\$600,228.51)	\$0.00	(\$26,682.40)	\$0.00	\$0.00	(\$8,177,398.18)	(\$5,303,957.63)
V2008 50%	\$28,087,182.36	(\$346,606.72)	\$27,890,675.63	\$19,439,468.78	\$1,693,804.97	\$0.00	(\$102,333.90)	\$0.00	\$0.00	\$27,740,575.64	\$20,889,000.95
V2009	\$3,391,082.86	(\$23,049.64)	\$3,226,482.44	\$1,963,533.30	\$170,019.46	\$0.00	\$214,202.52	\$217,556.00	\$0.00	\$3,368,033.22	\$2,113,856.58
V2009 50%	\$13,544,922.71	(\$432,561.23)	\$13,328,642.11	\$8,649,723.72	\$809,768.71	\$0.00	(\$115,248.62)	\$0.00	\$0.00	\$13,112,361.48	\$9,142,179.81
V2010	\$524,261.41	(\$2,341.05)	\$637,945.66	\$827,788.51	\$33,109.87	\$0.00	(\$969.24)	\$0.00	\$0.00	\$521,920.36	\$859,526.56
V2010 100%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
V2010 50%	\$7,761,246.60	(\$135,092.87)	\$7,693,700.16	\$4,326,450.96	\$454,151.18	\$0.00	(\$53,574.25)	\$0.00	\$0.00	\$7,626,153.73	\$4,699,083.49
V2011	\$4,352,877.34	(\$1.45)	\$4,361,452.49	\$2,109,146.65	\$234,557.39	\$0.00	(\$1.16)	\$0.00	\$0.00	\$4,352,875.89	\$2,343,703.75
V2011 100%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

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Vintage	Beginning Asset Balance	Additions/Retirements	Depreciable Base	Beginning Reserve	Depreciation	Capitalized Depreciation	Gain/(Loss)	Salvage	Cost of Removal	Ending Asset Balance	Ending Reserve
V2011 50%	\$504,270.33	(\$1,569.69)	\$503,485.49	\$353,254.35	\$11,291.15	\$0.00	(\$910.89)	\$0.00	\$0.00	\$502,700.64	\$363,886.69
V2012	\$69,182.65	(\$2,092.56)	\$58,892.73	(\$2,070.94)	\$470.91	\$0.00	(\$1,313.12)	\$0.00	\$0.00	\$67,090.09	(\$2,379.45)
V2012 50%	\$44,826,564.02	(\$697,183.68)	\$44,464,862.17	\$15,910,708.80	\$2,156,523.17	\$0.00	(\$308,908.90)	\$0.00	\$0.00	\$44,129,380.34	\$17,678,957.19
V2013	\$1,652,702.67	(\$69.04)	\$1,487,959.09	\$193,402.72	\$43,209.99	\$0.00	(\$47.84)	\$0.00	\$0.00	\$1,652,633.63	\$236,591.52
V2013 50%	\$55,159,745.74	(\$700,670.26)	\$54,762,905.60	\$16,992,092.39	\$2,861,758.56	\$0.00	(\$252,084.68)	\$0.00	\$0.00	\$54,459,075.48	\$19,405,265.38
V2014	\$1,815,449.03	(\$86.70)	\$1,732,035.57	\$598,374.10	\$45,763.10	\$0.00	(\$64.27)	\$0.00	\$0.00	\$1,815,362.33	\$644,114.77
V2014 50%	\$72,125,418.98	(\$228,343.75)	\$71,934,496.49	\$20,586,858.43	\$3,957,300.94	\$0.00	(\$164,210.63)	\$0.00	\$0.00	\$71,897,075.23	\$24,480,026.24
V2015	\$1,003,159.21	(\$5.21)	\$950,771.20	\$64,754.33	\$26,241.17	\$0.00	(\$4.71)	\$0.00	\$0.00	\$1,003,154.00	\$90,995.00
V2015 50%	\$61,300,248.49	(\$433,444.48)	\$59,408,482.73	\$13,083,963.34	\$4,247,914.19	\$0.00	(\$321,724.61)	\$0.00	\$0.00	\$60,866,804.01	\$17,220,157.68
V2016	\$667,993.13	(\$6.09)	\$650,922.70	\$26,163.32	\$17,753.84	\$0.00	(\$5.72)	\$0.00	\$0.00	\$667,987.04	\$43,916.80
V2016 50%	\$80,598,915.46	(\$429,977.74)	\$80,143,023.54	\$9,352,054.87	\$5,649,394.17	\$0.00	(\$368,458.68)	\$0.00	\$0.00	\$80,168,937.72	\$14,939,929.99
V2017	\$421,980.00	(\$164.30)	\$417,894.95	\$6,183.25	\$11,730.10	\$0.00	(\$152.36)	\$0.00	\$0.00	\$421,815.70	\$17,901.40
V2017 100%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
V2017 50%	\$78,065,486.27	(\$614,181.94)	\$77,704,155.68	\$3,352,451.02	\$6,451,340.65	\$0.00	(\$568,981.22)	\$0.00	\$0.00	\$77,451,304.33	\$9,758,590.97
V2018	\$0.00	\$165,369,204.07	\$165,369,204.07	\$0.00	\$6,434,166.66	\$0.00	(\$475,849.03)	\$0.00	\$0.00	\$165,369,204.07	\$6,434,166.66
Total Tax Classes:	\$870,734,965.82	\$149,561,948.61	\$759,017,645.43	\$517,675,568.90	\$38,998,958.62	\$0.00	(\$3,169,402.32)	\$217,556.00	\$0.00	\$1,022,008,920.94	\$545,490,387.81
Company:	\$870,734,965.82	\$149,561,948.61	\$759,017,645.43	\$517,675,568.90	\$38,998,958.62	\$0.00	(\$3,169,402.32)	\$217,556.00	\$0.00	\$1,022,008,920.94	\$545,490,387.81
Tax Year:	\$870,734,965.82	\$149,561,948.61	\$759,017,645.43	\$517,675,568.90	\$38,998,958.62	\$0.00	(\$3,169,402.32)	\$217,556.00	\$0.00	\$1,022,008,920.94	\$545,490,387.81

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 Grouped By: Total Tax Classes

Vintage	Beginning Asset Balance	Additions/Retirements	Depreciable Base	Beginning Reserve	Depreciation	Capitalized Depreciation	Gain/(Loss)	Salvage	Cost of Removal	Ending Asset Balance	Ending Reserve
V1953	\$12,993,254.21	\$0.00	\$12,993,254.21	\$12,993,254.21	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$12,993,254.21	\$12,993,254.21
V1954	\$2,054,844.74	\$0.00	\$2,054,844.74	\$2,054,844.74	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,054,844.74	\$2,054,844.74
V1955	\$4,729,153.01	\$0.00	\$4,729,153.01	\$4,729,153.01	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$4,729,153.01	\$4,729,153.01
V1956	\$2,950,168.99	\$0.00	\$2,950,168.99	\$2,950,168.99	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,950,168.99	\$2,950,168.99
V1957	\$3,804,095.16	\$0.00	\$3,804,095.16	\$3,804,095.16	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,804,095.16	\$3,804,095.16
V1958	\$4,398,657.14	\$0.00	\$4,398,657.14	\$4,398,657.14	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$4,398,657.14	\$4,398,657.14
V1959	\$3,992,678.90	\$0.00	\$3,992,678.90	\$3,992,678.90	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,992,678.90	\$3,992,678.90
V1960	\$4,191,174.80	\$0.00	\$4,191,174.80	\$4,191,174.80	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$4,191,174.80	\$4,191,174.80
V1961	\$4,590,202.80	\$0.00	(\$17.50)	\$4,590,202.80	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$4,590,202.80	\$4,590,202.80
V1962	\$4,198,630.28	\$0.00	\$0.00	\$4,198,630.28	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$4,198,630.28	\$4,198,630.28
V1963	\$4,988,213.06	\$0.00	\$0.00	\$4,988,213.06	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$4,988,213.06	\$4,988,213.06
V1964	\$5,221,133.60	\$0.00	\$0.00	\$5,221,133.60	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,221,133.60	\$5,221,133.60
V1965	\$4,391,780.50	\$0.00	\$0.00	\$4,391,780.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$4,391,780.50	\$4,391,780.50
V1966	\$5,934,231.57	\$0.00	\$0.00	\$5,934,231.57	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,934,231.57	\$5,934,231.57
V1967	\$5,957,204.06	\$0.00	\$0.00	\$5,957,204.06	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,957,204.06	\$5,957,204.06
V1968	\$5,487,995.46	\$0.00	\$0.00	\$5,487,995.46	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,487,995.46	\$5,487,995.46
V1969	\$4,213,695.22	\$0.00	\$0.12	\$4,213,695.10	\$0.12	\$0.00	\$0.00	\$0.00	\$0.00	\$4,213,695.22	\$4,213,695.22
V1970	\$3,449,805.79	\$0.00	\$0.38	\$3,449,805.41	\$0.25	\$0.00	\$0.00	\$0.00	\$0.00	\$3,449,805.79	\$3,449,805.66
V1971	\$9,434,564.80	\$0.00	\$44,735.72	\$9,447,223.64	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$9,434,564.80	\$9,447,223.64
V1972	\$5,775,199.74	\$0.00	(\$11,546.27)	\$5,790,010.32	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,775,199.74	\$5,790,010.32
V1973	\$4,866,019.98	\$0.00	\$13,423.00	\$4,866,019.98	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$4,866,019.98	\$4,866,019.98
V1974	\$6,670,943.99	\$0.00	\$0.00	\$6,670,943.99	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$6,670,943.99	\$6,670,943.99
V1975	\$6,249,648.70	\$0.00	\$6,007.66	\$6,248,509.72	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$6,249,648.70	\$6,248,509.72
V1976	\$5,570,313.67	\$0.00	\$91,085.06	\$5,497,197.27	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,570,313.67	\$5,497,197.27
V1977	\$9,828,321.03	\$0.00	\$54,037.80	\$9,775,016.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$9,828,321.03	\$9,775,016.50
V1978	\$10,299,560.20	\$0.00	\$148,528.65	\$10,151,031.55	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$10,299,560.20	\$10,151,031.55
V1979	\$13,288,569.13	\$0.00	\$80,393.06	\$13,324,841.03	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$13,288,569.13	\$13,324,841.03
V1980	\$12,344,452.59	\$0.00	(\$49,447.43)	\$12,427,191.31	\$334.31	\$0.00	\$0.00	\$0.00	\$0.00	\$12,344,452.59	\$12,427,525.62
V1981	\$12,911,649.54	\$0.00	\$12,911,649.54	\$12,886,119.34	\$767.64	\$0.00	\$0.00	\$0.00	\$0.00	\$12,911,649.54	\$12,886,886.98

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Vintage	Beginning Asset Balance	Additions/Retirements	Depreciable Base	Beginning Reserve	Depreciation	Capitalized Depreciation	Gain/(Loss)	Salvage	Cost of Removal	Ending Asset Balance	Ending Reserve
V1982	\$11,921,478.53	\$0.00	\$11,921,478.53	\$11,897,874.13	\$660.18	\$0.00	\$0.00	\$0.00	\$0.00	\$11,921,478.53	\$11,898,534.31
V1983	\$10,309,128.54	\$0.00	\$10,309,128.54	\$10,294,872.94	\$377.27	\$0.00	\$0.00	\$0.00	\$0.00	\$10,309,128.54	\$10,295,250.21
V1984	\$12,120,571.16	\$0.00	\$12,120,571.16	\$12,104,176.56	\$422.12	\$0.00	\$0.00	\$0.00	\$0.00	\$12,120,571.16	\$12,104,598.68
V1985	\$12,109,153.40	\$0.00	\$12,109,153.40	\$12,070,408.60	\$977.81	\$0.00	\$0.00	\$0.00	\$0.00	\$12,109,153.40	\$12,071,386.41
V1986	\$13,464,961.04	\$0.00	\$13,464,961.04	\$13,454,991.44	\$243.72	\$0.00	\$0.00	\$0.00	\$0.00	\$13,464,961.04	\$13,455,235.16
V1987	\$237,569.09	\$0.00	\$237,569.09	\$224,130.86	\$849.56	\$0.00	\$0.00	\$0.00	\$0.00	\$237,569.09	\$224,980.42
V1987 Q1	\$2,657,485.69	\$0.00	\$18,261.00	\$2,657,485.69	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,657,485.69	\$2,657,485.69
V1987 Q2	\$3,330,315.00	\$0.00	\$0.00	\$3,330,315.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,330,315.00	\$3,330,315.00
V1987 Q3	\$3,712,886.78	\$0.00	\$0.00	\$3,712,886.78	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,712,886.78	\$3,712,886.78
V1987 Q4	\$4,620,932.89	\$0.00	\$3,710.00	\$4,620,932.89	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$4,620,932.89	\$4,620,932.89
V1988	(\$404,843.01)	\$0.00	(\$404,843.01)	(\$418,213.96)	\$991.97	\$0.00	\$0.00	\$0.00	\$0.00	(\$404,843.01)	(\$417,221.99)
V1988 Q1	\$2,651,758.65	\$0.00	\$0.00	\$2,651,758.65	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,651,758.65	\$2,651,758.65
V1988 Q2	\$2,827,524.22	\$0.00	\$0.00	\$2,827,524.22	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,827,524.22	\$2,827,524.22
V1988 Q3	\$866,383.64	\$0.00	\$0.00	\$866,383.64	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$866,383.64	\$866,383.64
V1988 Q4	\$720,815.51	\$0.00	\$0.00	\$720,815.51	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$720,815.51	\$720,815.51
V1989	(\$309,354.51)	\$0.00	(\$309,354.51)	(\$354,961.10)	\$2,130.87	\$0.00	\$0.00	\$0.00	\$0.00	(\$309,354.51)	(\$352,830.23)
V1989 Q1	\$1,695,262.39	\$0.00	\$0.00	\$1,695,262.39	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,695,262.39	\$1,695,262.39
V1989 Q2	\$1,500,063.52	\$0.00	\$0.00	\$1,500,063.52	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,500,063.52	\$1,500,063.52
V1989 Q3	\$1,719,209.64	\$0.00	\$13,618.89	\$1,719,209.64	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,719,209.64	\$1,719,209.64
V1989 Q4	\$1,144,591.23	\$0.00	\$0.00	\$1,144,591.23	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,144,591.23	\$1,144,591.23
V1990	\$5,215,681.34	\$0.00	(\$345,467.06)	\$5,189,066.54	\$626.06	\$0.00	\$0.00	\$0.00	\$0.00	\$5,215,681.34	\$5,189,692.60
V1991	(\$308,260.90)	\$0.00	(\$308,260.90)	(\$335,474.94)	\$606.27	\$0.00	\$0.00	\$0.00	\$0.00	(\$308,260.90)	(\$334,868.67)
V1991 Q1	\$1,579,943.77	\$0.00	\$0.00	\$1,579,943.77	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,579,943.77	\$1,579,943.77
V1991 Q2	\$1,110,799.48	\$0.00	\$0.00	\$1,110,799.48	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,110,799.48	\$1,110,799.48
V1991 Q3	\$564,209.41	\$0.00	\$0.00	\$564,209.41	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$564,209.41	\$564,209.41
V1991 Q4	\$2,183,601.19	\$0.00	\$11,138.00	\$2,183,601.19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,183,601.19	\$2,183,601.19
V1992	(\$328,999.17)	\$0.00	(\$328,999.17)	(\$374,175.41)	\$1,861.11	\$0.00	\$0.00	\$0.00	\$0.00	(\$328,999.17)	(\$372,314.30)
V1992 Q1	\$1,136,800.71	\$0.00	\$0.00	\$1,136,800.71	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,136,800.71	\$1,136,800.71
V1992 Q2	\$1,762,068.73	\$0.00	\$0.00	\$1,762,068.73	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,762,068.73	\$1,762,068.73

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Vintage	Beginning Asset Balance	Additions/Retirements	Depreciable Base	Beginning Reserve	Depreciation	Capitalized Depreciation	Gain/(Loss)	Salvage	Cost of Removal	Ending Asset Balance	Ending Reserve
V1992 Q3	\$1,396,333.58	\$0.00	\$0.00	\$1,396,333.58	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,396,333.58	\$1,396,333.58
V1992 Q4	\$1,527,194.05	\$0.00	\$0.00	\$1,527,194.05	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,527,194.05	\$1,527,194.05
V1993	(\$404,066.58)	\$0.00	(\$404,066.58)	(\$443,644.50)	\$916.47	\$0.00	\$0.00	\$0.00	\$0.00	(\$404,066.58)	(\$442,728.03)
V1993 Q1	\$1,208,824.11	\$0.00	\$0.00	\$1,208,824.11	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,208,824.11	\$1,208,824.11
V1993 Q2	\$1,604,367.39	\$0.00	\$0.00	\$1,604,367.39	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,604,367.39	\$1,604,367.39
V1993 Q3	\$1,643,042.78	\$0.00	\$0.00	\$1,643,042.78	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,643,042.78	\$1,643,042.78
V1993 Q4	\$1,539,516.90	\$0.00	\$1,507.00	\$1,539,516.90	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,539,516.90	\$1,539,516.90
V1994	(\$303,206.34)	\$0.00	(\$352,192.93)	(\$435,845.35)	\$4,257.22	\$0.00	\$0.00	\$0.00	\$0.00	(\$303,206.34)	(\$431,588.13)
V1994 Q1	\$2,398,246.09	\$0.00	\$0.00	\$2,398,246.09	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,398,246.09	\$2,398,246.09
V1994 Q2	\$1,808,371.22	\$0.00	\$0.00	\$1,808,371.22	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,808,371.22	\$1,808,371.22
V1994 Q3	\$1,602,112.50	\$0.00	\$0.00	\$1,602,112.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,602,112.50	\$1,602,112.50
V1994 Q4	\$2,584,119.03	\$0.00	\$0.00	\$2,584,119.03	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,584,119.03	\$2,584,119.03
V1995	(\$237,457.13)	\$0.00	(\$237,457.13)	(\$461,039.82)	\$4,617.51	\$0.00	\$0.00	\$0.00	\$0.00	(\$237,457.13)	(\$456,422.30)
V1995 Q1	\$115.24	\$0.00	\$0.00	\$115.24	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$115.24	\$115.24
V1995 Q2	\$2,000,773.37	\$0.00	\$0.00	\$2,000,773.37	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,000,773.37	\$2,000,773.37
V1995 Q3	\$1,305,750.45	\$0.00	\$0.00	\$1,305,750.45	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,305,750.45	\$1,305,750.45
V1995 Q4	\$3,744,264.18	\$0.00	\$0.00	\$3,744,264.18	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,744,264.18	\$3,744,264.18
V1996	\$8,067,882.07	\$0.00	(\$453,099.46)	\$7,996,785.08	\$3,843.35	\$0.00	\$0.00	\$0.00	\$0.00	\$8,067,882.07	\$8,000,628.43
V1997	(\$227,386.05)	\$0.00	(\$260,091.06)	(\$545,323.31)	\$7,312.43	\$0.00	\$0.00	\$0.00	\$0.00	(\$227,386.05)	(\$538,010.88)
V1997 Q1	\$1,153,493.43	\$0.00	\$0.00	\$1,153,493.43	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,153,493.43	\$1,153,493.43
V1997 Q2	\$1,506,190.50	\$0.00	\$0.00	\$1,506,190.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,506,190.50	\$1,506,190.50
V1997 Q3	\$2,250,711.04	\$0.00	\$0.00	\$2,250,711.04	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,250,711.04	\$2,250,711.04
V1997 Q4	\$4,625,799.64	\$0.00	\$0.00	\$4,625,799.64	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$4,625,799.64	\$4,625,799.64
V1998	(\$325,231.84)	\$0.00	(\$325,231.84)	(\$417,179.55)	\$6,941.88	\$0.00	\$0.00	\$0.00	\$0.00	(\$325,231.84)	(\$410,237.67)
V1998 Q1	\$3,199,281.12	\$0.00	\$0.00	\$3,199,281.12	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,199,281.12	\$3,199,281.12
V1998 Q2	\$2,597,742.37	\$0.00	\$0.00	\$2,597,742.37	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,597,742.37	\$2,597,742.37
V1998 Q3	\$1,277,510.63	\$0.00	\$0.00	\$1,277,510.63	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,277,510.63	\$1,277,510.63
V1998 Q4	\$1,510,951.76	\$0.00	\$0.00	\$1,510,951.76	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,510,951.76	\$1,510,951.76
V1999	\$8,813,330.70	\$0.00	(\$255,142.25)	\$8,519,287.89	\$191,522.13	\$0.00	\$0.00	\$0.00	\$0.00	\$8,813,330.70	\$8,710,810.02

PowerTax
 Depreciation Summary Report 7
 NiSource

Tax Year: 2019
 Tax Book: Federal
 Columbia Gas of Pennsylvania
 Grouped By: Total Tax Classes

Vintage	Beginning Asset Balance	Additions/Retirements	Depreciable Base	Beginning Reserve	Depreciation	Capitalized Depreciation	Gain/(Loss)	Salvage	Cost of Removal	Ending Asset Balance	Ending Reserve
V2000	(\$658,705.40)	\$0.00	(\$641,798.79)	(\$598,203.84)	(\$28,707.22)	\$0.00	\$0.00	\$0.00	\$0.00	(\$658,705.40)	(\$626,911.06)
V2000 Q1	\$1,397,100.07	\$0.00	\$69,334.89	\$1,329,001.72	\$57,679.72	\$0.00	\$0.00	\$0.00	\$0.00	\$1,397,100.07	\$1,386,681.44
V2000 Q2	\$1,330,062.24	\$0.00	\$82,302.33	\$1,248,531.36	\$57,926.85	\$0.00	\$0.00	\$0.00	\$0.00	\$1,330,062.24	\$1,306,458.21
V2000 Q3	\$2,882,139.22	\$0.00	\$271,168.36	\$2,626,764.50	\$130,271.30	\$0.00	\$0.00	\$0.00	\$0.00	\$2,882,139.22	\$2,757,035.80
V2000 Q4	\$2,819,399.51	\$0.00	\$245,299.03	\$2,574,100.48	\$131,176.10	\$0.00	\$0.00	\$0.00	\$0.00	\$2,819,399.51	\$2,705,276.58
V2001	\$9,045,607.80	\$0.00	\$1,098,764.39	\$8,025,658.27	\$394,882.26	\$0.00	\$0.00	\$0.00	\$0.00	\$9,045,607.80	\$8,420,540.53
V2001 30% Bonu:	(\$254,150.25)	\$0.00	(\$476,806.58)	(\$250,162.73)	(\$16,596.14)	\$0.00	\$0.00	\$0.00	\$0.00	(\$254,150.25)	(\$266,758.87)
V2002	\$3,470,595.66	\$0.00	\$2,787,184.77	\$1,729,484.52	\$86,581.77	\$0.00	\$0.00	\$0.00	\$0.00	\$3,470,595.66	\$1,816,066.29
V2002 30% Bonu:	\$4,298,820.11	\$0.00	\$379,743.55	\$3,659,243.68	\$193,455.41	\$0.00	\$0.00	\$0.00	\$0.00	\$4,298,820.11	\$3,852,699.09
COR	\$9.00	\$0.00	\$9.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$38,763.47	\$9.00	\$0.00
V2003	\$561,419.36	\$0.00	\$194,720.78	\$420,906.71	\$25,214.62	\$0.00	\$0.00	\$0.00	\$0.00	\$561,419.36	\$446,121.33
V2003 30% Bonu:	(\$654,886.05)	\$0.00	(\$106,431.12)	(\$548,454.93)	(\$23,651.14)	\$0.00	\$0.00	\$0.00	\$0.00	(\$654,886.05)	(\$572,106.07)
V2003 50% Bonu:	\$2,411,212.24	\$0.00	\$348,563.86	\$1,927,113.11	\$107,575.68	\$0.00	\$0.00	\$0.00	\$0.00	\$2,411,212.24	\$2,034,688.79
V2004	\$711,058.35	\$0.00	(\$5,583.80)	\$703,221.00	\$30,937.82	\$0.00	\$0.00	\$0.00	\$0.00	\$711,058.35	\$734,158.82
V2004 30%	\$1,054,824.41	\$0.00	\$258,818.24	\$796,006.17	\$47,058.33	\$0.00	\$0.00	\$0.00	\$0.00	\$1,054,824.41	\$843,064.50
V2004 50% Bonu:	\$5,784,369.55	\$0.00	\$1,203,177.64	\$4,374,085.55	\$256,419.23	\$0.00	\$0.00	\$0.00	\$0.00	\$5,784,369.55	\$4,630,504.78
V2005	\$7,423,677.19	\$0.00	\$3,841,637.38	\$6,357,669.96	\$405,459.68	\$0.00	\$0.00	\$0.00	\$0.00	\$7,423,677.19	\$6,763,129.64
V2005 50% Bonu:	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
V2006	\$10,080,809.89	\$0.00	\$10,028,322.42	\$8,539,347.05	\$597,370.87	\$0.00	\$0.00	\$0.00	\$0.00	\$10,080,809.89	\$9,136,717.92
V2007	\$18,822,034.46	\$0.00	\$18,788,653.83	\$15,654,437.51	\$1,171,837.88	\$0.00	\$0.00	\$0.00	\$0.00	\$18,822,034.46	\$16,826,275.39
V2008	(\$8,177,398.18)	\$0.00	(\$8,304,141.27)	(\$5,303,957.63)	(\$643,273.61)	\$0.00	\$0.00	\$0.00	\$0.00	(\$8,177,398.18)	(\$5,947,231.24)
V2008 50%	\$27,740,575.64	\$0.00	\$27,717,372.27	\$20,889,000.95	\$1,683,603.89	\$0.00	\$0.00	\$0.00	\$0.00	\$27,740,575.64	\$22,572,604.84
V2009	\$3,368,033.22	\$0.00	\$3,196,936.99	\$2,113,856.58	\$164,521.66	\$0.00	\$0.00	\$0.00	\$0.00	\$3,368,033.22	\$2,278,378.24
V2009 50%	\$13,112,361.48	\$0.00	\$13,112,361.48	\$9,142,179.81	\$800,145.22	\$0.00	\$0.00	\$0.00	\$0.00	\$13,112,361.48	\$9,942,325.03
V2010	\$521,920.36	\$0.00	\$651,372.49	\$859,526.56	\$28,353.68	\$0.00	\$0.00	\$0.00	\$0.00	\$521,920.36	\$887,880.24
V2010 100%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
V2010 50%	\$7,626,153.73	\$0.00	\$7,626,153.73	\$4,699,083.49	\$450,324.41	\$0.00	\$0.00	\$0.00	\$0.00	\$7,626,153.73	\$5,149,407.90
V2011	\$4,352,875.89	\$0.00	\$4,362,755.75	\$2,343,703.75	\$221,167.54	\$0.00	\$0.00	\$0.00	\$0.00	\$4,352,875.89	\$2,564,871.29
V2011 100%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

PowerTax
Depreciation Summary Report 7
NiSource

Tax Year: 2019
Tax Book: Federal
Columbia Gas of Pennsylvania
Grouped By: Total Tax Classes

Vintage	Beginning Asset Balance	Additions/ Retirements	Depreciable Base	Beginning Reserve	Depreciation	Capitalized Depreciation	Gain/ (Loss)	Salvage	Cost of Removal	Ending Asset Balance	Ending Reserve
V2011 50%	\$502,700.64	\$0.00	\$502,700.64	\$363,886.69	\$11,106.31	\$0.00	\$0.00	\$0.00	\$0.00	\$502,700.64	\$374,993.00
V2012	\$67,090.09	\$0.00	\$56,164.10	(\$2,379.45)	\$655.45	\$0.00	\$0.00	\$0.00	\$0.00	\$67,090.09	(\$1,724.00)
V2012 50%	\$44,129,380.34	\$0.00	\$44,121,815.17	\$17,678,957.19	\$1,983,888.14	\$0.00	\$0.00	\$0.00	\$0.00	\$44,129,380.34	\$19,662,845.33
V2013	\$1,652,633.63	\$0.00	\$1,450,982.44	\$236,591.52	\$43,158.45	\$0.00	\$0.00	\$0.00	\$0.00	\$1,652,633.63	\$279,749.97
V2013 50%	\$54,459,075.48	\$0.00	\$54,456,361.04	\$19,405,265.38	\$2,635,834.70	\$0.00	\$0.00	\$0.00	\$0.00	\$54,459,075.48	\$22,041,100.08
V2014	\$1,815,362.33	\$0.00	\$1,708,190.73	\$644,114.77	\$44,481.33	\$0.00	\$0.00	\$0.00	\$0.00	\$1,815,362.33	\$688,596.10
V2014 50%	\$71,897,075.23	\$0.00	\$71,812,116.14	\$24,480,026.24	\$3,609,310.06	\$0.00	\$0.00	\$0.00	\$0.00	\$71,897,075.23	\$28,089,336.30
V2015	\$1,003,154.00	\$0.00	\$929,471.54	\$90,995.00	\$26,231.78	\$0.00	\$0.00	\$0.00	\$0.00	\$1,003,154.00	\$117,226.78
V2015 50%	\$60,866,804.01	\$0.00	\$58,908,486.13	\$17,220,157.68	\$3,842,396.60	\$0.00	\$0.00	\$0.00	\$0.00	\$60,866,804.01	\$21,062,554.28
V2016	\$667,987.04	\$0.00	\$639,228.29	\$43,916.80	\$17,753.62	\$0.00	\$0.00	\$0.00	\$0.00	\$667,987.04	\$61,670.42
V2016 50%	\$80,168,937.72	\$0.00	\$79,836,329.40	\$14,939,929.99	\$5,088,403.79	\$0.00	\$0.00	\$0.00	\$0.00	\$80,168,937.72	\$20,028,333.78
V2017	\$421,815.70	\$0.00	\$410,402.37	\$17,901.40	\$11,658.53	\$0.00	\$0.00	\$0.00	\$0.00	\$421,815.70	\$29,559.93
V2017 100%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
V2017 50%	\$77,451,304.33	\$0.00	\$77,310,162.79	\$9,758,590.97	\$5,993,299.54	\$0.00	\$0.00	\$0.00	\$0.00	\$77,451,304.33	\$15,751,890.51
V2018	\$165,369,204.07	\$0.00	\$165,304,706.79	\$6,434,166.66	\$12,400,536.99	\$0.00	\$0.00	\$0.00	\$0.00	\$165,369,204.07	\$18,834,703.65
V2019	\$0.00	\$249,831,008.00	\$249,831,008.00	\$0.00	\$9,674,149.85	\$0.00	\$0.00	\$0.00	\$0.00	\$249,831,008.00	\$9,674,149.85
Total Tax Classes:	1,022,008,920.94	249,831,008.00	1,002,637,784.68	545,490,387.81	51,942,861.20	0.00	0.00	0.00	38,763.47	1,271,839,928.94	597,433,249.02
Company:	1,022,008,920.94	249,831,008.00	1,002,637,784.68	545,490,387.81	51,942,861.20	0.00	0.00	0.00	38,763.47	1,271,839,928.94	597,433,249.02
Tax Year:	1,022,008,920.94	249,831,008.00	1,002,637,784.68	545,490,387.81	51,942,861.20	0.00	0.00	0.00	38,763.47	1,271,839,928.94	597,433,249.02

COLUMBIA GAS OF PENNSYLVANIA, INC
53.52 C

If a public utility files a tariff, revision or supplement which it is calculated will increase the bills of a customer or a group of customers by an amount, when projected to an annual basis, exceeding 3% of the operating revenues of the utility - subsection (b)(4) divided by the operating revenues of the utility for a 12-month period as defined in subsection (b)(2) - or which it is calculated will increase the bills of 5% or more of the number of customers served by the utility – subsection (b)(3) divided by subsection (a)(2) - it shall submit to the Commission with the tariff, revision, or supplement, in addition to the statements required by subsections (a) and (b), all of the following information:

1. A statement showing the utility's calculation of the rate of return earned in the 12-month period referred to in subsection (b)(2), and the anticipated rate of return to be earned when the tariff, revision, or supplement becomes effective. The rate base used in this calculation shall be supported by summaries of original cost for the rate of return calculation.

Response:

See response to 53.53 I.A.2 at Exhibit No. 8, Page 2.

COLUMBIA GAS OF PENNSYLVANIA, INC.
53.53 I. VALUATION
A. ALL UTILITIES

2. Provide a schedule showing the measures of value and rates of return at the original cost and trended original cost measures of value at the spot, three-year and five-year average price levels. All claims made on this exhibit should be cross-referenced to appropriate exhibits. Provide a schedule similar to the ones listed above, reflecting respondent's final claim in its previous rate case.

Response:

A schedule showing rates of return for Columbia Gas of Pennsylvania, Inc. at November 30, 2019 per books, pro forma at present rates and pro forma at proposed rates is found at Exhibit No. 2, Schedule No. 3, Page 3.

See the attached Exhibit No. 8, Page 3, for Columbia's adjusted rate base at November 30, 2019, and Exhibit No. 8, Page 4, for Columbia's rate base using a fully projected future test year ending December 31, 2019 from the last base rate case R-2018-2647577, which was a negotiated settlement.

Columbia Gas of Pennsylvania, Inc.
Statement of Rate Base at Present Rates
November 30, 2019

<u>Line No.</u>	<u>Acct. No.</u>	<u>Description</u>	<u>Per Books</u> (1) \$	<u>Adjustments</u> (2) \$	<u>Pro Forma</u> (3) \$	<u>Reference</u> (4)
1		Property Plant and Equipment				
2	101	Gas Plant in Service- excluding leases	2,556,711,787	0	2,556,711,787	Exh 8, Schedule 1
3	106	Completed Construction Not Classified	131,134,316	0	131,134,316	Exh 8, Schedule 1
4	101	Gas Plant in Service -Intangible Plant, Misc. Clouds	0	567,599	567,599	Exh 8, Schedule 1
5	101	Gas Plant in Service -Leases	32,883,688	(32,883,688)	0	
6	107	Construction Work in Progress	68,940,448	(68,940,448)	0	Exh 8, Schedule 2
7	117/191	Gas Stored Underground - Non-Current	3,794,693	0	3,794,693	
8	108-111	Depreciation Reserve	(502,691,310)	3,212,707	(499,478,603)	Exh 8, Schedule 3
9	111	Depreciation Reserve- Intangible Plant, Misc. Clouds	0	(92,060)	(92,060)	Exh 8, Schedule 3
10	117	Accum. Provision Gas Lost - Underground Storage	(163,467)	0	(163,467)	Exh 1, Schedule 1
11		Net Plant in Service	<u>2,290,610,156</u>	<u>(98,135,890)</u>	<u>2,192,474,265</u>	
12		Working Capital				
13	154-163-186	Materials and Supplies	1,158,708	(58,278)	1,100,430	Exh 8, Schedule 5
14	165	Prepayments	5,092,243	(2,228,497)	2,863,746	Exh 8, Schedule 6
15	164	Gas Storage Underground	59,220,987	(15,279,673)	43,941,314	Exh 8, Schedule 7
16		Cash Allowance	0	0	0	Exh 8, Schedule 4
17		Total Working Capital	<u>65,471,939</u>	<u>(17,566,449)</u>	<u>47,905,490</u>	
18		Deferred Income Taxes				
19	190	Income Taxes	76,165,784	0	76,165,784	Exh 8, Schedule 8
20	282	Depreciation	(462,673,593)	(136,494)	(462,810,087)	Exh 8, Schedule 8
21	283	Other	0	0	0	Exh 8, Schedule 8
22		Total Deferred Income Taxes	<u>(386,507,809)</u>	<u>(136,494)</u>	<u>(386,644,303)</u>	
23						
24	235	Customer Deposits	(3,406,498)	176,971	(3,229,527)	Exh 8, Schedule 9
25		Customer Advances for Construction				
26	252/186	Cash Deposits	<u>31,832</u>	<u>0</u>	<u>31,832</u>	Exh 8, Schedule 10
27		Total Rate Base	<u>1,966,199,619</u>	<u>(115,661,862)</u>	<u>1,850,537,758</u>	

Columbia Gas of Pennsylvania, Inc.
Statement of Rate Base at Present Rates
Forecasted December 2019 per Case No. R2018-2647577

<u>Line No.</u>	<u>Acct. No.</u>	<u>Description</u>	<u>Amount</u> (1) \$	1/
1		Property Plant and Equipment		
2	101-106	Gas Plant in Service	2,741,791,737	
3	107	Construction Work in Progress - In Service	0	
4	117/191	Gas Stored Underground - Non-Current	3,794,693	
5	108-111	Depreciation Reserve	(499,229,725)	
6	117	Accum. Provision Gas Lost - Underground Storage	<u>(163,467)</u>	
7		Net Plant in Service	2,246,193,238	
8		Working Capital		
9	154-163-186	Materials and Supplies	851,388	
10	165	Prepayments	3,087,006	
11	164	Gas Storage Underground	50,432,424	
12		Cash Allowance	<u>0</u>	
13		Total Working Capital	54,370,818	
14		Deferred Income Taxes		
15	190	Income Taxes	79,055,237	
16	282	Depreciation	(460,787,161)	
17	283	Other	<u>0</u>	
18		Total Deferred Income Taxes	(381,731,924)	
19		Customer Deposits		
20	235	13 Month Average	(2,838,227)	
21		Customer Advances for Construction		
22	252/186	Cash Deposits	<u>2,552</u>	
23		Total Rate Base	<u>1,915,996,457</u>	

Note:

1/ Rate base for the Fully Projected Future Test Year from the company's last rate case at R-2018-2647577. See Exhibit No. 108, Page 3 of 11, Column 5 of that case. Case was a negotiated settlement.

COLUMBIA GAS OF PENNSYLVANIA, INC
53.52 (c)

If a public utility files a tariff, revision or supplement which it is calculated will increase the bills of a customer or a group of customers by an amount, when projected to an annual basis, exceeding 3% of the operating revenues of the utility - subsection (b)(4) divided by the operating revenues of the utility for a 12-month period as defined in subsection (b)(2) - or which it is calculated will increase the bills of 5% or more of the number of customers served by the utility – subsection (b)(3) divided by subsection (a)(2) - it shall submit to the Commission with the tariff, revision or supplement, in addition to the statements required by subsections (a) and (b), all of the following information:

4. A statement showing the amount of the depreciation reserve, at the date of the balance sheet required by paragraph (2), applicable to the property, summarized as required by paragraph (3).

Response:

Please see Exhibit No. 8, Schedule No. 3.

COLUMBIA GAS OF PENNSYLVANIA, INC.

53.53 I. VALUATION

A. ALL UTILITIES

8. Provide a description of the trending methodology which was utilized. Identify all indexes which were used (include all back up workpapers) and the reasons particular indexes were chosen. If indexes were spliced, indicate which years were utilized in any splices. If indexes were composited, show all supporting calculations. Include any analysis made to "test" the applicability of any indexes.
 - a. Supply a comprehensive statement of any changes made in the selection of trend factors or in the methodology used in the current rate filing compared to the most recent previous rate filing.

Response:

See Pa. B. Doc. No. 81-1842 filed November 27, 1981, changing the Commission's Regulations with respect to the filing of trended original cost measures of value. (Refer to Pennsylvania Bulletin Vol. 11, No. 48, Saturday November 28, 1981, pp. 41 57 - 41 58).

9. Provide an exhibit indicating the spot trended original cost at test year end by vintage by account and include applicable depreciation reserves. Include totals by account for all other trended measures of value.

Response:

See Pa. B. Doc. No. 81-1842 filed November 27, 1981, changing the Commission's Regulations with respect to the filing of trended original cost measures of value. (Refer to Pennsylvania Bulletin Vol. 11, No. 48, Saturday November 28, 1981, pp. 41 57 - 41 58).

COLUMBIA GAS OF PENNSYLVANIA, INC.

53.53 I. VALUATION

A. ALL UTILITIES

10. Supply an exhibit indicating the percentages of undepreciated original cost which were trended with the following indexes:
- a. Boeckh
 - b. Handy-Whitman
 - c. Indexes developed from supplier's prices
 - d. Indexes developed from company records and company price histories
 - e. Construction equipment
 - f. Government statistical releases.

Response: See Pa. B. Doc. No. 81-1842 filed November 27, 1981, changing the Commission's Regulations with respect to the filing of trended original cost measures of value. (Refer to Pennsylvania Bulletin Vol. 11, No. 48, Saturday November 28, 1981, pp. 41 57 - 41 58).

11. Provide a table, showing the cumulative *trended depreciated original cost* (at the spot price level) by year of installation for utility plant in service at the end of the test year (depreciable plant only) as claimed in the measures of value, in the following form:
- a. Year Installed
 - b. Trended original cost (at the spot price level) - the total surviving cost associated with each installation year from all plant accounts.
 - c. Trended calculated depreciation reserve - the calculated depreciation reserve associated with each installation year from all plant accounts.
 - d. Depreciated trended original cost - (Column B minus Column C)
 - e. Total - cumulation year by year of the figures from Column D
 - f. Column E divided by the total of the figures in Column D.

Response: See Pa. B. Doc. No. 81-1842 filed November 27, 1981, changing the Commission's Regulations with respect to the filing of trended original cost measures of value. (Refer to Pennsylvania Bulletin Vol. 11, No. 48, Saturday November 28, 1981, pp. 41 57 - 41 58).

COLUMBIA GAS OF PENNSYLVANIA, INC.

53.53 I. VALUATION

A. ALL UTILITIES

12. If a claim is made for construction work in progress, include, in the form of an exhibit, the summary page from all work orders, amount expended at the end of the test year and anticipated in-service dates. Indicate if any of the construction work in progress will result in insurance recoveries, reimbursements, or retirements of existing facilities. Describe in exact detail the necessity of each project claimed if not detailed on the summary page from the work order. Include final completion dates and estimated total amounts to be spent on each project.

Response: CPA is not making a claim for construction work in progress as of November 30, 2019. Please see Exhibit No.8, Schedule No.2.

13. If a claim is made for non-revenue producing construction work in progress, include in the form of an exhibit, the summary page from all work orders, amount expended at the end of the test year and anticipated in-service dates. Indicate if any of the construction work in progress will result in insurance recoveries, reimbursements, or retirements of existing facilities. Describe in exact detail the necessity of each project claimed if not detailed on the summary page from the work order. Include final completion date and estimated total amounts to be spent on each project.

Response: CPA is not making a claim for non-revenue producing construction work in progress for the Historic Test Year.

COLUMBIA GAS OF PENNSYLVANIA, INC.

53.53 I. VALUATION

A. ALL UTILITIES

14. If a claim is made for plant held for future use, supply the following:
- a. A brief description of the plant or land site and its costs.
 - b. Expected date of use for each item claimed.
 - c. Explanation as to why it is necessary to acquire each item in advance of its date of use.
 - d. Date when each item was acquired.
 - e. Date when each item was placed in plant held for future use.

Response: CPA is not making a claim for plant held for future use for the Historic Test Year.

15. If materials and supplies comprise part of cash working capital claim, attach an exhibit showing the actual book balances for materials and supplies by month for thirteen months prior to the end of the test year. Explain any abrupt changes in monthly balances. (Explain method of determining claim if other than that described above)

Response: There are no expected abrupt changes in monthly balances for the Historic Test Year.

16. If fuel stocks comprise part of the cash working capital claim, provide an exhibit showing the actual book balances (quantity and price) for the fuel inventories by type of fuel for the thirteen months prior to the end of the test year by location, station, etc. (Explain the method of determining claim if other than that described above.)

Response: CPA is not making a claim for fuel stock for the Historic Test Year.

COLUMBIA GAS OF PENNSYLVANIA, INC.
53.53 I. VALUATION
A. ALL UTILITIES

18. Explain in detail by statement or exhibit the appropriateness of claiming any additional items, not previously mentioned, in the measure of value.

Response: See Exhibit No.8, Schedule No.8, for deferred taxes, Exhibit No.8, Schedule No.9, for customer deposits, and Exhibit No.8, Schedule No. 10 for customer advances for construction.

COLUMBIA GAS OF PENNSYLVANIA, INC.
53.53 II. RATE OF RETURN
A. ALL UTILITIES

21. Provide Original Cost, Trended Original Cost and Fair Value rate base claims.

Response:

The rate base claim at original cost as of November 30, 2019 is found above under Regulation 53.53 I.A.2 at Exhibit No. 8, Page 2.

COLUMBIA GAS OF PENNSYLVANIA, INC.
53.53 III. BALANCE SHEET AND OPERATING STATEMENT
A. ALL UTILITIES

14. Provide schedules and data in support of the following working capital items:
- a. Prepayments - List and Identify all items
 - b. Federal Excise Tax accrued and prepaid
 - c. Federal Income Tax accrued or prepaid
 - d. Pa. State Income Tax accrued or prepaid
 - e. Pa. Gross Receipts Tax accrued or prepaid
 - f. Pa. Capital Stock Tax accrued or prepaid
 - g. Pa. Pub Utility realty Tax accrued or prepaid
 - h. State sales tax accrued or prepaid
 - i. Payroll taxes accrued or prepaid
 - j. Any adjustment related to the above items for ratemaking purposes.

Response:

See Exhibit No.8, Schedule No.4, for cash working capital (lead/lag), Exhibit No.8, Schedule No.6, for prepayments working capital, and Exhibit No.8, Schedule No.7, for Gas Stored Underground working capital.

COLUMBIA GAS OF PENNSYLVANIA, INC
53.52 C 3

3. A summary, by detailed plant accounts, of the book value of the property of the utility at the date of the balance sheet required by paragraph (2).

As of November 30, 2019										
Line No.	Account No.	Description	Gas Plant In Service Account 101-1000 (1)	Contribution In Aid of Construction Account 101-2000 (2)	Contribution In Aid of Construction Affiliated Companies Account 101-3000 (3)	Non-Taxable Relocation Reimbursements Account 101-4000 (4)	Customer Advances for Construction (Deposits) Account 101-4005 (5)	Completed Construction Not Classified Account 106 (6)	Construction Work In Progress Account 107 (7)	1/ Total Gas Plant In Service (8)=(1 thru 7) \$
Intangible Plant										
1	301.00	Organization Costs	100,099	0	0	0	0	0	0	100,099
2	302.10	Franchises/Consent, Perpetual	26,216	0	0	0	0	0	0	26,216
3	303.00	Intangible Plant, General	4,809,062	0	0	0	0	0	0	4,809,062
4	303.30	Intangible Plant, Miscellaneous Software	24,574,424	0	0	0	0	0	0	24,574,424
5		Total Intangible Plant	29,509,802	0	0	0	0	0	0	29,509,802
Underground Storage Plant										
6	350.10	Land	23,882	0	0	0	0	0	0	23,882
7	350.20	Rights of Way	1,932	0	0	0	0	0	0	1,932
8	351.20	Compressor Station Structures	3,220,858	0	0	0	0	0	0	3,220,858
9	352.01	Wells Construction	738,941	0	0	0	0	0	0	738,941
10	352.02	Wells Equipment	168,032	0	0	0	0	0	0	168,032
11	352.10	Storage Leasehold and Rights	139,442	0	0	0	0	0	0	139,442
12	352.12	Other Leases	67,498	0	0	0	0	0	0	67,498
13	353.00	Lines	389,345	0	0	0	0	0	0	389,345
14	354.00	Compressor Station Equipment	948,272	0	0	0	0	0	0	948,272
15	355.00	Measuring & Regulating Equipment	104,477	0	0	0	0	0	0	104,477
16		Total Underground Storage Plant	5,802,680	0	0	0	0	0	0	5,802,680
Distribution Plant										
17	374.10	Land, City Gate/Main Line Industrial	21,944	0	0	0	0	0	0	21,944
18	374.20	Land, Other Distribution System	477,100	0	0	0	0	0	0	477,100
19	374.30	Land Rights, City Gate/Main Line	95,361	0	0	0	0	0	0	95,361
20	374.40	Land Rights, City Other Distribution System	3,140,856	(11,729)	0	(106,236)	0	59,381	0	3,082,273
21	374.41	Land Rights, City Other Distribution System, Loc	13	0	0	0	0	0	0	13
22	374.50	Rights of Way	3,257,472	(19,163)	0	(5,147)	0	0	0	3,233,161
23	375.20	Structures, City Gate Measurement & Regulating	7,026	0	0	0	0	0	0	7,026
24	375.31	Structures, General Meas & Reg Local Gas	4,012	0	0	0	0	0	0	4,012
25	375.40	Structures, Regulating	5,206,600	(82,237)	0	(40,624)	0	100,717	0	5,184,456
26	375.60	Structures, Distribution Industrial M&R	86,228	0	0	0	0	0	0	86,228
27	375.70	Structures, Other Distribution System	9,900,799	0	0	0	0	16,305	0	9,917,104
28	375.71	Structures, Other Distribution System, Leased	5,487,917	0	0	0	0	0	0	5,487,917
29	375.80	Structures, Communication	16,515	0	0	0	0	0	0	16,515
30	376.00	Mains	1,583,383,147	(8,654,232)	(8,637)	(4,128,568)	(19,760)	118,291,785	0	1,688,863,735
31	376.08	Mains - CSL Replacements	23,574,504	0	0	0	0	0	0	23,574,504
32	376.30	Mains - Bare Steel	64,933,670	0	0	0	0	0	0	64,933,670
33	376.80	Mains - Cast Iron	263,240	0	0	0	0	0	0	263,240
34	378.10	Measuring & Regulating Equipment General	1,615,347	(162,340)	0	(1,068)	0	0	0	1,451,939
35	378.20	Measuring & Regulating Equipment Regulating	82,381,627	(133,773)	0	(180,688)	0	11,178,266	0	93,245,433
36	378.30	Measuring & Regulating Equipment Local Gas	644,881	(190,096)	0	0	0	133	0	454,917
37	379.10	Measuring & Regulating Equipment City Gate	136,417	0	0	0	0	0	0	136,417
38	379.11	Measuring & Regulating Equipment Exchange Gas	9,244	(9,694)	0	0	0	0	0	(450)
39	380.00	Services	581,590,912	(1,108,064)	0	(17,664)	0	322,819	0	580,788,003

1/ See Exhibit 8, Schedule 2

COLUMBIA GAS OF PENNSYLVANIA, INC
53.52 C 3

3. A summary, by detailed plant accounts, of the book value of the property of the utility at the date of the balance sheet required by paragraph (2).

		As of November 30, 2019									
Line No.	Account No.	Description	Gas Plant In Service Account 101-1000 (1) \$	Contribution In Aid of Construction Account 101-2000 (2) \$	Contribution In Aid of Construction Affiliated Companies Account 101-3000 (3) \$	Non-Taxable Relocation Reimbursements Account 101-4000 (4) \$	Customer Advances for Construction (Deposits) Account 101-4005 (5) \$	Completed Construction Not Classified Account 106 (6) \$	Construction Work In Progress Account 107 (7) \$	1/	Total Gas Plant In Service (8)=(1 thru 7) \$
1	381.00	Meters	39,171,625	0	0	0	0	4,671	0		39,176,296
2	381.10	Auto Meter Reading Devices	24,571,576	0	0	0	0	(1,029)	0		24,570,547
3	382.00	Meter Installations	40,642,126	(52,412)	0	(547)	0	0	0		40,589,166
4	383.00	House Regulators	13,725,971	(38,809)	0	(368)	0	0	0		13,686,795
5	384.00	House Regulators Installations	3,492,526	(6,880)	0	(858)	0	0	0		3,484,788
6	385.00	Industrial M&R Equipment. Station Equipment	6,367,060	(137,663)	0	(15,248)	0	148,836	0		6,362,985
7	385.10	Industrial M&R Equipment. Large Volume	1,094,442	(26,526)	0	(19,937)	0	531,978	0		1,579,956
8	387.10	Other Equipment	19,450	0	0	0	0	0	0		19,450
9	387.20	Other Equipment, Odorization	117,248	0	0	0	0	0	0		117,248
10	387.42	Other Equipment, Radio	119,609	0	0	0	0	0	0		119,609
11	387.44	Other Equipment, Other Communications	627,560	0	0	0	0	0	0		627,560
12	387.45	Other Equipment, Telemetry	9,084,421	0	0	0	0	434,766	0		9,519,187
13	387.46	Other Equipment, Customer Information Service	259,436	0	0	0	0	0	0		259,436
14	387.50	GPS Pipe Locators	2,201,372	0	0	0	0	0	0		2,201,372
15		Total Distribution Plant	2,507,729,254	(10,633,618)	(8,637)	(4,516,953)	(19,760)	131,088,628	0		2,623,638,914
General Plant											
16	390.10	Structures, Communications	52,901	(3,080)	0	0	0	0	0		49,821
17	391.10	Office Furniture & Equipment, Unspecified	2,380,973	0	0	0	0	0	0		2,380,973
18	391.11	Office Furniture & Equipment, Data handling Equip	91,304	0	0	0	0	0	0		91,304
19	391.12	Office Furniture & Equipment, Information Systems	4,498,635	0	0	0	0	0	0		4,498,635
20	391.20	Office Furniture & Equipment, Air Condition Equip	3,007	0	0	0	0	0	0		3,007
21	392.20	Transportation Equipment, Trailers > \$1,000	14,787	0	0	0	0	0	0		14,787
22	392.21	Transportation Equipment, Trailers \$1,000 or <	10,830	0	0	0	0	0	0		10,830
23	393.00	Stores Equipment	0	0	0	0	0	0	0		0
24	394.10	Tools, Garage & Service Equipment	57,458	0	0	0	0	0	0		57,458
25	394.11	Tools, CNG Equipment, Stationary	2,235,476	0	0	0	0	0	0		2,235,476
26	394.12	Tools, CNG Equipment, Portable	179,308	0	0	0	0	0	0		179,308
27	394.20	Tools, Shop Equipment	35,454	0	0	0	0	0	0		35,454
28	394.30	Tools and Other	16,300,076	0	0	0	0	45,688	0		16,345,764
29	394.31	Tools, High Pressure Stopping	10,847	0	0	0	0	0	0		10,847
30	395.00	Laboratory Equipment Gas	269,030	0	0	0	0	0	0		269,030
31	396.00	Power Operated Equipment	948,698	0	0	0	0	0	0		948,698
32	397.00	Communication Equipment	0	0	0	0	0	0	0		0
33	397.10	Communication Equipment, Telephone	0	0	0	0	0	0	0		0
34	397.20	Communication Equipment, Radio	0	0	0	0	0	0	0		0
35	397.40	Communication Equipment, Other	0	0	0	0	0	0	0		0
36	397.50	Communication Equipment, Telemetry	792,133	0	0	0	0	0	0		792,133
37	398.00	Miscellaneous Equipment	971,183	0	0	0	0	0	0		971,183
38		Total General Plant	28,852,099	(3,080)	0	0	0	45,688	0		28,894,707
39		Total Gas Plant in Service	2,571,893,834	(10,636,697)	(8,637)	(4,516,953)	(19,760)	131,134,316	0		2,687,846,103
40	303.60	Intangible Plant, Miscellaneous Clouds	567,599	0	0	0	0	0	0		567,599
41		Total Gas Plant in Service- including Clouds	2,572,461,433	(10,636,697)	(8,637)	(4,516,953)	(19,760)	131,134,316	0		2,688,413,702

1/ See Exhibit 8, Schedule 2

COLUMBIA GAS OF PENNSYLVANIA, INC
53.52 C 3

ACCOUNT 107 CONSTRUCTION WORK IN PROGRESS

Line No.	Account No.	Description	As of November 30, 2019			
			Construction Work In Progress Account 107 Per Books \$	Construction Work In Progress Account 165 Clouds	Construction Work In Progress Account 107 Not In Rate Base \$	Construction Work In Progress Account 107 In Rate Base \$
1		Intangible Plant				
2	301.00	Organization Costs	0	0	0	0
3	302.10	Franchises/Consent, Perpetual	0	0	0	0
4	303.00	Intangible Plant, General	156,891	0	156,891	0
5	303.30	Intangible Plant, Miscellaneous Software	1,536,803	0	1,536,803	0
	303.60	Intangible Plant, Miscellaneous Clouds	0	1,008,080	1,008,080	0
6		Total Intangible Plant	1,693,694	1,008,080	2,701,774	0
7		Underground Storage Plant				
8	350.10	Land	0	0	0	0
9	350.20	Rights of Way	0	0	0	0
10	351.20	Compressor Station Structures	60,059	0	60,059	0
11	352.01	Wells Construction	0	0	0	0
12	352.02	Wells Equipment	0	0	0	0
13	352.10	Storage Leasehold and Rights	0	0	0	0
14	352.12	Other Leases	0	0	0	0
15	353.00	Lines	0	0	0	0
16	354.00	Compressor Station Equipment	0	0	0	0
17	355.00	Measuring & Regulating Equipment	0	0	0	0
18		Total Underground Storage Plant	60,059	0	60,059	0
19		Distribution Plant				
20	374.10	Land, City Gate/Main Line Industrial	0	0	0	0
21	374.20	Land, Other Distribution System	0	0	0	0
22	374.30	Land Rights, City Gate/Main Line	0	0	0	0
23	374.40	Land Rights, City Other Distribution System	627,354	0	627,354	0
24	374.41	Land Rights, City Other Distribution System, Loc	0	0	0	0
25	374.50	Rights of Way	0	0	0	0
26	375.20	Structures, City Gate Measurement & Regulating	0	0	0	0
27	375.31	Structures, General Meas & Reg Local Gas	0	0	0	0
28	375.40	Structures, Regulating	531,526	0	531,526	0
29	375.60	Structures, Distribution Industrial M&R	0	0	0	0
30	375.70	Structures, Other Distribution System	100,400	0	100,400	0
31	375.71	Structures, Other Distribution System, Leased	10,510,666	0	10,510,666	0
32	375.80	Structures, Communication	0	0	0	0
33	376.00	Mains	47,642,307	0	47,642,307	0
34	376.08	Mains - CSL Replacements	0	0	0	0
35	376.25	BS & CI Replaced Total	2,040	0	2,040	0
36	378.10	Measuring & Regulating Equipment General	0	0	0	0
37	378.20	Measuring & Regulating Equipment Regulating	4,672,937	0	4,672,937	0

COLUMBIA GAS OF PENNSYLVANIA, INC
53.52 C.3
ACCOUNT 107 CONSTRUCTION WORK IN PROGRESS

			As of November 30, 2019			
Line No.	Account No.	Description	Construction Work		Construction Work	Construction Work
			In Progress Account 107	Per Books	In Progress Account 107	In Progress Account 107
			\$		\$	\$
1	378.30	Measuring & Regulating Equipment Local Gas	0	0	0	0
2	379.10	Measuring & Regulating Equipment City Gate	0	0	0	0
3	379.11	Measuring & Regulating Equipment Exchange Gas	0	0	0	0
4	380.00	Services	283,928	0	283,928	0
5	380.12	CSL Replacement	0	0	0	0
6	380.13	Customer Service	0	0	0	0
7	381.00	Meters	27,075	0	27,075	0
8	381.10	Auto Meter Reading Devices	29,205	0	29,205	0
9	382.00	Meter Installations	145,441	0	145,441	0
10	383.00	House Regulators	64,628	0	64,628	0
11	384.00	House Regulators Installations	0	0	0	0
12	385.00	Industrial M&R Equipment. Station Equipment	99,826	0	99,826	0
13	385.10	Industrial M&R Equipment. Large Volume	6,609	0	6,609	0
14	387.10	Other Equipment	0	0	0	0
15	387.20	Other Equipment, Odorization	0	0	0	0
16	387.42	Other Equipment, Radio	0	0	0	0
17	387.44	Other Equipment, Other Communications	0	0	0	0
18	387.45	Other Equipment, Telephone	874,075	0	874,075	0
19	387.46	Other Equipment, Customer Information Service	0	0	0	0
20	398.00	Miscellaneous Equipment	0	0	0	0
21		Total Distribution Plant	65,618,016	0	65,618,016	0
22		General Plant				
23	389.20	Land Rights	0	0	0	0
24	390.10	Structures, Communications	0	0	0	0
25	391.10	Office Furniture & Equipment, Unspecified	0	0	0	0
26	391.11	Office Furniture & Equipment, Data handling Equip	0	0	0	0
27	391.12	Office Furniture & Equipment, Information Systems	0	0	0	0
28	391.20	Office Furniture & Equipment, Air Condition Equip	0	0	0	0
29	392.20	Transportation Equipment, Trailers > \$1,000	0	0	0	0
30	392.21	Transportation Equipment, Trailers \$1,000 or <	0	0	0	0
31	393.00	Stores Equipment	0	0	0	0
32	394.10	Tools, Garage & Service Equipment	0	0	0	0
33	394.11	Tools, CNG Equipment, Stationary	0	0	0	0
34	394.12	Tools, CNG Equipment, Portable	0	0	0	0
35	394.20	Tools, Shop Equipment	0	0	0	0
36	394.30	Tools, Tools and Other	150,874	0	150,874	0
37	394.31	Tools, High Pressure Stopping	0	0	0	0
38	395.00	Laboratory Equipment Gas	0	0	0	0
39	396.00	Power Operated Equipment	0	0	0	0
40	397.00	Communication Equipment	0	0	0	0
41	397.10	Communication Equipment, Telephone	0	0	0	0
42	397.20	Communication Equipment, Radio	0	0	0	0
43	397.40	Communication Equipment, Other	0	0	0	0
44	397.50	Communication Equipment, Telemetering	0	0	0	0
45	398.00	Miscellaneous Equipment	3,300	0	3,300	0
46		Bonus Accruals	1,414,505	0	1,414,505	0
47		Total General Plant	1,568,679	0	1,568,679	0
48		Total Plant	68,940,448	1,008,080	69,948,527	0

Columbia Gas of Pennsylvania, Inc.
Depreciation Reserve at November 30, 2019

<u>Line No.</u>	<u>Description</u>	<u>Amount</u> \$
1	Amortizable Plant	(15,252,177)
2	Underground Storage Plant	(4,156,210)
3	Distribution Plant	(464,829,567)
4	General Plant	(15,030,726)
5	Non Depreciable Plant	<u>(209,923)</u>
6	Total (Exhibit 5)	<u>(499,478,603)</u>
7	Intangible Plant, Miscellaneous Clouds	(92,060)
8	Total Depreciation Reserve	<u><u>(499,570,663)</u></u>

COLUMBIA GAS OF PENNSYLVANIA, INC.
53.53 III BALANCE SHEET AND OPERATING STATEMENT
A. ALL UTILITIES

15. Supply an Exhibit supporting the claim for working capital requirement based on a lead-lag method.
- a. Pro forma expenses and revenues are to be used in lieu of book data for computing lead-lag days.
 - b. Respondent must either include sales for resale and related expenses in revenues and in expenses or exclude from revenues and expenses. Explain

Response:

Columbia Gas of Pennsylvania, Inc. ("Columbia") is not making a claim for cash working capital. Columbia does not offer wholesale service.

16. Provide detailed calculations showing the derivation of the tax liability offset to gross cash working capital requirements.

Response:

Columbia is not making a claim for cash working capital.

COLUMBIA GAS OF PENNSYLVANIA, INC
PLANT MATERIALS AND SUPPLIES
AVERAGE OF THIRTEEN MONTHLY BALANCES ENDED
NOVEMBER 30, 2019

<u>Line</u> <u>No.</u>	<u>Month</u>	<u>Amount</u> \$
1	Nov-18	1,020,641
2	Dec-18	1,040,237
3	Jan-19	1,086,007
4	Feb-19	1,086,298
5	Mar-19	1,093,064
6	Apr-19	1,094,130
7	May-19	1,103,021
8	Jun-19	1,123,404
9	Jul-19	1,106,722
10	Aug-19	1,116,033
11	Sep-19	1,121,428
12	Oct-19	1,155,892
13	Nov-19	<u>1,158,708</u>
14	Total	14,305,585
15	13 Month Average Balance	<u><u>1,100,430</u></u>

COLUMBIA GAS OF PENNSYLVANIA, INC
PREPAYMENTS
AVERAGE OF THIRTEEN MONTHLY BALANCES ENDED
NOVEMBER 30, 2019

Accounts

Line No.	Month	Prepaid Leases	Corp. Ins.	Medical LTD Ins.	Prepaid Ins. I/C	PUC,OCA, OSBA Fees	Total
		<u>16500000</u>	<u>16521000</u>	<u>16500010</u>	<u>16520000</u>	<u>16503600</u>	
		(1)	(2)	(3)	(4)	(5)	(6)
		\$	\$	\$	\$	\$	\$
1	Nov-18	0	1,412,077	46,914	794,305	1,317,511	3,570,807
2	Dec-18	66,879	1,269,886	15,645	644,861	1,129,295	3,126,567
3	Jan-19	74,287	1,096,302	13,038	537,741	941,080	2,662,447
4	Feb-19	84,287	1,109,860	(7,124)	690,075	752,864	2,629,962
5	Mar-19	84,167	900,570	7,823	775,197	564,648	2,332,406
6	Apr-19	92,073	723,974	5,216	617,889	376,432	1,815,583
7	May-19	76,151	507,434	2,608	460,581	188,216	1,234,989
8	Jun-19	(325,943)	338,692	1	319,796	0	332,546
9	Jul-19	70,345	2,628,600	1	623,866	0	3,322,812
10	Aug-19	79,580	2,445,425	1	728,349	0	3,253,356
11	Sep-19	91,348	2,196,925	1	1,329,228	1,353,768	4,971,270
12	Oct-19	117,919	1,906,786	1	1,147,216	1,203,349	4,375,272
13	Nov-19	<u>(69,369)</u>	<u>1,651,113</u>	<u>0</u>	<u>966,000</u>	<u>1,052,931</u>	<u>3,600,676</u>
14	Total	441,727	18,187,644	84,125	9,635,104	8,880,094	37,228,693
15	13 Month Average Balance						<u><u>2,863,746</u></u>

COLUMBIA GAS OF PENNSYLVANIA, INC
GAS STORED UNDERGROUND
AVERAGE OF TWELVE MONTHLY BALANCES ENDED
NOVEMBER 30, 2019

Line No.	Month	Injections DTH (A)	ACOG \$ (B)	Injection Activity \$ (C = A * B)	Monthly WACOG \$ (D)	Withdrawals DTH (E)	Withdrawal Activity \$ (F = D * E)	Ending Cumulative Balance \$ (G)	Ending Cumulative Balance DTH (H)	Monthly Average Rate \$ (I = G / H)
1										
2	11/30/2018 Balance							68,080,702	24,872,375	
3	Dec-18	106,139	4.50900	478,581	2.7447	3,001,296	(8,237,656)	60,321,627	21,977,218	2.7447
4	Jan-19	1,352	4.4979	6,081	2.7448	7,000,267	(19,214,333)	41,113,375	14,978,303	2.7449
5	Feb-19	(7,268)	3.3393	(24,270)	2.7446	5,675,979	(15,578,291)	25,510,814	9,295,056	2.7446
6	Mar-19	217,088	2.8966	628,817	2.7480	4,217,320	(11,589,196)	14,550,435	5,294,824	2.7480
7	Apr-19	2,608,853	2.5261	6,590,224	2.6748	96,947	(259,314)	20,881,345	7,806,730	2.6748
8	May-19	4,218,787	2.3410	9,876,180	2.5577	135,627	(346,892)	30,410,633	11,889,891	2.5577
9	Jun-19	4,154,161	2.2730	9,158,764	2.4840	(89,565)	222,480	39,791,877	16,133,617	2.4664
10	Jul-19	4,207,848	2.0872	9,066,264	2.4019	(58,818)	141,275	48,999,416	20,400,283	2.4019
11	Aug-19	4,182,520	1.9570	8,185,192	2.3262	31,580	(73,462)	57,111,146	24,551,223	2.3262
12	Sep-19	3,378,564	1.9217	6,492,586	2.2773	13,458	(30,649)	63,573,083	27,916,328	2.2773
13	Oct-19	1,412,623	1.6755	2,366,850	2.2483	57,333	(128,902)	65,811,031	29,271,618	2.2483
14	Nov-19	(78,730)	2.2329	(175,796)	2.2483	2,852,933	(6,414,248)	59,220,987	26,339,956	2.2483
15	Twelve Month Average ((Lns. 3 thru 14)/12)							43,941,314		

COLUMBIA GAS OF PENNSYLVANIA, INC
DEFERRED INCOME TAXES
BALANCE ENDED
NOVEMBER 30, 2019

Line No.	Acct	Pro Forma Balance 11/30/19 (\$)	Reference
1	<u>Account 190 - Deferred Income Taxes</u>		
2	19001000 LIFO Inventory Adj - Federal	6,222,864	
3	19002000 LIFO Inventory Adj - State	3,288,863	
4	19001000 Capitalized Inventory - Fed	991,536	
5	19002000 Capitalized Inventory - St	524,039	
6	19005000 Cust. Advances - Fed	798,649	
7	19006000 Cust. Advances - St	422,096	
8	19005000 Federal Net Operating Loss	34,820,033	
	19005000 Deficient Deferred Taxes 190- NOL, Inventory & Customer Advances	29,097,704	
9	Total Account 190	<u>76,165,784</u>	
10	<u>Account 282 - Deferred Income Taxes-Depreciation</u>		
11	Various Excess Accelerated Tax Depreciation - Fed	(462,810,087)	
12	Total Account 282	<u>(462,810,087)</u>	
13	<u>Account 283 - Deferred Income Taxes - Other</u>		
14	28305000 Legal Liability-Lease on G.O. Bldg. - Fed	0	
15	28306000 Legal Liability-Lease on G.O. Bldg. - St	0	
16	Total Account 283	<u>0</u>	
17	Total Accumulated Deferred Taxes	<u>(386,644,303)</u>	Exhibit 7, Pg. 8 & 9

COLUMBIA GAS OF PENNSYLVANIA, INC
CUSTOMER DEPOSITS
AVERAGE OF THIRTEEN MONTHLY BALANCES ENDED
NOVEMBER 30, 2019

Line No.	Month	Acct-23500300 Other Deposits (1) \$	Acct-23500000 Security Deposits (2) \$	Total Account 235 (3) \$
1	Nov-18	(140,000)	(3,139,182)	(3,279,182)
2	Dec-18	(140,000)	(3,201,169)	(3,341,169)
3	Jan-19	(140,000)	(3,105,326)	(3,245,326)
4	Feb-19	(140,000)	(3,055,514)	(3,195,514)
5	Mar-19	(140,000)	(3,011,401)	(3,151,401)
6	Apr-19	(140,000)	(2,971,040)	(3,111,040)
7	May-19	(140,000)	(3,003,243)	(3,143,243)
8	Jun-19	(140,000)	(3,051,650)	(3,191,650)
9	Jul-19	(140,000)	(3,066,470)	(3,206,470)
10	Aug-19	(140,000)	(3,050,318)	(3,190,318)
11	Sep-19	(140,000)	(3,086,014)	(3,226,014)
12	Oct-19	(140,000)	(3,156,033)	(3,296,033)
13	Nov-19	<u>(140,000)</u>	<u>(3,266,498)</u>	<u>(3,406,498)</u>
14	Total	(1,820,000)	(40,163,857)	(41,983,857)
15	13 Month Average Balance	<u><u>(140,000)</u></u>	<u><u>(3,089,527)</u></u>	<u><u>(3,229,527)</u></u>

COLUMBIA GAS OF PENNSYLVANIA, INC
CUSTOMER ADVANCES
NOVEMBER 30, 2019

<u>Line No.</u>	<u>Month</u>	Customer Advances - Deposit Account <u>25200000</u> (1) \$	Customer Advances - Deposit (Post 12/31/99) Account <u>18600400</u> (2) \$	Net <u>252</u> (3=1+2)
1	Nov-19	(4,225,188)	4,257,020	<u>31,832</u>

COLUMBIA GAS OF PENNSYLVANIA, INC.
53.53 I. VALUATION
A. ALL UTILITIES

3. Provide a description of the depreciation methods utilized in calculating annual depreciation amounts and depreciation reserves, together with a discussion of factors which were considered in arriving at estimates of service life and dispersion by account. Provide dates of all field inspections and facilities visited.

Response:

The depreciation methods utilized in calculating annual and accrued depreciation are discussed in Exhibit No. 109 in the section titled, "Calculation of Annual and Accrued Depreciation" beginning on page IV-2. The factors considered in arriving at estimates of service life and dispersion by account, begin in the section on page III-2 and the section on page III-8.

Field trips and facilities visited over the years for Columbia Gas of Pennsylvania are presented in Exhibit No. 109, in the section "Field Trips", beginning on page III-2.

4. Set forth, in exhibit form, charts depicting the original and estimated survivor curves and a tabular presentation of the original life table plotted on the chart for each account, where the retirement rate method of analysis is utilized.
 - a. If any utility plant was excluded from the measures of value because it was deemed not to be "used and useful" in the public service; supply a detailed description of each item of property.
 - b. Provide the surviving original cost at test year end by vintage by account and include applicable depreciation reserves and annuities.
 - (i) These calculations should be provided for plant in service as well as other categories of plant, including, but not limited to, contributions in aid of construction, customers' advances for construction, and anticipated retirements associated with any construction work in progress claims (if applicable).

Response:

The charts depicting the original and estimated survivor curves, and a tabular presentation of the original life table plotted on the chart for each account where the retirement rate method of analysis is utilized, is presented in Exhibit No. 109 in the section beginning on page VI-2.

- a. There were no assets deemed not to be "used or useful" in the depreciation study.
- b. The detailed calculations which set forth the surviving original cost as of November 30, 2019, by vintage by account and including applicable depreciation reserves and accruals begin on page II-8.



2019 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION
ACCRUALS RELATED TO GAS PLANT
AS OF NOVEMBER 30, 2019

Prepared by:



Excellence Delivered As Promised

COLUMBIA GAS OF PENNSYLVANIA, INC.
Pittsburgh, Pennsylvania

2019 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS
RELATED TO GAS PLANT
AS OF NOVEMBER 30, 2019

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC
Camp Hill, Pennsylvania



Excellence Delivered As Promised

March 13, 2020

Columbia Gas of Pennsylvania, Inc.
121 Champion Way, Suite 100
Canonsburg, PA 15317

Ladies and Gentlemen:

Pursuant to your request, we have determined the annual depreciation accruals applicable to gas plant as of November 30, 2019. Summaries of the original cost, annual accruals and the book depreciation reserve are presented in Tables 1 and 2, beginning on page I-3 of the attached report.

A description of the methods and procedures upon which the study was based is set forth in a companion report, "2020 Depreciation Study - Calculated Annual Depreciation Accruals Related to Gas Plant as of November 30, 2020".

Respectfully submitted,

GANNETT FLEMING VALUATION
AND RATE CONSULTANTS, LLC

A handwritten signature in black ink that reads 'John J. Spanos'.

JOHN J. SPANOS
President

JJS:mle

066624.000

Gannett Fleming Valuation and Rate Consultants, LLC

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PART I. RESULTS OF STUDY

**COLUMBIA GAS OF PENNSYLVANIA, INC.
DEPRECIATION STUDY**

PART I. RESULTS OF STUDY

DESCRIPTION OF SUMMARY TABULATIONS

The results of the depreciation study are summarized in Table 1, which sets forth the calculated annual depreciation related to Gas Plant in Service as of November 30, 2019. Table 2 presents the experienced salvage and cost of removal associated with regular retirements during the five-year period, 2014-2018 and the annual amortization of net salvage.

DETAILED TABULATIONS OF DEPRECIATION CALCULATIONS

The supporting data for the depreciation calculations are presented in account sequence in the section beginning on II-7. The original cost, calculated accrued depreciation, allocated book reserve, future accruals, remaining life and annual accrual are shown for each vintage of each account or subaccount. The amounts of regular retirements, gross salvage and cost of removal are set forth by account for the years 2014 through 2018, beginning on beginning on III-2 through III-4.



COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVES, ORIGINAL COST, BOOK RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF NOVEMBER 30, 2019

DEPRECIABLE GROUP (1)	SURVIVOR CURVE (2)	ORIGINAL COST AS OF NOVEMBER 30, 2019 (3)	BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	CALCULATED ANNUAL ACCRUAL		COMPOSITE REMAINING LIFE (8)=(5)/(6)	
					AMOUNT (6)	RATE (7)=(6)/(3)		
DEPRECIABLE PLANT								
UNDERGROUND STORAGE PLANT								
350.2	RIGHTS OF WAY	SQUARE *	1,932.08	1,931	1	0	-	-
351	COMPRESSOR STATION STRUCTURES	65-R2.5 *	3,220,858.29	1,787,340	1,433,518	258,896	8.04	5.5
WELLS								
352.01	CONSTRUCTION	SQUARE *	738,941.36	738,926	15	3	-	5.0
352.02	EQUIPMENT	50-S2.5 *	168,031.87	168,032	0	0	-	-
	TOTAL ACCOUNT 352		906,973.23	906,958	15	3		
352.1	STORAGE LEASEHOLDS AND RIGHTS	SQUARE *	206,940.78	206,932	9	2	-	4.5
353	LINES	50-S1.5 *	389,345.13	388,711	634	123	0.03	5.2
354	COMPRESSOR STATION EQUIPMENT	55-R2.5 *	948,272.21	759,861	188,411	34,177	3.60	5.5
355	MEASURING AND REGULATING EQUIPMENT	37-R1.5 *	104,476.92	104,477	0	0	-	-
	TOTAL UNDERGROUND STORAGE PLANT		5,778,798.64	4,156,210	1,622,588	293,201	5.07	
DISTRIBUTION PLANT								
LAND AND LAND RIGHTS								
374.4	LAND RIGHTS	70-R2.5	3,177,646.40	767,255	2,410,391	52,722	1.66	45.7
374.5	RIGHTS OF WAY	80-S4	3,233,161.36	1,721,412	1,511,749	35,102	1.09	43.1
	TOTAL ACCOUNT 374		6,410,807.76	2,488,667	3,922,140	87,824	1.37	
STRUCTURES AND IMPROVEMENTS								
375.34	MEASURING AND REGULATING	60-R1	5,195,494.58	1,341,810	3,853,685	111,828	2.15	34.5
375.6	INDUSTRIAL MEASURING AND REGULATING	55-R1	86,227.87	74,740	11,488	536	0.62	21.4
375.7	OTHER DISTRIBUTION SYSTEMS							
	DISTRIBUTION SYSTEM STRUCTURES	90-R1.5 *	7,303,629.43	2,267,012	5,036,616	220,918	3.02	22.8
	OTHER BUILDINGS	35-R2	2,613,474.49	937,179	1,676,295	74,174	2.84	22.6
	TOTAL ACCOUNT 375.70		9,917,103.92	3,204,191	6,712,911	295,092	2.98	22.7
375.8	COMMUNICATION	45-R3	16,515.17	7,523	8,992	367	2.22	24.5
	TOTAL ACCOUNT 375		15,215,341.54	4,628,264	10,587,076	407,823	2.68	



COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVES, ORIGINAL COST, BOOK RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF NOVEMBER 30, 2019

DEPRECIABLE GROUP (1)	SURVIVOR CURVE (2)	ORIGINAL COST	BOOK	FUTURE	CALCULATED		COMPOSITE	
		AS OF NOVEMBER 30, 2019 (3)	RESERVE (4)	BOOK ACCRUALS (5)	ANNUAL ACCRUAL AMOUNT (6)	RATE (7)=(6)/(3)	REMAINING LIFE (8)=(5)/(6)	
376	MAINS							
	CAST IRON	71-R1 *	257,119.69	204,253	52,867	9,706	3.77	5.4
	BARE STEEL	71-R1 *	64,855,156.02	46,019,762	18,835,394	1,860,455	2.87	10.1
	OTHER	71-R1	<u>1,712,522,873.35</u>	<u>215,685,728</u>	<u>1,496,837,145</u>	<u>37,017,626</u>	2.16	40.4
	TOTAL ACCOUNT 376		1,777,635,149.06	261,909,743	1,515,725,406	38,887,787	2.19	
378	MEASURING AND REGULATING STATION EQUIPMENT - GENERAL	45-O1	95,152,289.01	13,923,477	81,228,812	3,865,467	4.06	21.0
379.1	MEASURING AND REGULATING STATION EQUIPMENT - CITY GATE	35-S2	135,966.90	23,396	112,571	11,564	8.51	9.7
380	SERVICES							
	BARE STEEL	50-R0.5 *	848,484.37	669,890	178,594	23,101	2.72	7.7
	OTHER	50-R0.5	<u>579,939,518.91</u>	<u>124,429,518</u>	<u>455,510,001</u>	<u>17,258,270</u>	2.98	26.4
	TOTAL ACCOUNT 380		580,788,003.28	125,099,408	455,688,595	17,281,371	2.98	
381	METERS	44-S1	39,176,296.30	16,692,236	22,484,060	939,195	2.40	23.9
381.1	METERS - AMR	15-S2.5	24,570,547.05	13,753,323	10,817,224	1,628,550	6.63	6.6
382	METER INSTALLATIONS	55-R3	40,589,166.28	13,740,052	26,849,114	764,801	1.88	35.1
383	HOUSE REGULATORS AND INSTALLATIONS	45-S2	17,171,583.11	7,229,368	9,942,215	341,058	1.99	29.2
385	INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT - OTHER THAN METERS	30-R0.5	7,942,941.17	2,475,154	5,467,787	407,818	5.13	13.4
	OTHER EQUIPMENT							
387	GENERAL	32-R0.5	136,698.14	68,409	68,289	6,804	4.98	10.0
387.4	COMMUNICATION EQUIPMENT	25-R2	10,525,792.35	1,762,268	8,763,524	541,999	5.15	16.2
387.5	GPS EQUIPMENT	10-S3	<u>2,201,371.95</u>	<u>1,035,802</u>	<u>1,165,570</u>	<u>262,246</u>	11.91	4.4
	TOTAL ACCOUNT 387		<u>12,863,862.44</u>	<u>2,866,479</u>	<u>9,997,383</u>	<u>811,049</u>	6.30	
	TOTAL DISTRIBUTION PLANT		2,617,651,953.90	464,829,567	2,152,822,383	65,434,307	2.50	
GENERAL PLANT								
390.1	STRUCTURES AND IMPROVEMENTS - COMMUNICATION	45-R2	49,821.42	49,821	0	0	-	-
	OFFICE FURNITURE AND EQUIPMENT							
391.1	FURNITURE	20-SQ	2,383,980.24	1,033,246	1,350,734	88,519	3.71	15.3
391.11	EQUIPMENT	15-SQ	91,303.67	35,307	55,997	5,863	6.42	9.6
391.12	INFORMATION SYSTEMS	5-SQ	<u>4,498,634.50</u>	<u>2,724,157</u>	<u>1,774,478</u>	<u>932,686</u>	20.73	1.9
	TOTAL ACCOUNT 391		6,973,918.41	3,792,710	3,181,209	1,027,068	14.73	

COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVES, ORIGINAL COST, BOOK RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF NOVEMBER 30, 2019

DEPRECIABLE GROUP (1)	SURVIVOR CURVE (2)	ORIGINAL COST AS OF NOVEMBER 30, 2019 (3)	BOOK RESERVE (4)	FUTURE BOOK ACCUALS (5)	CALCULATED ANNUAL ACCRUAL		COMPOSITE REMAINING LIFE (8)=(5)/(6)	
					AMOUNT (6)	RATE (7)=(6)/(3)		
392	TRANSPORTATION EQUIPMENT - TRAILERS	15-SQ	25,616.89	26,344	(727)	0	-	-
	TOOLS, SHOP AND GARAGE EQUIPMENT							
394	EQUIPMENT	25-SQ	16,449,522.26	6,592,470	9,857,052	590,635	3.59	16.7
394.12	CNG FACILITIES	12-S1.5	2,414,784.54	2,414,378	407	310	0.01	1.3
	<i>TOTAL ACCOUNT 394</i>		18,864,306.80	9,006,848	9,857,459	590,945	3.13	
395	LABORATORY EQUIPMENT	20-SQ	269,029.81	58,966	210,064	14,206	5.28	14.8
396	POWER OPERATED EQUIPMENT	13-L2	948,698.04	937,267	11,431	2,411	0.25	4.7
397.5	COMMUNICATION EQUIPMENT - TELEMETERING	19-R2.5	792,132.68	784,415	7,718	613	0.08	12.6
398	MISCELLANEOUS EQUIPMENT	15-SQ	971,182.92	374,355	596,828	58,683	6.04	10.2
	<i>TOTAL GENERAL PLANT</i>		<u>28,894,706.97</u>	<u>15,030,726</u>	<u>13,863,982</u>	<u>1,693,926</u>	<u>5.86</u>	
	SUBTOTAL DEPRECIABLE PLANT		2,652,325,459.51	484,016,503	2,168,308,953	67,421,434	2.54	
	AMORTIZABLE PLANT							
303	MISCELLANEOUS INTANGIBLE PLANT		29,383,486.22	13,551,909	15,831,577	3,557,804	**	
362.1	ENVIRONMENTAL REMEDIATION			(216,952)				
375.71	STRUCTURES AND IMPROVEMENTS - LEASED		5,487,916.76	1,917,220	3,570,697	491,410	**	
	SUBTOTAL AMORTIZABLE PLANT		34,871,402.98	15,252,177	19,402,274	4,049,214		
	NONDEPRECIABLE PLANT		649,240.82	209,923				
	TOTAL GAS PLANT		2,687,846,103.31	499,478,603	2,187,711,227	71,470,648		

* Indicates the use of an interim survivor curve and retirement date.
 ** Accrual rate based on individual asset amortization.

Note: New additions in Account 303.6 (Miscellaneous Intangible Plant - Cloud) as of December 1, 2019 will utilize an annual accrual rate of 20.00% consistent with a 5-SQ Survivor Curve.

COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 2. AMORTIZATION OF EXPERIENCED NET SALVAGE

ACCOUNT (1)	2014		2015		2016		2017		2018		NET SALVAGE (12)	SALVAGE ACCRUAL (13)=(12)/5
	COST OF REMOVAL (2)	GROSS SALVAGE (3)	COST OF REMOVAL (4)	GROSS SALVAGE (5)	COST OF REMOVAL (6)	GROSS SALVAGE (7)	COST OF REMOVAL (8)	GROSS SALVAGE (9)	COST OF REMOVAL (10)	GROSS SALVAGE (11)		
351.20									21,434.00		(21,434.00)	(4.287)
353.00									633.71		(633.71)	(1.27)
362.10	461,689.98		56,875.48		27,770.30		56,417.81		101,148.90		(703,902.47)	(140,780)
374.20	(211,267.49)				192.38						211,075.11	42,215
374.40	21.91		2,713.76		17.13		38,240.05				(44,639.81)	(8,928)
374.50			14,909.72								(14,909.72)	(2,982)
375.34	20,674.45				26,961.80		36,137.31				(118,890.07)	(23,778)
375.70			22,140.00						35,116.51		(22,140.00)	(4,428)
376.00	1,281,289.43		978,776.00	20,828.00	1,131,099.09	3,855.00	1,258,205.78	1,297.00	1,441,406.34		(6,064,796.64)	(1,212,959)
378.00	185,399.17		104,647.11		63,141.34		247,333.58				(971,443.38)	(194,289)
379.10	91.84								76,321.00		(76,412.84)	(15,283)
380.00	4,690,972.30		2,926,513.18		2,853,156.51		2,142,798.48		3,052,049.09		(15,665,489.56)	(3,133,098)
381.00					675.71	215,365.51	4,899.87	34,508.89		60,956.85	305,255.67	61,051
382.00									10.01		(10.01)	(2)
385.00	63,312.71		27,745.87		64,142.79		113,814.22		124,888.37		(393,903.96)	(78,781)
387.40	933.57		1,060.39		1,807.70		459.97		5,150.01		(9,411.64)	(1,882)
392.00				26,139.89						13,348.29	39,486.18	7,896
394.00					2,431.14		1,648.52			6,262.88	2,183.22	437
396.00				109,393.82		52,454.60				123,650.81	285,499.23	57,100
397.50			29,402.56				257.12				(29,659.68)	(5,932)
TOTAL	6,493,117.87	0.00	4,164,784.07	156,361.71	4,171,395.89	271,675.11	3,900,212.71	35,805.89	5,232,727.08	204,218.83	(23,294,176.08)	(4,658,835)

**PART II. DETAILED DEPRECIATION
CALCULATIONS**

CUMULATIVE DEPRECIATED ORIGINAL COST

COLUMBIA GAS OF PENNSYLVANIA, INC.

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	AMOUNT		CUMULATIVE AMOUNT (5)	PCT OF
			(2)	(3)		COL 4 TOTAL (6)
1883	866	866				0.0
1884	2,319	2,319				0.0
1885	952	952				0.0
1886	9,401	9,401				0.0
1887	9,112	9,112				0.0
1888	7,418	7,418				0.0
1889	7,449	7,449				0.0
1890	5,619	5,619				0.0
1891	8,617	8,617				0.0
1892	2,295	2,295				0.0
1893	1,132	1,132				0.0
1894	3,312	3,313		1-	1-	0.0
1895	1,502	1,502			1-	0.0
1896	4,809	4,809			1-	0.0
1897	2,713	2,713			1-	0.0
1898	3,450	3,450			1-	0.0
1899	2,675	2,675			1-	0.0
1900	12,214	12,213		1		0.0
1901	506,820	402,511	104,309		104,309	0.0
1902	53,067	43,814	9,253		113,562	0.0
1903	45,715	39,514	6,201		119,763	0.0
1904	36,197	30,652	5,545		125,308	0.0
1905	43,120	36,902	6,218		131,526	0.0
1906	25,428	21,451	3,977		135,503	0.0
1907	66,777	53,333	13,444		148,947	0.0
1908	27,455	23,060	4,395		153,342	0.0
1909	24,842	20,987	3,855		157,197	0.0
1910	19,564	15,775	3,789		160,986	0.0
1911	23,617	18,978	4,639		165,625	0.0
1912	15,272	12,504	2,768		168,393	0.0
1913	40,576	32,747	7,829		176,222	0.0
1914	31,062	25,821	5,241		181,463	0.0
1915	29,117	25,017	4,100		185,563	0.0
1916	20,670	16,721	3,949		189,512	0.0
1917	23,696	19,142	4,554		194,066	0.0
1918	8,901	7,431	1,470		195,536	0.0
1919	13,666	11,060	2,606		198,142	0.0
1920	15,693	12,731	2,962		201,104	0.0
1921	35,417	28,471	6,946		208,050	0.0
1922	56,530	44,796	11,734		219,784	0.0
1923	39,033	31,955	7,078		226,862	0.0
1924	64,478	50,486	13,992		240,854	0.0
1925	93,484	74,176	19,308		260,162	0.0
1926	107,835	83,971	23,864		284,026	0.0
1927	81,337	64,036	17,301		301,327	0.0
1928	148,352	115,707	32,645		333,972	0.0

COLUMBIA GAS OF PENNSYLVANIA, INC.

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	AMOUNT		CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
			(2)	(3)		
1929	184,603	145,223	39,380		373,352	0.0
1930	157,793	121,517	36,276		409,628	0.0
1931	160,340	123,220	37,120		446,748	0.0
1932	30,476	23,845	6,631		453,379	0.0
1933	33,092	26,207	6,885		460,264	0.0
1934	39,350	31,049	8,301		468,565	0.0
1935	40,690	30,760	9,930		478,495	0.0
1936	48,510	37,795	10,715		489,210	0.0
1937	79,847	62,248	17,599		506,809	0.0
1938	69,730	56,536	13,194		520,003	0.0
1939	180,410	143,416	36,994		556,997	0.0
1940	152,631	118,579	34,052		591,049	0.0
1941	203,675	156,245	47,430		638,479	0.0
1942	115,013	90,236	24,777		663,256	0.0
1943	75,388	58,734	16,654		679,910	0.0
1944	34,409	27,879	6,530		686,440	0.0
1945	31,534	25,229	6,305		692,745	0.0
1946	129,851	99,897	29,954		722,699	0.0
1947	127,361	99,644	27,717		750,416	0.0
1948	303,346	233,240	70,106		820,522	0.0
1949	657,158	493,336	163,822		984,344	0.0
1950	1,198,908	893,730	305,178		1,289,522	0.1
1951	1,020,628	764,453	256,175		1,545,697	0.1
1952	2,170,336	1,575,246	595,090		2,140,787	0.1
1953	1,531,933	1,126,357	405,576		2,546,363	0.1
1954	1,909,775	1,399,823	509,952		3,056,315	0.1
1955	4,672,425	3,356,411	1,316,014		4,372,329	0.2
1956	2,930,041	2,089,546	840,495		5,212,824	0.2
1957	3,769,010	2,699,235	1,069,775		6,282,599	0.3
1958	4,495,107	3,218,939	1,276,168		7,558,767	0.3
1959	3,772,938	2,668,266	1,104,672		8,663,439	0.4
1960	4,018,984	2,826,175	1,192,809		9,856,248	0.5
1961	4,378,846	3,064,426	1,314,420		11,170,668	0.5
1962	4,040,803	2,803,308	1,237,495		12,408,163	0.6
1963	4,993,559	3,443,374	1,550,185		13,958,348	0.6
1964	5,131,940	3,539,419	1,592,521		15,550,869	0.7
1965	4,221,306	2,897,563	1,323,743		16,874,612	0.8
1966	5,681,524	3,873,978	1,807,546		18,682,158	0.9
1967	5,581,027	3,773,364	1,807,663		20,489,821	0.9
1968	4,936,269	3,235,510	1,700,759		22,190,580	1.0
1969	4,185,256	2,630,500	1,554,756		23,745,336	1.1
1970	4,172,392	2,959,870	1,212,522		24,957,858	1.2
1971	6,127,881	3,946,823	2,181,058		27,138,916	1.3
1972	3,513,759	2,073,886	1,439,873		28,578,789	1.3
1973	3,853,389	1,871,457	1,981,932		30,560,721	1.4
1974	3,325,731	1,369,269	1,956,462		32,517,183	1.5

COLUMBIA GAS OF PENNSYLVANIA, INC.

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	AMOUNT		CUMULATIVE AMOUNT (5)	PCT OF
			(2)	(3)		COL 4 TOTAL (6)
1975	3,331,807	1,380,070	1,951,737		34,468,920	1.6
1976	3,215,436	1,699,476	1,515,960		35,984,880	1.7
1977	7,129,928	3,754,508	3,375,420		39,360,300	1.8
1978	6,861,520	3,532,172	3,329,348		42,689,648	2.0
1979	8,690,225	4,479,974	4,210,251		46,899,899	2.2
1980	11,517,722	5,928,430	5,589,292		52,489,191	2.4
1981	13,343,573	6,844,678	6,498,895		58,988,086	2.7
1982	12,216,446	6,000,639	6,215,807		65,203,893	3.0
1983	10,462,396	5,063,989	5,398,407		70,602,300	3.3
1984	12,127,702	5,805,155	6,322,547		76,924,847	3.5
1985	12,256,708	5,866,885	6,389,823		83,314,670	3.8
1986	13,875,262	6,507,905	7,367,357		90,682,027	4.2
1987	14,415,914	6,796,050	7,619,864		98,301,891	4.5
1988	16,710,984	7,614,867	9,096,117		107,398,008	5.0
1989	15,853,302	7,169,184	8,684,118		116,082,126	5.4
1990	14,008,550	6,239,573	7,768,977		123,851,103	5.7
1991	13,833,896	6,033,915	7,799,981		131,651,084	6.1
1992	15,571,000	6,564,790	9,006,210		140,657,294	6.5
1993	16,442,390	6,796,962	9,645,428		150,302,722	6.9
1994	19,817,950	7,896,888	11,921,062		162,223,784	7.5
1995	20,271,077	8,557,179	11,713,898		173,937,682	8.0
1996	21,354,337	8,902,751	12,451,586		186,389,268	8.6
1997	22,695,292	8,693,445	14,001,847		200,391,115	9.2
1998	20,936,017	7,696,120	13,239,897		213,631,012	9.9
1999	20,075,896	7,077,006	12,998,890		226,629,902	10.5
2000	21,382,735	7,915,013	13,467,722		240,097,624	11.1
2001	21,784,468	7,328,779	14,455,689		254,553,313	11.7
2002	17,638,029	5,826,209	11,811,820		266,365,133	12.3
2003	21,345,490	6,619,897	14,725,593		281,090,726	13.0
2004	29,931,032	8,428,656	21,502,376		302,593,102	14.0
2005	35,376,417	8,955,708	26,420,709		329,013,811	15.2
2006	23,950,168	5,946,747	18,003,421		347,017,232	16.0
2007	56,669,593	12,744,761	43,924,832		390,942,064	18.0
2008	79,140,282	16,662,655	62,477,627		453,419,691	20.9
2009	54,599,542	10,819,022	43,780,520		497,200,211	22.9
2010	69,542,641	12,831,897	56,710,744		553,910,955	25.5
2011	125,483,778	24,698,346	100,785,432		654,696,387	30.2
2012	135,741,408	22,979,623	112,761,785		767,458,172	35.4
2013	166,257,857	21,763,269	144,494,588		911,952,760	42.1
2014	185,048,715	22,725,770	162,322,945		1,074,275,705	49.5
2015	188,891,468	19,802,257	169,089,211		1,243,364,916	57.3
2016	222,169,509	17,717,735	204,451,774		1,447,816,690	66.8

COLUMBIA GAS OF PENNSYLVANIA, INC.

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	AMOUNT		DEPRECIATED ORIGINAL COST	
			(2)	(3)	CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
2017	273,874,658	16,841,322	257,033,336		1,704,850,026	78.6
2018	235,431,205	9,421,259	226,009,946		1,930,859,972	89.0
2019	240,778,582	3,329,604	237,448,978		2,168,308,950	100.0
SUBTOTAL	2,652,325,460	484,016,503	2,168,308,953			
AMORTIZABLE PLANT	34,871,403	15,252,177	19,619,226			
NONDEPRECIABLE PLANT	649,241	209,923	439,318			
TOTAL	2,687,846,103	499,478,603	2,188,367,497			

UTILITY PLANT IN SERVICE

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 350.2 RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
 RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
INTERIM SURVIVOR CURVE.. SQUARE						
PROBABLE RETIREMENT YEAR.. 6-2025						
NET SALVAGE PERCENT.. 0						
1972	1,896.43	1,697	1,895	1	5.58	
1973	35.65	32	36			
	1,932.08	1,729	1,931	1		
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						0.0 0.00

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 351.2 COMPRESSOR STATION STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
 RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
INTERIM SURVIVOR CURVE.. IOWA 65-R2.5						
PROBABLE RETIREMENT YEAR.. 6-2025						
NET SALVAGE PERCENT.. 0						
1970	124,246.77	111,041	100,583	23,664	5.34	4,431
1971	44,955.88	40,099	36,323	8,633	5.35	1,614
1972	14,771.99	13,149	11,911	2,861	5.36	534
1973	1,046.90	930	842	205	5.38	38
1996	107,318.16	86,949	78,760	28,558	5.49	5,202
1997	932.86	749	678	255	5.52	46
1998	7,804.72	6,202	5,618	2,187	5.54	395
2001	87,639.68	67,465	61,111	26,529	5.51	4,815
2003	212,167.85	158,829	143,871	68,297	5.51	12,395
2004	195,419.81	143,712	130,177	65,243	5.55	11,755
2008	670,893.34	451,914	409,353	261,540	5.53	47,295
2009	11,299.51	7,368	6,674	4,626	5.56	832
2012	59,116.96	33,803	30,619	28,498	5.55	5,135
2013	744,499.18	399,349	361,739	382,760	5.55	68,966
2014	847,869.30	418,847	379,401	468,468	5.55	84,409
2015	51,937.15	23,008	20,841	31,096	5.55	5,603
2016	9,550.22	3,639	3,296	6,254	5.55	1,127
2018	29,388.01	6,119	5,543	23,845	5.54	4,304
	3,220,858.29	1,973,172	1,787,340	1,433,518		258,896
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 5.5						8.04

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 352 WELLS - CONSTRUCTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
 RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
INTERIM SURVIVOR CURVE.. SQUARE						
PROBABLE RETIREMENT YEAR.. 6-2025						
NET SALVAGE PERCENT.. 0						
1970	326,259.85	293,161	326,260			
1971	246,359.45	220,903	246,359			
1972	166,322.06	148,812	166,307	15	5.58	3
	738,941.36	662,876	738,926	15		3
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					5.0	0.00

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 352 WELLS - EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
 RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
INTERIM SURVIVOR CURVE.. IOWA 50-S2.5						
PROBABLE RETIREMENT YEAR.. 6-2025						
NET SALVAGE PERCENT.. 0						
1970	62,707.48	56,291	62,707			
1971	60,755.98	54,436	60,756			
1972	42,286.87	37,812	42,287			
1978	2,281.54	2,032	2,282			
	168,031.87	150,571	168,032			
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 0.0 0.00						

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 352.1 STORAGE LEASEHOLDS AND RIGHTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
 RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
INTERIM SURVIVOR CURVE.. SQUARE						
PROBABLE RETIREMENT YEAR.. 6-2025						
NET SALVAGE PERCENT.. 0						
1970	206,940.78	185,947	206,932	9	5.58	2
	206,940.78	185,947	206,932	9		2
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 4.5						0.00

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 353 LINES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
 RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
INTERIM SURVIVOR CURVE.. IOWA 50-S1.5						
PROBABLE RETIREMENT YEAR.. 6-2025						
NET SALVAGE PERCENT.. 0						
1971	260,327.01	231,350	260,327			
1972	56,823.89	50,412	56,765	59	4.99	12
1973	54,831.76	48,545	54,662	170	5.02	34
1984	13,885.22	12,097	13,622	263	5.24	50
1989	3,477.25	2,962	3,335	142	5.30	27
	389,345.13	345,366	388,711	634		123
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						5.2 0.03

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 354 COMPRESSOR STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
INTERIM SURVIVOR CURVE.. IOWA 55-R2.5						
PROBABLE RETIREMENT YEAR.. 6-2025						
NET SALVAGE PERCENT.. 0						
1950	5,342.87	4,919	5,343			
1952	23,888.55	21,944	23,889			
1957	363.93	332	362	2	4.61	
1967	1,175.28	1,056	1,152	23	5.01	5
1969	2,168.00	1,940	2,117	51	5.08	10
1970	490,801.17	438,389	478,369	12,432	5.11	2,433
1971	21,258.89	18,949	20,677	582	5.14	113
1972	4,125.93	3,670	4,005	121	5.16	23
1979	1,860.35	1,647	1,797	63	5.25	12
1987	19,667.77	16,832	18,367	1,301	5.46	238
1991	11,137.86	9,337	10,188	950	5.48	173
1993	1,506.99	1,250	1,364	143	5.43	26
2013	280,679.09	150,556	164,286	116,393	5.55	20,972
2017	84,295.53	25,609	27,945	56,351	5.54	10,172
	948,272.21	696,430	759,861	188,411		34,177
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 5.5						3.60

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 355 MEASURING AND REGULATING EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
 RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
INTERIM SURVIVOR CURVE.. IOWA 37-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2025						
NET SALVAGE PERCENT.. 0						
1970	56,228.75	49,715	56,229			
1975	2,685.09	2,345	2,685			
1981	13,738.52	12,245	13,739			
1986	29,489.73	25,721	29,490			
1987	2,334.83	2,021	2,334			
	104,476.92	92,047	104,477			
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						0.0 0.00

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 374.4 LAND AND LAND RIGHTS - LAND RIGHTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 70-R2.5						
NET SALVAGE PERCENT.. 0						
1920	1,634.55	1,459	1,390	245	7.52	33
1953	2.00	1	1	1	18.45	
1957	3,252.89	2,297	2,189	1,064	20.56	52
1961	830.30	559	533	297	22.86	13
1962	323.98	215	205	119	23.46	5
1963	5,711.86	3,748	3,571	2,141	24.07	89
1964	3,704.51	2,398	2,285	1,420	24.69	58
1965	1,147.61	733	698	450	25.32	18
1966	2,376.18	1,495	1,424	952	25.96	37
1967	11,428.60	7,084	6,750	4,679	26.61	176
1968	1,995.68	1,218	1,161	835	27.27	31
1969	12,205.21	7,334	6,988	5,217	27.94	187
1970	8,052.25	4,760	4,535	3,517	28.62	123
1971	20,679.96	12,024	11,457	9,223	29.30	315
1972	11,643.50	6,655	6,341	5,302	29.99	177
1973	5,483.64	3,079	2,934	2,550	30.70	83
1974	16,686.28	9,199	8,765	7,921	31.41	252
1975	25,272.60	13,676	13,031	12,242	32.12	381
1976	24,345.48	14,588	13,900	10,445	29.04	360
1977	54,513.13	32,141	30,624	23,889	29.53	809
1978	21,191.48	12,287	11,707	9,484	30.01	316
1979	36,560.99	20,686	19,710	16,851	31.01	543
1980	22,999.87	12,783	12,180	10,820	31.50	343
1981	39,985.17	21,812	20,783	19,202	32.01	600
1982	62,650.36	33,524	31,942	30,708	32.51	945
1983	40,223.76	20,949	19,960	20,264	33.51	605
1984	44,787.52	22,842	21,764	23,024	34.03	677
1985	66,040.22	32,954	31,399	34,641	34.55	1,003
1986	40,012.58	19,522	18,601	21,412	35.08	610
1987	63,884.90	30,441	29,004	34,881	35.61	980
1988	98,844.45	45,646	43,492	55,352	36.61	1,512
1989	131,102.83	59,022	56,236	74,867	37.15	2,015
1990	83,991.22	36,813	35,076	48,915	37.70	1,297
1991	49,247.11	20,989	19,998	29,249	38.25	765
1992	13,465.78	5,537	5,276	8,190	39.25	209
1993	43,321.43	17,281	16,465	26,856	39.81	675
1994	35,296.72	13,635	12,991	22,306	40.38	552
1995	19,271.18	7,200	6,860	12,411	40.94	303
1996	46,023.19	16,596	15,813	30,210	41.52	728
1997	38,776.81	13,386	12,754	26,023	42.52	612
1998	9,183.56	3,049	2,905	6,279	43.10	146
1999	6,027.94	1,920	1,829	4,199	43.69	96
2000	14,218.67	4,334	4,129	10,090	44.28	228

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 374.4 LAND AND LAND RIGHTS - LAND RIGHTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 70-R2.5						
NET SALVAGE PERCENT.. 0						
2001	13,623.43	3,964	3,777	9,846	44.87	219
2002	3,026.59	838	798	2,229	45.48	49
2003	43,663.62	11,470	10,929	32,735	46.08	710
2004	46,284.94	11,418	10,879	35,406	47.08	752
2005	26,785.92	6,217	5,924	20,862	47.70	437
2006	37,665.30	8,188	7,802	29,863	48.31	618
2007	66,976.43	13,556	12,916	54,060	48.93	1,105
2008	28,129.15	5,266	5,018	23,111	49.56	466
2009	154,820.42	26,768	25,505	129,315	49.83	2,595
2010	80,507.25	12,664	12,066	68,441	50.46	1,356
2011	76,852.69	10,867	10,354	66,499	51.11	1,301
2012	208,077.90	26,072	24,842	183,236	51.76	3,540
2013	199,508.04	21,886	20,853	178,655	52.06	3,432
2014	95,872.29	8,935	8,513	87,359	52.72	1,657
2015	135,848.29	10,433	9,941	125,907	53.06	2,373
2016	172,118.26	10,413	9,922	162,196	53.08	3,056
2017	322,411.06	14,025	13,363	309,048	53.14	5,816
2018	137,218.56	3,677	3,503	133,716	52.89	2,528
2019	89,858.31	728	694	89,164	50.87	1,753
	3,177,646.40	805,256	767,255	2,410,391		52,722
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 45.7						1.66

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 374.5 LAND AND LAND RIGHTS - RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-S4						
NET SALVAGE PERCENT.. 0						
1883	866.25	854	866			
1884	2,319.40	2,282	2,319			
1885	952.00	936	952			
1886	9,401.15	9,226	9,401			
1887	4,690.00	4,598	4,690			
1888	6,579.75	6,442	6,580			
1889	6,551.18	6,405	6,551			
1890	1,679.50	1,640	1,680			
1891	8,350.23	8,146	8,350			
1892	1,354.95	1,320	1,355			
1893	650.85	633	651			
1894	1,616.78	1,571	1,617			
1895	1,133.20	1,100	1,133			
1896	4,260.56	4,128	4,261			
1897	2,267.65	2,194	2,268			
1898	1,633.73	1,579	1,634			
1899	934.25	901	934			
1900	8,185.42	7,886	8,185			
1901	15,227.76	14,645	15,228			
1902	7,330.74	7,040	7,331			
1903	15,446.32	14,811	15,446			
1904	8,443.31	8,083	8,443			
1905	13,211.32	12,625	13,211			
1906	5,826.89	5,559	5,827			
1907	4,318.72	4,113	4,319			
1908	5,084.82	4,834	5,085			
1909	5,578.23	5,292	5,578			
1910	944.58	895	945			
1911	1,805.52	1,707	1,806			
1912	1,590.08	1,500	1,590			
1913	4,199.64	3,953	4,200			
1914	6,522.34	6,127	6,522			
1915	9,299.36	8,716	9,299			
1916	2,133.53	1,995	2,134			
1917	2,947.27	2,749	2,947			
1918	969.85	903	970			
1919	713.16	662	712	1	5.72	
1920	1,116.43	1,034	1,112	4	5.92	1
1921	2,386.50	2,204	2,371	16	6.12	3
1922	5,478.84	5,046	5,427	52	6.32	8
1923	5,748.64	5,280	5,679	70	6.52	11
1924	2,962.36	2,713	2,918	44	6.74	7
1925	8,085.67	7,381	7,939	147	6.97	21

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 374.5 LAND AND LAND RIGHTS - RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-S4						
NET SALVAGE PERCENT.. 0						
1926	3,690.49	3,359	3,613	77	7.19	11
1927	3,441.21	3,122	3,358	83	7.43	11
1928	3,616.30	3,269	3,516	100	7.68	13
1929	9,736.71	8,772	9,435	302	7.93	38
1930	3,705.73	3,326	3,577	129	8.19	16
1931	4,695.61	4,198	4,515	181	8.47	21
1932	2,031.20	1,809	1,946	85	8.75	10
1933	2,540.95	2,254	2,424	117	9.04	13
1934	4,020.82	3,551	3,819	202	9.34	22
1935	866.62	762	820	47	9.66	5
1936	4,994.63	4,372	4,702	293	9.98	29
1937	3,607.79	3,142	3,379	229	10.32	22
1938	1,245.49	1,079	1,161	84	10.67	8
1939	956.06	824	886	70	11.03	6
1940	13,850.45	11,875	12,772	1,078	11.41	94
1941	4,887.61	4,167	4,482	406	11.80	34
1942	8,169.68	6,923	7,446	724	12.21	59
1943	1,693.42	1,426	1,534	159	12.63	13
1944	978.40	819	881	97	13.06	7
1945	1,004.81	835	898	107	13.52	8
1946	344.00	284	305	39	13.99	3
1947	142.29	117	126	16	14.48	1
1948	3,080.71	2,504	2,693	388	14.98	26
1949	16,198.32	13,060	14,047	2,151	15.50	139
1950	20,911.66	16,716	17,979	2,933	16.05	183
1951	11,956.42	9,474	10,190	1,766	16.61	106
1952	8,038.39	6,311	6,788	1,250	17.19	73
1953	5,949.87	4,627	4,977	973	17.79	55
1954	21,585.01	16,615	17,870	3,715	18.42	202
1955	32,149.56	24,490	26,340	5,810	19.06	305
1956	51,558.51	38,849	41,784	9,775	19.72	496
1957	19,916.61	14,835	15,956	3,961	20.41	194
1958	63,499.25	46,743	50,274	13,225	21.11	626
1959	28,371.09	20,626	22,184	6,187	21.84	283
1960	26,305.63	18,881	20,307	5,999	22.58	266
1961	15,768.03	11,166	12,010	3,758	23.35	161
1962	18,087.78	12,632	13,586	4,502	24.13	187
1963	27,374.57	18,844	20,268	7,107	24.93	285
1964	40,027.79	27,144	29,195	10,833	25.75	421
1965	17,574.04	11,733	12,619	4,955	26.59	186
1966	18,597.25	12,216	13,139	5,458	27.45	199
1967	96,910.77	62,604	67,333	29,578	28.32	1,044
1968	82,637.79	52,475	56,439	26,199	29.20	897

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 374.5 LAND AND LAND RIGHTS - RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-S4						
NET SALVAGE PERCENT.. 0						
1969	46,057.56	28,728	30,898	15,160	30.10	504
1970	45,097.36	27,611	29,697	15,400	31.02	496
1971	54,600.87	32,801	35,279	19,322	31.94	605
1972	80,822.88	47,614	51,211	29,612	32.87	901
1973	31,060.02	17,929	19,283	11,777	33.82	348
1974	42,716.26	24,151	25,975	16,741	34.77	481
1975	53,203.52	29,442	31,666	21,538	35.73	603
1976	46,796.87	26,211	28,191	18,606	34.10	546
1977	50,016.13	27,369	29,437	20,579	35.10	586
1978	27,600.77	14,747	15,861	11,740	36.10	325
1979	28,400.77	14,808	15,927	12,474	37.10	336
1980	24,054.08	12,231	13,155	10,899	38.10	286
1981	55,235.53	27,375	29,443	25,793	39.10	660
1982	47,534.94	22,945	24,678	22,857	40.10	570
1983	27,148.25	12,754	13,717	13,431	41.10	327
1984	30,306.87	13,847	14,893	15,414	42.10	366
1985	72,105.59	32,015	34,434	37,672	43.10	874
1986	17,533.91	7,559	8,130	9,404	44.10	213
1987	27,416.83	11,466	12,332	15,085	45.10	334
1988	11,339.22	4,596	4,943	6,396	46.10	139
1989	70,119.13	27,515	29,594	40,525	47.10	860
1990	44,760.66	16,987	18,270	26,491	48.10	551
1991	35,224.46	12,913	13,889	21,335	49.10	435
1992	54,141.31	19,150	20,597	33,544	50.10	670
1993	58,993.43	20,105	21,624	37,369	51.10	731
1994	184,531.84	60,508	65,079	119,453	52.10	2,293
1995	584,928.49	184,252	198,171	386,757	53.10	7,284
1996	126,940.88	38,349	41,246	85,695	54.10	1,584
1997	68,030.65	19,674	21,160	46,871	55.10	851
1998	40,132.45	11,089	11,927	28,205	56.10	503
2000	15,568.19	3,900	4,195	11,373	58.10	196
2001	39,714.12	9,436	10,149	29,565	59.10	500
2002	181,571.19	40,799	43,880	137,691	60.10	2,291
2003	1,938.28	411	442	1,496	61.10	24
	3,233,161.36	1,605,825	1,721,412	1,511,749		35,102
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						43.1 1.09

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.34 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
 RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R1						
NET SALVAGE PERCENT.. 0						
1913	430.94	398	431			
1914	264.24	243	264			
1925	211.96	183	206	6	8.27	1
1928	563.20	476	536	27	9.27	3
1929	4,214.96	3,541	3,986	229	9.60	24
1930	4,816.07	4,017	4,522	294	9.95	30
1931	1,147.03	950	1,069	78	10.29	8
1932	2,321.06	1,909	2,149	172	10.64	16
1933	2,564.07	2,094	2,357	207	11.00	19
1934	1,102.49	894	1,006	96	11.35	8
1935	97.20	78	88	9	11.72	1
1936	1,998.78	1,596	1,797	202	12.08	17
1938	618.55	486	547	72	12.83	6
1939	4,678.94	3,649	4,108	571	13.21	43
1940	554.29	429	483	71	13.60	5
1941	897.54	688	774	124	13.99	9
1942	116.21	88	99	17	14.38	1
1943	695.22	524	590	105	14.78	7
1945	639.53	473	532	108	15.59	7
1946	1,024.41	751	845	179	16.00	11
1947	2,770.44	2,012	2,265	505	16.42	31
1948	6,715.12	4,830	5,437	1,278	16.84	76
1949	1,156.73	824	928	229	17.27	13
1950	5,042.16	3,555	4,002	1,040	17.70	59
1951	7,765.78	5,418	6,099	1,667	18.14	92
1952	16,254.25	11,221	12,631	3,623	18.58	195
1953	22,977.37	15,690	17,662	5,315	19.03	279
1954	14,248.42	9,622	10,831	3,417	19.48	175
1955	12,140.88	8,106	9,125	3,016	19.94	151
1956	27,766.95	18,321	20,623	7,144	20.41	350
1957	29,374.58	19,152	21,559	7,816	20.88	374
1958	40,025.28	25,783	29,023	11,002	21.35	515
1959	24,741.65	15,740	17,718	7,024	21.83	322
1960	28,082.78	17,636	19,852	8,231	22.32	369
1961	39,863.03	24,708	27,813	12,050	22.81	528
1962	43,743.68	26,749	30,111	13,633	23.31	585
1963	26,476.42	15,970	17,977	8,499	23.81	357
1964	41,732.87	24,817	27,936	13,797	24.32	567
1965	27,828.79	16,308	18,357	9,472	24.84	381
1966	27,208.84	15,708	17,682	9,527	25.36	376
1967	18,571.27	10,558	11,885	6,686	25.89	258
1968	8,481.65	4,747	5,344	3,138	26.42	119
1969	17,416.71	9,591	10,796	6,621	26.96	246

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.34 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R1						
NET SALVAGE PERCENT.. 0						
1970	5,033.19	2,726	3,069	1,964	27.50	71
1971	20,648.66	10,995	12,377	8,272	28.05	295
1972	10,177.69	5,325	5,994	4,184	28.61	146
1973	12,609.98	6,479	7,293	5,317	29.17	182
1974	12,610.14	6,360	7,159	5,451	29.74	183
1975	16,872.99	8,349	9,398	7,475	30.31	247
1976	26,321.53	16,343	18,397	7,925	26.51	299
1977	22,573.98	13,788	15,521	7,053	27.03	261
1978	21,032.60	12,630	14,217	6,816	27.55	247
1979	33,072.13	19,648	22,117	10,955	27.61	397
1980	12,380.66	7,223	8,131	4,250	28.15	151
1981	27,705.54	15,859	17,852	9,854	28.70	343
1982	41,179.46	23,266	26,190	14,989	28.81	520
1983	15,103.94	8,360	9,411	5,693	29.38	194
1984	14,547.02	7,883	8,874	5,673	29.94	189
1985	12,792.93	6,825	7,683	5,110	30.10	170
1986	26,393.61	13,759	15,488	10,906	30.69	355
1987	3,272.42	1,665	1,874	1,398	31.28	45
1988	16,513.79	8,249	9,286	7,228	31.48	230
1989	14,462.96	7,039	7,924	6,539	32.08	204
1990	9,633.48	4,591	5,168	4,465	32.31	138
1991	35,776.94	16,672	18,767	17,010	32.56	522
1992	129.79	59	66	64	33.19	2
1993	23,505.08	10,370	11,673	11,832	33.46	354
1994	1,512.34	650	732	780	33.76	23
1995	13,604.01	5,647	6,357	7,247	34.41	211
1996	15,690.38	6,320	7,114	8,576	34.72	247
1997	16,887.61	6,586	7,414	9,474	35.06	270
1998	61,992.71	23,365	26,301	35,692	35.40	1,008
1999	2,550.99	927	1,043	1,508	35.76	42
2000	23,235.27	8,165	9,191	14,044	35.83	392
2001	26,878.06	9,058	10,196	16,682	36.23	460
2002	15,754.24	5,104	5,745	10,009	36.34	275
2003	62,637.02	19,330	21,759	40,878	36.78	1,111
2004	27,614.85	8,133	9,155	18,460	36.94	500
2005	48,475.82	13,559	15,263	33,213	37.13	895
2006	68,903.16	18,211	20,500	48,403	37.35	1,296
2007	109,457.61	27,321	30,754	78,704	37.33	2,108
2008	397,019.11	92,466	104,086	292,933	37.60	7,791
2009	100,851.22	21,854	24,600	76,251	37.66	2,025
2010	175,158.80	35,137	39,553	135,606	37.53	3,613
2011	199,439.56	36,597	41,196	158,244	37.45	4,225
2012	240,492.18	39,777	44,776	195,716	37.43	5,229

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.34 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
 RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R1						
NET SALVAGE PERCENT.. 0						
2013	235,967.57	34,664	39,020	196,948	37.25	5,287
2014	377,846.86	48,516	54,613	323,234	36.78	8,788
2015	916,875.16	99,573	112,086	804,789	36.24	22,207
2016	405,324.26	35,587	40,059	365,265	35.49	10,292
2017	340,510.74	22,372	25,184	315,327	34.35	9,180
2018	101,713.54	4,364	4,912	96,802	32.55	2,974
2019	255,408.66	3,755	4,227	251,182	27.91	9,000
	5,195,494.58	1,192,034	1,341,810	3,853,685		111,828
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						34.5 2.15

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.6 STRUCTURES AND IMPROVEMENTS - INDUSTRIAL MEASURING AND
REGULATING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R1						
NET SALVAGE PERCENT.. 0						
1922	114.31	105	114			
1928	87.15	78	87			
1930	127.57	112	128			
1931	263.40	230	263			
1934	783.68	670	784			
1935	147.25	125	147			
1936	21.46	18	21			
1937	618.76	518	619			
1938	1,463.03	1,215	1,463			
1940	440.04	360	440			
1942	1,018.37	820	1,018			
1944	2,850.41	2,256	2,850			
1946	377.07	293	377			
1947	568.77	438	569			
1948	482.71	369	482	1	13.00	
1950	1,857.60	1,392	1,817	41	13.80	3
1951	3,131.90	2,323	3,033	99	14.21	7
1952	3,969.07	2,914	3,805	164	14.62	11
1953	4,259.74	3,095	4,041	219	15.04	15
1955	4,904.63	3,488	4,554	351	15.89	22
1956	2,507.83	1,764	2,303	205	16.32	13
1957	14,375.38	9,995	13,050	1,325	16.76	79
1958	1,667.93	1,146	1,496	172	17.20	10
1959	5,902.55	4,008	5,233	670	17.65	38
1960	1,345.00	902	1,178	167	18.11	9
1961	1,954.81	1,295	1,691	264	18.57	14
1963	3,416.99	2,204	2,878	539	19.52	28
1967	1,614.49	984	1,285	329	21.48	15
1970	2,450.11	1,425	1,860	590	23.01	26
1971	7,721.50	4,418	5,768	1,954	23.53	83
1972	1.00	1	1			
1980	3,885.67	2,404	3,139	747	24.28	31
1988	11,897.69	6,316	8,246	3,652	27.76	132
	86,227.87	57,681	74,740	11,488		536
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 21.4 0.62						

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.7 STRUCTURES AND IMPROVEMENTS - OTHER DISTRIBUTION SYSTEM
 STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
 RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
GETTYSBURG GARAGE						
FULLY ACCRUED						
NET SALVAGE PERCENT.. 0						
1934	778.19	778	778			
1955	80.00	80	80			
1957	860.20	860	860			
1971	1,426.78	1,427	1,427			
	3,145.17	3,145	3,145			
WARREN SERVICE CENTER						
INTERIM SURVIVOR CURVE.. IOWA 90-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2033						
NET SALVAGE PERCENT.. 0						
1958	23,203.80	18,689	21,658	1,546	12.74	121
1959	530.28	426	494	37	12.77	3
1978	1,767.28	1,347	1,561	206	12.93	16
1985	19,951.17	14,489	16,791	3,160	12.98	243
1987	7,647.96	5,455	6,322	1,326	13.04	102
1995	8,147.09	5,292	6,133	2,014	13.18	153
1998	14,593.54	9,032	10,467	4,127	13.19	313
1999	5,204.23	3,166	3,669	1,535	13.14	117
2003	17,099.66	9,489	10,997	6,103	13.17	463
2007	4,558.44	2,213	2,565	1,994	13.16	152
2010	1,391.88	581	673	719	13.16	55
2012	15,971.90	5,756	6,670	9,301	13.16	707
2014	1,825.22	533	618	1,208	13.14	92
2015	221,738.88	55,923	64,808	156,931	13.10	11,979
2016	69,144.37	14,341	16,619	52,525	13.06	4,022
2019	16,304.76	523	606	15,699	12.57	1,249
	429,080.46	147,255	170,650	258,430		19,787
WASHINGTON SERVICE CENTER						
INTERIM SURVIVOR CURVE.. IOWA 90-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2030						
NET SALVAGE PERCENT.. 0						
1928	539.04	475	539			
1933	401.96	352	402			
1937	77.17	67	77			
1955	4,931.58	4,175	4,838	93	10.04	9

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.7 STRUCTURES AND IMPROVEMENTS - OTHER DISTRIBUTION SYSTEM
STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
WASHINGTON SERVICE CENTER						
INTERIM SURVIVOR CURVE.. IOWA 90-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2030						
NET SALVAGE PERCENT.. 0						
1957	17,943.97	15,126	17,530	414	10.07	41
1958	1,091.86	918	1,064	28	10.08	3
1962	275.80	230	267	9	10.13	1
1963	17,141.83	14,238	16,500	641	10.14	63
1964	81,035.39	67,112	77,776	3,259	10.16	321
1965	2,232.00	1,843	2,136	96	10.17	9
1968	462.64	379	439	23	10.20	2
1969	861.74	703	815	47	10.21	5
1973	1,166.63	938	1,087	80	10.24	8
1976	1,998.47	1,614	1,870	128	10.34	12
1978	1,705.03	1,370	1,588	117	10.13	12
1982	1,111.41	873	1,012	100	10.20	10
1984	4,760.67	3,692	4,279	482	10.25	47
1985	911.17	702	814	98	10.23	10
1987	180,447.17	136,887	158,639	21,809	10.32	2,113
1995	194,747.16	136,946	158,707	36,040	10.31	3,496
1996	41,750.41	28,937	33,535	8,215	10.37	792
1997	51,204.74	35,009	40,572	10,633	10.37	1,025
1998	27,872.99	18,803	21,791	6,082	10.33	589
2005	152,784.63	88,982	103,121	49,663	10.34	4,803
2006	8,853.44	5,000	5,795	3,059	10.34	296
2008	7,810.00	4,092	4,742	3,068	10.37	296
2010	86,191.80	41,070	47,596	38,596	10.35	3,729
2011	15,761.85	7,071	8,195	7,567	10.35	731
2013	102,652.64	39,326	45,575	57,078	10.33	5,525
2015	29,890.28	8,964	10,388	19,502	10.31	1,892
2016	11,433.54	2,848	3,301	8,133	10.30	790
2017	165,917.86	31,591	36,611	129,307	10.27	12,591
2018	119,361.36	14,920	17,291	102,071	10.21	9,997
2019	163,107.48	6,524	7,561	155,547	10.01	15,539
	1,498,435.71	721,777	836,451	661,985		64,757

BRADFORD OFFICE
FULLY ACCRUED
NET SALVAGE PERCENT.. 0

1958	20,999.60	21,000	21,000
1959	135.56	136	136

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.7 STRUCTURES AND IMPROVEMENTS - OTHER DISTRIBUTION SYSTEM
 STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
 RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
BRADFORD OFFICE						
FULLY ACCRUED						
NET SALVAGE PERCENT.. 0						
1960	720.61	721	721			
1964	300.54	301	301			
1965	4,024.39	4,024	4,024			
1993	27,303.35	27,303	27,303			
1999	1,735.00	1,735	1,735			
	55,219.05	55,220	55,219			
BRADFORD OFFICE (NEW)						
INTERIM SURVIVOR CURVE.. IOWA 90-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2069						
NET SALVAGE PERCENT.. 0						
2019	1,853,669.43	22,244	25,884	1,827,785	34.19	53,460
	1,853,669.43	22,244	25,884	1,827,785		53,460
HANOVER SERVICE CENTER						
INTERIM SURVIVOR CURVE.. IOWA 90-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2029						
NET SALVAGE PERCENT.. 0						
1939	1,201.91	1,058	1,202			
1949	338.10	293	338			
1979	85,249.40	69,257	80,598	4,651	9.33	498
1983	5,480.40	4,371	5,087	394	9.25	43
1991	1,625.41	1,224	1,424	201	9.32	22
1992	3,087.69	2,302	2,679	409	9.35	44
1998	249,117.92	173,386	201,779	47,339	9.35	5,063
2000	1,971.28	1,328	1,545	426	9.40	45
2007	8,637.28	4,912	5,716	2,921	9.42	310
2009	8,908.99	4,686	5,453	3,456	9.39	368
2013	76,855.87	31,219	36,331	40,525	9.38	4,320
2014	4,037.54	1,479	1,721	2,316	9.38	247
2015	4,344.34	1,391	1,619	2,726	9.38	291
2016	18,864.29	5,046	5,872	12,992	9.36	1,388
2017	23,434.00	4,820	5,609	17,825	9.33	1,911
	493,154.42	306,772	356,975	136,179		14,550

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.7 STRUCTURES AND IMPROVEMENTS - OTHER DISTRIBUTION SYSTEM
STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
JEANNETTE SERVICE CENTER AND SHOP						
INTERIM SURVIVOR CURVE.. IOWA 90-R1.5						
PROBABLE RETIREMENT YEAR.. 6-2056						
NET SALVAGE PERCENT.. 0						
1981	593,681.70	328,425	382,172	211,510	31.03	6,816
1986	14,531.65	7,478	8,702	5,830	31.52	185
1987	10,690.59	5,406	6,291	4,400	31.69	139
1988	10,177.82	5,084	5,916	4,262	31.48	135
1996	15,873.85	6,691	7,786	8,088	32.14	252
1997	7,912.22	3,246	3,777	4,135	32.23	128
1998	1,295.01	519	604	691	32.06	22
2000	2,043.39	770	896	1,147	32.13	36
2003	23,934.57	8,054	9,372	14,563	32.37	450
2006	122,192.82	35,900	41,775	80,418	32.25	2,494
2007	83,513.69	23,225	27,026	56,488	32.23	1,753
2009	23,195.60	5,678	6,607	16,588	32.14	516
2010	4,267.07	964	1,122	3,145	32.25	98
2013	784,265.50	131,364	152,862	631,404	31.90	19,793
2015	1,037,129.72	127,360	148,203	888,927	31.55	28,175
2016	79,468.00	7,820	9,100	70,368	31.31	2,247
2017	9,316.95	677	788	8,529	30.81	277
2018	86,622.59	4,002	4,657	81,966	30.09	2,724
2019	60,812.45	888	1,033	59,779	28.15	2,124
	2,970,925.19	703,551	818,688	2,152,237		68,364

OTHER BUILDINGS
SURVIVOR CURVE.. IOWA 35-R2
NET SALVAGE PERCENT.. 0

1919	142.68	143	143			
1931	4,005.57	4,006	4,006			
1948	244.11	244	244			
1950	56.50	56	57			
1951	94.17	94	94			
1953	2,600.92	2,601	2,601			
1954	2,263.57	2,264	2,264			
1955	7,045.40	7,007	7,045			
1956	294.53	291	295			
1961	5,869.31	5,578	5,869			
1966	2,114.98	1,923	2,115			
1969	1,259.56	1,114	1,260			
1971	106,649.53	92,480	106,650			

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.7 STRUCTURES AND IMPROVEMENTS - OTHER DISTRIBUTION SYSTEM
STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER BUILDINGS						
SURVIVOR CURVE.. IOWA 35-R2						
NET SALVAGE PERCENT.. 0						
1972	9,337.50	8,017	9,338			
1975	5,803.33	4,823	5,644	160	5.91	27
1976	6,723.83	5,926	6,724			
1984	43,036.41	34,601	40,500	2,536	8.63	294
1985	3,259.62	2,580	3,020	240	9.06	26
1987	14,383.92	11,004	12,880	1,504	9.96	151
1988	14,889.44	11,227	13,141	1,748	10.25	171
1989	11,476.85	8,483	9,929	1,548	10.74	144
1990	32,260.00	23,343	27,323	4,937	11.24	439
1993	8,113.24	5,487	6,422	1,691	12.64	134
1994	15,147.02	9,971	11,671	3,476	13.19	264
1995	27,857.47	17,820	20,858	6,999	13.75	509
1996	2,392.16	1,490	1,744	648	14.18	46
1997	1,337.50	807	945	393	14.76	27
1998	56,879.39	33,132	38,781	18,099	15.35	1,179
1999	23,666.45	13,336	15,610	8,057	15.82	509
2000	187,147.80	101,378	118,661	68,486	16.43	4,168
2001	9,051.12	4,717	5,521	3,530	16.92	209
2003	12,533.29	5,967	6,984	5,549	18.07	307
2006	1,753.31	710	831	922	19.70	47
2007	26,323.12	10,003	11,708	14,615	20.26	721
2008	132,433.81	46,868	54,858	77,576	20.84	3,722
2009	186,519.97	61,011	71,412	115,108	21.43	5,371
2010	11,740.04	3,527	4,128	7,612	21.93	347
2011	8,340.00	2,274	2,662	5,678	22.45	253
2012	10,145.94	2,476	2,898	7,248	22.98	315
2013	565,538.18	121,591	142,320	423,218	23.43	18,063
2014	218,081.27	40,280	47,147	170,934	23.91	7,149
2015	160,202.26	24,687	28,896	131,307	24.24	5,417
2016	468,024.28	57,099	66,834	401,191	24.59	16,315
2017	90,145.26	8,014	9,380	80,765	24.76	3,262
2018	75,032.14	4,202	4,918	70,114	24.58	2,852
2019	41,257.74	726	850	40,408	23.28	1,736
	2,613,474.49	805,378	937,179	1,676,295		74,174
	9,917,103.92	2,765,342	3,204,191	6,712,911		295,092

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 22.7 2.98

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.8 STRUCTURES AND IMPROVEMENTS - COMMUNICATION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
 RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R3						
NET SALVAGE PERCENT.. 0						
2001	16,515.17	7,087	7,523	8,992	24.50	367
	16,515.17	7,087	7,523	8,992		367
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						24.5 2.22

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 376.1 MAINS - CAST IRON

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
INTERIM SURVIVOR CURVE.. IOWA 71-R1						
PROBABLE RETIREMENT YEAR.. 12-2025						
NET SALVAGE PERCENT.. 0						
1901	19,809.24	18,530	16,057	3,752	4.57	821
1902	207.30	194	168	39	4.63	8
1903	401.87	375	325	77	4.68	16
1904	799.23	746	646	153	4.73	32
1905	397.36	370	321	76	4.78	16
1908	6.70	6	5	2	4.90	
1911	778.25	723	626	152	5.01	30
1912	62.67	58	50	13	5.05	3
1913	440.37	408	354	86	5.08	17
1914	111.28	103	89	22	5.11	4
1915	454.56	421	365	90	5.14	18
1917	1,022.70	946	820	203	5.20	39
1918	36.45	34	29	7	5.22	1
1919	36.74	34	29	8	5.25	2
1920	1,081.46	999	866	215	5.27	41
1921	16,668.37	15,386	13,332	3,336	5.30	629
1922	360.98	333	289	72	5.32	14
1923	491.76	453	393	99	5.34	19
1924	3,116.96	2,872	2,489	628	5.36	117
1925	1,397.01	1,287	1,115	282	5.38	52
1926	3,054.68	2,812	2,437	618	5.40	114
1927	254.63	234	203	52	5.42	10
1928	18,389.46	16,906	14,649	3,740	5.44	688
1929	26,993.42	24,800	21,490	5,503	5.46	1,008
1930	12,158.17	11,164	9,674	2,484	5.47	454
1931	9,746.10	8,943	7,749	1,997	5.49	364
1932	0.23					
1933	1,837.88	1,684	1,459	379	5.52	69
1934	541.26	496	430	111	5.54	20
1937	81.46	74	64	17	5.58	3
1938	3,094.74	2,826	2,449	646	5.59	116
1939	105,132.52	95,932	83,126	22,007	5.61	3,923
1940	3,407.53	3,107	2,692	716	5.62	127
1941	7,291.89	6,644	5,757	1,535	5.63	273
1942	563.35	513	445	118	5.64	21
1943	1,901.17	1,729	1,498	403	5.66	71
1944	2,481.50	2,255	1,954	528	5.67	93
1945	1,809.50	1,643	1,424	386	5.68	68
1946	1,246.72	1,131	980	267	5.69	47
1947	587.88	533	462	126	5.70	22
1948	8,489.79	7,687	6,661	1,829	5.71	320

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 376.1 MAINS - CAST IRON

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
 RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
INTERIM SURVIVOR CURVE.. IOWA 71-R1						
PROBABLE RETIREMENT YEAR.. 12-2025						
NET SALVAGE PERCENT.. 0						
1949	15.21	14	12	3	5.72	1
1951	22.71	21	18	5	5.74	1
1982	336.63	291	252	85	5.87	14
	257,119.69	235,717	204,253	52,867		9,706
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 5.4						3.77

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 376.3 MAINS - BARE STEEL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
INTERIM SURVIVOR CURVE.. IOWA 71-R1						
PROBABLE RETIREMENT YEAR.. 12-2030						
NET SALVAGE PERCENT.. 0						
1901	471,783.38	428,412	371,226	100,557	6.52	15,423
1902	42,881.32	38,853	33,667	9,214	6.66	1,383
1903	28,268.42	25,556	22,145	6,123	6.80	900
1904	24,709.11	22,293	19,317	5,392	6.93	778
1905	27,931.90	25,148	21,791	6,141	7.06	870
1906	17,970.88	16,148	13,993	3,978	7.18	554
1907	60,356.70	54,139	46,912	13,445	7.29	1,844
1908	19,584.57	17,532	15,192	4,393	7.41	593
1909	17,089.01	15,273	13,234	3,855	7.51	513
1910	16,695.18	14,894	12,906	3,789	7.62	497
1911	19,655.45	17,505	15,168	4,487	7.72	581
1912	12,008.16	10,678	9,253	2,755	7.81	353
1913	33,550.05	29,782	25,807	7,743	7.91	979
1914	22,495.83	19,938	17,277	5,219	8.00	652
1915	17,199.92	15,222	13,190	4,010	8.08	496
1916	16,853.46	14,892	12,904	3,949	8.17	483
1917	18,477.70	16,303	14,127	4,351	8.25	527
1918	6,181.23	5,446	4,719	1,462	8.33	176
1919	10,935.08	9,621	8,337	2,598	8.40	309
1920	9,960.30	8,751	7,583	2,377	8.47	281
1921	14,569.51	12,783	11,077	3,493	8.54	409
1922	47,178.36	41,334	35,817	11,361	8.61	1,320
1923	26,580.15	23,254	20,150	6,430	8.68	741
1924	52,766.05	46,103	39,949	12,817	8.74	1,466
1925	73,504.28	64,137	55,576	17,928	8.80	2,037
1926	90,547.92	78,901	68,369	22,179	8.86	2,503
1927	65,230.29	56,761	49,184	16,046	8.92	1,799
1928	112,021.15	97,337	84,344	27,677	8.98	3,082
1929	128,797.67	111,772	96,852	31,946	9.03	3,538
1930	130,526.70	113,107	98,009	32,518	9.09	3,577
1931	137,257.86	118,779	102,924	34,334	9.14	3,756
1932	24,065.40	20,797	18,021	6,044	9.19	658
1933	22,465.29	19,386	16,798	5,667	9.24	613
1934	29,119.86	25,097	21,747	7,373	9.28	795
1935	37,156.23	31,976	27,708	9,448	9.33	1,013
1936	36,882.26	31,697	27,466	9,416	9.37	1,005
1937	63,648.55	54,615	47,325	16,324	9.42	1,733
1938	40,804.85	34,963	30,296	10,509	9.46	1,111
1939	43,640.66	37,338	32,354	11,287	9.50	1,188
1940	114,085.18	97,461	84,452	29,633	9.54	3,106
1941	159,381.85	135,945	117,799	41,583	9.58	4,341
1942	76,818.81	65,417	56,685	20,134	9.62	2,093

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 376.3 MAINS - BARE STEEL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
INTERIM SURVIVOR CURVE.. IOWA 71-R1						
PROBABLE RETIREMENT YEAR.. 12-2030						
NET SALVAGE PERCENT.. 0						
1943	54,390.11	46,240	40,068	14,322	9.66	1,483
1944	16,801.94	14,262	12,358	4,444	9.69	459
1945	15,724.40	13,324	11,545	4,179	9.73	429
1946	95,221.55	80,556	69,803	25,419	9.76	2,604
1947	72,327.78	61,074	52,922	19,406	9.80	1,980
1948	206,327.25	173,917	150,702	55,625	9.83	5,659
1949	536,510.09	451,420	391,163	145,347	9.86	14,741
1950	1,015,636.66	852,972	739,115	276,522	9.89	27,960
1951	805,800.75	675,446	585,286	220,515	9.92	22,229
1952	1,778,978.14	1,488,222	1,289,570	489,408	9.95	49,187
1953	1,298,717.42	1,084,195	939,474	359,243	9.98	35,996
1954	1,577,464.19	1,314,122	1,138,709	438,755	10.01	43,832
1955	4,005,093.91	3,329,034	2,884,666	1,120,428	10.04	111,596
1956	2,330,934.95	1,933,417	1,675,339	655,596	10.06	65,169
1957	3,101,749.04	2,566,759	2,224,141	877,608	10.09	86,978
1958	3,619,569.24	2,987,918	2,589,083	1,030,486	10.12	101,827
1959	2,851,946.83	2,348,749	2,035,232	816,715	10.14	80,544
1960	3,122,885.42	2,565,669	2,223,197	899,688	10.16	88,552
1961	3,361,569.39	2,754,235	2,386,592	974,977	10.19	95,680
1962	2,921,093.00	2,387,088	2,068,453	852,640	10.21	83,510
1963	3,817,028.01	3,110,801	2,695,563	1,121,465	10.23	109,625
1964	3,697,120.40	3,003,910	2,602,940	1,094,180	10.26	106,645
1965	2,950,009.63	2,389,862	2,070,857	879,153	10.28	85,521
1966	4,187,113.61	3,381,764	2,930,357	1,256,757	10.30	122,015
1967	3,977,037.68	3,201,913	2,774,513	1,202,525	10.32	116,524
1968	3,051,683.10	2,448,823	2,121,948	929,735	10.34	89,916
1969	2,232,117.15	1,785,091	1,546,812	685,305	10.36	66,149
1970	1,069,300.09	852,093	738,353	330,947	10.38	31,883
1971	2,593,689.14	2,059,623	1,784,699	808,990	10.39	77,862
1972	939,208.24	742,923	643,756	295,452	10.41	28,382
1973	616,273.43	485,525	420,716	195,557	10.43	18,749
1974	1,349.53	1,059	918	432	10.45	41
1975	814.03	636	551	263	10.46	25
1976	259.38	209	181	78	10.34	8
1977	2,137.12	1,713	1,484	653	10.49	62
1978	175,486.56	140,266	121,543	53,944	10.40	5,187
1979	18,317.33	14,584	12,637	5,680	10.35	549
1980	211,560.34	167,619	145,245	66,315	10.33	6,420
1981	60.06	47	41	19	10.37	2
1983	7,789.49	6,042	5,235	2,554	10.53	243
1984	207.92	161	140	68	10.45	7
1985	36.16	28	24	12	10.43	1

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 376.3 MAINS - BARE STEEL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
INTERIM SURVIVOR CURVE.. IOWA 71-R1						
PROBABLE RETIREMENT YEAR.. 12-2030						
NET SALVAGE PERCENT.. 0						
1986	83.84	64	55	29	10.44	3
1988	0.10					
1989	911.06	676	586	325	10.57	31
1990	11,903.30	8,754	7,586	4,317	10.58	408
1992	45,851.46	33,063	28,650	17,201	10.60	1,623
1997	4,061.62	2,759	2,391	1,671	10.59	158
1998	670.88	448	388	283	10.63	27
2008	78.49	41	36	42	10.61	4
2011	32,618.28	14,414	12,489	20,129	10.63	1,894
	64,855,156.02	53,108,876	46,019,762	18,835,394		1,860,455
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						10.1 2.87

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 376.45 MAINS - OTHER

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 71-R1						
NET SALVAGE PERCENT.. 0						
1952	122,452.54	74,421	64,487	57,966	27.85	2,081
1954	27,968.51	16,600	14,384	13,585	28.86	471
1955	103,784.21	60,838	52,717	51,067	29.38	1,738
1956	83,808.09	48,514	42,038	41,770	29.90	1,397
1957	89,533.84	51,173	44,342	45,192	30.42	1,486
1958	78,394.90	44,210	38,309	40,086	30.96	1,295
1959	87,361.60	48,615	42,126	45,236	31.49	1,437
1960	62,033.17	34,048	29,503	32,530	32.03	1,016
1961	21,434.94	11,599	10,051	11,384	32.58	349
1962	79,040.77	42,159	36,532	42,509	33.13	1,283
1963	103,503.02	54,404	47,142	56,361	33.68	1,673
1964	165,095.73	85,478	74,068	91,028	34.24	2,659
1965	73,352.75	37,400	32,408	40,945	34.80	1,177
1966	113,400.39	56,908	49,312	64,088	35.37	1,812
1967	64,479.62	31,831	27,582	36,898	35.95	1,026
1968	292,415.57	141,965	123,015	169,401	36.53	4,637
1969	639,953.67	305,463	264,689	375,265	37.11	10,112
1970	669,594.66	314,047	272,127	397,468	37.70	10,543
1971	1,357,784.08	625,531	542,033	815,751	38.29	21,305
1972	1,076,591.89	486,889	421,898	654,694	38.89	16,835
1973	2,286,985.48	1,014,964	879,484	1,407,501	39.49	35,642
1974	2,817,643.08	1,226,266	1,062,581	1,755,062	40.10	43,767
1975	2,716,899.89	1,159,084	1,004,366	1,712,534	40.71	42,067
1976	2,392,401.90	1,329,458	1,151,998	1,240,404	34.71	35,736
1977	4,776,819.35	2,613,876	2,264,969	2,511,850	35.10	71,563
1978	4,901,761.52	2,639,108	2,286,833	2,614,929	35.51	73,639
1979	6,030,203.35	3,192,993	2,766,784	3,263,419	35.92	90,852
1980	7,581,277.42	3,944,539	3,418,011	4,163,266	36.34	114,564
1981	8,357,821.48	4,270,011	3,700,039	4,657,782	36.77	126,673
1982	8,377,817.21	4,200,638	3,639,926	4,737,891	37.21	127,328
1983	6,987,188.51	3,434,902	2,976,402	4,010,787	37.66	106,500
1984	8,031,190.54	3,868,624	3,352,230	4,678,961	38.11	122,775
1985	7,382,479.35	3,480,839	3,016,207	4,366,272	38.58	113,174
1986	8,458,850.76	3,901,222	3,380,476	5,078,375	39.04	130,081
1987	8,146,025.63	3,696,666	3,203,225	4,942,801	39.01	126,706
1988	9,387,882.78	4,158,832	3,603,700	5,784,183	39.50	146,435
1989	8,484,418.86	3,664,421	3,175,284	5,309,135	40.01	132,695
1990	6,903,567.42	2,904,331	2,516,653	4,386,914	40.51	108,292
1991	7,022,345.05	2,893,206	2,507,013	4,515,332	40.55	111,352
1992	7,958,866.23	3,185,934	2,760,667	5,198,199	41.08	126,538
1993	8,380,620.83	3,254,195	2,819,816	5,560,805	41.61	133,641
1994	10,558,292.02	3,998,425	3,464,705	7,093,587	41.70	170,110
1995	10,476,185.34	3,836,379	3,324,289	7,151,896	42.25	169,276

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 376.45 MAINS - OTHER

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 71-R1						
NET SALVAGE PERCENT.. 0						
1996	10,395,874.19	3,699,892	3,206,021	7,189,853	42.38	169,652
1997	13,036,504.84	4,500,201	3,899,502	9,137,003	42.52	214,887
1998	11,081,899.32	3,679,191	3,188,083	7,893,816	43.10	183,151
1999	10,003,964.30	3,206,271	2,778,289	7,225,675	43.28	166,952
2000	9,660,276.41	2,982,127	2,584,065	7,076,211	43.48	162,746
2001	11,407,512.37	3,382,327	2,930,845	8,476,667	43.70	193,974
2002	7,472,600.33	2,121,471	1,838,291	5,634,309	43.93	128,257
2003	11,021,037.32	2,985,599	2,587,073	8,433,964	44.19	190,857
2004	17,109,185.21	4,431,279	3,839,780	13,269,405	44.11	300,825
2005	23,396,564.13	5,734,498	4,969,042	18,427,522	44.41	414,941
2006	12,794,124.48	2,969,516	2,573,137	10,220,987	44.39	230,254
2007	37,485,200.46	8,190,516	7,097,224	30,387,976	44.40	684,414
2008	56,963,969.98	11,643,435	10,089,238	46,874,732	44.45	1,054,550
2009	35,225,636.91	6,678,781	5,787,280	29,438,357	44.53	661,090
2010	46,505,227.77	8,147,716	7,060,137	39,445,091	44.34	889,605
2011	84,287,223.72	13,477,527	11,678,511	72,608,713	44.22	1,641,988
2012	91,366,109.57	13,211,539	11,448,028	79,918,082	43.87	1,821,702
2013	120,449,265.02	15,453,641	13,390,848	107,058,417	43.58	2,456,595
2014	126,464,405.49	14,113,428	12,229,530	114,234,875	43.13	2,648,618
2015	124,329,148.77	11,749,105	10,180,803	114,148,346	42.31	2,697,905
2016	170,989,966.94	13,029,435	11,290,232	159,699,735	41.43	3,854,688
2017	193,690,523.63	11,040,360	9,566,664	184,123,860	39.96	4,607,704
2018	160,478,768.75	5,969,810	5,172,944	155,305,825	37.76	4,112,972
2019	163,178,355.49	2,072,365	1,795,740	161,382,615	32.37	4,985,561
	1,712,522,873.35	248,911,036	215,685,728	1,496,837,145		37,017,626
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						40.4 2.16

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-01						
NET SALVAGE PERCENT.. 0						
1894	756.79	757	757			
1912	38.19	38	38			
1914	87.37	87	87			
1920	86.01	86	86			
1928	88.16	88	88			
1929	428.62	429	429			
1930	205.41	204	196	9	0.29	9
1931	188.76	185	177	12	0.79	12
1932	357.90	348	334	24	1.29	19
1933	427.81	411	394	34	1.79	19
1934	281.77	267	256	26	2.29	11
1935	187.38	176	169	18	2.79	6
1936	261.36	242	232	29	3.29	9
1938	483.00	437	419	64	4.29	15
1939	453.88	406	389	65	4.79	14
1940	995.02	878	842	153	5.29	29
1941	1,703.81	1,485	1,424	280	5.79	48
1942	409.66	352	337	73	6.29	12
1943	131.78	112	107	25	6.79	4
1944	1,298.86	1,088	1,043	256	7.29	35
1945	154.75	128	123	32	7.79	4
1946	265.58	217	208	58	8.29	7
1947	765.94	616	591	175	8.79	20
1948	408.10	324	311	97	9.29	10
1949	1,419.90	1,111	1,065	355	9.79	36
1950	11,548.78	8,908	8,540	3,009	10.29	292
1951	10,328.40	7,852	7,527	2,801	10.79	260
1952	47,685.47	35,722	34,245	13,440	11.29	1,190
1953	42,997.47	31,732	30,420	12,577	11.79	1,067
1954	24,935.11	18,125	17,376	7,559	12.29	615
1955	115,690.48	82,809	79,385	36,305	12.79	2,839
1956	50,477.08	35,570	34,099	16,378	13.29	1,232
1957	35,247.08	24,446	23,435	11,812	13.79	857
1958	39,934.19	27,253	26,126	13,808	14.29	966
1959	50,694.97	34,033	32,626	18,069	14.79	1,222
1960	76,016.17	50,187	48,112	27,904	15.29	1,825
1961	94,312.98	61,219	58,688	35,625	15.79	2,256
1962	87,499.53	55,825	53,517	33,983	16.29	2,086
1963	74,144.73	46,481	44,559	29,586	16.79	1,762
1964	67,979.73	41,861	40,130	27,850	17.29	1,611
1965	43,162.76	26,099	25,020	18,143	17.79	1,020
1966	49,047.17	29,112	27,908	21,139	18.29	1,156
1967	52,084.91	30,336	29,082	23,003	18.79	1,224

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-01						
NET SALVAGE PERCENT.. 0						
1968	40,725.51	23,268	22,306	18,420	19.29	955
1969	64,331.90	36,040	34,550	29,782	19.79	1,505
1970	36,037.09	19,788	18,970	17,067	20.29	841
1971	149,311.26	80,329	77,008	72,303	20.79	3,478
1972	94,026.79	49,542	47,494	46,533	21.29	2,186
1973	90,812.63	46,839	44,902	45,911	21.79	2,107
1974	96,863.87	48,884	46,863	50,001	22.29	2,243
1975	64,656.62	31,912	30,593	34,064	22.79	1,495
1976	58,929.05	39,913	38,263	20,666	20.69	999
1977	69,853.90	46,816	44,880	24,974	20.87	1,197
1978	46,323.61	30,699	29,430	16,894	21.08	801
1979	42,001.73	27,331	26,201	15,801	21.70	728
1980	47,806.34	30,716	29,446	18,360	21.93	837
1981	102,196.56	64,782	62,104	40,093	22.19	1,807
1982	229,854.87	143,636	137,697	92,158	22.46	4,103
1983	100,029.63	61,558	59,013	41,017	22.76	1,802
1984	135,681.78	82,169	78,772	56,910	23.06	2,468
1985	225,511.54	134,270	128,719	96,793	23.39	4,138
1986	166,094.95	97,132	93,116	72,979	23.73	3,075
1987	176,731.36	101,408	97,215	79,516	24.08	3,302
1988	312,684.72	176,823	169,512	143,173	24.14	5,931
1989	217,489.87	120,402	115,424	102,066	24.53	4,161
1990	223,187.85	121,459	116,437	106,751	24.64	4,332
1991	201,517.74	107,087	102,660	98,858	25.06	3,945
1992	92,005.79	47,926	45,945	46,061	25.22	1,826
1993	148,743.60	75,829	72,694	76,050	25.40	2,994
1994	263,102.49	131,078	125,659	137,443	25.60	5,369
1995	133,660.84	64,946	62,261	71,400	25.83	2,764
1996	399,804.37	189,107	181,288	218,516	26.09	8,375
1997	112,345.59	51,881	49,736	62,610	26.13	2,396
1998	68,409.93	30,620	29,354	39,056	26.43	1,478
1999	525,507.92	228,543	219,094	306,414	26.53	11,550
2000	943,291.18	397,409	380,978	562,313	26.67	21,084
2001	239,317.16	97,833	93,788	145,529	26.63	5,465
2002	290,478.34	114,332	109,605	180,873	26.83	6,741
2003	376,982.29	142,952	137,042	239,940	26.87	8,930
2004	304,791.02	111,371	106,766	198,025	26.78	7,395
2005	143,794.17	50,170	48,096	95,698	26.90	3,558
2006	591,934.33	197,765	189,589	402,345	26.74	15,047
2007	480,033.23	151,979	145,696	334,337	26.80	12,475
2008	1,306,189.89	392,249	376,032	930,158	26.60	34,968
2009	486,158.63	137,243	131,569	354,590	26.48	13,391
2010	1,506,822.25	397,349	380,921	1,125,901	26.30	42,810

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-01						
NET SALVAGE PERCENT.. 0						
2011	2,089,006.11	511,598	490,446	1,598,560	25.95	61,602
2012	744,546.73	166,778	159,883	584,664	25.70	22,750
2013	3,164,192.82	641,698	615,167	2,549,026	25.23	101,032
2014	10,895,293.74	1,965,511	1,884,248	9,011,046	24.61	366,154
2015	9,446,462.39	1,472,703	1,411,815	8,034,647	23.91	336,037
2016	8,996,466.29	1,165,042	1,116,874	7,879,592	22.97	343,038
2017	16,946,988.60	1,699,783	1,629,506	15,317,483	21.68	706,526
2018	16,932,873.43	1,159,902	1,111,946	15,820,927	19.82	798,230
2019	13,544,751.89	349,455	335,007	13,209,745	15.74	839,247
	95,152,289.01	14,523,897	13,923,477	81,228,812		3,865,467
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						21.0 4.06

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 379.1 MEASURING AND REGULATING EQUIPMENT - CITY GATE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S2						
NET SALVAGE PERCENT.. 0						
1976	591.42	524	122	469	5.60	84
1983	32,512.26	26,878	6,245	26,267	7.63	3,443
1984	1,528.08	1,250	290	1,238	7.87	157
1987	6,793.84	5,330	1,238	5,556	8.90	624
1988	15,907.49	12,293	2,856	13,051	9.24	1,412
1989	30,556.87	23,235	5,399	25,158	9.58	2,626
1996	48,076.94	31,183	7,246	40,831	12.69	3,218
	135,966.90	100,693	23,396	112,571		11,564

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 9.7 8.51

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 380.3 SERVICES - BARE STEEL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
INTERIM SURVIVOR CURVE.. IOWA 50-R0.5						
PROBABLE RETIREMENT YEAR.. 12-2030						
NET SALVAGE PERCENT.. 0						
1887	4,421.71	4,422	4,422			
1888	837.89	838	838			
1889	897.79	898	898			
1890	3,939.45	3,939	3,939			
1891	266.58	267	267			
1892	940.37	940	940			
1893	481.29	481	481			
1894	938.71	939	939			
1895	368.90	369	369			
1896	548.36	548	548			
1897	445.21	445	445			
1898	1,815.93	1,816	1,816			
1899	1,741.16	1,741	1,741			
1900	4,028.48	4,028	4,028			
1902	2,623.81	2,624	2,624			
1903	1,598.34	1,598	1,598			
1904	2,245.72	2,246	2,246			
1905	1,579.16	1,579	1,579			
1906	1,630.66	1,631	1,631			
1907	2,101.69	2,102	2,102			
1908	2,778.44	2,778	2,778			
1909	2,175.11	2,175	2,175			
1910	1,924.02	1,924	1,924			
1911	1,378.19	1,378	1,378			
1912	1,572.96	1,573	1,573			
1913	1,904.24	1,904	1,904			
1914	1,564.64	1,565	1,565			
1915	2,140.84	2,141	2,141			
1916	1,623.94	1,624	1,624			
1917	1,068.15	1,068	1,068			
1918	880.35	880	880			
1919	1,350.61	1,351	1,351			
1920	1,526.97	1,518	1,407	120	0.30	120
1921	1,163.12	1,145	1,062	101	0.79	101
1922	2,571.50	2,506	2,323	248	1.27	195
1923	4,545.95	4,387	4,067	479	1.75	274
1924	4,403.29	4,207	3,900	503	2.23	226
1925	7,682.47	7,268	6,738	944	2.70	350
1926	7,522.81	7,046	6,532	991	3.17	313
1927	7,984.89	7,405	6,865	1,120	3.63	309
1928	7,404.88	6,801	6,305	1,100	4.08	270
1929	8,925.02	8,116	7,524	1,401	4.53	309

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 380.3 SERVICES - BARE STEEL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
INTERIM SURVIVOR CURVE.. IOWA 50-R0.5						
PROBABLE RETIREMENT YEAR.. 12-2030						
NET SALVAGE PERCENT.. 0						
1930	5,109.61	4,602	4,266	844	4.97	170
1931	2,992.64	2,670	2,475	518	5.39	96
1932	1,700.13	1,505	1,395	305	5.75	53
1933	2,596.70	2,282	2,116	481	6.06	79
1934	2,586.61	2,259	2,094	493	6.32	78
1935	2,090.41	1,816	1,684	406	6.55	62
1936	3,905.37	3,377	3,131	774	6.76	114
1937	5,103.63	4,394	4,074	1,030	6.94	148
1938	8,861.39	7,599	7,045	1,816	7.10	256
1939	14,201.81	12,131	11,246	2,956	7.26	407
1940	11,046.55	9,403	8,717	2,330	7.40	315
1941	15,366.43	13,037	12,086	3,280	7.53	436
1942	16,020.88	13,550	12,562	3,459	7.65	452
1943	6,717.28	5,664	5,251	1,466	7.77	189
1944	4,921.64	4,138	3,836	1,086	7.87	138
1945	5,743.48	4,815	4,464	1,279	7.98	160
1946	14,386.56	12,026	11,149	3,238	8.08	401
1947	28,729.03	23,953	22,206	6,523	8.17	798
1948	37,300.14	31,015	28,753	8,547	8.26	1,035
1949	55,203.70	45,777	42,439	12,765	8.35	1,529
1950	72,482.17	59,951	55,579	16,903	8.43	2,005
1951	93,477.08	77,112	71,489	21,988	8.51	2,584
1952	98,385.63	80,963	75,059	23,327	8.58	2,719
1953	92,922.37	76,255	70,695	22,227	8.66	2,567
1954	139,089.53	113,845	105,544	33,546	8.73	3,843
	848,484.37	718,350	669,890	178,594		23,101

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 7.7 2.72

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 380.45 SERVICES - OTHER

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R0.5						
NET SALVAGE PERCENT.. 0						
1955	247,978.74	172,990	161,320	86,659	15.12	5,731
1956	283,070.41	195,092	181,931	101,139	15.54	6,508
1957	272,221.68	185,274	172,775	99,447	15.97	6,227
1958	361,191.66	242,721	226,347	134,845	16.40	8,222
1959	461,090.00	305,887	285,252	175,838	16.83	10,448
1960	455,101.56	297,909	277,812	177,290	17.27	10,266
1961	579,421.87	374,191	348,948	230,474	17.71	13,014
1962	582,083.17	370,787	345,773	236,310	18.15	13,020
1963	671,331.10	421,596	393,155	278,176	18.60	14,956
1964	670,714.46	415,038	387,039	283,675	19.06	14,883
1965	669,729.77	408,401	380,850	288,880	19.51	14,807
1966	835,101.75	501,395	467,571	367,531	19.98	18,395
1967	928,707.01	549,052	512,013	416,694	20.44	20,386
1968	1,007,645.57	586,248	546,699	460,947	20.91	22,044
1969	740,769.94	423,869	395,275	345,495	21.39	16,152
1970	682,316.77	383,871	357,975	324,342	21.87	14,830
1971	606,648.21	335,476	312,845	293,803	22.35	13,146
1972	580,569.39	315,365	294,090	286,479	22.84	12,543
1973	474,491.38	252,999	235,932	238,559	23.34	10,221
1974	103,267.87	54,050	50,404	52,864	23.83	2,218
1975	157,716.18	80,940	75,480	82,236	24.34	3,379
1976	494,654.37	330,726	308,415	186,239	21.52	8,654
1977	1,921,780.22	1,271,642	1,185,856	735,924	21.69	33,929
1978	1,422,652.68	925,009	862,607	560,046	22.28	25,137
1979	1,902,281.50	1,222,406	1,139,942	762,340	22.48	33,912
1980	2,597,574.14	1,638,290	1,527,770	1,069,804	23.08	46,352
1981	2,902,773.82	1,806,686	1,684,806	1,217,968	23.31	52,251
1982	2,475,115.55	1,518,731	1,416,276	1,058,840	23.56	44,942
1983	2,349,485.14	1,411,806	1,316,565	1,032,920	24.19	42,700
1984	2,774,090.58	1,640,875	1,530,181	1,243,910	24.46	50,855
1985	3,231,773.75	1,879,600	1,752,801	1,478,973	24.76	59,732
1986	3,689,329.33	2,108,083	1,965,870	1,723,459	25.06	68,773
1987	4,289,628.83	2,405,624	2,243,339	2,046,290	25.39	80,594
1988	5,176,897.57	2,846,258	2,654,248	2,522,650	25.73	98,043
1989	4,962,171.54	2,671,633	2,491,403	2,470,769	26.08	94,738
1990	5,104,343.34	2,687,947	2,506,616	2,597,727	26.45	98,213
1991	4,807,042.69	2,472,262	2,305,482	2,501,561	26.83	93,237
1992	5,549,813.40	2,784,341	2,596,508	2,953,305	27.23	108,458
1993	5,818,074.10	2,859,002	2,666,132	3,151,942	27.34	115,287
1994	6,958,298.58	3,324,675	3,100,390	3,857,909	27.78	138,874
1995	6,303,806.54	2,940,095	2,741,754	3,562,053	27.94	127,489
1996	6,052,836.17	2,735,277	2,550,753	3,502,083	28.40	123,313
1997	6,360,292.67	2,794,713	2,606,180	3,754,113	28.60	131,263

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 380.45 SERVICES - OTHER

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R0.5						
NET SALVAGE PERCENT.. 0						
1998	6,863,454.37	2,925,204	2,727,868	4,135,586	28.83	143,447
1999	7,257,624.22	2,993,044	2,791,131	4,466,493	29.09	153,540
2000	7,434,663.96	2,958,996	2,759,380	4,675,284	29.37	159,186
2001	7,156,516.96	2,754,543	2,568,720	4,587,797	29.43	155,888
2002	6,257,516.57	2,310,275	2,154,422	4,103,095	29.75	137,919
2003	5,907,457.16	2,094,784	1,953,469	3,953,988	29.88	132,329
2004	8,522,564.94	2,890,854	2,695,835	5,826,730	30.04	193,966
2005	9,071,131.53	2,942,675	2,744,160	6,326,972	30.03	210,688
2006	8,841,853.79	2,716,217	2,532,979	6,308,875	30.25	208,558
2007	12,411,232.24	3,621,598	3,377,283	9,033,949	30.14	299,733
2008	14,690,338.23	4,025,153	3,753,614	10,936,724	30.25	361,545
2009	13,545,777.77	3,470,428	3,236,311	10,309,467	30.24	340,922
2010	15,937,671.91	3,796,353	3,540,249	12,397,423	30.11	411,738
2011	23,234,964.01	5,104,722	4,760,354	18,474,610	29.90	617,880
2012	29,309,066.90	5,867,675	5,471,838	23,837,229	29.62	804,768
2013	35,094,540.92	6,306,489	5,881,049	29,213,492	29.30	997,048
2014	36,869,028.51	5,810,559	5,418,575	31,450,454	28.95	1,086,371
2015	41,933,269.04	5,669,378	5,286,918	36,646,351	28.26	1,296,757
2016	32,904,093.07	3,642,483	3,396,758	29,507,335	27.45	1,074,948
2017	52,168,482.81	4,413,454	4,115,719	48,052,764	26.15	1,837,582
2018	49,691,872.57	2,812,560	2,622,823	47,069,050	24.31	1,936,201
2019	56,320,512.43	1,154,571	1,076,683	55,243,829	19.95	2,769,114
	579,939,518.91	133,430,847	124,429,518	455,510,001		17,258,270
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						26.4
						2.98

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 381 METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 44-S1						
NET SALVAGE PERCENT.. 0						
1913	50.76	51	51			
1914	16.80	17	17			
1915	22.42	22	22			
1916	59.45	59	59			
1917	179.76	180	180			
1918	720.08	720	720			
1919	487.97	488	488			
1920	287.36	287	287			
1921	629.11	629	629			
1922	815.45	815	815			
1923	1,666.14	1,666	1,666			
1924	1,229.70	1,230	1,230			
1925	2,602.31	2,602	2,602			
1926	3,019.51	3,020	3,020			
1927	4,426.27	4,426	4,426			
1928	5,533.51	5,534	5,534			
1929	4,753.22	4,753	4,753			
1930	367.68	368	368			
1931	23.47	23	23			
1934	122.80	121	123			
1935	25.42	25	25			
1936	446.25	434	446			
1937	73.25	71	73			
1938	221.34	212	218	3	1.76	2
1939	405.31	387	398	7	2.04	3
1941	2,023.14	1,904	1,959	64	2.59	25
1942	2,400.62	2,244	2,309	92	2.87	32
1943	1,829.64	1,699	1,748	82	3.15	26
1944	113.98	105	108	6	3.44	2
1945	678.05	621	639	39	3.73	10
1946	4,096.95	3,724	3,832	265	4.01	66
1947	2,214.86	1,998	2,056	159	4.31	37
1948	15,259.78	13,664	14,062	1,198	4.60	260
1949	15,654.78	13,911	14,316	1,339	4.90	273
1950	28,650.43	25,265	26,001	2,649	5.20	509
1951	53,793.08	47,069	48,439	5,354	5.50	973
1952	34,451.07	29,902	30,773	3,678	5.81	633
1953	18,661.71	16,066	16,534	2,128	6.12	348
1954	53,145.64	45,379	46,700	6,446	6.43	1,002
1955	64,763.87	54,828	56,424	8,340	6.75	1,236
1956	29,529.30	24,785	25,507	4,022	7.07	569
1957	100,938.74	83,986	86,431	14,508	7.39	1,963
1958	165,125.39	136,154	140,118	25,007	7.72	3,239

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 381 METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
 RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 44-S1						
NET SALVAGE PERCENT.. 0						
1959	170,100.15	138,980	143,026	27,074	8.05	3,363
1960	171,530.43	138,862	142,905	28,625	8.38	3,416
1961	185,190.23	148,489	152,812	32,378	8.72	3,713
1962	220,058.79	174,746	179,834	40,225	9.06	4,440
1963	134,975.14	106,109	109,198	25,777	9.41	2,739
1964	206,900.85	161,006	165,694	41,207	9.76	4,222
1965	226,921.25	174,782	179,871	47,050	10.11	4,654
1966	223,442.93	170,275	175,232	48,211	10.47	4,605
1967	208,269.51	156,960	161,530	46,740	10.84	4,312
1968	176,802.91	131,759	135,595	41,208	11.21	3,676
1969	173,043.92	127,502	131,214	41,830	11.58	3,612
1970	144,355.76	105,117	108,177	36,179	11.96	3,025
1971	283,938.39	204,243	210,189	73,749	12.35	5,972
1972	242,798.89	172,496	177,518	65,281	12.74	5,124
1973	145,304.16	101,911	104,878	40,426	13.14	3,077
1974	185,570.06	128,465	132,205	53,365	13.54	3,941
1975	211,820.70	144,663	148,875	62,946	13.95	4,512
1976	94,936.28	73,367	75,503	19,433	12.76	1,523
1977	179,721.99	137,218	141,213	38,509	13.14	2,931
1978	173,244.83	130,592	134,394	38,851	13.53	2,871
1979	306,993.55	228,311	234,958	72,036	13.93	5,171
1980	587,993.78	433,410	446,029	141,965	14.06	10,097
1981	628,507.01	456,359	469,646	158,861	14.49	10,963
1982	423,596.06	302,744	311,558	112,038	14.94	7,499
1983	316,845.65	223,851	230,368	86,478	15.13	5,716
1984	416,549.54	289,169	297,588	118,962	15.60	7,626
1985	547,914.84	375,267	386,193	161,722	15.83	10,216
1986	582,431.74	391,219	402,609	179,823	16.33	11,012
1987	589,060.05	389,545	400,886	188,174	16.60	11,336
1988	667,589.44	432,064	444,643	222,946	17.13	13,015
1989	746,464.66	474,528	488,344	258,121	17.43	14,809
1990	467,805.85	291,724	300,217	167,589	17.75	9,442
1991	527,068.96	320,511	329,843	197,226	18.31	10,771
1992	774,246.62	460,599	474,009	300,238	18.67	16,081
1993	913,921.66	531,171	546,636	367,286	19.04	19,290
1994	369,816.48	209,612	215,715	154,101	19.43	7,931
1995	8,146.20	4,495	4,626	3,520	19.83	178
1996	1,728,330.34	926,731	953,712	774,618	20.25	38,253
1997	707,511.30	367,977	378,691	328,820	20.69	15,893
1998	1,021,125.97	513,933	528,896	492,230	21.14	23,284
1999	1,138,513.83	553,204	569,310	569,204	21.60	26,352
2000	23,982.97	11,222	11,549	12,434	22.08	563
2001	445,713.57	200,304	206,136	239,578	22.57	10,615

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 381 METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 44-S1						
NET SALVAGE PERCENT.. 0						
2002	1,144,957.90	492,561	506,902	638,056	23.07	27,657
2003	844,466.18	346,569	356,659	487,807	23.58	20,687
2004	1,110,163.50	434,740	447,397	662,766	23.95	27,673
2005	487,519.31	180,626	185,885	301,634	24.49	12,317
2006	504,695.02	176,038	181,163	323,532	25.05	12,915
2007	1,031,421.39	336,862	346,670	684,751	25.60	26,748
2008	1,065,489.56	323,589	333,010	732,480	26.18	27,979
2009	1,400,799.47	392,504	403,931	996,868	26.76	37,252
2010	1,104,850.36	282,952	291,190	813,660	27.35	29,750
2011	1,045,935.01	242,134	249,184	796,751	27.95	28,506
2012	1,341,350.92	275,513	283,534	1,057,817	28.69	36,871
2013	1,300,816.37	233,757	240,563	1,060,253	29.30	36,186
2014	1,125,074.30	171,911	176,916	948,158	30.04	31,563
2015	2,508,148.49	314,522	323,679	2,184,469	30.80	70,924
2016	1,259,282.20	123,032	126,614	1,132,668	31.55	35,901
2017	1,232,436.09	85,778	88,275	1,144,161	32.31	35,412
2018	1,081,792.66	45,543	46,869	1,034,924	33.15	31,219
2019	1,266,523.96	15,198	15,641	1,250,883	34.19	36,586
	39,176,296.30	16,220,765	16,692,236	22,484,060		939,195
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 23.9						2.40

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 381.1 METERS - AMR

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 15-S2.5						
NET SALVAGE PERCENT.. 0						
2000	296,427.01	269,926	276,237	20,190	1.91	10,571
2001	278,746.25	250,008	255,853	22,893	2.12	10,799
2003	514.10	443	453	61	2.63	23
2004	107,825.28	90,595	92,713	15,112	2.93	5,158
2005	169,036.06	137,933	141,158	27,878	3.25	8,578
2007	107,411.45	81,085	82,981	24,430	4.03	6,062
2008	485,486.24	348,628	356,779	128,707	4.48	28,729
2009	420,783.25	284,449	291,099	129,684	4.99	25,989
2010	824,868.47	518,842	530,972	293,896	5.55	52,954
2011	11,263,089.05	6,493,171	6,644,977	4,618,112	6.18	747,267
2012	8,735,379.14	4,535,409	4,641,444	4,093,935	6.87	595,915
2014	306,936.92	119,859	122,661	184,276	8.45	21,808
2015	372,440.91	119,740	122,539	249,902	9.32	26,814
2016	392,723.42	98,338	100,637	292,086	10.23	28,552
2017	189,201.48	33,602	34,388	154,813	11.19	13,835
2018	497,031.94	53,332	54,579	442,453	12.13	36,476
2019	122,646.08	3,765	3,853	118,793	13.17	9,020
	24,570,547.05	13,439,125	13,753,323	10,817,224		1,628,550
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						6.6 6.63

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 382 METER INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R3						
NET SALVAGE PERCENT.. 0						
1937	5,560.59	5,304	5,561			
1938	12,721.71	12,074	12,722			
1939	9,392.36	8,872	9,360	32	3.05	10
1940	8,251.67	7,755	8,181	71	3.31	21
1941	11,712.89	10,953	11,555	158	3.57	44
1942	8,759.99	8,152	8,600	160	3.82	42
1943	3,963.87	3,670	3,872	92	4.08	23
1944	3,997.40	3,682	3,884	113	4.34	26
1945	5,300.88	4,858	5,125	176	4.60	38
1946	12,830.81	11,697	12,340	491	4.86	101
1947	18,676.09	16,938	17,869	807	5.12	158
1948	23,712.95	21,393	22,569	1,144	5.38	213
1949	30,584.40	27,442	28,951	1,633	5.65	289
1950	35,528.38	31,704	33,447	2,081	5.92	352
1951	30,962.56	27,472	28,983	1,980	6.20	319
1952	32,228.26	28,431	29,994	2,234	6.48	345
1953	38,526.30	33,777	35,634	2,892	6.78	427
1954	36,169.40	31,507	33,239	2,930	7.09	413
1955	45,374.68	39,270	41,429	3,946	7.40	533
1956	47,867.16	41,139	43,401	4,466	7.73	578
1957	43,972.72	37,521	39,584	4,389	8.07	544
1958	55,874.53	47,311	49,912	5,963	8.43	707
1959	68,439.89	57,490	60,651	7,789	8.80	885
1960	49,854.41	41,524	43,807	6,047	9.19	658
1961	43,164.15	35,638	37,598	5,566	9.59	580
1962	61,702.89	50,473	53,248	8,455	10.01	845
1963	65,682.02	53,202	56,127	9,555	10.45	914
1964	117,746.10	94,411	99,602	18,144	10.90	1,665
1965	156,218.11	123,923	130,737	25,481	11.37	2,241
1966	144,702.96	113,499	119,740	24,963	11.86	2,105
1967	132,669.20	102,831	108,485	24,184	12.37	1,955
1968	171,134.21	131,027	138,232	32,902	12.89	2,553
1969	161,914.98	122,379	129,108	32,807	13.43	2,443
1970	148,287.12	110,569	116,649	31,638	13.99	2,261
1971	129,480.57	95,203	100,438	29,043	14.56	1,995
1972	81,417.16	58,991	62,235	19,182	15.15	1,266
1973	75,626.18	53,955	56,922	18,704	15.76	1,187
1974	12,933.56	9,082	9,581	3,353	16.38	205
1975	23,800.41	16,440	17,344	6,456	17.01	380
1976	43,211.09	31,518	33,251	9,960	16.11	618
1977	48,044.47	34,438	36,332	11,712	16.76	699
1978	48,621.78	34,434	36,327	12,295	17.06	721
1979	115,657.03	80,405	84,826	30,831	17.72	1,740

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 382 METER INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R3						
NET SALVAGE PERCENT.. 0						
1980	263,407.77	179,618	189,495	73,913	18.39	4,019
1981	375,038.89	250,676	264,460	110,579	19.06	5,802
1982	298,791.87	195,649	206,407	92,385	19.73	4,682
1983	350,508.49	224,641	236,993	113,515	20.40	5,564
1984	429,238.46	269,090	283,887	145,351	21.08	6,895
1985	443,564.15	273,280	288,307	155,257	21.45	7,238
1986	518,637.34	311,960	329,114	189,523	22.14	8,560
1987	583,564.06	342,377	361,203	222,361	22.83	9,740
1988	664,424.45	379,918	400,809	263,615	23.53	11,203
1989	767,092.13	426,963	450,441	316,651	24.23	13,069
1990	781,069.62	422,793	446,041	335,029	24.93	13,439
1991	701,991.86	369,037	389,329	312,663	25.64	12,194
1992	766,626.89	390,980	412,479	354,148	26.34	13,445
1993	651,030.76	321,609	339,293	311,738	27.06	11,520
1994	754,052.51	360,286	380,097	373,956	27.78	13,461
1995	664,682.81	306,751	323,618	341,065	28.49	11,971
1996	757,980.76	337,226	355,769	402,212	29.22	13,765
1997	724,545.57	310,250	327,310	397,236	29.94	13,268
1998	621,744.85	255,661	269,719	352,026	30.67	11,478
1999	522,279.59	205,778	217,093	305,187	31.40	9,719
2000	1,149,971.91	433,194	457,014	692,958	32.13	21,567
2001	1,032,367.13	370,723	391,108	641,259	32.87	19,509
2002	1,005,237.51	343,188	362,059	643,179	33.60	19,142
2003	1,103,155.63	354,995	374,515	728,641	34.60	21,059
2004	1,073,469.03	326,013	343,940	729,529	35.35	20,637
2005	769,217.69	219,535	231,607	537,611	36.09	14,896
2006	212,731.97	56,799	59,922	152,810	36.83	4,149
2007	2,950,304.12	732,561	772,843	2,177,461	37.58	57,942
2008	1,423,650.46	326,728	344,694	1,078,956	38.33	28,149
2009	1,791,921.43	377,020	397,751	1,394,170	39.09	35,666
2010	1,434,900.97	272,918	287,925	1,146,976	40.09	28,610
2011	1,563,484.57	267,200	281,893	1,281,592	40.84	31,381
2012	1,664,759.30	251,878	265,728	1,399,031	41.60	33,631
2013	1,026,037.83	134,924	142,343	883,695	42.37	20,857
2014	1,231,165.01	137,398	144,953	1,086,212	43.13	25,185
2015	1,326,768.28	121,267	127,935	1,198,833	43.89	27,314
2016	1,384,621.43	98,447	103,861	1,280,760	44.66	28,678

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 382 METER INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R3						
NET SALVAGE PERCENT.. 0						
2017	1,957,775.86	98,868	104,304	1,853,472	45.43	40,798
2018	1,448,523.02	44,615	47,069	1,401,454	45.93	30,513
2019	976,552.41	8,789	9,272	967,280	46.09	20,987
	40,589,166.28	13,023,957	13,740,052	26,849,114		764,801
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 35.1						1.88

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 383 HOUSE REGULATORS AND INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-S2						
NET SALVAGE PERCENT.. 0						
1918	113.14	113	113			
1939	77.64	75	78			
1949	77.13	70	77			
1955	432.93	382	433			
1957	490.94	427	491			
1958	704.49	609	704			
1960	354.57	302	355			
1961	925.50	783	926			
1962	6,951.72	5,839	6,952			
1963	11,335.62	9,449	11,336			
1964	16,073.66	13,291	16,074			
1965	20,111.70	16,492	20,112			
1966	51,019.08	41,473	51,019			
1967	39,700.39	31,990	39,619	81	8.74	9
1968	52,162.89	41,649	51,582	581	9.07	64
1969	47,765.97	37,778	46,788	978	9.41	104
1970	51,799.54	40,565	50,239	1,561	9.76	160
1971	43,735.55	33,909	41,996	1,740	10.11	172
1972	25,258.06	19,376	23,997	1,261	10.48	120
1973	22,289.80	16,916	20,950	1,340	10.85	124
1974	2,407.82	1,806	2,237	171	11.24	15
1975	27,566.07	20,436	25,310	2,256	11.64	194
1976	17,219.27	13,756	17,037	182	10.93	17
1977	3,947.87	3,115	3,858	90	11.34	8
1978	7,338.63	5,745	7,115	224	11.49	19
1979	55,031.99	42,485	52,617	2,415	11.94	202
1980	102,933.32	78,301	96,975	5,958	12.40	480
1981	147,358.05	110,961	137,424	9,934	12.60	788
1982	153,862.34	113,981	141,164	12,698	13.09	970
1983	139,108.11	101,312	125,474	13,634	13.58	1,004
1984	149,525.79	107,509	133,149	16,377	13.84	1,183
1985	167,472.28	118,152	146,330	21,142	14.37	1,471
1986	191,354.28	133,010	164,731	26,623	14.66	1,816
1987	232,213.28	158,091	195,794	36,419	15.20	2,396
1988	263,476.20	175,475	217,324	46,152	15.75	2,930
1989	240,293.98	157,152	194,631	45,663	16.09	2,838
1990	234,853.04	149,907	185,658	49,195	16.67	2,951
1991	212,129.50	132,623	164,252	47,878	17.04	2,810
1992	216,474.43	131,746	163,166	53,308	17.63	3,024
1993	173,007.80	102,369	126,783	46,225	18.23	2,536
1994	257,351.32	147,823	183,077	74,274	18.83	3,944
1995	229,237.75	128,167	158,733	70,505	19.25	3,663
1996	208,680.76	112,875	139,794	68,887	19.87	3,467

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 383 HOUSE REGULATORS AND INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-S2						
NET SALVAGE PERCENT.. 0						
1997	282,008.35	147,293	182,421	99,587	20.50	4,858
1998	217,864.42	109,651	135,801	82,063	21.14	3,882
1999	159,090.11	76,984	95,344	63,746	21.78	2,927
2000	374,840.66	173,964	215,452	159,389	22.42	7,109
2001	299,066.48	132,187	163,712	135,354	23.25	5,822
2002	534,141.89	225,141	278,834	255,308	23.90	10,682
2003	681,870.40	271,998	336,866	345,004	24.74	13,945
2004	902,660.60	340,935	422,244	480,417	25.40	18,914
2005	720,439.71	255,468	316,394	404,046	26.24	15,398
2006	426,887.69	141,471	175,210	251,678	27.07	9,297
2007	857,488.99	264,021	326,987	530,502	27.91	19,008
2008	554,465.50	157,635	195,229	359,236	28.74	12,500
2009	786,318.70	204,757	253,589	532,730	29.58	18,010
2010	623,867.35	147,482	182,655	441,212	30.42	14,504
2011	698,079.54	147,504	182,682	515,398	31.42	16,404
2012	686,844.51	127,890	158,390	528,455	32.42	16,300
2013	507,746.93	82,103	101,683	406,064	33.27	12,205
2014	642,318.63	87,676	108,586	533,733	34.27	15,574
2015	543,533.27	60,495	74,922	468,611	35.27	13,286
2016	545,660.13	46,981	58,185	487,475	36.27	13,440
2017	688,738.63	41,944	51,947	636,792	37.27	17,086
2018	760,768.16	27,996	34,673	726,095	38.22	18,998
2019	852,658.26	8,953	11,088	841,570	39.27	21,430
	17,171,583.11	5,838,814	7,229,368	9,942,215		341,058
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 29.2						1.99

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 385 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT - OTHER
 THAN METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
 RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 30-R0.5						
NET SALVAGE PERCENT.. 0						
1902	24.00	24	24			
1922	10.69	11	11			
1928	109.16	109	109			
1929	753.75	754	754			
1930	776.51	777	777			
1931	19.20	19	19			
1933	257.28	257	257			
1934	12.20	12	12			
1935	119.38	119	119			
1937	1,076.12	1,076	1,076			
1938	216.32	216	216			
1939	268.73	269	269			
1941	371.05	371	371			
1942	668.42	668	668			
1943	4,065.91	4,066	4,066			
1944	964.96	965	965			
1945	478.56	479	479			
1946	57.67	58	58			
1947	577.57	578	578			
1948	1,325.51	1,326	1,326			
1950	1,760.15	1,760	1,760			
1951	3,294.77	3,295	3,295			
1952	4,004.87	4,005	4,005			
1953	4,318.02	4,318	4,318			
1954	12,905.57	12,906	12,906			
1955	22,595.13	22,595	22,595			
1956	22,226.09	22,226	22,226			
1957	24,393.97	24,394	24,394			
1958	23,632.62	23,633	23,633			
1959	21,305.34	21,305	21,305			
1960	24,754.68	24,515	18,426	6,329	0.29	6,329
1961	28,541.71	27,800	20,895	7,647	0.78	7,647
1962	12,315.27	11,798	8,868	3,447	1.26	2,736
1963	35,437.69	33,394	25,100	10,338	1.73	5,976
1964	23,507.76	21,792	16,379	7,129	2.19	3,255
1965	28,992.94	26,442	19,874	9,119	2.64	3,454
1966	27,398.44	24,585	18,479	8,919	3.08	2,896
1967	47,933.46	42,325	31,812	16,121	3.51	4,593
1968	50,121.10	43,572	32,750	17,371	3.92	4,431
1969	45,389.40	38,838	29,191	16,198	4.33	3,741
1970	42,883.31	36,108	27,139	15,744	4.74	3,322

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 385 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT - OTHER
 THAN METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
 RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 30-R0.5						
NET SALVAGE PERCENT.. 0						
1971	99,937.82	82,815	62,245	37,693	5.14	7,333
1972	67,768.45	55,254	41,530	26,238	5.54	4,736
1973	34,454.32	27,644	20,778	13,676	5.93	2,306
1974	22,121.67	17,454	13,119	9,003	6.33	1,422
1975	21,506.58	16,689	12,544	8,963	6.72	1,334
1976	737.80	641	482	256	6.58	39
1977	519.78	445	334	186	7.09	26
1978	10,511.72	8,924	6,707	3,805	7.37	516
1979	34,594.51	29,084	21,860	12,735	7.66	1,663
1980	60,704.27	50,488	37,948	22,756	7.98	2,852
1981	85,921.95	70,310	52,846	33,076	8.53	3,878
1982	104,595.19	84,534	63,537	41,058	8.88	4,624
1983	72,405.29	57,743	43,401	29,004	9.25	3,136
1984	30,185.02	23,840	17,919	12,266	9.43	1,301
1985	40,985.34	31,878	23,960	17,025	9.83	1,732
1986	78,922.27	60,391	45,391	33,531	10.25	3,271
1987	15,358.13	11,600	8,719	6,639	10.50	632
1988	49,030.76	36,351	27,322	21,709	10.96	1,981
1989	70,164.87	51,220	38,498	31,667	11.25	2,815
1990	55,637.25	39,770	29,892	25,745	11.74	2,193
1991	102,286.44	71,795	53,962	48,324	12.07	4,004
1992	79,932.27	55,009	41,346	38,586	12.42	3,107
1993	107,229.59	72,230	54,289	52,941	12.80	4,136
1994	163,130.52	107,389	80,716	82,415	13.19	6,248
1995	120,248.87	77,512	58,259	61,990	13.46	4,605
1996	141,769.67	88,975	66,875	74,895	13.90	5,388
1997	101,900.90	62,363	46,873	55,028	14.21	3,872
1998	103,532.09	61,643	46,332	57,200	14.55	3,931
1999	34,342.77	19,843	14,914	19,429	14.92	1,302
2000	150,633.58	84,234	63,312	87,322	15.31	5,704
2001	7,478.46	4,049	3,043	4,435	15.60	284
2002	205,975.41	107,622	80,891	125,084	15.92	7,857
2003	436,052.63	219,073	164,659	271,394	16.26	16,691
2004	12,896.01	6,222	4,677	8,219	16.53	497
2005	56,671.36	26,142	19,649	37,022	16.83	2,200
2006	145,661.55	63,902	48,030	97,632	17.17	5,686
2007	196,945.97	81,930	61,580	135,366	17.43	7,766
2008	230,267.35	90,426	67,966	162,301	17.65	9,196
2009	160,963.99	59,364	44,619	116,345	17.83	6,525
2010	242,304.51	83,280	62,595	179,710	17.98	9,995
2011	233,046.06	74,155	55,736	177,310	18.04	9,829

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 385 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT - OTHER
 THAN METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
 RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 30-R0.5						
NET SALVAGE PERCENT.. 0						
2012	196,374.86	57,086	42,907	153,468	18.09	8,484
2013	297,602.04	77,912	58,560	239,042	18.09	13,214
2014	200,511.77	46,378	34,859	165,653	18.00	9,203
2015	309,665.11	61,561	46,270	263,395	17.80	14,797
2016	559,489.23	91,756	68,966	490,523	17.42	28,159
2017	648,887.79	81,890	61,550	587,338	16.74	35,086
2018	551,957.42	47,082	35,388	516,569	15.64	33,029
2019	669,254.68	21,015	15,795	653,460	12.85	50,853
	7,942,941.17	3,242,673	2,475,154	5,467,787		407,818
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						13.4 5.13

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 387 OTHER EQUIPMENT - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 32-R0.5						
NET SALVAGE PERCENT.. 0						
1941	38.38	38	38			
1942	67.31	67	67			
1950	90.19	90	90			
1955	4,288.05	4,288	4,288			
1957	14,374.70	14,024	12,136	2,239	0.78	2,239
1959	188.29	178	154	34	1.73	20
1962	7,626.48	6,890	5,962	1,664	3.09	539
1967	445.13	373	323	122	5.17	24
1972	7,910.24	6,140	5,313	2,597	7.16	363
1981	13,548.93	10,774	9,323	4,226	9.89	427
1985	14,556.64	10,971	9,494	5,063	11.25	450
1992	2,228.63	1,479	1,280	949	13.90	68
2010	68,488.09	22,505	19,474	49,014	19.24	2,548
2015	2,847.08	540	467	2,380	18.89	126
	136,698.14	78,357	68,409	68,289		6,804
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 10.0						4.98

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 387.4 OTHER EQUIPMENT - COMMUNICATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
 RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 25-R2						
NET SALVAGE PERCENT.. 0						
1973	917.13	916	758	159	0.04	159
1974	11,561.27	11,441	9,462	2,099	0.26	2,099
1975	3,189.09	3,123	2,583	606	0.52	606
1976	6,308.81	6,218	5,142	1,167	0.63	1,167
1980	1,144.78	1,096	906	239	1.74	137
1983	10,695.21	9,971	8,246	2,449	2.64	928
1984	4,730.23	4,373	3,617	1,113	2.90	384
1985	27,353.09	25,042	20,710	6,643	3.18	2,089
1986	61,596.14	55,781	46,132	15,464	3.48	4,444
1987	40,005.58	35,793	29,602	10,404	3.82	2,724
1989	3,425.59	3,001	2,482	944	4.31	219
1990	37,952.71	32,711	27,053	10,900	4.71	2,314
1991	31,594.95	26,846	22,202	9,393	5.03	1,867
1992	6,510.50	5,444	4,502	2,008	5.37	374
1993	1,718.09	1,412	1,168	550	5.74	96
1994	4,082.11	3,289	2,720	1,362	6.13	222
2000	47,842.64	32,887	27,198	20,645	8.83	2,338
2001	142,467.12	94,712	78,329	64,138	9.29	6,904
2003	2,326.24	1,428	1,181	1,145	10.32	111
2004	119,576.43	70,048	57,931	61,645	10.90	5,656
2005	235,835.64	131,573	108,814	127,022	11.42	11,123
2006	17,269.88	9,129	7,550	9,720	11.96	813
2007	9,937.59	4,948	4,092	5,846	12.52	467
2008	0.11					
2009	5,832.45	2,527	2,090	3,742	13.62	275
2010	123,486.39	49,308	40,779	82,707	14.17	5,837
2011	49,875.40	18,135	14,998	34,877	14.73	2,368
2012	146,646.41	47,851	39,574	107,072	15.31	6,994
2013	626,309.90	180,440	149,228	477,082	15.86	30,081
2014	1,943,076.34	484,215	400,456	1,542,620	16.32	94,523
2015	772,983.31	160,781	132,969	640,014	16.82	38,051
2016	1,054,688.74	174,446	144,270	910,419	17.24	52,809
2017	2,231,225.63	270,201	223,462	2,007,764	17.54	114,468
2018	2,020,153.33	154,340	127,642	1,892,511	17.63	107,346
2019	723,473.52	17,436	14,420	709,054	16.88	42,006
	10,525,792.35	2,130,862	1,762,268	8,763,524		541,999

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 16.2 5.15

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 387.5 OTHER EQUIPMENT - GPS EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
 RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 10-S3						
NET SALVAGE PERCENT.. 0						
2014	1,942,103.70	1,091,851	960,003	982,101	4.22	232,725
2015	112,834.83	52,728	46,361	66,474	5.03	13,216
2016	33,669.32	12,296	10,811	22,858	5.94	3,848
2017	34,335.00	8,903	7,828	26,507	6.90	3,842
2018	78,429.10	12,282	10,799	67,630	7.85	8,615
	2,201,371.95	1,178,060	1,035,802	1,165,570		262,246
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 4.4						11.91

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 390.1 STRUCTURES AND IMPROVEMENTS - COMMUNICATION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
 RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R2						
NET SALVAGE PERCENT.. 0						
1955	1,170.54	1,032	1,171			
1958	192.08	165	192			
1959	2,129.94	1,820	2,130			
1971	17,971.09	13,618	17,971			
1983	7,872.27	5,562	7,872			
1984	3,449.87	2,395	3,450			
1987	6,786.87	4,444	6,787			
1988	9,428.54	6,043	9,429			
1990	820.22	502	819			
	49,821.42	35,581	49,821			
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						0.0 0.00

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 391.1 OFFICE FURNITURE AND EQUIPMENT - FURNITURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2000	92,789.14	90,082	92,789			
2001	173,686.96	159,936	173,687			
2002	94,356.55	82,169	94,357			
2003	96,741.60	79,408	96,742			
2004	31,580.89	24,343	29,787	1,794	4.58	392
2005	522.52	377	461	62	5.58	11
2007	4,181.56	2,596	3,177	1,005	7.58	133
2010	7,734.00	3,641	4,455	3,279	10.58	310
2011	12,031.56	5,063	6,195	5,837	11.58	504
2012	1,550.11	575	704	846	12.58	67
2014	565,919.21	153,268	187,544	378,375	14.58	25,952
2015	1,175,148.72	259,508	317,542	857,607	15.58	55,045
2016	113,113.73	19,323	23,644	89,470	16.58	5,396
2017	14,623.69	1,767	2,162	12,462	17.58	709
	2,383,980.24	882,056	1,033,246	1,350,734		88,519
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 15.3						3.71

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 391.11 OFFICE FURNITURE AND EQUIPMENT - EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
 RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2011	24,427.00	13,706	14,490	9,937	6.58	1,510
2015	66,876.67	19,691	20,817	46,060	10.58	4,353
	91,303.67	33,397	35,307	55,997		5,863
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						9.6 6.42

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 391.12 OFFICE FURNITURE AND EQUIPMENT - INFORMATION SYSTEMS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
 RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 5-SQUARE						
NET SALVAGE PERCENT.. 0						
2014	319,479.04	319,479	319,479			
2015	941,918.01	832,024	750,920	190,998	0.58	190,998
2016	1,495,726.59	1,022,075	922,446	573,281	1.58	362,836
2017	1,577,540.60	762,473	688,149	889,392	2.58	344,726
2018	163,970.26	47,825	43,163	120,807	3.54	34,126
	4,498,634.50	2,983,876	2,724,157	1,774,478		932,686
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 1.9						20.73

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 392 TRANSPORTATION EQUIPMENT - TRAILERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
 RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2011	3,781.00	2,122	3,781			
2012	14,849.79	7,342	14,850			
2013	2,789.00	1,193	2,789			
2015	4,197.10	1,236	4,924			727-
	25,616.89	11,893	26,344			727-
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						0.0 0.00

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 394 TOOLS, SHOP AND GARAGE EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 25-SQUARE						
NET SALVAGE PERCENT.. 0						
1994	89,988.87	89,989	89,989			
1995	162,417.47	158,628	162,417			
1996	552,198.39	517,228	542,499	9,699	1.58	6,139
1997	1,142,432.35	1,024,385	1,074,435	67,997	2.58	26,355
1998	383,704.26	328,708	344,768	38,936	3.58	10,876
1999	191,341.50	156,263	163,898	27,444	4.58	5,992
2000	296,716.81	230,451	241,711	55,006	5.58	9,858
2001	186,888.81	137,675	144,402	42,487	6.58	6,457
2002	303,527.92	211,459	221,791	81,737	7.58	10,783
2003	291,419.99	191,367	200,717	90,703	8.58	10,571
2004	366,999.55	226,318	237,375	129,625	9.58	13,531
2005	79,725.36	45,975	48,221	31,504	10.58	2,978
2006	167,413.05	89,846	94,236	73,177	11.58	6,319
2007	835,832.86	415,133	435,416	400,417	12.58	31,830
2008	1,181,797.10	539,691	566,059	615,738	13.58	45,342
2009	278,442.30	116,019	121,688	156,754	14.58	10,751
2010	777,173.73	292,738	307,041	470,133	15.58	30,175
2011	595,579.35	200,514	210,311	385,268	16.58	23,237
2012	870,830.41	258,349	270,971	599,859	17.58	34,122
2013	784,168.63	201,273	211,107	573,062	18.58	30,843
2014	894,641.85	193,842	203,313	691,329	19.58	35,308
2015	1,788,936.70	316,051	331,492	1,457,445	20.58	70,819
2016	971,312.23	132,749	139,235	832,077	21.58	38,558
2017	1,449,495.87	140,123	146,969	1,302,527	22.58	57,685
2018	1,163,102.32	67,844	71,159	1,091,943	23.54	46,387
2019	643,434.58	10,726	11,250	632,185	24.58	25,719
	16,449,522.26	6,293,344	6,592,470	9,857,052		590,635
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 16.7						3.59

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 394.12 TOOLS, SHOP AND GARAGE EQUIPMENT - CNG FACILITIES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
 RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 12-S1.5						
NET SALVAGE PERCENT.. 0						
1989	99,674.00	99,674	99,674			
1990	2,097.64	2,098	2,098			
1991	24,694.44	24,694	24,694			
1993	82,680.49	82,680	82,680			
1994	117,928.20	117,928	117,928			
1995	1,302,755.56	1,302,756	1,302,756			
1996	587,355.23	587,296	587,355			
1998	98,401.65	95,892	98,402			
1999	18,450.18	17,742	18,450			
2001	80,747.15	75,394	80,341	406	1.31	310
	2,414,784.54	2,406,154	2,414,378	407		310
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 1.3 0.01						

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 395 LABORATORY EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2000	2,990.39	2,903	2,586	404	0.58	404
2002	1,118.18	974	868	250	2.58	97
2011	19,084.33	8,031	7,154	11,930	11.58	1,030
2015	245,836.91	54,288	48,358	197,479	15.58	12,675
	269,029.81	66,196	58,966	210,064		14,206
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 14.8						5.28

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 396 POWER OPERATED EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 13-L2						
NET SALVAGE PERCENT.. 0						
1990	14,666.07	14,065	14,666			
1991	70,212.28	66,842	70,212			
1992	7,619.70	7,207	7,620			
1993	2,619.06	2,449	2,619			
1994	45,419.28	42,135	45,419			
1995	9,638.80	8,849	9,639			
1997	945.49	850	945			
1999	89,292.15	78,023	89,292			
2000	424,416.34	365,083	424,416			
2001	23,340.60	19,774	23,341			
2002	21,599.55	17,945	21,600			
2003	209,492.31	170,590	206,167	3,325	3.74	889
2011	25,036.41	15,615	18,872	6,164	5.08	1,213
2014	4,400.00	2,035	2,459	1,941	6.29	309
	948,698.04	811,462	937,267	11,431		2,411
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 4.7						0.25

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 397.5 COMMUNICATION EQUIPMENT - TELEMETERING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 19-R2.5						
NET SALVAGE PERCENT.. 0						
1995	11,741.33	10,665	11,741			
1996	125,441.49	112,508	125,441			
1997	37,661.00	33,262	37,661			
1998	6,337.07	5,497	6,337			
1999	96,304.72	81,792	96,305			
2000	239,707.61	198,742	239,708			
2001	117,197.05	94,754	117,197			
2002	106,166.48	83,213	106,166			
2015	51,575.93	13,394	43,859	7,717	12.59	613
	792,132.68	633,827	784,415	7,718		613
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					12.6	0.08

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 398 MISCELLANEOUS EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2019

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2005	17,913.22	17,217	17,913			
2006	8,228.13	7,360	8,228			
2007	136.82	113	127	10	2.58	4
2008	2,264.03	1,723	1,940	324	3.58	91
2009	11,311.50	7,855	8,843	2,468	4.58	539
2010	25,988.40	16,315	18,366	7,622	5.58	1,366
2011	6,122.60	3,435	3,867	2,256	6.58	343
2012	129,294.07	63,928	71,966	57,328	7.58	7,563
2013	14,421.00	6,169	6,945	7,476	8.58	871
2014	98,828.36	35,688	40,175	58,653	9.58	6,122
2015	400,910.38	118,044	132,886	268,024	10.58	25,333
2016	234,767.97	53,475	60,199	174,569	11.58	15,075
2017	8,370.44	1,349	1,519	6,851	12.58	545
2018	12,626.00	1,227	1,381	11,245	13.54	831
	971,182.92	333,898	374,355	596,828		58,683
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						10.2 6.04

PART III. EXPERIENCED NET SALVAGE

COLUMBIA GAS OF PENNSYLVANIA, INC.

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
 COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2014 TRANSACTION YEAR				
362.10		461,689.98		461,689.98-
374.20	104.80	211,267.49-		211,267.49
374.40	24,414.93	21.91		21.91-
375.34	59,724.17	20,674.45		20,674.45-
376.00	7,885,751.50	1,281,289.43		1,281,289.43-
378.00	433,323.74	185,399.17		185,399.17-
379.10	12,676.85	91.84		91.84-
380.00	6,142,996.19	4,690,972.30		4,690,972.30-
381.00	393,244.36			
382.00	107,002.51			
385.00	232,189.97	63,312.71		63,312.71-
387.40	27,680.85	933.57		933.57-
392.00	10,545.15			
397.50	28,765.62			
	15,358,420.64	6,493,117.87		6,493,117.87-
2015 TRANSACTION YEAR				
362.10		56,875.48		56,875.48-
374.40	15,753.17	2,713.76		2,713.76-
375.34	28,538.10	14,909.72		14,909.72-
375.70		22,140.00		22,140.00-
376.00	8,996,141.74	978,776.00	20,828.00	957,948.00-
378.00	306,255.48	104,647.11		104,647.11-
380.00	4,918,094.66	2,926,513.18		2,926,513.18-
381.00	370,041.70			
382.00	144,324.79			
385.00	197,819.03	27,745.87		27,745.87-
387.40	26,673.61	1,060.39		1,060.39-
392.00	12,904.19		26,139.89	26,139.89
394.00	758,805.48			
396.00			109,393.82	109,393.82
397.50	29,824.98	29,402.56		29,402.56-
	15,805,176.93	4,164,784.07	156,361.71	4,008,422.36-

COLUMBIA GAS OF PENNSYLVANIA, INC.

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
 COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2016 TRANSACTION YEAR				
362.10		27,770.30		27,770.30-
374.20	7.02	192.38		192.38-
374.40	281.87	17.13		17.13-
375.34	72,407.95	26,961.80		26,961.80-
375.70	9,328.45			
376.00	8,479,913.68	1,131,099.09	3,855.00	1,127,244.09-
378.00	1,212,757.48	63,141.34		63,141.34-
380.00	6,548,981.00	2,853,156.51		2,853,156.51-
381.00	724,309.02	675.71	215,365.51	214,689.80
382.00	154,260.25			
385.00	85,292.41	64,142.79		64,142.79-
387.40	36,279.86	1,807.70		1,807.70-
394.00	161,691.96	2,431.14		2,431.14-
396.00	218,570.62		52,454.60	52,454.60
397.50	14,631.27			
	17,718,712.84	4,171,395.89	271,675.11	3,899,720.78-
2017 TRANSACTION YEAR				
353.00	5,745.26			
362.10		56,417.81		56,417.81-
374.40	11,936.44	38,240.05		38,240.05-
375.34	177,551.37	36,137.31		36,137.31-
376.00	12,225,336.78	1,258,205.78	1,297.00	1,256,908.78-
378.00	649,171.93	247,333.58		247,333.58-
379.10	889.56			
380.00	7,406,277.97	2,142,798.48		2,142,798.48-
381.00	394,736.32	4,899.87	34,508.89	29,609.02
382.00	124,360.72			
385.00	357,612.63	113,814.22		113,814.22-
387.40	37,733.38	459.97		459.97-
392.00	42,274.76			
394.00	186,713.88	1,648.52		1,648.52-
396.00	180,818.08			
397.50	43,079.36	257.12		257.12-
	21,844,238.44	3,900,212.71	35,805.89	3,864,406.82-

COLUMBIA GAS OF PENNSYLVANIA, INC.

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
 COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2018 TRANSACTION YEAR				
351.20	9,061.96	21,434.00		21,434.00-
353.00	55.42	633.71		633.71-
362.10		101,148.90		101,148.90-
374.20	2.25			
374.40	2,661.60	3,646.96		3,646.96-
375.34	47,458.73	35,116.51		35,116.51-
375.70	3,994.37			
376.00	10,232,873.86	1,441,406.34		1,441,406.34-
378.00	846,387.37	370,922.18		370,922.18-
379.10	4,260.61	76,321.00		76,321.00-
380.00	9,754,235.29	3,052,049.09		3,052,049.09-
381.00	517,125.77		60,956.85	60,956.85
382.00	154,844.89	10.01		10.01-
385.00	198,750.03	124,888.37		124,888.37-
387.40	79,635.11	5,150.01		5,150.01-
392.00	3,312.39		13,348.29	13,348.29
394.00	432,858.80		6,262.88	6,262.88
396.00	87,406.00		123,650.81	123,650.81
	22,374,924.45	5,232,727.08	204,218.83	5,028,508.25-
TOTAL	93,101,473.30	23,962,237.62	668,061.54	23,294,176.08-

COLUMBIA GAS OF PENNSYLVANIA. INC.

53.53 I. VALUATION

A. ALL UTILITIES

5. Provide a comparison of respondent's calculated depreciation reserve vs. book reserve by account at the end of the test year.

Response:

A comparison of the calculated depreciation reserve vs. book reserve by account as of November 30, 2019, is listed on Pages 2 through 4 of this response.

COLUMBIA GAS OF PENNSYLVANIA, INC.

COMPARISON OF CALCULATED ACCRUED DEPRECIATION
AND BOOK RESERVE AS OF NOVEMBER 30, 2019

<u>DEPRECIABLE GROUP</u>		<u>CALCULATED ACCRUED DEPRECIATION</u>	<u>BOOK RESERVE</u>
(1)		(2)	(3)
		\$	\$
DEPRECIABLE PLANT			
UNDERGROUND STORAGE PLANT			
350.2	RIGHTS OF WAY	1,729	1,931
351	COMPRESSOR STATION STRUCTURES	1,973,172	1,787,340
	WELLS		
352.01	CONSTRUCTION	662,876	738,926
352.02	EQUIPMENT	150,571	168,032
	<i>TOTAL ACCOUNT 352</i>	<u>813,447</u>	<u>906,958</u>
352.1	STORAGE LEASEHOLDS AND RIGHTS	185,947	206,932
353	LINES	345,366	388,711
354	COMPRESSOR STATION EQUIPMENT	696,430	759,861
355	MEASURING AND REGULATING EQUIPMENT	92,047	104,477
	TOTAL UNDERGROUND STORAGE PLANT	4,108,138	4,156,210
DISTRIBUTION PLANT			
	LAND AND LAND RIGHTS		
374.4	LAND RIGHTS	805,256	767,255
374.5	RIGHTS OF WAY	1,605,825	1,721,412
	<i>TOTAL ACCOUNT 374</i>	<u>2,411,081</u>	<u>2,488,667</u>
	STRUCTURES AND IMPROVEMENTS		
375.34	MEASURING AND REGULATING	1,192,034	1,341,810
375.6	INDUSTRIAL MEASURING AND REGULATING	57,681	74,740
375.7	OTHER DISTRIBUTION SYSTEMS		
	DISTRIBUTION SYSTEM STRUCTURES	1,959,964	2,267,012
	OTHER BUILDINGS	805,378	937,179
	<i>TOTAL ACCOUNT 375.70</i>	<u>2,765,342</u>	<u>3,204,191</u>
375.8	COMMUNICATION	7,087	7,523
	<i>TOTAL ACCOUNT 375</i>	<u>4,022,144</u>	<u>4,628,264</u>
376	MAINS		
	CAST IRON	235,717	204,253
	BARE STEEL	53,108,876	46,019,762
	OTHER	248,911,036	215,685,728
	<i>TOTAL ACCOUNT 376</i>	<u>302,255,629</u>	<u>261,909,743</u>

COLUMBIA GAS OF PENNSYLVANIA, INC.

COMPARISON OF CALCULATED ACCRUED DEPRECIATION
AND BOOK RESERVE AS OF NOVEMBER 30, 2019

DEPRECIABLE GROUP		CALCULATED ACCRUED DEPRECIATION	BOOK RESERVE
(1)		(2)	(3)
		\$	\$
378	MEASURING AND REGULATING STATION EQUIPMENT - GENERAL	14,523,897	13,923,477
379.1	MEASURING AND REGULATING STATION EQUIPMENT - CITY GATE	100,693	23,396
380	SERVICES		
	BARE STEEL	718,350	669,890
	OTHER	133,430,847	124,429,518
	<i>TOTAL ACCOUNT 380</i>	134,149,197	125,099,408
381	METERS	16,220,765	16,692,236
381.1	METERS - AMR	13,439,125	13,753,323
382	METER INSTALLATIONS	13,023,957	13,740,052
383	HOUSE REGULATORS AND INSTALLATIONS	5,838,814	7,229,368
385	INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT - OTHER THAN METERS	3,242,673	2,475,154
	OTHER EQUIPMENT		
387	GENERAL	78,357	68,409
387.4	COMMUNICATION EQUIPMENT	2,130,862	1,762,268
387.5	GPS EQUIPMENT	1,178,060	1,035,802
	<i>TOTAL ACCOUNT 387</i>	3,387,279	2,866,479
	TOTAL DISTRIBUTION PLANT	512,615,254	464,829,567
GENERAL PLANT			
390.1	STRUCTURES AND IMPROVEMENTS - COMMUNICATION	35,581	49,821
	OFFICE FURNITURE AND EQUIPMENT		
391.1	FURNITURE	882,056	1,033,246
391.11	EQUIPMENT	33,397	35,307
391.12	INFORMATION SYSTEMS	2,983,876	2,724,157
	<i>TOTAL ACCOUNT 391</i>	3,899,329	3,792,710
392	TRANSPORTATION EQUIPMENT - TRAILERS	11,893	26,344
	TOOLS, SHOP AND GARAGE EQUIPMENT		
394	EQUIPMENT	6,293,344	6,592,470
394.12	CNG FACILITIES	2,406,154	2,414,378
	<i>TOTAL ACCOUNT 394</i>	8,699,498	9,006,848
395	LABORATORY EQUIPMENT	66,196	58,966
396	POWER OPERATED EQUIPMENT	811,462	937,267

COLUMBIA GAS OF PENNSYLVANIA, INC.

COMPARISON OF CALCULATED ACCRUED DEPRECIATION
AND BOOK RESERVE AS OF NOVEMBER 30, 2019

<u>DEPRECIABLE GROUP</u>		<u>CALCULATED ACCRUED DEPRECIATION</u>	<u>BOOK RESERVE</u>
(1)		(2)	(3)
		\$	\$
397.5	COMMUNICATION EQUIPMENT - TELEMETERING	633,827	784,415
398	MISCELLANEOUS EQUIPMENT	<u>333,898</u>	<u>374,355</u>
	TOTAL GENERAL PLANT	<u>14,491,684</u>	<u>15,030,726</u>
	SUBTOTAL DEPRECIABLE PLANT	531,215,076	484,016,503
AMORTIZABLE PLANT			
303	MISCELLANEOUS INTANGIBLE PLANT	13,551,909	13,551,909
362.1	ENVIRONMENTAL REMEDIATION	(216,952)	(216,952)
375.71	STRUCTURES AND IMPROVEMENTS - LEASED	<u>1,917,220</u>	<u>1,917,220</u>
	SUBTOTAL AMORTIZABLE PLANT	15,252,177	15,252,177
	NONDEPRECIABLE PLANT	<u>209,923</u>	<u>209,923</u>
	TOTAL GAS PLANT	<u><u>546,677,176</u></u>	<u><u>499,478,603</u></u>

COLUMBIA GAS OF PENNSYLVANIA, INC.
53.53 I. VALUATION
A. ALL UTILITIES

6. Supply a schedule by account and depreciation group showing the survivor curve and annual accrual rate estimated to be appropriate:
- a. For the purposes of this filing.
 - b. For the purposes of the most recent rate increase filing prior to the current proceedings.
 - (i) Supply a comprehensive statement of any changes made in method of depreciation and in the selection of average services lives and dispersion.

Response:

- a. Please refer to pages I-3 through I-5 of the Columbia's historic test year Depreciation Study in Exhibit No.9, Schedule No.1.
- b. Please refer to Exhibit No.9, Schedule No.3, Pages 2 through 4.
 - (i) The depreciation methods and procedures used in this filing are the same as those used in previous filings. Explanations of the depreciation methods and procedures are presented in Exhibit No. 109.

The estimated survivor curves used in this filing have not changed from those used in the most recent rate filing, R-2018-2647577.

COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVES, ORIGINAL COST, BOOK RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF NOVEMBER 30, 2017

DEPRECIABLE GROUP		SURVIVOR CURVE	ORIGINAL COST AS OF NOVEMBER 30, 2017	BOOK RESERVE	FUTURE BOOK ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	RATE	COMPOSITE REMAINING LIFE
(1)		(2)	(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)=(5)/(6)
DEPRECIABLE PLANT								
UNDERGROUND STORAGE PLANT								
350.2	RIGHTS OF WAY	SQUARE *	1,932.08	1,931	1	0	-	-
351	COMPRESSOR STATION STRUCTURES	65-R2.5 *	3,287,122.58	1,304,750	1,982,373	264,366	8.04	7.5
WELLS								
352.01	CONSTRUCTION	SQUARE *	799,133.73	799,118	16	2	-	8.0
352.02	EQUIPMENT	50-S2.5 *	168,679.67	168,680	0	0	-	-
	<i>TOTAL ACCOUNT 352</i>		967,813.40	967,798	16	2		
352.1	STORAGE LEASEHOLDS AND RIGHTS	SQUARE *	206,940.78	206,932	9	1	-	7.6
353	LINES	50-S1.5 *	399,542.52	399,543	0	0	-	-
354	COMPRESSOR STATION EQUIPMENT	55-R2.5 *	864,751.66	699,570	165,182	22,068	2.55	7.5
355	MEASURING AND REGULATING EQUIPMENT	37-R1.5 *	104,476.92	104,477	0	0	-	-
	TOTAL UNDERGROUND STORAGE PLANT		5,832,579.94	3,685,001	2,147,581	286,437	4.91	
DISTRIBUTION PLANT								
LAND AND LAND RIGHTS								
374.4	LAND RIGHTS	70-R2.5	2,670,339.26	667,725	2,002,614	44,334	1.66	45.2
374.5	RIGHTS OF WAY	80-S4	3,239,641.11	1,643,493	1,596,148	35,648	1.10	44.8
	<i>TOTAL ACCOUNT 374</i>		5,909,980.37	2,311,218	3,598,762	79,982	1.35	
STRUCTURES AND IMPROVEMENTS								
375.34	MEASURING AND REGULATING	60-R1	5,729,198.24	1,213,191	4,516,007	135,579	2.37	33.3
375.6	INDUSTRIAL MEASURING AND REGULATING	55-R1	87,669.84	74,553	13,117	589	0.67	22.3
375.7	OTHER DISTRIBUTION SYSTEMS							
	DISTRIBUTION SYSTEM STRUCTURES	90-R1.5 *	4,937,982.55	1,917,190	3,020,792	135,986	2.75	22.2
	OTHER BUILDINGS	35-R2	2,449,730.24	799,806	1,649,924	71,515	2.92	23.1
	<i>TOTAL ACCOUNT 375.7</i>		7,387,712.79	2,716,996	4,670,716	207,501	2.81	22.5
375.8	COMMUNICATION	45-R3	16,515.17	6,825	9,690	373	2.26	26.0
	<i>TOTAL ACCOUNT 375</i>		13,221,096.04	4,011,565	9,209,530	344,042	2.60	
376	MAINS							
	CAST IRON	71-R1 *	401,655.64	358,577	43,079	6,120	1.52	7.0
	BARE STEEL	71-R1 *	66,940,943.83	63,102,913	3,838,031	321,178	0.48	11.9
	OTHER	71-R1	1,344,071,421.71	156,851,372	1,187,220,050	29,510,555	2.20	40.2
	<i>TOTAL ACCOUNT 376</i>		1,411,414,021.18	220,312,862	1,191,101,160	29,837,853	2.11	

COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVES, ORIGINAL COST, BOOK RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF NOVEMBER 30, 2017

DEPRECIABLE GROUP (1)		SURVIVOR CURVE (2)	ORIGINAL COST	BOOK	FUTURE	CALCULATED		COMPOSITE
			AS OF NOVEMBER 30, 2017 (3)	RESERVE (4)	BOOK ACCRUALS (5)	ANNUAL ACCRUAL AMOUNT (6)	RATE (7)=(6)/(3)	REMAINING LIFE (8)=(5)/(6)
378	MEASURING AND REGULATING EQUIPMENT - GENERAL	45-O1	58,450,086.57	10,073,380	48,376,707	2,328,404	3.98	20.8
379.1	MEASURING AND REGULATING EQUIPMENT - CITY GATE	35-S2	140,227.51	95,966	44,262	4,026	2.87	11.0
380	SERVICES							
	BARE STEEL	50-R0.5 *	898,311.12	730,900	167,411	18,424	2.05	9.1
	OTHER	50-R0.5	483,475,480.22	113,522,031	369,953,449	14,027,425	2.90	26.4
	<i>TOTAL ACCOUNT 380</i>		484,373,791.34	114,252,931	370,120,860	14,045,849	2.90	
381	METERS	44-S1	37,708,686.29	15,801,176	21,907,510	908,099	2.41	24.1
381.1	METERS - AMR	15-S2.5	23,950,869.03	10,261,568	13,689,301	1,732,872	7.24	7.9
382	METER INSTALLATIONS	55-R3	38,336,244.15	12,461,669	25,874,575	723,979	1.89	35.7
383	HOUSE REGULATORS	45-S2	12,036,517.80	3,881,080	8,155,438	264,376	2.20	30.8
384	HOUSE REGULATOR INSTALLATIONS	45-S2	3,864,772.07	3,032,646	832,126	38,695	1.00	21.5
385	INDUSTRIAL MEASURING AND REGULATING EQUIPMENT - OTHER THAN METERS	30-R0.5	7,123,055.78	2,643,672	4,479,384	332,000	4.66	13.5
	OTHER EQUIPMENT							
387	GENERAL	32-R0.5	136,698.14	75,906	60,792	3,786	2.77	16.1
387.4	COMMUNICATION EQUIPMENT	25-R2	8,021,658.42	1,069,199	6,952,459	430,981	5.37	16.1
387.5	GPS EQUIPMENT	10-S3	2,053,366.00	514,814	1,538,552	259,015	12.61	5.9
	<i>TOTAL ACCOUNT 387</i>		10,211,722.56	1,659,919	8,551,803	693,782	6.79	
	<i>TOTAL DISTRIBUTION PLANT</i>		2,106,741,070.69	400,799,652	1,705,941,418	51,333,959	2.44	
GENERAL PLANT								
390.1	STRUCTURES AND IMPROVEMENTS - COMMUNICATION	45-R2	120,070.46	85,423	34,647	1,907	1.59	18.2
	OFFICE FURNITURE AND EQUIPMENT							
391.1	FURNITURE	20-SQ	3,278,017.98	1,662,145	1,615,873	97,299	2.97	16.6
391.11	EQUIPMENT	15-SQ	91,303.67	23,133	68,171	5,903	6.47	11.5
391.12	INFORMATION SYSTEMS	5-SQ	3,117,085.86	1,348,842	1,768,244	627,181	20.12	2.8
	<i>TOTAL ACCOUNT 391</i>		6,486,407.51	3,034,120	3,452,288	730,383	11.26	
392	TRANSPORTATION EQUIPMENT - TRAILERS	15-SQ	96,520.90	88,926	7,595	718	0.74	10.6
393	STORES EQUIPMENT	20-SQ	13,435.25	13,435	0	0	-	-
	TOOLS, SHOP AND GARAGE EQUIPMENT							
394	EQUIPMENT	25-SQ	15,376,593.25	6,087,689	9,288,904	567,720	3.69	16.4
394.12	CNG FACILITIES	12-S1.5	1,953,497.84	1,953,091	407	222	0.01	1.8
	<i>TOTAL ACCOUNT 394</i>		17,330,091.09	8,040,780	9,289,311	567,942	3.28	

COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVES, ORIGINAL COST, BOOK RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF NOVEMBER 30, 2017

DEPRECIABLE GROUP (1)	SURVIVOR CURVE (2)	ORIGINAL COST	BOOK	FUTURE	CALCULATED ANNUAL ACCRUAL		COMPOSITE	
		AS OF NOVEMBER 30, 2017 (3)	RESERVE (4)	BOOK ACCRUALS (5)	AMOUNT (6)	RATE (7)=(6)/(3)	REMAINING LIFE (8)=(5)/(6)	
395	LABORATORY EQUIPMENT	20-SQ	273,740.05	36,580	237,160	14,905	5.44	15.9
396	POWER OPERATED EQUIPMENT	13-L2	1,216,922.12	1,256,735	(39,813)	0	-	-
397.5	COMMUNICATION EQUIPMENT - TELEMETERING	19-R2.5	1,276,430.90	743,236	533,195	141,497	11.09	3.8
398	MISCELLANEOUS EQUIPMENT	15-SQ	1,219,845.23	247,882	971,963	82,784	6.79	11.7
TOTAL GENERAL PLANT			28,033,463.51	13,547,117	14,486,346	1,540,136	5.49	
SUBTOTAL DEPRECIABLE PLANT			2,140,607,114.14	418,031,770	1,722,575,345	53,160,532	2.48	
AMORTIZABLE PLANT								
303	MISCELLANEOUS INTANGIBLE PLANT		27,039,391.46	10,398,453	16,640,938	3,224,729	**	
362.1	ENVIRONMENTAL REMEDIATION			(318,584)				
374.2	LAND, OTHER DISTRIBUTION SYSTEMS		477,102.49	210,197				
375.71	STRUCTURES AND IMPROVEMENTS - LEASED		2,830,322.52	1,099,938	1,730,385	179,544	**	
SUBTOTAL AMORTIZABLE PLANT			30,346,816.47	11,390,004	18,371,323	3,404,273		
NONDEPRECIABLE PLANT			172,413.08					
TOTAL GAS PLANT			2,171,126,343.69	429,421,774	1,740,946,668	56,564,805		

* Indicates the use of an interim survivor curve and retirement date.

** Accrual rate based on individual asset amortization.

COLUMBIA GAS OF PENNSYLVANIA, INC.
53.53 I. VALUATION
A. ALL UTILITIES

7. Provide a table, showing the cumulative depreciated original cost by year of installation for utility plant in service at the end of the test year (depreciable plant only) as claimed in the measures of value, in the following form:
- a. Year installed
 - b. Original cost – the total surviving cost associated with each installation year from all plant accounts.
 - c. Calculated depreciation reserve – the calculated depreciation reserve associated with each installation year from all plant accounts.
 - d. Depreciated original cost – (Column B minus Column C).
 - e. Total – cumulation year by year of the figures from Column D.
 - f. Column E divided by the total of the figure in Column D.

Response:

Please reference pages 15-18 of Columbia's Depreciation Study for the historic test year included in Exhibit No.9, Schedule No.1.

COLUMBIA GAS OF PENNSYLVANIA, INC.

53.53 I. VALUATION

A. ALL UTILITIES

17. Regardless of whether a claim for net negative or positive salvage is made, attach an exhibit showing gross salvage, cost of removal, and net salvage for the test year and four previous years by account.

Response:

Please refer to pages III-2 through III-4 of Columbia's historic test year depreciation study is included in Exhibit No.9, Schedule No.1.

COLUMBIA GAS OF PENNSYLVANIA, INC.
53.53 III. BALANCE SHEET AND OPERATING STATEMENT
E. GAS UTILITIES

12. Provide a schedule showing residential and commercial heating sales by unit (MCF) per month and degree days for the test year and three preceding twelve month periods.

Response:

See Exhibit No. 10, Schedule No. 1, Pages 2-3 for residential and commercial heating sales by Dth.

Columbia Gas of Pennsylvania, Inc
Degree Day Data and Residential Heating Sales
Billing Month

Line No.	Description	<u>December</u> (1)	<u>January</u> (2)	<u>February</u> (3)	<u>March</u> (4)	<u>April</u> (5)	<u>May</u> (6)	<u>June</u> (7)	<u>July</u> (8)	<u>August</u> (9)	<u>September</u> (10)	<u>October</u> (11)	<u>November</u> (12)	<u>Total</u> (13)
1	Degree Days (BPT=65)													
2	January 2021 to December 2021 (1)	835	1,091	1,047	859	550	257	82	8	2	21	159	453	5,364
3	December 2019 to November 2020 (1)	835	1,091	1,047	859	550	257	82	8	2	21	159	453	5,364
4	December 2018 to November 2019 (2)	951	1,018	1,062	911	525	204	61	7	1	8	116	492	5,356
5	December 2017 to November 2018 (3)	856	1,313	946	787	748	259	28	5	1	15	133	566	5,657
6	December 2016 to November 2017 (3)	807	1,036	826	724	493	220	86	10	3	47	88	430	4,770
7	December 2015 to November 2016 (3)	647	929	1,022	724	493	278	90	6	1	4	108	369	4,671
8	Residential Heating Sales - Dth													
9	January 2021 to December 2021 (1)	3,451,315	4,781,263	4,806,155	3,940,096	2,362,424	896,088	256,837	-	-	-	309,096	1,339,238	22,142,512
10	December 2019 to November 2020 (1)	3,362,705	4,707,246	4,736,608	3,881,466	2,341,000	880,306	252,627	-	-	-	300,947	1,333,373	21,796,279
11	December 2018 to November 2019 (2)	4,234,179	4,693,111	5,245,534	4,390,123	2,370,896	691,672	195,757	-	-	-	209,150	1,708,398	23,738,820
12	December 2017 to November 2018 (3)	3,614,430	6,182,546	4,547,759	3,589,668	3,349,906	1,125,466	105,612	-	-	-	239,167	1,997,256	24,751,810
13	December 2016 to November 2017 (3)	3,319,693	4,663,210	3,776,609	3,186,454	2,118,628	661,748	236,484	-	-	42,972	113,705	1,398,470	19,517,973
14	December 2015 to November 2016 (3)	2,397,509	3,865,736	4,666,698	3,330,229	2,026,864	892,329	313,579	-	-	-	158,873	1,100,320	18,752,138

(1) Rate test year and Future test year reflecting normal weather based upon the 20 Year (2000-2019) average.

(2) Historic test year.

(3) Actual heating sales, not weather normalized.

Columbia Gas of Pennsylvania, Inc
Degree Day Data and Commercial Heating Sales
Billing Month

Line No.	Description	December (1)	January (2)	February (3)	March (4)	April (5)	May (6)	June (7)	July (8)	August (9)	September (10)	October (11)	November (12)	Total (13)
1	Degree Days (BPT=65)													
2	January 2021 to December 2021 (1)	835	1,091	1,047	859	550	257	82	8	2	21	159	453	5,364
3	December 2019 to November 2020 (1)	835	1,091	1,047	859	550	257	82	8	2	21	159	453	5,364
4	December 2018 to November 2019 (2)	951	1,018	1,062	911	525	204	61	7	1	8	116	492	5,356
5	December 2017 to November 2018 (3)	856	1,313	946	787	748	259	28	5	1	15	133	566	5,657
6	December 2016 to November 2017 (3)	807	1,036	826	724	493	220	86	10	3	47	88	430	4,770
7	December 2015 to November 2016 (3)	647	929	1,022	724	493	278	90	6	1	4	108	369	4,671
8	Commercial Heating Sales - Dth													
9	January 2021 to December 2021 (1)	965,379	1,387,566	1,452,870	1,108,286	614,416	230,698	49,953	-	-	12,471	108,144	362,193	6,291,976
10	December 2019 to November 2020 (1)	968,637	1,386,873	1,453,733	1,108,234	626,059	230,805	50,474	-	-	13,096	106,549	361,869	6,306,330
11	December 2018 to November 2019 (2)	1,027,074	1,181,998	1,391,551	1,114,162	569,672	134,301	31,903	-	-	10,615	58,047	400,697	5,920,021
12	December 2017 to November 2018 (3)	937,118	1,752,954	1,301,111	965,078	881,308	251,179	20,280	-	-	6,697	62,362	498,992	6,677,080
13	December 2016 to November 2017 (3)	868,859	1,332,477	1,073,179	886,091	559,159	140,650	47,042	-	-	16,681	40,107	353,174	5,317,420
14	December 2015 to November 2016 (3)	598,725	1,065,629	1,373,230	921,068	499,180	202,410	48,971	-	-	1,977	52,871	264,361	5,028,421

(1) Rate test year and Future test year reflecting normal weather based upon the 20 Year (2000-2019) average.

(2) Historic test year.

(3) Actual heating sales, not weather normalized.

COLUMBIA GAS OF PENNSYLVANIA, INC.
53.53 III. BALANCE SHEET AND OPERATING STATEMENT
E. GAS UTILITIES

19. Provide growth patterns of usage and customer numbers per rate class, using historical and projected data.

Response:

See Exhibit No. 10, Schedule 2, Pages 2-8.

Columbia Gas of Pennsylvania, Inc.
 Analysis of the Average Monthly Consumption
 Twelve Months Ended November 30, 2015

Line No.	Period	Residential (1)					Commercial (1)					Industrial					
		Total Customers	Sales Volume	Trans Volume	Through-Put	Average	Total Customers	Sales Volume	Trans Volume	Through-Put	Average	Total Customers	Sales Volume	Trans Volume	Through-Put	Average	
			MDth	MDth	MDth	Dth/Cust		MDth	MDth	MDth	Dth/Cust		MDth	MDth	MDth	Dth/Cust	
1	Dec	2014	384230	4041	1174	5215	13.57	37284	1317	1856	3173	85.10	274	32	1924	1957	7,142
2	Jan	2015	385187	5206	1495	6701	17.40	37341	1736	2278	4014	107.50	275	41	2020	2060	7,492
3	Feb		385718	5678	1604	7283	18.88	37396	1926	2528	4454	119.09	274	42	2039	2080	7,592
4	Mar		386105	5557	1563	7120	18.44	37384	1889	2322	4211	112.63	274	33	1838	1871	6,828
5	Apr		384943	2966	833	3799	9.87	37306	975	1465	2440	65.41	273	17	1611	1628	5,962
6	May		383544	1210	344	1554	4.05	37156	401	843	1244	33.48	273	8	1660	1667	6,107
7	Jun		381643	585	169	754	1.98	37006	220	603	822	22.22	273	6	1445	1451	5,315
8	Jul		380412	456	133	589	1.55	36932	189	535	724	19.61	273	5	1541	1546	5,663
9	Aug		379773	403	115	518	1.36	36883	175	516	691	18.73	272	4	1560	1564	5,750
10	Sep		379879	421	121	542	1.43	36858	183	545	728	19.75	271	6	1576	1582	5,837
11	Oct		381209	689	195	885	2.32	36910	261	700	961	26.05	271	8	1634	1643	6,062
12	Nov	2015	383419	1483	420	1903	4.96	37048	491	986	1476	39.85	271	16	1924	1939	7,156
13																	
14	Total or Average		383,005	28,696	8,166	36,862	95.81	37,125	9,764	15,175	24,939	669.42	273	216	20,772	20,988	76,905.94
15																	
16	Heating Season			21,966	6,256	28,222	73		7,359	9,969	17,328	464		163	9,744	9,908	36,210
17	(November-March)																
18	Non-Heating Season			6,730	1,910	8,640	23		2,405	5,206	7,611	205		53	11,027	11,080	40,696
19	(April-October)																
20	Daily Average = Total/365			79	22	101			27	42	68			1	57	58	

Columbia Gas of Pennsylvania, Inc.
Analysis of the Average Monthly Consumption
Twelve Months Ended November 30, 2016

Line No.	Period	Residential (1)						Commercial (1)					Industrial				
		Total Customers	Sales Volume	Trans Volume	Through-Put	Average		Total Customers	Sales Volume	Trans Volume	Through-Put	Average	Total Customers	Sales Volume	Trans Volume	Through-Put	Average
			MDth	MDth	MDth	Dth/Cust		MDth	MDth	MDth	Dth/Cust		MDth	MDth	MDth	Dth/Cust	
1	Dec	2015	385616	2817	789	3607	9.35	37113	884	1463	2347	63	271	18	1557	1574	5,809
2	Jan	2016	387022	4292	1187	5479	14.16	37291	1374	2044	3419	92	272	29	1767	1795	6,600
3	Feb		387739	5050	1380	6429	16.58	37300	1660	2323	3983	107	273	31	1934	1965	7,199
4	Mar		388108	3716	1004	4719	12.16	37288	1211	1670	2881	77	271	18	1757	1775	6,550
5	Apr		386798	2423	654	3077	7.95	37216	757	1322	2080	56	270	11	1658	1668	6,180
6	May		385327	1273	342	1614	4.19	37145	425	874	1299	35	269	6	1676	1682	6,252
7	Jun		384212	711	193	904	2.35	37041	254	630	884	24	269	4	1584	1588	5,904
8	Jul		383324	442	118	561	1.46	36976	184	521	704	19	269	3	1728	1731	6,435
9	Aug		383128	381	102	482	1.26	36902	169	513	682	18	268	3	1625	1629	6,077
10	Sep		383096	395	105	499	1.30	36877	178	532	710	19	269	4	1553	1557	5,786
11	Oct		384127	544	142	687	1.79	36901	227	665	892	24	268	5	1598	1603	5,982
12	Nov	2016	386173	1486	387	1873	4.85	37001	480	1041	1521	41	268	8	1722	1731	6,458
13																	
14	Total or Average		385,389	23,530	6,402	29,933	77.41	37,088	7,803	13,597	21,400	575.71	270	141	20,157	20,298	75,232.10
15																	
16	Heating Season			17,362	4,747	22,108	57		5,609	8,541	14,150	380		104	8,736	8,840	32,616
17	(November-March)																
18	Non-Heating Season			6,169	1,656	7,824	20		2,195	5,056	7,251	196		37	11,421	11,458	42,616
19	(April-October)																
20	Daily Average = Total/365			64	18	82			21	37	59			0	55	56	

Columbia Gas of Pennsylvania, Inc.
Analysis of the Average Monthly Consumption
Twelve Months Ended November 30, 2017

Line No.	Period	Residential (1)						Commercial (1)						Industrial					
		Total Customers	Sales Volume	Trans Volume	Through-Put	Average		Total Customers	Sales Volume	Trans Volume	Through-Put	Average		Total Customers	Sales Volume	Trans Volume	Through-Put	Average	
			MDth	MDth	MDth	MDth	Dth/Cust		MDth	MDth	MDth	MDth	Dth/Cust		MDth	MDth	MDth	MDth	Dth/Cust
1	Dec	2016	388829	3776	966	4742	12.19	37148	1169	1855	3024	81	268	23	1912	1936	7,224		
2	Jan	2017	390253	5132	1298	6430	16.48	37243	1667	2290	3957	106	268	20	2168	2188	8,163		
3	Feb		390777	4196	1046	5243	13.42	37262	1362	1978	3340	90	268	17	2171	2188	8,163		
4	Mar		391078	3605	891	4496	11.50	37266	1170	1739	2909	78	268	13	1950	1963	7,324		
5	Apr		390176	2546	625	3172	8.13	37197	840	1316	2155	58	268	8	1940	1948	7,268		
6	May		388794	1090	269	1360	3.50	37099	363	817	1180	32	268	6	1837	1843	6,877		
7	Jun		387557	670	166	836	2.16	37059	256	642	898	24	268	6	1736	1742	6,499		
8	Jul		386740	447	109	557	1.44	36957	193	526	719	19	268	6	1880	1885	7,035		
9	Aug		386176	403	99	502	1.30	36924	181	533	714	19	267	7	1868	1875	7,022		
10	Sep		386502	475	114	589	1.52	36904	207	582	788	21	268	8	1960	1968	7,343		
11	Oct		387584	536	127	663	1.71	36928	227	631	858	23	268	13	2113	2126	7,931		
12	Nov	2017	389898	1825	432	2257	5.79	37076	590	1182	1772	48	268	20	1853	1873	6,989		
13																			
14	Total or Average		388,697	24,702	6,143	30,845	79.13	37,089	8,224	14,090	22,313	600.48	268	146	23,387	23,533	87,837.29		
15																			
16	Heating Season			18,534	4,633	23,167	59		5,958	9,043	15,001	403		93	10,054	10,147	37,862		
17	(November-March)																		
18	Non-Heating Season			6,168	1,510	7,678	20		2,266	5,046	7,312	197		53	13,333	13,386	49,976		
19	(April-October)																		
20	Daily Average = Total/365			68	17	85			23	39	61			0	64	64			

Columbia Gas of Pennsylvania, Inc.
Analysis of the Average Monthly Consumption
Twelve Months Ended November 30, 2018

Line No.	Period	Residential (1)					Commercial (1)					Industrial				
		Total Customers	Sales Volume	Trans Volume	Through-Put	Average	Total Customers	Sales Volume	Trans Volume	Through-Put	Average	Total Customers	Sales Volume	Trans Volume	Through-Put	Average
			MDth	MDth	MDth	Dth/Cust		MDth	MDth	MDth	Dth/Cust		MDth	MDth	MDth	Dth/Cust
1	Dec 2017	392350	4057	948	5005	12.76	37226	1243	1937	3179	85	268	19	2068	2087	7,787
2	Jan 2018	393759	6639	1540	8179	20.77	37318	2094	2845	4939	132	268	29	2370	2399	8,952
3	Feb	394172	4953	1139	6092	15.46	37321	1596	2261	3857	103	268	21	2176	2197	8,198
4	Mar	394418	3996	910	4906	12.44	37284	1251	1865	3116	84	269	18	2193	2212	8,221
5	Apr	393550	3776	854	4630	11.76	37239	1175	1809	2985	80	266	18	2131	2148	8,077
6	May	392010	1532	343	1875	4.78	37139	499	932	1432	39	266	8	1936	1944	7,308
7	Jun	390689	533	111	644	1.65	37054	212	605	817	22	265	5	1851	1856	7,004
8	Jul	389727	444	92	535	1.37	36993	183	541	724	20	266	5	1807	1812	6,813
9	Aug	389242	404	82	486	1.25	36940	177	546	723	20	265	5	1871	1875	7,077
10	Sep	389708	435	88	523	1.34	36940	192	567	759	21	266	5	1879	1883	7,080
11	Oct	390942	654	132	786	2.01	36972	258	680	938	25	265	8	1922	1930	7,283
12	Nov 2018	393551	2420	489	2908	7.39	37067	752	1393	2145	58	264	12	2068	2080	7,880
13																
14	Total or Average	392,010	29,843	6,728	36,570	92.98	37,124	9,631	15,982	25,613	688.33	266	152	24,272	24,424	91,679.62
15																
16	Heating Season		22,065	5,026	27,091	69		6,935	10,301	17,236	463		99	10,876	10,975	41,038
17	(November-March)															
18	Non-Heating Season		7,778	1,701	9,479	24		2,696	5,681	8,377	226		53	13,397	13,449	50,641
19	(April-October)															
20	Daily Average = Total/365		82	18	100			26	44	70			0	66	67	

Columbia Gas of Pennsylvania, Inc.
Analysis of the Average Monthly Consumption
Twelve Months Ended November 30, 2019

Line No.	Period	Residential (1)						Commercial (1)						Industrial					
		Total Customers	Sales	Trans	Through-	Average		Total Customers	Sales	Trans	Through-	Average		Total Customers	Sales	Trans	Through-	Average	
			Volume	Volume	Put				Volume	Volume	Volume				Volume	Volume	Volume		Volume
MDth	MDth	MDth	MDth	Dth/Cust	MDth	MDth	MDth	MDth	MDth	Dth/Cust	MDth	MDth	MDth	MDth	MDth	MDth	Dth/Cust		
1	Dec 2018	395703	4682	933	5615	14.19	37202	1313	2207	3520	95	269	22	2215	2237	8,317			
2	Jan 2019	396660	5157	1018	6175	15.57	37231	1488	2360	3848	103	269	23	2191	2214	8,231			
3	Feb	397257	5658	1101	6759	17.02	37280	1665	2607	4272	115	269	25	2307	2332	8,671			
4	Mar	397564	4803	942	5745	14.45	37281	1387	2188	3575	96	268	22	2178	2200	8,208			
5	Apr	396747	2791	550	3341	8.42	37257	827	1478	2305	62	269	13	2072	2085	7,750			
6	May	395563	1115	221	1336	3.38	37153	348	832	1180	32	269	7	1911	1918	7,132			
7	Jun	394045	621	123	744	1.89	37057	218	635	853	23	268	6	1801	1806	6,740			
8	Jul	393293	460	92	552	1.40	37000	179	538	717	19	269	5	1735	1741	6,471			
9	Aug	392735	400	77	476	1.21	36988	169	543	712	19	269	4	1774	1778	6,608			
10	Sep	393051	437	84	521	1.33	36974	186	583	769	21	267	4	1824	1828	6,846			
11	Oct	394141	623	120	743	1.89	37002	238	694	932	25	268	6	1878	1884	7,028			
12	Nov 2019	396927	2121	409	2531	6.38	37111	624	1330	1954	53	266	9	2012	2021	7,598			
13																			
14	Total or Average	395,307	28,869	5,670	34,539	87.11	37,128	8,641	15,996	24,637	662.38	268	147	23,897	24,044	89,599.26			
15																			
16	Heating Season (November-March)		22,421	4,404	26,825	68		6,477	10,692	17,170	461		102	10,903	11,005	41,025			
17	Non-Heating Season (April-October)		6,448	1,266	7,714	20		2,164	5,304	7,467	201		45	12,994	13,039	48,575			
18	Daily Average = Total/365		79	16	95			24	44	67			0	65	66				

Columbia Gas of Pennsylvania, Inc.
Analysis of the Average Monthly Consumption
Twelve Months Ended November 30, 2020

Line No.	Period	Residential						Commercial					Industrial				
		Total Customers	Sales Volume	Trans Volume	Through-Put	Average		Total Customers	Sales Volume	Trans Volume	Through-Put	Average	Total Customers	Sales Volume	Trans Volume	Through-Put	Average
			MDth	MDth	MDth	Dth/Cust		MDth	MDth	MDth	Dth/Cust		MDth	MDth	MDth	MDth	Dth/Cust
1	Dec 2019	399057	3780	1182	4962	12.44	37231	1298	1892	3189	86	267	18	1971	1990	7,451	
2	Jan 2020	399904	5133	1589	6722	16.81	37306	1732	2400	4133	111	265	25	2130	2155	8,132	
3	Feb	400411	5116	1561	6677	16.68	37339	1759	2447	4207	113	266	27	2262	2289	8,606	
4	Mar	400649	4262	1308	5570	13.90	37328	1410	2013	3423	92	265	26	2135	2161	8,156	
5	Apr	399634	2718	849	3567	8.93	37267	905	1463	2368	64	266	21	2030	2050	7,709	
6	May	398118	1257	393	1650	4.15	37162	498	866	1363	37	266	8	1868	1875	7,051	
7	Jun	396528	646	193	839	2.12	37075	257	685	942	25	266	5	1842	1847	6,944	
8	Jul	395378	408	120	528	1.34	36998	203	550	754	20	267	5	1745	1750	6,556	
9	Aug	394659	379	111	490	1.24	36963	188	543	731	20	267	5	1839	1844	6,905	
10	Sep	394722	390	114	504	1.28	36930	208	586	794	22	266	5	1828	1832	6,888	
11	Oct	395741	682	213	895	2.26	36966	361	686	1048	28	268	7	1876	1883	7,027	
12	Nov 2020	397948	1709	529	2238	5.62	37087	598	1239	1838	50	267	13	1978	1991	7,458	
13																	
14	Total or Average	397,729	26,482	8,161	34,643	86.75	37,138	9,418	15,371	24,789	665.98	266	165	23,504	23,668	88,880.96	
15																	
16	Heating Season		20,001	6,168	26,169	65		6,798	9,992	16,790	450		109	10,477	10,586	39,802	
17	(November-March)																
18	Non-Heating Season		6,481	1,993	8,474	21		2,619	5,380	7,999	216		55	13,027	13,082	49,079	
19	(April-October)																
20	Daily Average = Total/365		73	22	95			26	42	68			0	64	65		

Columbia Gas of Pennsylvania, Inc.
 Analysis of the Average Monthly Consumption
 Twelve Months Ended December 31, 2021

Line No.	Period	Residential					Commercial					Industrial					
		Total Customers	Sales Volume	Trans Volume	Through-Put	Average	Total Customers	Sales Volume	Trans Volume	Through-Put	Average	Total Customers	Sales Volume	Trans Volume	Through-Put	Average	
			MDth	MDth	MDth	Dth/Cust		MDth	MDth	MDth	Dth/Cust		MDth	MDth	MDth	Dth/Cust	
1	Jan	2021	401179	5192	1540	6732	16.78	37318	1728	2395	4123	110	267	26	2184	2210	8,278
2	Feb		401755	5172	1512	6685	16.64	37352	1755	2441	4195	112	268	28	2308	2336	8,715
3	Mar		402091	4306	1266	5572	13.86	37340	1405	2006	3411	91	267	26	2178	2204	8,255
4	Apr		401177	2740	821	3561	8.88	37278	900	1455	2356	63	268	22	2088	2109	7,870
5	May		399743	1259	377	1636	4.09	37170	493	858	1351	36	268	8	1932	1940	7,238
6	Jun		398228	637	182	819	2.06	37079	253	676	930	25	268	5	1892	1897	7,079
7	Jul		397150	395	111	506	1.27	36999	200	542	742	20	269	5	1786	1791	6,657
8	Aug		396513	366	102	468	1.18	36962	184	535	719	19	269	5	1865	1870	6,952
9	Sep		396664	378	106	484	1.22	36928	205	578	783	21	268	5	1858	1862	6,948
10	Oct		397735	675	202	876	2.20	36963	358	679	1037	28	270	7	1900	1908	7,065
11	Nov		400006	1702	504	2206	5.51	37085	595	1232	1827	49	269	13	1994	2007	7,460
12	Dec	2021	402258	3860	1108	4968	12.35	37236	1290	1880	3171	85	267	19	2061	2081	7,792
13																	
14	Total or Average		399,542	26,682	7,831	34,513	86.05	37,143	9,366	15,278	24,644	661.94	268	168	24,045	24,214	90,309.23
15																	
16	Heating Season			20,233	5,930	26,163	65		6,773	9,955	16,727	449		112	10,725	10,837	40,500
17	(November-March)																
18	Non-Heating Season			6,449	1,901	8,350	21		2,593	5,324	7,917	213		56	13,320	13,377	49,809
19	(April-October)																
20	Daily Average = Total/365			73	21	95			26	42	68			0	66	66	

COLUMBIA GAS OF PENNSYLVANIA, INC.
53.53 III. BALANCE SHEET AND OPERATING STATEMENT
E. GAS UTILITIES

22. Provide supporting data detailing curtailment adjustments, procedures and policies.

Response:

No curtailment adjustments have been made to the retail sales volumes for the twelve months ended November 30, 2019 (Historic Test Year), the twelve months ended November 30, 2020 (Future Test Year) or the twelve months ending December 31, 202 (Fully Projected Future Test Year).

For Columbia's procedures and policies relating to curtailment, please see Tariff section Section 2.3 Gas Emergency Rules and Section 2.4 Emergency Curtailment for Tests or Repair. Please see Exhibit No. 14, Schedule No. 2, for a complete copy of Columbia's tariff.

COLUMBIA GAS OF PENNSYLVANIA, INC.
53.53 III. BALANCE SHEET AND OPERATING STATEMENT
E. GAS UTILITIES

38. Identify company's policy with respect to replacing customers lost through attrition.

Response:

Columbia's policy for replacing customers lost through attrition and its policy for new business are essentially identical. Columbia is currently staffed with seven New Business Representatives – three Conversion Consultants, whose primary focus is converting PA residents from alternate fuel sources to natural gas, and four Development Managers whose focus is on residential new construction projects where main is needed, as well as commercial and industrial projects. All seven positions work with Columbia's new business team and the Company's internal stakeholders to implement the process of connecting the customers to Columbia's system. In addition, Columbia uses the annual Dormant Account Survey process as a means of identifying customers who have left the system and targets them for reconnection.

Rules and regulations regarding applicant/new customers are detailed on Page Nos. 38 through 54 of Tariff Gas Pa. P.U.C. No.9 and are included as part of Exhibit 14, Schedule 2, Attachment 1. Page Nos. 38 through 54 of the current Tariff contain rules relevant to applicants and customers, including Application for Service, Customer's Installation, Testing and Inspection of Customer's Service, Credit, Point of Delivery of Gas to Customer, Extensions, Rights of Way, Introduction of Service, Company Equipment on Customer's Premises and Selection of Rate Schedule.

Witness: S. Bardes Hasson

COLUMBIA GAS OF PENNSYLVANIA, INC.
53.53 III. BALANCE SHEET AND OPERATING STATEMENT
E. GAS UTILITIES

39. Identify procedures developed to govern relationships between the respondent and potential customers; i.e., basically expansion, alternate energy requirements, availability of supply, availability of distribution facilities, ownership of metering and related facilities.

Response:

The relationship between Columbia Gas of Pennsylvania, Inc. and potential customers is described in its tariff currently on file with the Pennsylvania Public Utility Commission (Commission). Please reference Exhibit No. 14, Schedule No.2.

The availability of gas supply and/or capacity is evaluated for new loads being considered for addition to the distribution system. Key variables include the projected daily maximum and annual usage of the load being evaluated, the character of service being requested (sales service or general distribution service, firm service or interruptible service), the ability to accept such new loads within the constraints of existing distribution facilities and the existing contracts with the companies' interstate pipeline suppliers. Ownership of metering and related facilities is specifically addressed in Section 4 (Customer's Installations - refer to Page Nos. 40-43) of the Company's tariff currently on file with the Commission.

COLUMBIA GAS OF PENNSYLVANIA, INC.
53.53 IV. RATE STRUCTURE
B. GAS UTILITIES

4. Provide an exhibit for each customer classification showing the following data for the test year and the four previous years.
- a. The maximum coincident peak day demand.
 - b. The maximum coincident three-day peak day demand.
 - c. The average monthly consumption in MCF during the primary heating season (November - March).
 - d. The average monthly consumption in MCF during the non-heating season (April - October).
 - e. The average daily consumption in MCF for each twelve-month period.

Response:

Consistent with the fact that Columbia now bills in therms, the requested information is provided in Dth. Data by customer class is provided in the response to GAS-COS-010.

- a. See Page 2.
- b. See Page 2.
- c. See Exhibit No. 10, Schedule No.2.
- d. See Exhibit No. 10, Schedule No.2.
- e. See Exhibit No. 10, Schedule No.2.

COLUMBIA GAS OF PENNSYLVANIA, INC.
53.53 IV. RATE STRUCTURE
B. GAS UTILITIES

Maximum Coincident Peak Day Demand (Dth)

<u>Twelve Months</u> <u>Ending</u>	11/30/2019	11/30/2018	11/30/2017	11/30/2016	11/30/2015
	748,896	746,405	641,074	631,317	740,229

Maximum Coincident Three-Day Peak Day Demand (Dth)

<u>Twelve Months</u> <u>Ending</u>	11/30/2019	11/30/2018	11/30/2017	11/30/2016	11/30/2015
Day 1	748,896	687,330	551,205	596,348	617,841
Day 2	681,801	746,412	578,140	550,658	740,299
Day 3	622,606	734,759	607,435	631,317	638,205

COLUMBIA GAS OF PENNSYLVANIA, INC.
53.53 IV. RATE STRUCTURE
B. GAS UTILITIES

13. Submit the projected demands for all customer classes for both purchased and produced gas for the three years following the test year filing.

Response:

Please see Exhibit No. 10, Schedule No. 6, Pages 2-4.

Columbia Gas of Pennsylvania, Inc
Analysis of the Average Monthly Consumption
Twelve Months Ended December 31, 2022

Line No.	Period	Residential					Commercial					Industrial						
		Sales		Trans	Through-	Average	Total Customers	Sales		Trans	Through-	Average	Total Customers	Sales		Trans	Through-	Average
		Volume	MDth	Volume	Put			Volume	MDth	Volume	MDth			Volume	MDth	Volume	MDth	
1	Jan	2022	403,114	4,776	1,968	6,745	16.7	37,317	1,724	2,390	4,113	110.2	267	26	2,193	2,219	8,310	
2	Feb		403,675	4,759	1,936	6,695	16.6	37,352	1,750	2,435	4,186	112.1	268	28	2,319	2,346	8,755	
3	Mar		403,978	3,950	1,627	5,577	13.8	37,342	1,401	2,000	3,401	91.1	267	26	2,186	2,213	8,287	
4	Apr		403,048	2,494	1,063	3,557	8.8	37,280	896	1,449	2,345	62.9	268	21	2,088	2,109	7,871	
5	May		401,582	1,134	491	1,625	4.0	37,171	489	852	1,341	36.1	268	8	1,924	1,932	7,210	
6	Jun		400,050	573	230	802	2.0	37,080	250	669	919	24.8	268	5	1,879	1,884	7,029	
7	Jul		398,962	351	135	486	1.2	37,000	197	534	731	19.7	269	5	1,774	1,779	6,615	
8	Aug		398,298	326	121	448	1.1	36,960	182	526	708	19.2	269	5	1,857	1,862	6,921	
9	Sep		398,439	338	127	465	1.2	36,924	202	570	771	20.9	268	5	1,849	1,854	6,917	
10	Oct		399,483	606	252	857	2.1	36,959	353	671	1,024	27.7	270	7	1,892	1,899	7,034	
11	Nov		401,744	1,535	637	2,172	5.4	37,080	590	1,224	1,814	48.9	269	13	1,988	2,000	7,436	
12	Dec	2022	403,986	3,540	1,431	4,971	12.3	37,232	1,285	1,873	3,158	84.8	267	19	2,058	2,077	7,778	
13																		
14	Total or Average		401,363	24,383	10,017	34,400	85.37	37,141	9,318	15,193	24,511	658.36	268	168	24,007	24,175	90,163.63	
15																		
16	Heating Season			18,560	7,599	26,159	65		6,750	9,922	16,672	447		112	10,743	10,855	40,566	
17	(November-March)																	
18	Non-Heating Season			5,823	2,418	8,241	21		2,568	5,271	7,839	211		56	13,263	13,320	49,597	
19	(April-October)																	
20	Daily Average = Total/365			66.80	27.44	94.25			25.53	41.62	67.15			0.46	65.77	66.23		

Columbia Gas of Pennsylvania, Inc
 Analysis of the Average Monthly Consumption
 Twelve Months Ended December 31, 2023

Line No.	Period	Residential					Commercial					Industrial					
		Customers	Sales	Trans	Through-	Average	Total Customers	Sales	Trans	Through-	Average	Total Customers	Sales	Trans	Through-	Average	
			Volume	Volume	Put			Volume	Volume	Volume			Volume	Put	Volume		Volume
			MDth	MDth	MDth	Dth/Cust		MDth	MDth	MDth	Dth/Cust		MDth	MDth	MDth	Dth/Cust	
1	Jan	2023	404,798	4,825	1,926	6,751	16.7	37,313	1,718	2,382	4,100	109.9	267	26	2,191	2,217	8,304
2	Feb		405,350	4,805	1,894	6,699	16.5	37,347	1,744	2,428	4,172	111.7	268	28	2,317	2,345	8,750
3	Mar		405,625	3,986	1,590	5,576	13.7	37,337	1,395	1,993	3,388	90.7	267	26	2,185	2,212	8,283
4	Apr		404,685	2,512	1,037	3,550	8.8	37,275	891	1,441	2,332	62.6	268	21	2,088	2,109	7,871
5	May		403,210	1,135	476	1,611	4.0	37,166	484	844	1,327	35.7	268	8	1,926	1,934	7,216
6	Jun		401,651	564	219	783	1.9	37,074	246	659	905	24.4	268	5	1,881	1,886	7,038
7	Jul		400,551	338	126	464	1.2	36,994	193	524	716	19.4	269	5	1,776	1,781	6,622
8	Aug		399,894	313	113	426	1.1	36,953	178	516	693	18.8	269	5	1,858	1,863	6,926
9	Sep		400,023	325	118	443	1.1	36,918	197	559	756	20.5	268	5	1,850	1,854	6,919
10	Oct		401,072	596	240	836	2.1	36,952	347	662	1,009	27.3	270	7	1,892	1,899	7,035
11	Nov		403,339	1,523	612	2,135	5.3	37,073	585	1,214	1,798	48.5	269	13	1,987	2,000	7,435
12	Dec	2023	405,569	3,572	1,399	4,971	12.3	37,225	1,278	1,864	3,141	84.4	267	19	2,056	2,075	7,773
13																	
14	Total or Average		402,980	24,496	9,750	34,246	84.64	37,136	9,255	15,085	24,340	653.85	268	168	24,009	24,177	90,171.24
15																	
16	Heating Season			18,712	7,421	26,132	65		6,720	9,880	16,600	445		112	10,737	10,849	40,544
17	(November-March)																
18	Non-Heating Season			5,784	2,329	8,113	20		2,535	5,204	7,740	209		56	13,271	13,328	49,627
19	(April-October)																
20	Daily Average = Total/365			67.11	26.71	93.82			25.36	41.33	66.68			0.46	65.78	66.24	

Columbia Gas of Pennsylvania, Inc
Analysis of the Average Monthly Consumption
Twelve Months Ended December 31, 2024

Line No.	Period	Residential					Commercial					Industrial								
		Customers	Sales	Trans	Through-	Average	Total Customers	Sales	Trans	Through-	Average	Total Customers	Sales	Trans	Through-	Average				
			Volume	Volume	Put			Volume	Volume	Volume			Volume	Put	Volume		Volume	Volume	Put	Volume
			MDth	MDth	MDth			Dth/Cust	MDth	MDth			MDth	Dth/Cust	MDth		MDth	MDth	Dth/Cust	
1	Jan	2024	406,388	4,871	1,883	6,755	16.6	37,305	1,710	2,373	4,083	109.5	270	26	2,189	2,214	8,202			
2	Feb		406,927	4,849	1,851	6,700	16.5	37,340	1,737	2,418	4,155	111.3	271	28	2,314	2,341	8,639			
3	Mar		407,208	4,019	1,553	5,572	13.7	37,329	1,388	1,983	3,370	90.3	269	26	2,181	2,207	8,205			
4	Apr		406,256	2,528	1,012	3,540	8.7	37,267	884	1,431	2,315	62.1	270	21	2,083	2,105	7,795			
5	May		404,769	1,135	461	1,596	3.9	37,158	477	833	1,311	35.3	270	8	1,920	1,928	7,142			
6	Jun		403,217	554	208	762	1.9	37,066	241	647	889	24.0	270	5	1,874	1,880	6,961			
7	Jul		402,133	325	117	442	1.1	36,986	188	512	700	18.9	272	5	1,769	1,774	6,523			
8	Aug		401,509	299	104	403	1.0	36,945	173	504	677	18.3	272	5	1,851	1,855	6,822			
9	Sep		401,654	312	109	422	1.0	36,910	193	547	740	20.1	271	5	1,842	1,847	6,814			
10	Oct		402,738	587	229	816	2.0	36,944	342	651	993	26.9	273	7	1,884	1,891	6,927			
11	Nov		405,005	1,512	588	2,100	5.2	37,066	579	1,203	1,782	48.1	271	13	1,979	1,991	7,348			
12	Dec	2024	407,269	3,605	1,367	4,972	12.2	37,217	1,271	1,854	3,125	84.0	269	19	2,047	2,066	7,681			
13																				
14	Total or Average		404,589	24,596	9,483	34,079	83.89	37,128	9,184	14,956	24,140	648.62	271	167	23,933	24,100	89,059.24			
15																				
16	Heating Season			18,856	7,243	26,099	64		6,685	9,830	16,515	443		111	10,709	10,821	40,076			
17	(November-March)																			
18	Non-Heating Season			5,739	2,240	7,980	20		2,499	5,126	7,625	206		56	13,224	13,280	48,983			
19	(April-October)																			
20	Daily Average = Total/365			67.39	25.98	93.37			25.16	40.98	66.14			0.46	65.57	66.03				

COLUMBIA GAS OF PENNSYLVANIA, INC.
53.53 III. BALANCE SHEET AND OPERATING STATEMENT
E. GAS UTILITIES

3. Submit a schedule showing a reconciliation of test year MCF sales and line losses. List all amounts of gas purchased, manufactured and transported.

Response:

See Page 2 attached. Note that the data is presented in DTH. Columbia Gas of PA converted from billing in MCFs to therms effective February 2012, as approved by the Commission at Docket No. R-2010-2215623.

COLUMBIA GAS OF PENNSYLVANIA, INC.
53.53 IV. RATE STRUCTURE
B. GAS UTILITIES

14. Supply an exhibit showing the gas deliveries to each customer class for the most recent 24 month period. The exhibit should identify the source of the gas, such as "purchased" (pipeline), "production" (includes purchases from local producers), "storage withdrawal", "propane/air", and "unaccounted for".

Response:

See Pages 2 and 3 attached. Note that the data is presented in DTH. Columbia Gas of PA converted from billing in MCFs to therms effective February 2012, as approved by the Commission at Docket No. R-2010-2215623.

Columbia Gas of Pennsylvania, Inc.
Twelve Months Ended November 30, 2019
Dth

Description	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Total
Requirements													
Residential	4,682,180	5,156,881	5,658,225	4,802,598	2,790,918	1,115,425	621,356	459,985	399,797	437,014	623,252	2,121,309	28,868,941
Commercial	1,356,408	1,627,525	1,785,272	1,479,925	868,753	359,149	227,945	182,542	172,043	188,920	241,262	618,839	9,108,583
Industrial	20,343	27,861	24,440	24,210	18,522	15,448	13,398	5,168	4,478	4,341	6,194	27,068	191,470
Public Authority	0	0	0	0	0	0	0	0	0	0	0	0	0
Unbilled Revenue - Dth	46,034	1,130,009	(1,411,018)	(636,977)	(1,421,039)	(508,038)	(166,924)	11,899	27,115	15,027	782,914	1,906,054	(224,945)
Other	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Retail	6,104,966	7,942,275	6,056,919	5,669,755	2,257,154	981,985	695,776	659,594	603,433	645,301	1,653,622	4,673,270	37,944,050
Other Company Use	11,704	11,399	11,077	10,570	7,810	6,291	5,231	(998)	4,041	4,170	4,322	8,547	84,164
Gas Left On For Reconnect/Gas Lost - Line Breaks	2,072	2,131	1,135	1,513	586	585	4,914	(3,898)	446	1,205	477	2,642	13,810
Gas Lost from Storage - Current	68	67	67	67	67	67	67	67	67	67	67	67	805.51
Non-Traditional Sales - Dth	394,250	251,222	30,000	95,400	92,500	39,000	10,500	18,600	37,624	237,300	7,686	61,800	1,275,882
Total Miscellaneous Deliveries	408,094	264,820	42,279	107,550	100,963	45,943	20,713	13,771	42,178	242,742	12,552	73,055	1,374,661
Unaccounted for - Losses in Black	(238,407)	(461,332)	484,758	(331,727)	(141,018)	(91,148)	52,904	(284,356)	48,566	122,315	(171,729)	981,986	(29,189)
Total Requirements	6,274,653	7,745,763	6,583,956	5,445,579	2,217,100	936,780	769,392	389,008	694,177	1,010,359	1,494,444	5,728,312	39,289,522
Supply													
Field Line Purchases	10,234	9,060	11,000	9,601	8,700	10,468	10,302	6,401	8,677	12,935	9,213	21,317	127,908
Transmission Line Purchases	3,298,780	1,252,685	753,093	1,620,832	4,108,427	3,582,441	4,210,109	3,405,855	4,071,486	3,349,630	2,277,363	2,333,555	34,264,256
City Gate Purchases	629,565	681,819	521,225	563,685	315,750	312,685	233,187	236,685	236,685	413,510	341,261	795,750	5,281,807
Other Purchased Gas Expenses	0	0	0	0	0	0	0	0	0	0	0	0	0
Exchange Activity	(559,083)	(1,196,716)	(384,609)	(748,772)	296,129	1,114,346	559,520	1,006,734	528,270	599,389	221,897	(353,973)	1,083,132
Total Purchases	3,379,496	746,848	900,710	1,445,347	4,729,006	5,019,940	5,013,118	4,655,675	4,845,118	4,375,464	2,849,734	2,796,649	40,757,104
Storage	2,895,089	6,998,848	5,683,179	4,000,165	(2,511,973)	(4,083,227)	(4,243,793)	(4,266,733)	(4,151,007)	(3,365,173)	(1,355,357)	2,931,596	(1,468,386)
Shrinkage	68	67	67	67	67	67	67	67	67	67	67	67	806
Gas Volumes Available - Steamed	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Supply	6,274,652	7,745,763	6,583,956	5,445,579	2,217,100	936,780	769,392	389,009	694,178	1,010,359	1,494,444	5,728,312	39,289,523

Columbia Gas of Pennsylvania, Inc.
Twelve Months Ended November 30, 2018
Dth

Description	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Total
Requirements													
Residential	4,057,259	6,638,650	4,953,198	3,996,104	3,776,425	1,532,079	532,660	443,659	403,595	435,160	654,154	2,419,546	29,842,489
Commercial	1,325,515	2,183,763	1,692,961	1,313,451	1,190,685	530,272	213,176	185,646	179,758	192,859	261,544	834,953	10,104,582
Industrial	19,444	31,545	24,242	17,086	15,840	8,963	4,867	4,668	4,512	5,307	6,152	10,986	153,612
Public Authority	0	0	0	0	0	0	0	0	0	0	0	0	0
Unbilled Revenue - Dth	1,572,000	(767,013)	(1,363,985)	603,901	(1,492,906)	(980,005)	(57,077)	14,060	21,061	94,020	1,115,095	1,736,820	495,971
Other	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Retail	6,974,218	8,086,946	5,306,416	5,930,543	3,490,043	1,091,309	693,626	648,033	608,926	727,346	2,036,945	5,002,305	40,596,654
Other Company Use	12,057	12,306	11,023	9,373	8,429	6,622	4,689	4,104	4,237	4,329	4,588	7,321	89,076
Gas Left On For Reconnect/Gas Lost - Line Breaks	948	(165)	576	71	100	297	394	(109)	3,062	80	2,266	1,675	9,196
Gas Lost from Storage - Current	67	67	67	67	67	67	66	67	67	66	67	67	801.63
Non-Traditional Sales - Dth	31,400	68,786	109,419	166,800	89,900	97,200	501,600	44,600	490,500	56,210	139,302	62,500	1,858,217
Total Miscellaneous Deliveries	44,473	80,994	121,085	176,310	98,497	104,186	506,749	48,661	497,865	60,685	146,223	71,564	1,957,290
Unaccounted for - Losses in Black	445,998	729,287	(726,262)	481,431	1,692,108	(2,119,957)	(97,243)	187,545	199,945	59,222	(311,487)	543,294	1,083,883
Total Requirements	7,464,688	8,897,227	4,701,238	6,588,284	5,280,648	(924,462)	1,103,132	884,240	1,306,736	847,253	1,871,680	5,617,163	43,637,828
Supply													
Field Line Purchases	10,326	10,119	8,403	10,225	9,952	10,677	9,879	8,020	8,078	9,172	9,999	11,581	116,431
Transmission Line Purchases	1,608,098	1,863,317	1,329,538	1,334,881	6,145,599	3,435,447	4,396,601	4,435,804	3,788,716	3,251,648	3,519,330	1,446,187	36,555,165
City Gate Purchases	643,085	658,686	509,280	671,792	409,288	234,000	310,605	232,500	234,300	236,400	322,976	603,935	5,066,847
Other Purchased Gas Expenses	0	0	0	0	0	0	0	0	0	0	0	0	0
Exchange Activity	(827,551)	(1,138,738)	(906,913)	(461,933)	175,157	(73,385)	762,559	555,773	653,321	373,290	(25,953)	(132,023)	(1,046,396)
Total Purchases	1,433,958	1,393,384	940,308	1,554,965	6,739,996	3,606,739	5,479,643	5,232,097	4,684,415	3,870,510	3,826,352	1,929,680	40,692,047
Storage	6,030,663	7,503,776	3,760,864	5,033,252	(1,459,415)	(4,531,268)	(4,376,578)	(4,347,923)	(3,377,745)	(3,023,323)	(1,954,738)	3,687,416	2,944,981
Shrinkage	67	67	67	67	67	67	66	66	67	66	67	67	801
Gas Volumes Available - Steamed	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Supply	7,464,688	8,897,227	4,701,239	6,588,285	5,280,647	(924,462)	1,103,131	884,240	1,306,737	847,253	1,871,680	5,617,163	43,637,828

COLUMBIA GAS OF PENNSYLVANIA, INC.

WEATHER NORMALIZATION ADJUSTMENT

Response: Residential and Commercial volumes have been normalized using the calculations provided in the following table.

Residential Normalization Routine											
		Normal = 2000		2019	20 year average			HDD	HDD	Normal	
		Actual	Dth/Cus		TS Actual	TS Normal	Normal	Actual	Normal	Dth	
	Customers	Dth	Actual	NTS							
2019	Jan	396,660	6,174,839	15.57	1.40	14.17	15.18	16.58	1018	1091	6,577,812
2019	Feb	397,257	6,759,491	17.02	1.24	15.77	15.55	16.79	1062	1047	6,670,981
2019	Mar	397,564	5,744,880	14.45	1.24	13.21	12.46	13.70	911	859	5,445,125
2019	Apr	396,747	3,340,663	8.42	1.27	7.15	7.49	8.76	525	550	3,475,801
2019	May	395,563	1,336,194	3.38	1.28	2.09	2.64	3.92	204	257	1,551,461
2019	Jun	394,045	744,047	1.89	1.29	0.59	0.80	2.09	61	82	824,746
2019	Jul	393,293	551,504	1.40	1.40	0.00	0.00	1.40	7	8	551,504
2019	Aug	392,735	476,465	1.21	1.21	0.00	0.00	1.21	1	2	476,465
2019	Sep	393,051	521,348	1.33	1.33	0.00	0.00	1.33	8	21	521,348
2019	Oct	394,141	743,359	1.89	1.25	0.63	0.87	2.12	116	159	835,830
2019	Nov	396,927	2,530,743	6.38	1.24	5.13	4.73	5.97	492	453	2,369,183
2018	Dec	395,703	5,615,074	14.19	1.36	12.83	11.27	12.62	951	835	4,995,696
			34,538,606	87.11	15.52	71.59	70.98	86.50	5356	5364	34,295,952

Commercial Normalization Routine											
		Normal = 2000		2019	20 year average			HDD	HDD	Normal	
		Actual	Dth/Cus		TS Actual	TS Normal	Normal	Actual	Normal	Dth	
	Customers	Dth	Actual	NTS							
2019	Jan	37,231	3,848,263	103.36	21.26	82.10	87.99	109.25	1018	1091	4,067,459
2019	Feb	37,280	4,272,300	114.60	18.85	95.75	94.40	113.25	1062	1047	4,221,880
2019	Mar	37,281	3,575,019	95.89	18.85	77.05	72.65	91.50	911	859	3,411,063
2019	Apr	37,257	2,305,237	61.87	19.24	42.63	44.66	63.90	525	550	2,380,869
2019	May	37,153	1,179,800	31.76	19.49	12.27	15.45	34.94	204	257	1,298,206
2019	Jun	37,057	852,684	23.01	19.64	3.37	4.53	24.17	61	82	895,665
2019	Jul	37,000	717,377	19.39	19.39	0.00	0.00	19.39	7	8	717,377
2019	Aug	36,988	711,639	19.24	19.24	0.00	0.00	19.24	1	2	711,639
2019	Sep	36,974	769,030	20.80	19.61	1.19	3.12	22.73	8	21	840,458
2019	Oct	37,002	931,671	25.18	19.03	6.15	8.43	27.46	116	159	1,016,010
2019	Nov	37,111	1,954,472	52.67	18.85	33.82	31.14	49.98	492	453	1,854,986
2018	Dec	37,202	3,519,856	94.61	20.62	74.00	64.97	85.59	951	835	3,184,077
			24,637,347	662.38	234.06	428.32	427.34	661.40	5356	5364	24,599,689

Exhibit No. 10
Schedule No. 9
Page 1 of 1
Witness: M. Bikienga

COLUMBIA GAS OF PENNSYLVANIA, INC.
VOLUMETRIC PORTION OF THE LOAD GROWTH ADJUSTMENT
TWELVE MONTHS ENDED NOVEMBER 30, 2019
53.62

Response:

Please see Exhibit 3, Schedule 5.

COLUMBIA GAS OF PENNSYLVANIA, INC.
53.53 IV. RATE STRUCTURE
B. GAS UTILITIES

1. Provide a Cost of Service Study showing the rate of return under the present and proposed tariffs for all customer classifications. The study should include a summary of the allocated measures of value, operating revenues, operating expenses and net return for each of the customer classifications at original cost and at the 5-year trended original cost.

Response: See Exhibit No. 111, Schedule Nos. 1 through 3

2. Provide a statement of testimony describing the complete methodology of the cost of service study.

Response: See Statement No. 11

3. Provide a complete description and back-up calculations for all allocation factors.

Response: See Statement No. 11 and related attachments.

9. Supply a cost analysis supporting minimum charges for all rate schedules.

Response: See Exhibit No. 111, Schedule No. 1, Pages 14 through 30.

10. Supply a cost analysis supporting demand charges for all tariffs, which contain demand charges.

Response: None of Columbia's tariff rate schedules contain a distribution cost demand charge.

COLUMBIA GAS OF PENNSYLVANIA, INC.
53.53 IV. RATE STRUCTURE
B. GAS UTILITIES

5. Submit a Bill Frequency Analysis for each rate. The analysis should include the rate schedule and block interval, the number of bills at each interval, the cumulative number of bills at each interval, the Mcf or therms at each interval, the cumulative Mcf or therms at each interval, the accumulation of Mcf or therms passing through each interval, and the revenue at each interval for both the present and the proposed rates. The Analysis should show only those revenues collected from the basic tariff.

Response: Refer to Exhibit No. 103, Schedule No.1 (Revenue @ Current Rates on a Forecast Adjusted Bills and Volume) and Exhibit No. 103, Schedule No. 7, (Revenue @ Proposed Rates Based on Forecast Adjusted Bills and Volume).

7. Supply a graph of present and proposed base rates on hyperbolic cross section paper.

Response: Refer to Exhibit No. 111, Schedule No.5.

12. Supply a tabulation of base rate bills for each rate schedule comparing the existing rates to proposed rates. The tabulation should show the dollar difference and the per cent increase or decrease.

Response: Refer to Exhibit No. 103, Schedule No.8 and Exhibit No. 111, Schedule 6.

COLUMBIA GAS OF PENNSYLVANIA, INC.
53.53 III. BALANCE SHEET AND OPERATING STATEMENT
A. ALL UTILITIES

47. Submit a schedule showing rate of return on facilities allocated to serve wholesale customers.

Response:

Columbia Gas of Pennsylvania, Inc. does not offer service to wholesale customers; therefore, no facilities were allocated within the class cost of service studies presented in Exhibit No. 111.

COLUMBIA GAS OF PENNSYLVANIA, INC
53.53 III. BALANCE SHEET AND OPERATING STATEMENT
E. GAS UTILITIES

5. Submit a schedule showing the sources of gas supply associated with annualized DTH sales.

Response:

The following schedule shows the sources of supply used to meet Columbia's sales during the twelve-month period ended November 30, 2019 (Historic Test Year).

	(MDth)
Interstate Pipeline Purchases	40,937
City Gate Purchases	548
Local Production	128
Storage	
Withdrawal	22,934
Injection	<u>(24,828)</u>
Net	(1,893)
All Sources	39,719

COLUMBIA GAS OF PENNSYLVANIA, INC
53.53 III. BALANCE SHEET AND OPERATING STATEMENT
E. GAS UTILITIES

18. If the utility has a Fuel Adjustment Clause:
- a. State the base fuel cost per MCF chargeable against basic customers' rates during the test year. If there was any change in this basic fuel charge during the test year, give details and explanation thereof.
 - b. State the amount in which the fuel adjustment clause cost per MCF exceeds the fuel cost per MCF charged in base rates at the end of the test year.
 - c. If fuel cost deferment is used at the end of the test year, give:
 - (i) The amount of deferred fuel cost contained in the operating statement that was deferred from the 12-month operating period immediately preceding the test year.
 - (ii) The amount of deferred fuel cost that was removed from the test period and deferred to the period immediately following the test year.
 - d. State the amount of Fuel Adjustment Clause revenues credited to the test year operating account.
 - e. State the amount of fuel cost charged to the operating expense account in the test year which is the basis of Fuel Adjustment Clause billings to customers in that year. Provide summary details of this charge.
 - f. From the recorded test year operating account, remove the Fuel Adjustment Clause Revenues. Also remove from the test year recorded operating account the excess of fuel cost over base rate fuel charges, which is the basis for the Fuel Adjustment charges. Explain any differences between FAC Revenues and excess fuel costs. [The above is intended to limit the operating account to existing customers' base rate revenues and expense deductions relative thereto].

COLUMBIA GAS OF PENNSYLVANIA, INC
53.53 III. BALANCE SHEET AND OPERATING STATEMENT
E. GAS UTILITIES

Response:

- a. Base Cost of Gas - Columbia Gas of Pennsylvania, Inc. files quarterly adjustments in compliance with 52 Pa. Code § 53.64 (i)(5)(iii), which permits gas utilities to update their gas cost recovery rate. During the test year, quarterly filings were made in October 2018, January 2019, April 2019, July 2019, and October 2019.
- b. Columbia Gas of Pennsylvania, Inc. eliminated the fuel adjustment clause in its 1985 1307(f) proceeding.
- c. (i) During the twelve month period ended November 30, 2018, the revenues exceeded the cost of purchased gas collected in tariff rates by \$98,126.

(ii) During the twelve month period ended November 30, 2019, the revenues exceeded the cost of purchased gas collected in tariff rates by \$7,656,084.
- d. All purchased gas costs are included in Base Tariff Rates for the twelve months ending November 30, 2019.
- e. The purchased gas cost charged to the operating expense account during the twelve month period ended November 30, 2019 totaled \$172,060,016.
- f. Please refer to Exhibit No.3, Schedule 1 for the adjustment to operating revenue and expense, which is also summarized on Exhibit No.3, Page 10.

COLUMBIA GAS OF PENNSYLVANIA, INC.
53.53 III. BALANCE SHEET AND OPERATING STATEMENT
E. GAS UTILITIES

23. Submit a schedule showing fuel cost in excess of base compared to fuel cost recovery for the period two months prior to test year and the test year.

Response:

Period	Excess of Fuel Costs \$
	1_/
Oct-18	(7,440,886)
Nov-18	(7,968,698)
Dec-18	(698,185)
Jan-19	2,426,449
Feb-19	12,872,333
Mar-19	8,706,736
Apr-19	7,399,918
May-19	(113,182)
Jun-19	(2,551,814)
Jul-19	(3,210,456)
Aug-19	(3,053,897)
Sep-19	(3,162,567)
Oct-19	(5,178,617)
Nov-19	(5,780,634)

1_/ Please refer to Exhibits No. 1-E, Schedule No. 4, Sheet 1a and 1b and Exhibit 1-A, Schedule 1, Sheet 5 of 6 of Columbia's January 1, 2020 quarterly PGC filing.

COLUMBIA GAS OF PENNSYLVANIA, INC
53.53 III. BALANCE SHEET AND OPERATING STATEMENT
E. GAS UTILITIES

24. Supply a detailed analysis of Purchased Gas for the test year and the twelve month period prior to the test year.

Response: Please see Exhibit No. 12, Schedule 4, pages 2 and 3 of 52.

26. Submit detailed calculations for bulk gas transmission service costs under supply and/or interconnection agreements.

Response: Columbia has no bulk transmission service agreements.

30. Provide a schedule showing suppliers, Mcf purchased, cost (small purchases from independent suppliers may be grouped); emergency purchases, listing same information; curtailments during the year; gas put into and taken out of storage; line loss, and any other gas input or output not in the ordinary course of business.

Response: Please see Exhibit No. 12, Schedule 4, pages 4 through 51.
These pages are Exhibit 1-D from Columbia's 2019 1307(f) filing at Docket No. R-2019-3008255.

36. State the amount of gas, in Dth, obtained through various suppliers in past years.

Response: Please see Exhibit No. 12, Schedule No. 4 (30).

COLUMBIA GAS OF PENNSYLVANIA, INC.
PURCHASED GAS ANALYSIS
TWELVE MONTHS ENDED NOVEMBER 30, 2018

Line No.	Account No.	Description	Volumes (1) Dth	Costs (2) \$
1	801	<u>Natural Gas Field Line Purchases</u>	116,431	322,136
2	803	<u>Natural Gas Transmission line Purchases</u>		
3		Non-Appalachian Sources	37,492,587	101,027,231
4		Transportation- Affiliates	0	0
5		Transportation- Non-Affiliates	(547,985)	43,474,802
6		Storage - Affiliates	0	0
7		Storage - Non-Affiliates	(389,437)	18,595,792
8		Off System Sales - Purchases	0	13,097
9		Off System Sales - Transportation	0	0
10		Total Transmission line Purchases	<u>36,555,165</u>	<u>163,110,922</u>
11	804	<u>Natural Gas City Gate Purchases</u>	5,085,923	14,826,742
12	805	<u>Propane Purchases</u>	0	0
13	806	<u>Exchange Gas (Net)</u>	(1,046,396)	(2,111,642)
14	807	<u>Broker Fees</u>	0	0
15	808	<u>Storage Activity</u>		
16		Gas Withdrawn from Underground Storage	26,866,703	77,123,188
17		Gas Delivered to Underground Storage	(23,920,920)	(64,720,374)
18		Total Gas Stored (Net)	<u>2,945,783</u>	<u>12,402,814</u>
19	813	<u>Exchange Fees</u>		
20		Fees - Nonaffiliated	0	0
21		Fees - Affiliated	0	0
22		Total Exchange Fees	<u>0</u>	<u>0</u>
23		<u>Gas Lost From Storage</u>	0	0
24		TOTAL GAS PURCHASED	43,656,906	188,550,972

() In Acct. No. 803 negative volumes denotes transportation fuel.

() In Acct. No. 808 denotes injection volumes & credit.

COLUMBIA GAS OF PENNSYLVANIA, INC.
PURCHASED GAS ANALYSIS
TWELVE MONTHS ENDED NOVEMBER 30, 2019

<u>Line No.</u>	<u>Account No.</u>	<u>Description</u>	<u>Volumes</u> (1) Dth	<u>Costs</u> (2) \$
1	801	<u>Natural Gas Field Line Purchases</u>	127,908	319,970
2	803	<u>Natural Gas Transmission line Purchases</u>		
3		Non-Appalachian Sources	35,247,220	83,677,021
4		Transportation- Affiliates	0	0
5		Transportation- Non-Affiliates	(557,332)	44,916,529
6		Storage - Affiliates	0	0
7		Storage - Non-Affiliates	(425,632)	18,589,560
8		Off System Sales - Purchases	0	9,360
9		Off System Sales - Transportation	0	0
10		Total Transmission line Purchases	<u>34,264,256</u>	<u>147,192,471</u>
11	804	<u>Natural Gas City Gate Purchases</u>	5,149,512	14,864,683
12	805	<u>Propane Purchases</u>	0	0
13	806	<u>Exchange Gas (Net)</u>	1,083,132	177,646
14	807	<u>Broker Fees</u>	0	0
15	808	<u>Storage Activity</u>		
16		Gas Withdrawn from Underground Storage	22,934,356	61,507,164
17		Gas Delivered to Underground Storage	(24,401,937)	(52,649,473)
18		Total Gas Stored (Net)	<u>(1,467,581)</u>	<u>8,857,691</u>
19	813	<u>Exchange Fees</u>		
20		Fees - Nonaffiliated	0	0
21		Fees - Affiliated	0	0
22		Total Exchange Fees	<u>0</u>	<u>0</u>
23		<u>Gas Lost From Storage</u>	0	0
24		TOTAL GAS PURCHASED	39,157,228	171,412,462

() In Acct. No. 803 negative volumes denotes transportation fuel.

() In Acct. No. 808 denotes injection volumes & credit.

EXHIBIT 1-D
SCHEDULE 1
SHEET 1 OF 3

COLUMBIA GAS OF PENNSYLVANIA, INC.
SUMMARY OF PURCHASED GAS COSTS
BY TYPE BY MONTH

LINE NO.	MONTH	CITY GATE PURCHASES (SCHEDULE 2)	NON-LOCAL PURCHASES (SCHEDULE 3)	LOCAL PURCHASES (SCHEDULE 4)	GAS STORED UNDERGROUND (SCHEDULE 5)	TRANSPORTATION & GATHERING (SCHEDULE 6)	TOTAL SCHEDULES (6=1+2+3+4+5)
		(1) \$	(2) \$	(3) \$	(4) \$	(5) \$	\$
1	FEBRUARY, 2018	2,714,813	3,363,136	23,565	12,392,438	4,102,827	22,596,779
2	MARCH	1,441,375	2,631,392	35,116	16,159,578	4,465,643	24,733,103
3	APRIL	946,412	15,942,585	24,678	(2,001,673)	2,874,635	17,786,636
4	MAY	555,381	8,860,033	27,454	(10,222,005)	2,772,605	1,993,469
5	JUNE	762,310	11,703,354	26,315	(10,310,621)	3,116,032	5,297,389
6	JULY	567,300	12,247,403	21,693	(10,455,074)	2,824,668	5,205,991
7	AUGUST	615,662	10,328,720	23,129	(7,669,113)	2,817,596	6,115,993
8	SEPTEMBER	604,750	8,891,335	24,485	(6,765,762)	2,816,881	5,571,689
9	OCTOBER	811,336	10,106,726	27,148	(4,084,549)	4,214,941	11,075,602
10	NOVEMBER	1,759,900	5,501,044	32,271	11,619,143	4,326,927	23,239,285
11	DECEMBER	3,091,411	14,190,947	36,667	9,290,501	4,421,930	31,031,457
12	JANUARY, 2019	3,128,196	4,993,860	33,716	20,795,974	4,452,907	33,404,653
13	TOTAL	16,998,845	108,760,534	336,236	18,748,838	43,207,592	188,052,044

EXHIBIT 1-D
SCHEDULE 1
SHEET 2 OF 3

COLUMBIA GAS OF PENNSYLVANIA, INC.
SUMMARY OF PURCHASED GAS COSTS
BY TYPE BY MONTH

LINE NO.	MONTH	CITY GATE PURCHASES (SCHEDULE 2)	NON-LOCAL PURCHASES (SCHEDULE 3)	LOCAL PURCHASES (SCHEDULE 4)	GAS STORED UNDERGROUND (SCHEDULE 5)	GAS STORED UNDERGROUND (SCHEDULE 5)	TRANSPORTATION & GATHERING (SCHEDULE 6)	TRANSPORTATION & GATHERING (SCHEDULE 6)	TOTAL	TOTAL	TOTAL
		COMMODITY (1) \$	COMMODITY (2) \$	COMMODITY (3) \$	DEMAND (4) \$	COMMODITY (5) \$	DEMAND (6) \$	COMMODITY (7) \$	DEMAND (8=4+6) \$	COMMODITY (9=1+2+3+5+7) \$	SCHEDULES (10=8+9) \$
1	FEBRUARY, 2018	2,714,813	3,363,136	23,565	1,487,540	10,904,898	3,976,272	126,555	5,463,812	17,132,967	22,596,779
2	MARCH	1,441,375	2,631,392	35,116	1,487,540	14,672,037	4,209,324	256,319	5,696,865	19,036,238	24,733,103
3	APRIL	946,412	15,942,585	24,678	1,487,540	(3,489,213)	2,724,026	150,609	4,211,566	13,575,070	17,786,636
4	MAY	555,381	8,860,033	27,454	1,487,540	(11,709,545)	2,735,299	37,306	4,222,840	(2,229,371)	1,993,469
5	JUNE	762,310	11,703,354	26,315	1,487,540	(11,798,161)	2,753,364	362,668	4,240,905	1,056,484	5,297,389
6	JULY	567,300	12,247,403	21,693	1,487,540	(11,942,614)	2,756,391	68,278	4,243,931	962,060	5,205,991
7	AUGUST	615,662	10,328,720	23,129	1,487,540	(9,156,653)	2,755,642	61,953	4,243,183	1,872,810	6,115,993
8	SEPTEMBER	604,750	8,891,335	24,485	1,487,540	(8,253,302)	2,746,554	70,327	4,234,094	1,337,595	5,571,689
9	OCTOBER	811,336	10,106,726	27,148	1,487,540	(5,572,089)	4,149,063	65,878	5,636,603	5,438,999	11,075,602
10	NOVEMBER	1,759,900	5,501,044	32,271	1,487,542	10,131,601	4,215,856	111,071	5,703,399	17,535,886	23,239,285
11	DECEMBER	3,091,411	14,190,947	36,667	1,487,542	7,802,959	4,304,147	117,783	5,791,690	25,239,767	31,031,457
12	JANUARY, 2019	3,128,196	4,993,860	33,716	1,487,542	19,308,432	4,289,927	162,980	5,777,469	27,627,184	33,404,653
13	TOTAL	16,998,845	108,760,534	336,236	17,850,488	898,350	41,615,867	1,591,725	59,466,354	128,585,690	188,052,044

EXHIBIT 1-D
SCHEDULE 1
SHEET 3 OF 3

COLUMBIA GAS OF PENNSYLVANIA, INC.
SUMMARY OF PURCHASED GAS COSTS
BY TYPE BY MONTH

LINE NO.	MONTH	CITY GATE PURCHASES (SCHEDULE 2)	NON-LOCAL PURCHASES (SCHEDULE 3)	LOCAL PURCHASES (SCHEDULE 4)	GAS STORED UNDERGROUND (SCHEDULE 5)	TRANSPORTATION & GATHERING (SCHEDULE 6)	TOTAL
		(1) Dth	(2) Dth	(3) Dth	(4) Dth	(5) Dth	(6=1+2+3+4+5) Dth
1	FEBRUARY, 2018	509,280	1,455,621	8,403	3,658,852	(24,003)	5,608,153
2	MARCH	671,792	1,420,321	10,225	4,977,218	(29,357)	7,050,199
3	APRIL	409,288	6,304,012	9,952	(1,526,281)	(91,607)	5,105,364
4	MAY	234,000	3,491,565	10,677	(4,537,896)	(49,643)	(851,297)
5	JUNE	319,605	4,464,687	9,879	(4,384,777)	(60,144)	349,250
6	JULY	232,500	4,514,377	8,020	(4,357,355)	(62,805)	334,737
7	AUGUST	244,376	3,842,390	8,078	(3,387,055)	(51,453)	656,336
8	SEPTEMBER	236,400	3,308,902	9,172	(3,032,169)	(48,830)	473,475
9	OCTOBER	322,976	3,576,943	9,999	(1,962,529)	(50,534)	1,896,855
10	NOVEMBER	603,935	1,476,247	11,581	3,680,072	(24,305)	5,747,530
11	DECEMBER	637,065	3,396,297	10,234	2,841,400	(49,926)	6,835,070
12	JANUARY, 2019	681,819	1,362,092	9,060	6,916,514	(24,034)	8,945,451
13	TOTAL	5,103,036	38,613,453	115,280	(1,114,006)	(566,641)	42,151,122

EXHIBIT 1-D
SCHEDULE 2
SHEET 1 OF 1

COLUMBIA GAS OF PENNSYLVANIA, INC.
SUMMARY OF HISTORIC COST OF
CITY GATE GAS PURCHASES

LINE NO.	MONTH	MERCURIA		TOTAL GAS
		VOLUME	RATE	COST
		(1) DTH	(2) \$/DTH	(3=1x2) \$
1	FEBRUARY, 2018	508,080	5.4195	2,753,540
2	ADJUSTMENT	1,200	5.1800	6,216
3	ADJUSTMENT	0	0.0000	(44,943)
4	MARCH	671,792	2.2645	1,521,242
5	ADJUSTMENT	0	0.0000	(79,867)
6	APRIL	409,250	2.3000	941,261
7	ADJUSTMENT	38	2.4397	93
8	ADJUSTMENT	0	0.0000	5,058
9	MAY	234,000	2.3697	554,515
10	ADJUSTMENT	0	0.0000	866
11	JUNE	320,880	2.3851	765,325
12	ADJUSTMENT	(1,275)	2.3652	(3,016)
13	JULY	232,500	2.4400	567,300
14	AUGUST	244,376	2.5193	615,662
15	SEPTEMBER	236,400	2.5581	604,745
16	ADJUSTMENT	0	0.0000	5
17	OCTOBER	322,976	2.5118	811,266
18	ADJUSTMENT	0	0.0000	70
19	NOVEMBER	603,935	2.9130	1,759,275
20	ADJUSTMENT	0	0.0000	624
21	ADJUSTMENT			
22	DECEMBER	637,065	4.8510	3,090,426
23	ADJUSTMENT	0	0.0000	985
24	JANUARY, 2019	681,705	4.5870	3,126,954
25	ADJUSTMENT	114	4.8647	555
26	ADJUSTMENT	0	0.0000	687
27	TOTAL	<u>5,103,036</u>		<u>16,998,845</u>

EXHIBIT 1-D
 SCHEDULE 3
 SHEET 1 OF 13

COLUMBIA GAS OF PENNSYLVANIA, INC.
 SUMMARY OF HISTORIC COST OF GAS PURCHASES
 NON-LOCAL, SHORT & LONG TERM

LINE NO.	MONTH	VOLUME	TOTAL COMMODITY DOLLARS
		(1) Dth	(2) \$
1	FEBRUARY, 2018	1,455,621	3,363,136
2	MARCH	1,420,321	2,631,392
3	APRIL	6,304,012	15,942,585
4	MAY	3,491,565	8,860,033
5	JUNE	4,464,687	11,703,354
6	JULY	4,514,377	12,247,403
7	AUGUST	3,842,390	10,328,720
8	SEPTEMBER	3,308,902	8,891,335
9	OCTOBER	3,576,943	10,106,726
10	NOVEMBER	1,476,247	5,501,044
11	DECEMBER	3,396,297	14,190,947
12	JANUARY, 2019	<u>1,362,092</u>	<u>4,993,860</u>
13	TOTAL	<u><u>38,613,453</u></u>	<u><u>108,760,534</u></u>

EXHIBIT 1-D
SCHEDULE 3
SHEET 2 OF 13

COLUMBIA GAS OF PENNSYLVANIA, INC.
SUMMARY OF HISTORIC COST OF GAS PURCHASES
NON-LOCAL, SHORT & LONG TERM
FEBRUARY 2018

LINE NO.	SUPPLIER	VOLUMES	TOTAL COMMODITY DOLLARS
		(1) Dth	(2) \$
1	<u>ESTIMATE</u>		
2	BIOURJA TRADING, LLC	190,000	488,875
3	BP ENERGY COMPANY	40,000	110,400
4	CASTLETON COMMODITIES MERCHANT TRADING L.P.	14,500	32,471
5	CENTERPOINT ENERGY SERVICES, INC.	2,600	7,943
6	CITIGROUP ENERGY INC.	25,000	65,313
7	CNX GAS COMPANY LLC	30,000	76,400
8	CONOCOPHILLIPS COMPANY	115,000	299,363
9	DTE ENERGY TRADING, INC.	10,000	26,125
10	EDF TRADING NORTH AMERICA, LLC	20,000	52,000
11	ELEVATION ENERGY GROUP	11,000	27,834
12	EQT ENERGY, LLC.	14,900	34,523
13	EXELON GENERATION COMPANY, LLC	9,999	25,447
14	FREEPOINT COMMODITIES LLC	4,500	10,058
15	INTERSTATE GAS SUPPLY, INC.	10,000	26,150
16	MACQUARIE ENERGY LLC	261,300	879,572
17	MERCURIA ENERGY GAS TRADING LLC	132,300	1,038,518
18	NEXTERA ENERGY POWER MARKETING, LLC	11,100	28,638
19	NJR ENERGY SERVICES COMPANY	2,400	5,424
20	RANGE RESOURCES	88,900	236,887
21	REPSOL ENERGY NORTH AMERICA CORPORATION	8,000	21,175
22	SEQUENT ENERGY MANAGEMENT, LP	285,600	953,904
23	SNYDER BROTHERS INC.	21,000	43,365
24	SOUTH JERSEY RESOURCES GROUP, LLC	1,500	3,353
25	EQUINOR ASA	40,000	107,375
26	SOUTHWEST ENERGY, L.P.	5,000	13,500
27	UNITED ENERGY TRADING, LLC	20,000	60,300
28	WASHINGTON GAS LIGHT COMPANY	44,900	123,938
29	WGL MIDSTREAM, INC	20,100	52,612
30	TOTAL ESTIMATE	1,439,599	4,851,461
31	<u>ADJUST TO ACTUAL</u>		
32	MERCURIA ENERGY GAS TRADING LLC	0	351
33	EQT ENERGY, LLC.	0	17
34	GAS LOST DUE TO LINE HITS	(39)	(156)
35	ICE CHARGES	0	275
36	GAS SOLD TO SHIPPER (RADS 3.11)	(8,796)	(67,573)
37	GAS PURCHASED FROM SHIPPER (RADS 3.12)	24,856	58,098
38	OMO/OFO CHARGES (RADS 3.7, 3.8, 4.11)	0	(1,478,714)
39	CHOICE NON-COMPLIANCE CHARGES (RADS 4.12)	0	(626)
40	GAS LEFT ON FOR RECONNECT	1	3
41	TOTAL ADJUST TO ACTUAL	16,022	(1,488,324)
42	TOTAL SCHEDULE 3, SHEET 2	1,455,621	3,363,136

EXHIBIT 1-D
SCHEDULE 3
SHEET 3 OF 13

COLUMBIA GAS OF PENNSYLVANIA, INC.
SUMMARY OF HISTORIC COST OF GAS PURCHASES
NON-LOCAL, SHORT & LONG TERM
MARCH 2018

LINE NO.	SUPPLIER	TOTAL COMMODITY DOLLARS	
		VOLUMES	
		(1)	(2)
		Dth	\$
1	<u>ESTIMATE</u>		
2	BIOURJA TRADING, LLC	338,800	835,738
3	BP ENERGY COMPANY	107,000	260,293
4	CITIGROUP ENERGY INC.	197,000	493,333
5	CONOCOPHILLIPS COMPANY	15,500	39,021
6	DIRECT ENERGY BUSINESS MARKETING, LLC	7,500	18,075
7	DTE ENERGY TRADING, INC.	500	1,186
8	ELEVATION ENERGY GROUP	45,000	108,506
9	EQT ENERGY, LLC.	49,100	122,742
10	ESERVICES, LLC	500	1,268
11	GREYLOCK ENERGY, LLC	21,900	54,715
12	INTERSTATE GAS SUPPLY, INC.	70,100	167,703
13	MACQUARIE ENERGY LLC	109,000	273,994
14	MERCURIA ENERGY GAS TRADING LLC	59,700	132,398
15	NEXTERA ENERGY POWER MARKETING, LLC	63,400	158,082
16	RANGE RESOURCES	61,300	152,025
17	SNYDER BROTHERS INC.	3,400	8,330
18	SPRAGUE OPERATING RESOURCES LLC	1,000	2,510
19	EQUINOR ASA	16,000	40,918
20	SOUTHWEST ENERGY, L.P.	5,000	12,888
21	TENASKA GAS STORAGE, LLC	145,400	367,532
22	UNITED ENERGY TRADING, LLC	5,000	12,800
23	VITOL INC.	49,200	122,942
24	WASHINGTON GAS LIGHT COMPANY	80,000	200,775
25	TOTAL ESTIMATE	<u>1,451,300</u>	<u>3,587,772</u>
26	<u>ADJUST TO ACTUAL</u>		
27	MERCURIA ENERGY GAS TRADING LLC	0	(637,780)
28	EQT ENERGY, LLC.	0	17
29	GAS LOST DUE TO LINE HITS	(63)	(261)
30	ICE CHARGES	0	135
31	GAS SOLD TO SHIPPER (RADS 3.11)	(40,022)	(333,383)
32	GAS PURCHASED FROM SHIPPER (RADS 3.12)	9,124	17,905
33	OMO/OFO CHARGES (RADS 3.7, 3.8, 4.11)	0	(2,958)
34	GAS LEFT ON FOR RECONNECT	(18)	(54)
35	TOTAL ADJUST TO ACTUAL	<u>(30,979)</u>	<u>(956,380)</u>
36	TOTAL SCHEDULE 3, SHEET 3	<u>1,420,321</u>	<u>2,631,392</u>

EXHIBIT 1-D
SCHEDULE 3
SHEET 4 OF 13

COLUMBIA GAS OF PENNSYLVANIA, INC.
SUMMARY OF HISTORIC COST OF GAS PURCHASES
NON-LOCAL, SHORT & LONG TERM
APRIL 2018

LINE NO.	SUPPLIER	VOLUMES	TOTAL COMMODITY DOLLARS
		(1) Dth	(2) \$
1	<u>ESTIMATE</u>		
2	BIOURJA TRADING, LLC	1,242,478	3,226,712
3	BP ENERGY COMPANY	41,300	104,714
4	CASTLETON COMMODITIES MERCHANT TRADING L.P.	9,500	23,849
5	CHEVRON NATURAL GAS	54,500	113,825
6	CITIGROUP ENERGY INC.	9,200	23,437
7	CNX GAS COMPANY LLC	285,999	734,050
8	COKINOS ENERGY CORPORATION	15,000	38,525
9	CONCORD ENERGY LLC	7,200	18,252
10	CONOCOPHILLIPS COMPANY	7,500	19,706
11	DIRECT ENERGY BUSINESS MARKETING, LLC	10,000	25,225
12	DTE ENERGY TRADING, INC.	7,100	18,567
13	EDF TRADING NORTH AMERICA, LLC	71,700	183,833
14	ELEVATION ENERGY GROUP	10,500	28,108
15	EQT ENERGY, LLC.	640,000	1,582,475
16	EXELON GENERATION COMPANY, LLC	336,998	841,317
17	ESERVICES, LLC	2,100	5,433
18	GREEN PLAINS ENERGY SERVICES	7,500	19,125
19	GREYLOCK ENERGY, LLC	6,600	16,401
20	INTERSTATE GAS SUPPLY, INC.	85,700	217,770
21	J. ARON & COMPANY	27,000	66,690
22	KAISER MARKETING APPALACHIAN, LLC	149,500	388,693
23	MACQUARIE ENERGY LLC	218,900	556,192
24	MERCURIA ENERGY GAS TRADING LLC	559,300	1,275,591
25	mitsui & co. ENERGY MARKETING AND SERVICES, INC	3,000	7,755
26	MUNICH RE TRADING LLC	300,000	747,750
27	NEXTERA ENERGY POWER MARKETING, LLC	24,900	65,418
28	RANGE RESOURCES	345,500	863,239
29	SHELL ENERGY NORTH AMERICA, L.P.	5,700	14,663
30	SNYDER BROTHERS INC.	4,200	11,132
31	SOUTH JERSEY RESOURCES GROUP, LLC	5,000	13,125
32	SPOTLIGHT ENERGY LLC	24,100	62,114
33	EQUINOR ASA	10,000	25,175
34	TWIN EAGLE RESOURCE MANAGEMENT, LLC	2,400	6,450
35	UNITED ENERGY TRADING, LLC	55,000	146,350
36	VITOL INC.	863,500	2,264,941
37	WASHINGTON GAS ENERGY SERVICES, INC.	784,200	2,020,081
38	WASHINGTON GAS LIGHT COMPANY	46,500	121,769
39	WGL MIDSTREAM, INC	10,000	25,538
40	TOTAL ESTIMATE	<u>6,289,575</u>	<u>15,923,986</u>
41	<u>ADJUST TO ACTUAL</u>		
42	MERCURIA ENERGY GAS TRADING LLC	0	601
43	EQT ENERGY, LLC.	0	17
44	GAS LOST DUE TO LINE HITS	(133)	(549)
45	ICE CHARGES	0	329
46	GAS SOLD TO SHIPPER (RADS 3.11)	(297)	(967)
47	GAS PURCHASED FROM SHIPPER (RADS 3.12)	14,994	29,391
48	OMO/OFO CHARGES (RADS 3.7, 3.8, 4.11)	0	(9,786)
49	CHOICE NON-COMPLIANCE CHARGES (RADS 4.12)	0	(64)
50	GAS LEFT ON FOR RECONNECT	(127)	(374)
51	TOTAL ADJUST TO ACTUAL	<u>14,437</u>	<u>18,598</u>
52	TOTAL SCHEDULE 3, SHEET 4	<u>6,304,012</u>	<u>15,942,585</u>

EXHIBIT 1-D
SCHEDULE 3
SHEET 5 OF 13

COLUMBIA GAS OF PENNSYLVANIA, INC.
SUMMARY OF HISTORIC COST OF GAS PURCHASES
NON-LOCAL, SHORT & LONG TERM
MAY 2018

LINE NO.	SUPPLIER	TOTAL COMMODITY DOLLARS	
		VOLUMES	DOLLARS
		(1)	(2)
		Dth	\$
1	ESTIMATE		
2	BP ENERGY COMPANY	40,000	80,800
3	CASTLETON COMMODITIES MERCHANT TRADING L.P.	2,500	5,993
4	CHEVRON NATURAL GAS	2,000	4,340
5	CITIGROUP ENERGY INC.	13,500	31,609
6	CNX GAS COMPANY LLC	194,771	482,143
7	COKINOS ENERGY CORPORATION	25,000	61,338
8	COLONIAL ENERGY, INC	5,000	12,750
9	DIRECT ENERGY BUSINESS MARKETING, LLC	6,000	14,140
10	DOMINION ENERGY FIELD SERVICES, INC.	2,000	5,550
11	DOMINION ENERGY FUEL SERVICES, INC.	14,200	34,222
12	ELEVATION ENERGY GROUP	97,200	245,669
13	EQT ENERGY, LLC.	42,300	107,983
14	ESERVICES, LLC	1,000	2,635
15	GREYLOCK ENERGY, LLC	1,500	3,765
16	INTERSTATE GAS SUPPLY, INC.	20,000	52,050
17	KAISER MARKETING APPALACHIAN, LLC	30,100	65,202
18	MACQUARIE ENERGY LLC	730,900	1,905,504
19	MERCURIA ENERGY GAS TRADING LLC	1,237,385	3,084,735
20	NEXTERA ENERGY POWER MARKETING, LLC	76,200	195,524
21	RANGE RESOURCES	61,100	159,139
22	SEQUENT ENERGY MANAGEMENT, LP	1,500	3,555
23	SNYDER BROTHERS INC.	7,500	19,050
24	SOUTHWESTERN ENERGY SERVICES COMPANY	6,500	14,201
25	SPOTLIGHT ENERGY LLC	25,300	64,228
26	EQUINOR ASA	25,700	64,938
27	TEXLA ENERGY MANAGEMENT, INC	13,500	34,963
28	TOTAL GAS & POWER NORTH AMERICA, INC.	5,500	12,469
29	TWIN EAGLE RESOURCE MANAGEMENT, LLC	4,800	12,120
30	UNITED ENERGY TRADING, LLC	170,000	446,830
31	VITOL INC.	620,000	1,620,370
32	WASHINGTON GAS LIGHT COMPANY	10,000	24,950
33	TOTAL ESTIMATE	3,492,956	8,872,761
34	<u>ADJUST TO ACTUAL</u>		
35	MERCURIA ENERGY GAS TRADING LLC	0	1,188
36	EQT ENERGY, LLC.	(5)	(1,629)
37	GAS LOST DUE TO LINE HITS	(68)	(283)
38	ICE CHARGES	0	356
39	GAS SOLD TO SHIPPER (RADS 3.11)	(4,606)	(15,658)
40	GAS PURCHASED FROM SHIPPER (RADS 3.12)	3,508	6,888
41	OMO/OFO CHARGES (RADS 3.7, 3.8, 4.11)	0	(2,938)
42	GAS LEFT ON FOR RECONNECT	(220)	(651)
43	TOTAL ADJUST TO ACTUAL	(1,391)	(12,728)
44	TOTAL SCHEDULE 3, SHEET 5	3,491,565	8,860,033

EXHIBIT 1-D
SCHEDULE 3
SHEET 6 OF 13

COLUMBIA GAS OF PENNSYLVANIA, INC.
SUMMARY OF HISTORIC COST OF GAS PURCHASES
NON-LOCAL, SHORT & LONG TERM
JUNE 2018

LINE NO.	SUPPLIER	VOLUMES	TOTAL COMMODITY DOLLARS
		(1) Dth	(2) \$
1	<u>ESTIMATE</u>		
2	BP ENERGY COMPANY	147,200	376,795
3	CENTERPOINT ENERGY SERVICES, INC.	35,000	99,488
4	CHEVRON NATURAL GAS	87,300	190,889
5	CITIGROUP ENERGY INC.	500	1,394
6	CNX GAS COMPANY LLC	10,000	26,600
7	CONOCOPHILLIPS COMPANY	617,400	1,635,420
8	DIRECT ENERGY BUSINESS MARKETING, LLC	50,000	132,475
9	DTE ENERGY TRADING, INC.	307,500	814,288
10	EDF TRADING NORTH AMERICA, LLC	102,100	273,213
11	ELEVATION ENERGY GROUP	41,000	111,456
12	EQT ENERGY, LLC.	245,906	659,353
13	EXELON GENERATION COMPANY, LLC	5,000	13,950
14	FREEPOINT COMMODITIES LLC	1,800	5,018
15	GREYLOCK ENERGY, LLC	20,900	56,236
16	INTERSTATE GAS SUPPLY, INC.	47,400	127,032
17	KAISER MARKETING APPALACHIAN, LLC	2,500	6,663
18	MACQUARIE ENERGY LLC	390,500	1,020,058
19	MERCURIA ENERGY GAS TRADING LLC	588,850	1,393,633
20	NEXTERA ENERGY POWER MARKETING, LLC	15,500	41,676
21	NJR ENERGY SERVICES COMPANY	4,400	12,386
22	RANGE RESOURCES	661,000	1,744,260
23	SHELL ENERGY NORTH AMERICA	35,000	96,150
24	SNYDER BROTHERS INC.	8,700	24,251
25	SPOTLIGHT ENERGY LLC	8,200	22,878
26	EQUINOR ASA	15,000	39,938
27	TENASKA GAS STORAGE, LLC	30,000	79,875
28	TEXLA ENERGY MANAGEMENT, INC	27,300	72,257
29	TOTAL GAS & POWER NORTH AMERICA, INC.	1,200	3,198
30	TWIN EAGLE RESOURCE MANAGEMENT, LLC	1,000	2,770
31	UNITED ENERGY TRADING, LLC	281,276	781,841
32	VITOL INC.	626,600	1,751,348
33	WGL MIDSTREAM, INC	116,700	330,489
34	TOTAL ESTIMATE	<u>4,532,732</u>	<u>11,947,273</u>
35	<u>ADJUST TO ACTUAL</u>		
36	MERCURIA ENERGY GAS TRADING LLC	0	1,893
37	EQT ENERGY, LLC.	7,500	21,280
38	GAS LOST DUE TO LINE HITS	(93)	(391)
39	ICE CHARGES	0	263
40	GAS SOLD TO SHIPPER (RADS 3.11)	(2,231)	(7,631)
41	GAS PURCHASED FROM SHIPPER (RADS 3.12)	5,274	10,908
42	OMO/OFO CHARGES (RADS 3.7, 3.8, 4.11)	0	(25,009)
43	CHOICE INTERIM CASH OUT	(78,173)	(243,898)
44	CHOICE NON-COMPLIANCE CHARGES (RADS 4.12)	0	(373)
45	GAS LEFT ON FOR RECONNECT	(323)	(960)
46	TOTAL ADJUST TO ACTUAL	<u>(68,045)</u>	<u>(243,920)</u>
47	TOTAL SCHEDULE 3, SHEET 6	<u>4,464,687</u>	<u>11,703,354</u>

EXHIBIT 1-D
 SCHEDULE 3
 SHEET 7 OF 13

COLUMBIA GAS OF PENNSYLVANIA, INC.
 SUMMARY OF HISTORIC COST OF GAS PURCHASES
 NON-LOCAL, SHORT & LONG TERM
 JULY 2018

LINE NO.	SUPPLIER	TOTAL COMMODITY DOLLARS	
		VOLUMES	
		(1)	(2)
		Dth	\$
1	<u>ESTIMATE</u>		
2	BP ENERGY COMPANY	17,500	44,363
3	CENTERPOINT ENERGY SERVICES, INC.	48,800	131,320
4	CITIGROUP ENERGY INC.	20,000	56,150
5	COKINOS ENERGY CORPORATION	40,600	110,766
6	CONOCOPHILLIPS COMPANY	13,100	33,755
7	DIRECT ENERGY BUSINESS MARKETING, LLC	324,200	907,560
8	DTE ENERGY TRADING, INC.	54,200	142,659
9	ELEVATION ENERGY GROUP	1,600	4,106
10	EQT ENERGY, LLC.	360,500	1,052,926
11	EXELON GENERATION COMPANY, LLC	657,800	1,840,726
12	INTERSTATE GAS SUPPLY, INC.	40,000	105,325
13	J. ARON & COMPANY	27,800	71,557
14	KAISER MARKETING APPALACHIAN, LLC	8,200	22,090
15	KOCH ENERGY SERVICES, LLC	30,000	80,400
16	MACQUARIE ENERGY LLC	124,600	325,916
17	MERCURIA ENERGY GAS TRADING LLC	459,885	1,093,607
18	NEXTERA ENERGY POWER MARKETING, LLC	94,600	248,344
19	SEQUENT ENERGY MANAGEMENT, LP	60,000	160,650
20	SOUTH JERSEY RESOURCES GROUP, LLC	1,200	3,192
21	SPIRE MARKETING INC.	340,000	950,800
22	SPOTLIGHT ENERGY LLC	11,000	29,333
23	SPRAGUE OPERATING RESOURCES LLC	800	2,152
24	EQUINOR ASA	77,700	208,901
25	TENASKA GAS STORAGE, LLC	310,000	869,550
26	TENASKA MARKETING VENTURES	4,000	10,980
27	TOTAL GAS & POWER NORTH AMERICA, INC.	5,600	14,184
28	TWIN EAGLE RESOURCE MANAGEMENT, LLC	2,200	5,668
29	UNITED ENERGY TRADING, LLC	259,400	708,292
30	VITOL INC.	1,111,900	2,970,028
31	WASHINGTON GAS LIGHT COMPANY	5,000	13,775
32	TOTAL ESTIMATE	<u>4,512,185</u>	<u>12,219,070</u>
33	<u>ADJUST TO ACTUAL</u>		
34	MERCURIA ENERGY GAS TRADING LLC	0	2,197
35	EQT ENERGY, LLC.	0	(617)
36	GAS LOST DUE TO LINE HITS	(737)	(3,132)
37	ICE CHARGES	0	468
38	GAS PURCHASED FROM SHIPPER (RADS 3.12)	3,340	6,321
39	OMO/OFO CHARGES (RADS 3.7, 3.8, 4.11) - ADJ	0	24,603
40	CHOICE NON-COMPLIANCE CHARGES (RADS 4.12)	0	(284)
41	GAS LEFT ON FOR RECONNECT	(411)	(1,222)
42	TOTAL ADJUST TO ACTUAL	<u>2,192</u>	<u>28,334</u>
43	TOTAL SCHEDULE 3, SHEET 7	<u>4,514,377</u>	<u>12,247,403</u>

COLUMBIA GAS OF PENNSYLVANIA, INC.
SUMMARY OF HISTORIC COST OF GAS PURCHASES
NON-LOCAL, SHORT & LONG TERM
AUGUST 2018

LINE NO.	SUPPLIER	TOTAL COMMODITY DOLLARS	
		VOLUMES	
		(1)	(2)
		Dth	\$
1	<u>ESTIMATE</u>		
2	BP ENERGY COMPANY	4,000	10,589
3	CASTLETON COMMODITIES MERCHANT TRADING L.P.	620,000	1,622,850
4	CENTERPOINT ENERGY SERVICES, INC.	10,000	28,200
5	CHEVRON NATURAL GAS	17,200	44,869
6	EQT ENERGY, LLC.	242,500	689,075
7	EQUINOR ASA	30,700	86,685
8	GREYLOCK ENERGY, LLC	68,400	178,852
9	KAISER MARKETING APPALACHIAN, LLC	10,000	28,150
10	MACQUARIE ENERGY LLC	124,000	322,028
11	MERCURIA ENERGY GAS TRADING LLC	458,085	1,126,889
12	NEXTERA ENERGY POWER MARKETING, LLC	10,000	26,850
13	NJR ENERGY SERVICES COMPANY	7,900	22,302
14	SEQUENT ENERGY MANAGEMENT, LP	14,800	41,243
15	SPIRE MARKETING INC.	140,000	394,200
16	UNITED ENERGY TRADING, LLC	55,000	154,725
17	VITOL INC.	2,015,000	5,517,238
18	TOTAL ESTIMATE	<u>3,827,585</u>	<u>10,294,744</u>
19	<u>ADJUST TO ACTUAL</u>		
20	MERCURIA ENERGY GAS TRADING LLC	0	1,656
21	EQT ENERGY, LLC.	0	(2,349)
22	VITOL INC.	0	(3,306)
23	GAS LOST DUE TO LINE HITS	(169)	(715)
24	ICE CHARGES	0	226
25	GAS SOLD TO SHIPPER (RADS 3.11)	(19)	(66)
26	GAS PURCHASED FROM SHIPPER (RADS 3.12)	1,788	3,790
27	LEGAL SETTLEMENT FROM HEDGING PROGRAM	0	(479)
28	CHOICE ANNUAL CASH OUT	13,681	37,854
29	CHOICE NON-COMPLIANCE CHARGES (RADS 4.12)	0	(1,277)
30	GAS LEFT ON FOR RECONNECT	(476)	(1,356)
31	TOTAL ADJUST TO ACTUAL	<u>14,805</u>	<u>33,977</u>
32	TOTAL SCHEDULE 3, SHEET 8	<u><u>3,842,390</u></u>	<u><u>10,328,720</u></u>

COLUMBIA GAS OF PENNSYLVANIA, INC.
SUMMARY OF HISTORIC COST OF GAS PURCHASES
NON-LOCAL, SHORT & LONG TERM
SEPTEMBER 2018

LINE NO.	SUPPLIER	TOTAL COMMODITY DOLLARS	
		VOLUMES	
		(1)	(2)
		Dth	\$
1	<u>ESTIMATE</u>		
2	BIOURJA TRADING, LLC	305,600	816,662
3	BP ENERGY COMPANY	15,000	34,013
4	CASTLETON COMMODITIES MERCHANT TRADING L.P.	500	1,319
5	CENTERPOINT ENERGY SERVICES, INC.	14,000	36,813
6	DIRECT ENERGY BUSINESS MARKETING, LLC	45,000	113,063
7	DTE ENERGY TRADING, INC.	10,000	27,550
8	ELEVATION ENERGY GROUP	33,000	86,625
9	EQT ENERGY, LLC.	277,600	797,093
10	EQUINOR ASA	600,000	1,600,500
11	FREEPOINT COMMODITIES LLC	6,000	15,150
12	GREYLOCK ENERGY, LLC	15,400	39,666
13	INTERSTATE GAS SUPPLY, INC.	44,600	122,668
14	J. ARON & COMPANY	40,000	113,075
15	KAISER MARKETING APPALACHIAN, LLC	10,000	27,100
16	MACQUARIE ENERGY LLC	117,100	316,168
17	MERCURIA ENERGY GAS TRADING LLC	484,150	1,222,240
18	NEXTERA ENERGY POWER MARKETING, LLC	4,500	12,173
19	RANGE RESOURCES	300,000	801,000
20	SHELL ENERGY NORTH AMERICA, L.P.	600	1,473
21	SNYDER BROTHERS INC.	16,600	44,903
22	SOUTH JERSEY RESOURCES GROUP, LLC	4,000	10,480
23	SOUTHWEST ENERGY, L.P.	1,500	3,788
24	SPRAGUE ENERGY CORP.	5,100	12,508
25	SOUTHWESTERN ENERGY SERVICES COMPANY	19,500	51,902
26	UNITED ENERGY TRADING, LLC	45,000	123,688
27	VITOL INC.	896,000	2,488,408
28	TOTAL ESTIMATE	<u>3,310,750</u>	<u>8,920,023</u>
29	<u>ADJUST TO ACTUAL</u>		
30	MERCURIA ENERGY GAS TRADING LLC	0	1,283
31	EQT ENERGY, LLC.	0	(2,056)
32	GAS LOST DUE TO LINE HITS	(1,413)	(6,016)
33	ICE CHARGES	0	150
34	GAS SOLD TO SHIPPER (RADS 3.11)	(1,880)	(6,842)
35	GAS PURCHASED FROM SHIPPER (RADS 3.12)	1,933	4,276
36	OMO/OFO CHARGES (RADS 3.7, 3.8, 4.11)	0	(17,529)
37	CHOICE NON-COMPLIANCE CHARGES (RADS 4.12)	0	(442)
38	GAS LEFT ON FOR RECONNECT	(488)	(1,513)
39	TOTAL ADJUST TO ACTUAL	<u>(1,848)</u>	<u>(28,688)</u>
40	TOTAL SCHEDULE 3, SHEET 9	<u><u>3,308,902</u></u>	<u><u>8,891,335</u></u>

EXHIBIT 1-D
SCHEDULE 3
SHEET 10 OF 13

COLUMBIA GAS OF PENNSYLVANIA, INC.
SUMMARY OF HISTORIC COST OF GAS PURCHASES
NON-LOCAL, SHORT & LONG TERM
OCTOBER 2018

LINE NO.	SUPPLIER	TOTAL COMMODITY DOLLARS	
		VOLUMES	DOLLARS
		(1)	(2)
		Dth	\$
1	<u>ESTIMATE</u>		
2	BIOURJA TRADING, LLC	93,000	262,353
3	BP ENERGY COMPANY	21,000	64,995
4	CENTERPOINT ENERGY SERVICES, INC.	36,300	114,708
5	CITADEL ENERGY MARKETING LLC	310,000	843,200
6	CITIGROUP ENERGY INC.	30,000	90,650
7	CNX GAS COMPANY LLC	25,000	73,938
8	COKINOS ENERGY CORPORATION	18,500	59,543
9	DTE ENERGY TRADING, INC.	49,100	153,647
10	DOMINION ENERGY FUEL SERVICES, INC	49,800	146,537
11	EDF TRADING NORTH AMERICA, LLC	19,800	59,895
12	ELEVATION ENERGY GROUP	17,500	54,125
13	EQT ENERGY, LLC.	276,400	811,502
14	EQUINOR ASA	825,000	2,257,238
15	EXELON GENERATION COMPANY, LLC	20,300	60,250
16	GREYLOCK ENERGY, LLC	397,700	1,168,468
17	INTERSTATE GAS SUPPLY, INC.	40,000	126,125
18	J. ARON & COMPANY	3,500	10,693
19	KAISER MARKETING APPALACHIAN, LLC	20,000	60,425
20	MACQUARIE ENERGY LLC	148,800	463,770
21	MERCURIA ENERGY GAS TRADING LLC	489,109	1,275,946
22	NEXTERA ENERGY POWER MARKETING, LLC	43,800	134,063
23	NJR ENERGY SERVICES COMPANY	12,500	39,038
24	RANGE RESOURCES	186,500	523,716
25	SEQUENT ENERGY MANAGEMENT, LP	55,200	166,980
26	SOUTH JERSEY RESOURCES GROUP, LLC	18,900	43,997
27	SPIRE MARKETING INC. (LACLEDE ENERGY)	51,600	156,312
28	SPOTLIGHT ENERGY LLC	4,600	7,820
29	SOUTHWESTERN ENERGY SERVICES COMPANY	10,000	31,775
30	TENASKA MARKETING VENTURES	130,400	392,228
31	TWIN EAGLE RESOURCE MANAGEMENT, LLC	9,500	29,054
32	UNITED ENERGY TRADING, LLC	20,000	62,400
33	VITOL INC.	148,900	459,052
34	WASHINGTON GAS LIGHT COMPANY	5,100	13,541
35	TOTAL ESTIMATE	<u>3,587,809</u>	<u>10,217,979</u>
36	<u>ADJUST TO ACTUAL</u>		
37	MERCURIA ENERGY GAS TRADING LLC	0	4,394
38	EQT ENERGY, LLC.	0	(1,675)
39	GAS LOST DUE TO LINE HITS	(186)	(801)
40	ICE CHARGES	0	190
41	GAS SOLD TO SHIPPER (RADS 3.11)	(12,011)	(42,145)
42	GAS PURCHASED FROM SHIPPER (RADS 3.12)	2,110	4,487
43	OMO/OFO CHARGES (RADS 3.7, 3.8, 4.11)	0	(62,937)
44	CHOICE NON-COMPLIANCE CHARGES (RADS 4.12)	0	(10,449)
45	GAS LEFT ON FOR RECONNECT	(779)	(2,317)
46	TOTAL ADJUST TO ACTUAL	<u>(10,866)</u>	<u>(111,253)</u>
47	TOTAL SCHEDULE 3, SHEET 10	<u><u>3,576,943</u></u>	<u><u>10,106,726</u></u>

EXHIBIT 1-D
 SCHEDULE 3
 SHEET 11 OF 13

COLUMBIA GAS OF PENNSYLVANIA, INC.
 SUMMARY OF HISTORIC COST OF GAS PURCHASES
 NON-LOCAL, SHORT & LONG TERM
 NOVEMBER 2018

LINE NO.	SUPPLIER	TOTAL COMMODITY DOLLARS	
		VOLUMES	
		(1)	(2)
		Dth	\$
1	<u>ESTIMATE</u>		
2	BIOURJA TRADING, LLC	60,600	224,762
3	BP ENERGY COMPANY	5,000	20,238
4	CASTLETON COMMODITIES MERCHANT TRADING L.P.	27,400	96,707
5	CENTERPOINT ENERGY SERVICES, INC.	15,000	45,225
6	CITADEL ENERGY MARKETING LLC	65,000	287,950
7	CITIGROUP ENERGY INC.	21,200	84,936
8	COLONIAL ENERGY, INC	5,400	21,680
9	DIRECT ENERGY BUSINESS MARKETING, LLC	1,800	8,100
10	DTE ENERGY TRADING, INC.	43,500	176,783
11	EDF TRADING NORTH AMERICA, LLC	179,000	655,873
12	ELEVATION ENERGY GROUP	9,000	39,758
13	ENI TRADING & SHIPPING INC.	20,000	74,500
14	EQT ENERGY, LLC.	2,200	8,690
15	FREEPOINT COMMODITIES LLC	25,300	95,597
16	GREYLOCK ENERGY, LLC	367,000	1,404,328
17	HARTREE PARTNERS, LP	10,000	41,800
18	INTERSTATE GAS SUPPLY, INC.	5,400	21,211
19	KAISER MARKETING APPALACHIAN, LLC	67,300	254,835
20	MACQUARIE ENERGY LLC	25,000	86,688
21	MERCURIA ENERGY GAS TRADING LLC	68,315	198,090
22	NEXTERA ENERGY POWER MARKETING, LLC	36,200	112,527
23	NJR ENERGY SERVICES COMPANY	14,300	60,894
24	RANGE RESOURCES	15,576	57,159
25	REPSOL ENERGY NORTH AMERICA CORPORATION	26,000	112,945
26	SNYDER BROTHERS INC.	34,500	145,433
27	SOUTH JERSEY RESOURCES GROUP, LLC	17,500	75,788
28	SPIRE MARKETING INC. (LACLEDE ENERGY)	120,000	503,370
29	SPOTLIGHT ENERGY LLC	3,700	10,952
30	SOUTHWESTERN ENERGY SERVICES COMPANY	38,200	136,516
31	TENASKA MARKETING VENTURES	39,500	161,596
32	TEXLA ENERGY MANAGEMENT, INC	25,800	92,342
33	TWIN EAGLE RESOURCE MANAGEMENT, LLC	15,900	61,795
34	UNITED ENERGY TRADING, LLC	45,000	189,425
35	VITOL INC.	7,900	33,277
36	WASHINGTON GAS ENERGY SERVICES, INC.	6,400	18,944
37	WASHINGTON GAS LIGHT COMPANY	5,000	19,750
38	TOTAL ESTIMATE	1,474,891	5,640,459
39	<u>ADJUST TO ACTUAL</u>		
40	MERCURIA ENERGY GAS TRADING LLC	0	2,549
41	SPIRE MARKETING INC. (LACLEDE ENERGY)	0	(5)
42	GREYLOCK ENERGY, LLC	0	12,600
43	EQT ENERGY, LLC.	0	(1,341)
44	GAS LOST DUE TO LINE HITS	(353)	(1,497)
45	ICE CHARGES	0	340
46	GAS SOLD TO SHIPPER (RADS 3.11)	(12,810)	(49,655)
47	GAS PURCHASED FROM SHIPPER (RADS 3.12)	16,175	25,684
48	OMO/OFO CHARGES (RADS 3.7, 3.8, 4.11)	0	(123,060)
49	CHOICE NON-COMPLIANCE CHARGES (RADS 4.12)	0	(129)
50	GAS LEFT ON FOR RECONNECT	(1,656)	(4,899)
51	TOTAL ADJUST TO ACTUAL	1,356	(139,415)
52	TOTAL SCHEDULE 3, SHEET 11	1,476,247	5,501,044

EXHIBIT 1-D
SCHEDULE 3
SHEET 12 OF 13

COLUMBIA GAS OF PENNSYLVANIA, INC.
SUMMARY OF HISTORIC COST OF GAS PURCHASES
NON-LOCAL, SHORT & LONG TERM
DECEMBER 2018

LINE NO.	SUPPLIER	TOTAL COMMODITY DOLLARS	
		VOLUMES	
		(1)	(2)
		Dth	\$
1	<u>ESTIMATE</u>		
2	BP ENERGY COMPANY	80,500	362,443
3	CASTLETON COMMODITIES MERCHANT TRADING L.P.	30,000	109,200
4	CITADEL ENERGY MARKETING LLC	70,900	239,610
5	CITIGROUP ENERGY INC.	346,200	1,552,046
6	COLONIAL ENERGY, INC	9,100	39,228
7	CONOCOPHILLIPS COMPANY	318,500	1,443,334
8	DIRECT ENERGY BUSINESS MARKETING, LLC	15,500	62,098
9	DTE ENERGY TRADING, INC.	250,600	1,142,595
10	ELEVATION ENERGY GROUP	8,000	35,200
11	ENI TRADING & SHIPPING INC.	105,000	444,425
12	EQUINOR NATURAL GAS LLC	45,000	194,513
13	EQT ENERGY, LLC.	47,000	183,120
14	EXELON GENERATION COMPANY, LLC	62,500	227,606
15	FREEPOINT COMMODITIES LLC	148,900	610,905
16	GREYLOCK ENERGY, LLC	162,600	677,102
17	J. ARON & COMPANY	15,000	63,938
18	KAISER MARKETING APPALACHIAN, LLC	366,900	1,500,388
19	MACQUARIE ENERGY LLC	275,000	1,180,563
20	MERCURIA ENERGY GAS TRADING LLC	112,420	501,171
21	NEXTERA ENERGY POWER MARKETING, LLC	39,700	168,729
22	NJR ENERGY SERVICES COMPANY	5,000	21,600
23	RANGE RESOURCES	436,021	1,588,644
24	SEQUENT ENERGY MANAGEMENT, LP	25,000	110,263
25	SNYDER BROTHERS INC.	12,700	51,323
26	SOUTH JERSEY RESOURCES GROUP, LLC	30,000	128,475
27	SPIRE MARKETING INC. (LACLEDE ENERGY)	276,100	1,179,557
28	SPOTLIGHT ENERGY LLC	49,000	212,385
29	TENASKA MARKETING VENTURES	30,000	111,600
30	TWIN EAGLE RESOURCE MANAGEMENT, LLC	1,300	4,687
31	TOTAL ESTIMATE	<u>3,374,441</u>	<u>14,146,742</u>
32	<u>ADJUST TO ACTUAL</u>		
33	MERCURIA ENERGY GAS TRADING LLC	0	171
34	SOUTH JERSEY RESOURCES GROUP, LLC	0	(350)
35	SPIRE MARKETING INC. (LACLEDE ENERGY)	0	455
36	GAS LOST DUE TO LINE HITS	(134)	(586)
37	ICE CHARGES	0	301
38	GAS SOLD TO SHIPPER (RADS 3.11)	(5,094)	(25,467)
39	GAS PURCHASED FROM SHIPPER (RADS 3.12)	28,648	81,707
40	CHOICE NON-COMPLIANCE CHARGES (RADS 4.12)	0	(1,128)
41	GAS LEFT ON FOR RECONNECT	(1,564)	(10,898)
42	TOTAL ADJUST TO ACTUAL	<u>21,856</u>	<u>44,205</u>
43	TOTAL SCHEDULE 3, SHEET 12	<u>3,396,297</u>	<u>14,190,947</u>

COLUMBIA GAS OF PENNSYLVANIA, INC.
SUMMARY OF HISTORIC COST OF GAS PURCHASES
NON-LOCAL, SHORT & LONG TERM
JANUARY 2019

LINE NO.	SUPPLIER	VOLUMES	TOTAL COMMODITY DOLLARS
		(1) Dth	(2) \$
1	<u>ESTIMATE</u>		
2	BP ENERGY COMPANY	19,000	55,650
3	CITIGROUP ENERGY INC.	316,200	1,074,290
4	COKINOS ENERGY CORPORATION	1,300	4,355
5	DIRECT ENERGY BUSINESS MARKETING, LLC	19,100	54,789
6	DTE ENERGY TRADING, INC.	235,600	817,532
7	ENI TRADING & SHIPPING INC.	55,000	147,575
8	EQT ENERGY, LLC.	20,200	52,290
9	GREEN PLAINS ENERGY SERVICES	2,500	8,750
10	GREYLOCK ENERGY, LLC	8,000	23,320
11	J. ARON & COMPANY	26,300	84,352
12	KAISER MARKETING APPALACHIAN, LLC	173,700	531,495
13	MACQUARIE ENERGY LLC	60,000	173,400
14	MERCURIA ENERGY GAS TRADING LLC	28,280	95,948
15	RANGE RESOURCES	185,400	523,255
16	SEQUENT ENERGY MANAGEMENT, LP	8,000	26,080
17	SOUTH JERSEY RESOURCES GROUP, LLC	9,200	29,072
18	SPIRE MARKETING INC. (LACLEDE ENERGY)	199,100	603,326
19	TENASKA MARKETING VENTURES	9,000	24,525
20	TWIN EAGLE RESOURCE MANAGEMENT, LLC	7,100	24,171
21	TOTAL ESTIMATE	<u>1,382,980</u>	<u>4,354,173</u>
22	<u>ADJUST TO ACTUAL</u>		
23	MERCURIA ENERGY GAS TRADING LLC	0	97
24	CITIGROUP ENERGY INC.	0	(25)
25	GAS LOST DUE TO LINE HITS	(61)	(256)
26	ICE CHARGES	0	310
27	GAS SOLD TO SHIPPER (RADS 3.11)	(33,176)	(187,776)
28	GAS PURCHASED FROM SHIPPER (RADS 3.12)	13,675	39,061
29	OMO/OFO CHARGES (RADS 3.7, 3.8, 4.11)	0	(4,183)
30	OMO/OFO CHARGES ADJUSTMENT	0	800,326
31	CHOICE NON-COMPLIANCE CHARGES (RADS 4.12)	0	(2,774)
32	GAS LEFT ON FOR RECONNECT	(1,326)	(5,093)
33	TOTAL ADJUST TO ACTUAL	<u>(20,888)</u>	<u>639,686</u>
34	TOTAL SCHEDULE 3, SHEET 13	<u>1,362,092</u>	<u>4,993,860</u>

EXHIBIT 1-D
SCHEDULE 4
SHEET 1 OF 1

COLUMBIA GAS OF PENNSYLVANIA, INC.
DETAIL OF HISTORIC COST OF GAS PURCHASES
FROM LOCAL PRODUCERS

LINE NO.	MONTH	VOLUME	TOTAL DOLLARS
		(1) DTH	(2) \$
1	FEBRUARY, 2018	8,403	23,565
2	MARCH	10,225	35,116
3	APRIL	9,952	24,678
4	MAY	10,677	27,454
5	JUNE	9,879	26,315
6	JULY	8,020	21,693
7	AUGUST	8,078	23,129
8	SEPTEMBER	9,172	24,485
9	OCTOBER	9,999	27,148
10	NOVEMBER	11,581	32,271
11	DECEMBER	10,234	36,667
12	JANUARY, 2019	<u>9,060</u>	<u>33,716</u>
13	TOTAL	<u><u>115,280</u></u>	<u><u>336,236</u></u>

EXHIBIT 1-D
SCHEDULE 5
SHEET 1 OF 12

COLUMBIA GAS OF PENNSYLVANIA, INC.
SUMMARY OF HISTORIC COST OF GAS
APPLICABLE TO NET
GAS STORED UNDERGROUND

LINE NO.	MONTH	VOLUMES	DEMAND DOLLARS	COMMODITY DOLLARS	TOTAL DOLLARS
		(1)	(2)	(3)	(4=2+3)
		DTH	\$	\$	\$
1	FEBRUARY, 2018	3,658,852	1,487,540	10,904,898	12,392,438
2	MARCH	4,977,218	1,487,540	14,672,037	16,159,578
3	APRIL	(1,526,281)	1,487,540	(3,489,213)	(2,001,673)
4	MAY	(4,537,896)	1,487,540	(11,709,545)	(10,222,005)
5	JUNE	(4,384,777)	1,487,540	(11,798,161)	(10,310,621)
6	JULY	(4,357,355)	1,487,540	(11,942,614)	(10,455,074)
7	AUGUST	(3,387,055)	1,487,540	(9,156,653)	(7,669,113)
8	SEPTEMBER	(3,032,169)	1,487,540	(8,253,302)	(6,765,762)
9	OCTOBER	(1,962,529)	1,487,540	(5,572,089)	(4,084,549)
10	NOVEMBER	3,680,072	1,487,542	10,131,601	11,619,143
11	DECEMBER	2,841,400	1,487,542	7,802,959	9,290,501
12	JANUARY, 2019	<u>6,916,514</u>	<u>1,487,542</u>	<u>19,308,432</u>	<u>20,795,974</u>
13	TOTAL	<u>(1,114,006)</u>	<u>17,850,488</u>	<u>898,350</u>	<u>18,748,838</u>

EXHIBIT 1-D
SCHEDULE 5
SHEET 2 OF 12

COLUMBIA GAS OF PENNSYLVANIA, INC
DETAIL OF HISTORIC COST OF GAS
APPLICABLE TO NET GAS STORED UNDERGROUND
BLACKHAWK FACILITY

LINE NO.	MONTH	VOLUME INJECTED	RATE	AMOUNT	VOLUME WITHDRAWN	RATE	AMOUNT
		(1) DTH	(2) \$/DTH	(3=1x2) \$	(4) DTH	(5) \$/DTH	(6=4x5) \$
1	FEBRUARY, 2018	0	3.4025	0	6,175	2.8960	17,883
2	ADJUSTMENT	0	3.4025	0	67	2.8960	194
3	ADJUSTMENT	0	3.4025	0	0	2.8960	(185)
4	MARCH	0	1.8436	0	6,776	2.8919	19,596
5	ADJUSTMENT	0	1.8436	0	67	2.8919	194
6	ADJUSTMENT	0	1.8436	0	0	2.8919	(185)
7	APRIL	0	2.5993	0	10,751	2.7962	30,062
8	ADJUSTMENT	0	2.5993	0	67	2.7962	187
9	ADJUSTMENT	0	2.5993	0	0	2.7962	(179)
10	MAY	0	2.5748	0	7,120	2.7161	19,339
11	ADJUSTMENT	0	2.5748	0	67	2.7161	182
12	ADJUSTMENT	0	2.5748	0	0	2.7161	(174)
13	JUNE	0	2.7111	0	0	2.7147	0
14	ADJUSTMENT	0	2.7111	0	66	2.7147	179
15	ADJUSTMENT	0	2.7111	0	0	2.7147	(174)
16	JULY	0	2.7615	0	0	2.7248	0
17	ADJUSTMENT	0	2.7615	0	67	2.7248	183
18	ADJUSTMENT	0	2.7615	0	0	2.7248	(181)
19	AUGUST	0	2.7259	0	0	2.7249	0
20	ADJUSTMENT	0	2.7259	0	67	2.7249	183
21	ADJUSTMENT	0	2.7259	0	0	2.7249	(182)
22	SEPTEMBER	0	2.7456	0	0	2.7273	0
23	ADJUSTMENT	0	2.7456	0	66	2.7273	180
24	ADJUSTMENT	0	2.7456	0	0	2.7273	(180)
25	OCTOBER	0	2.8595	0	8,573	2.7368	23,463
26	ADJUSTMENT	0	2.8595	0	67	2.7368	183
27	ADJUSTMENT	0	2.8595	0	0	2.7368	(183)
28	NOVEMBER	0	3.5840	0	6,278	2.7372	17,184
29	ADJUSTMENT	0	3.5840	0	67	2.7372	183
30	ADJUSTMENT	0	3.5840	0	0	2.7372	(183)
31	DECEMBER	0	4.5090	0	8,222	2.7447	22,567
32	ADJUSTMENT	0	4.5090	0	68	2.7447	187
33	ADJUSTMENT	0	4.5090	0	0	2.7447	(184)
34	JANUARY, 2019	0	4.4979	0	8,338	2.7448	22,886
35	ADJUSTMENT	0	4.4979	0	67	2.7448	184
36	ADJUSTMENT	0	4.4979	0	0	2.7448	(185)
37	TOTAL	<u>0</u>		<u>0</u>	<u>63,036</u>		<u>173,022</u>

EXHIBIT 1-D
SCHEDULE 5
SHEET 3 OF 12

COLUMBIA GAS OF PENNSYLVANIA, INC
DETAIL OF HISTORIC COST OF GAS
APPLICABLE TO NET GAS STORED UNDERGROUND
COLUMBIA GAS TRANSMISSION - FSS

LINE NO.	MONTH	VOLUME INJECTED	RATE	AMOUNT	VOLUME WITHDRAWN	RATE	AMOUNT
		(1) DTH	(2) \$/DTH	(3=1x2) \$	(4) DTH	(5) \$/DTH	(6=4x5) \$
1	FEBRUARY, 2018	(80,285)	3.4025	(273,170)	3,286,143	2.8960	9,516,670
2	ADJUSTMENT	(13,633)	3.4025	(46,386)	2,246	2.8960	6,504
3	MARCH	(47,899)	1.8436	(88,307)	4,336,196	2.8919	12,539,845
4	ADJUSTMENT	6,520	1.8436	12,020	10,104	2.8919	29,220
5	APRIL	(2,299,288)	2.5993	(5,976,539)	1,385,503	2.7962	3,874,143
6	ADJUSTMENT	20,714	2.5993	53,842	(188,702)	2.7962	(527,649)
7	MAY	(3,583,531)	2.5748	(9,226,876)	0	2.7161	0
8	ADJUSTMENT	(94,875)	2.5748	(244,284)	(597,362)	2.7161	(1,622,495)
9	JUNE	(3,965,285)	2.7111	(10,750,284)	0	2.7147	0
10	ADJUSTMENT	12,405	2.7111	33,631	0	2.7147	0
11	JULY	(3,893,219)	2.7615	(10,751,124)	0	2.7248	0
12	ADJUSTMENT	34,812	2.7615	96,133	0	2.7248	0
13	AUGUST	(2,927,154)	2.7259	(7,979,129)	0	2.7249	0
14	ADJUSTMENT	32,855	2.7259	89,559	0	2.7249	0
15	SEPTEMBER	(2,591,946)	2.7456	(7,116,447)	0	2.7273	0
16	ADJUSTMENT	28,274	2.7456	77,629	0	2.7273	0
17	OCTOBER	(1,659,121)	2.8595	(4,744,256)	89,951	2.7368	246,178
18	ADJUSTMENT	12,670	2.8595	36,230	91	2.7368	249
19	NOVEMBER	(56,370)	3.5840	(202,030)	3,244,772	2.7372	8,881,590
20	ADJUSTMENT	41,358	3.5840	148,227	4,014	2.7372	10,987
21	DECEMBER	(76,658)	4.5090	(345,651)	2,460,099	2.7447	6,752,234
22	ADJUSTMENT	(29,481)	4.5090	(132,930)	76,309	2.7447	209,445
23	JANUARY, 2019	0	4.4979	0	6,052,565	2.7448	16,613,080
24	ADJUSTMENT	(1,352)	4.4979	(6,081)	123,747	2.7448	339,661
25	TOTAL	<u>(21,130,489)</u>		<u>(57,336,222)</u>	<u>20,285,676</u>		<u>56,869,664</u>

EXHIBIT 1-D
SCHEDULE 5
SHEET 4 OF 12

COLUMBIA GAS OF PENNSYLVANIA, INC
DETAIL OF HISTORIC COST OF GAS
APPLICABLE TO NET GAS STORED UNDERGROUND
DOMINION

LINE NO.	MONTH	VOLUME INJECTED	RATE	AMOUNT	VOLUME WITHDRAWN	RATE	AMOUNT
		(1) DTH	(2) \$/DTH	(3=1x2) \$	(4) DTH	(5) \$/DTH	(6=4x5) \$
1	FEBRUARY, 2018	0	3.4025	0	323,733	2.8960	937,531
2	ADJUSTMENT	0	3.4025	0	6,485	2.8960	18,781
3	MARCH	0	1.8436	0	448,482	2.8919	1,296,965
4	ADJUSTMENT	0	1.8436	0	8,073	2.8919	23,346
5	APRIL	(189,651)	2.5993	(492,960)	0	2.7962	0
6	MAY	(255,516)	2.5748	(657,903)	0	2.7161	0
7	ADJUSTMENT	257	2.5748	662	0	2.7161	0
8	JUNE	(267,199)	2.7111	(724,403)	0	2.7147	0
9	ADJUSTMENT	50	2.7111	136	0	2.7147	0
10	JULY	(261,325)	2.7615	(721,649)	0	2.7248	0
11	AUGUST	(255,183)	2.7259	(695,603)	0	2.7249	0
12	ADJUSTMENT	(72)	2.7259	(196)	0	2.7249	0
13	SEPTEMBER	(238,821)	2.7456	(655,707)	0	2.7273	0
14	OCTOBER	(178,843)	2.8595	(511,402)	0	2.7368	0
15	ADJUSTMENT	132	2.8595	377	0	2.7368	0
16	NOVEMBER	0	3.5840	0	309,973	2.7372	848,458
17	ADJUSTMENT	0	3.5840	0	(4,109)	2.7372	(11,247)
18	DECEMBER	0	4.5090	0	301,598	2.7447	827,796
19	JANUARY, 2019	0	4.4979	0	466,293	2.7448	1,279,881
20	ADJUSTMENT	0	4.4979	0	1,257	2.7448	3,450
21	TOTAL	<u>(1,646,171)</u>		<u>(4,458,648)</u>	<u>1,861,785</u>		<u>5,224,961</u>

EXHIBIT 1-D
SCHEDULE 5
SHEET 5 OF 12

COLUMBIA GAS OF PENNSYLVANIA, INC
DETAIL OF HISTORIC COST OF GAS
APPLICABLE TO NET GAS STORED UNDERGROUND
EQUITRANS

LINE NO.	MONTH	VOLUME INJECTED	RATE	AMOUNT	VOLUME WITHDRAWN	RATE	AMOUNT
		(1) DTH	(2) \$/DTH	(3=1x2) \$	(4) DTH	(5) \$/DTH	(6=4x5) \$
1	FEBRUARY, 2018	0	3.4025	0	230,000	2.8960	666,080
2	MARCH	0	1.8436	0	265,000	2.8919	766,354
3	APRIL	(198,742)	2.5993	(516,590)	0	2.7962	0
4	MAY	(7,361)	2.5748	(18,953)	0	2.7161	0
5	JUNE	(156,549)	2.7111	(424,420)	0	2.7147	0
6	JULY	(228,191)	2.7615	(630,149)	0	2.7248	0
7	AUGUST	(228,191)	2.7259	(622,026)	0	2.7249	0
8	SEPTEMBER	(220,830)	2.7456	(606,311)	0	2.7273	0
9	OCTOBER	(228,191)	2.8595	(652,512)	0	2.7368	0
10	NOVEMBER	0	3.5840	0	141,500	2.7372	387,314
11	DECEMBER	0	4.5090	0	155,000	2.7447	425,429
12	JANUARY, 2019	<u>0</u>	4.4979	<u>0</u>	<u>348,000</u>	2.7448	<u>955,190</u>
13	TOTAL	<u>(1,268,055)</u>		<u>(3,470,961)</u>	<u>1,139,500</u>		<u>3,200,366</u>

EXHIBIT 1-D
SCHEDULE 5
SHEET 6 OF 12

COLUMBIA GAS OF PENNSYLVANIA, INC
SUMMARY OF HISTORICAL GAS VOLUMES
RETAINAGE BY PIPELINE FOR STORAGE ACTIVITY

<u>LINE NO.</u>	<u>MONTH</u>	<u>TCO - FSS TOTAL</u> (1) DTH
1	FEBRUARY, 2018	(102,079)
2	MARCH	(56,101)
3	APRIL	(66,933)
4	MAY	(6,695)
5	JUNE	(8,265)
6	JULY	(9,499)
7	AUGUST	(9,377)
8	SEPTEMBER	(8,912)
9	OCTOBER	(7,858)
10	NOVEMBER	(7,411)
11	DECEMBER	(53,757)
12	JANUARY, 2019	<u>(82,401)</u>
13	TOTAL	<u><u>(419,288)</u></u>

NOTE: THESE VOLUMES REPRESENT RETAINAGE BY THE PIPELINE.

EXHIBIT 1-D
SCHEDULE 5
SHEET 7 OF 12

COLUMBIA GAS OF PENNSYLVANIA, INC
DETAIL OF HISTORIC COST OF GAS
STORAGE DEMAND CHARGES
COLUMBIA GAS TRANSMISSION CORPORATION

LINE NO.	MONTH	M D S E			S C Q		
		VOLUME (1) DTH	RATE (2) \$/DTH	AMOUNT (3=1x2) \$	VOLUME (4) DTH	RATE (5) \$/DTH	AMOUNT (6=4x5) \$
1	FEBRUARY, 2018	456,876	1.5010	685,771	25,341,126	0.0288	729,824
2	MARCH	456,876	1.5010	685,771	25,341,126	0.0288	729,824
3	APRIL	456,876	1.5010	685,771	25,341,126	0.0288	729,824
4	MAY	456,876	1.5010	685,771	25,341,126	0.0288	729,824
5	JUNE	456,876	1.5010	685,771	25,341,126	0.0288	729,824
6	JULY	456,876	1.5010	685,771	25,341,126	0.0288	729,824
7	AUGUST	456,876	1.5010	685,771	25,341,126	0.0288	729,824
8	SEPTEMBER	456,876	1.5010	685,771	25,341,126	0.0288	729,824
9	OCTOBER	456,876	1.5010	685,771	25,341,126	0.0288	729,824
10	NOVEMBER	456,876	1.5010	685,771	25,341,126	0.0288	729,824
11	DECEMBER	456,876	1.5010	685,771	25,341,126	0.0288	729,824
12	JANUARY, 2019	456,876	1.5010	685,771	25,341,126	0.0288	729,824
13	TOTAL	<u>5,482,512</u>		<u>8,229,251</u>	<u>304,093,512</u>		<u>8,757,893</u>

COLUMBIA GAS OF PENNSYLVANIA, INC
DETAIL OF HISTORIC COST OF GAS
STORAGE DEMAND CHARGES
DOMINION TRANSMISSION

LINE NO.	MONTH	STORAGE DEMAND			STORAGE CAPACITY		
		VOLUME (1) DTH	RATE (2) \$/DTH	AMOUNT (3=1x2) \$	VOLUME (4) DTH	RATE (5) \$/DTH	AMOUNT (6=4x5) \$
1	FEBRUARY, 2018	28,800	1.8672	53,775	2,111,176	0.0145	30,612
2	ADJUSTMENT	(4,800)	1.8672	(8,963)	(240,000)	0.0145	(3,480)
3	MARCH	28,800	1.8672	53,775	2,111,176	0.0145	30,612
4	ADJUSTMENT	(4,800)	1.8672	(8,963)	(240,000)	0.0145	(3,480)
5	APRIL	28,800	1.8672	53,775	2,111,176	0.0145	30,612
6	ADJUSTMENT	(4,800)	1.8672	(8,963)	(240,000)	0.0145	(3,480)
7	MAY	28,800	1.8672	53,775	2,111,176	0.0145	30,612
8	ADJUSTMENT	(4,800)	1.8672	(8,963)	(240,000)	0.0145	(3,480)
9	JUNE	28,800	1.8672	53,775	2,111,176	0.0145	30,612
10	ADJUSTMENT	(4,800)	1.8672	(8,963)	(240,000)	0.0145	(3,480)
11	JULY	28,800	1.8672	53,775	2,111,176	0.0145	30,612
12	ADJUSTMENT	(4,800)	1.8672	(8,963)	(240,000)	0.0145	(3,480)
13	AUGUST	28,800	1.8672	53,775	2,111,176	0.0145	30,612
14	ADJUSTMENT	(4,800)	1.8672	(8,963)	(240,000)	0.0145	(3,480)
15	SEPTEMBER	28,800	1.8672	53,775	2,111,176	0.0145	30,612
16	ADJUSTMENT	(4,800)	1.8672	(8,963)	(240,000)	0.0145	(3,480)
17	OCTOBER	28,800	1.8672	53,775	2,111,176	0.0145	30,612
18	ADJUSTMENT	(4,800)	1.8672	(8,963)	(240,000)	0.0145	(3,480)
19	NOVEMBER	28,800	1.8673	53,778	2,111,176	0.0145	30,612
20	ADJUSTMENT	(4,800)	1.8673	(8,964)	(240,000)	0.0145	(3,480)
21	DECEMBER	28,800	1.8673	53,778	2,111,176	0.0145	30,612
22	ADJUSTMENT	(4,800)	1.8673	(8,964)	(240,000)	0.0145	(3,480)
23	JANUARY, 2019	28,800	1.8673	53,778	2,111,176	0.0145	30,612
24	ADJUSTMENT	(4,800)	1.8673	(8,964)	(240,000)	0.0145	(3,480)
25	TOTAL	<u>287,999</u>		<u>537,759</u>	<u>22,454,112</u>		<u>325,585</u>

EXHIBIT 1-D
SCHEDULE 5
SHEET 9 OF 12

COLUMBIA GAS OF PENNSYLVANIA, INC
DETAIL OF HISTORIC COST OF GAS
STORAGE DEMAND CHARGES
EQUITRANS

LINE NO.	MONTH	STORAGE DEMAND			STORAGE CAPACITY		
		VOLUME	RATE	AMOUNT	VOLUME	RATE	AMOUNT
		(1) DTH	(2) \$/DTH	(3=1x2) \$	(4) DTH	(5) \$/DTH	(6=4x5) \$
1	FEBRUARY, 2018	14,348	1.4949	21,449	1,500,000	0.0262	39,300
2	ADJUSTMENT	(14,348)	1.4949	(21,449)	(1,500,000)	0.0262	(39,300)
3	MARCH	14,348	1.4949	21,449	1,500,000	0.0262	39,300
4	ADJUSTMENT	(14,348)	1.4949	(21,449)	(1,500,000)	0.0262	(39,300)
5	APRIL	14,348	1.4949	21,449	1,500,000	0.0262	39,300
6	ADJUSTMENT	(14,348)	1.4949	(21,449)	(1,500,000)	0.0262	(39,300)
7	MAY	14,348	1.4949	21,449	1,500,000	0.0262	39,300
8	ADJUSTMENT	(14,348)	1.4949	(21,449)	(1,500,000)	0.0262	(39,300)
9	JUNE	14,348	1.4949	21,449	1,500,000	0.0262	39,300
10	ADJUSTMENT	(14,348)	1.4949	(21,449)	(1,500,000)	0.0262	(39,300)
11	JULY	14,348	1.4949	21,449	1,500,000	0.0262	39,300
12	ADJUSTMENT	(14,348)	1.4949	(21,449)	(1,500,000)	0.0262	(39,300)
13	AUGUST	14,348	1.4949	21,449	1,500,000	0.0262	39,300
14	ADJUSTMENT	(14,348)	1.4949	(21,449)	(1,500,000)	0.0262	(39,300)
15	SEPTEMBER	14,348	1.4949	21,449	1,500,000	0.0262	39,300
16	ADJUSTMENT	(14,348)	1.4949	(21,449)	(1,500,000)	0.0262	(39,300)
17	OCTOBER	14,348	1.4949	21,449	1,500,000	0.0262	39,300
18	ADJUSTMENT	(14,348)	1.4949	(21,449)	(1,500,000)	0.0262	(39,300)
19	NOVEMBER	14,348	1.4949	21,449	1,500,000	0.0262	39,300
20	ADJUSTMENT	(14,348)	1.4949	(21,449)	(1,500,000)	0.0262	(39,300)
21	DECEMBER	14,348	1.4949	21,449	1,500,000	0.0262	39,300
22	ADJUSTMENT	(14,348)	1.4949	(21,449)	(1,500,000)	0.0262	(39,300)
23	JANUARY, 2019	14,348	1.4949	21,449	1,500,000	0.0262	39,300
24	ADJUSTMENT	(14,348)	1.4949	(21,449)	(1,500,000)	0.0262	(39,300)
25	TOTAL	<u>0</u>		<u>0</u>	<u>0</u>		<u>0</u>

EXHIBIT 1-D
SCHEDULE 5
SHEET 10 OF 12

COLUMBIA GAS OF PENNSYLVANIA, INC.
DETAIL OF HISTORIC COST OF GAS
INJECTION/WITHDRAWAL CHARGES
COLUMBIA GAS TRANSMISSION CORPORATION

LINE NO.	MONTH	WITHDRAWAL CHARGES			INJECTION CHARGES		
		VOLUME	RATE	AMOUNT	VOLUME	RATE	AMOUNT
		(1) DTH	(2) \$/DTH	(3=1x2) \$	(4) DTH	(5) \$/DTH	(6=4x5) \$
1	FEBRUARY, 2018	3,286,143	0.0153	50,278	0	0.0000	0
2	ADJUSTMENT	(2,383)	0.0153	(37)	0	0.0000	(2,989)
3	ADJUSTMENT	0	0.0000	7,361	0	0.0000	0
4	MARCH	4,336,196	0.0153	66,344	69,043	0.0153	1,057
5	ADJUSTMENT	8,602	0.0153	131	0	0.0000	0
6	ADJUSTMENT	0	0.0000	5	0	0.0000	0
7	APRIL	1,385,503	0.0153	21,198	2,299,288	0.0153	35,179
8	ADJUSTMENT	(187,071)	0.0153	(2,862)	31,263	0.0153	478
9	ADJUSTMENT	0	0.0000	387	0	0.0000	(29)
10	MAY	0	0.0000	0	3,583,531	0.0153	54,828
11	ADJUSTMENT	(1,385,503)	0.0153	(21,198)	30,818	0.0153	472
12	ADJUSTMENT	46,442	0.0153	711	0	0.0000	10
13	ADJUSTMENT	0	0.0000	(204)	0	0.0000	0
14	JUNE	3,965,285	0.0153	60,669	0	0.0000	0
15	ADJUSTMENT	(17,038)	0.0153	(261)	0	0.0000	(165)
16	ADJUSTMENT	0	0.0000	94	0	0.0000	0
17	JULY	0	0.0000	23	3,893,219	0.0153	59,566
18	ADJUSTMENT	0	0.0000	0	(10,312)	0.0153	(158)
19	ADJUSTMENT	0	0.0000	0	0	0.0000	(95)
20	AUGUST	0	0.0000	0	2,927,154	0.0153	44,785
21	ADJUSTMENT	0	0.0000	0	(7,418)	0.0153	(113)
22	ADJUSTMENT	0	0.0000	0	0	0.0000	15
23	SEPTEMBER	0	0.0000	0	2,591,946	0.0153	39,657
24	ADJUSTMENT	0	0.0000	0	(14,406)	0.0153	(220)
25	ADJUSTMENT	0	0.0000	0	0	0.0000	(21)
26	OCTOBER	0	0.0000	0	1,659,121	0.0153	25,385
27	ADJUSTMENT	0	0.0000	0	6,758	0.0153	103
28	ADJUSTMENT	0	0.0000	0	0	0.0000	(54)
29	NOVEMBER	3,251,867	0.0153	49,754	(65,240)	0.0153	(998)
30	ADJUSTMENT	93,965	0.0153	1,438	0	0.0000	(24)
31	DECEMBER	2,451,652	0.0153	37,510	51,043	0.0153	781
32	ADJUSTMENT	40,780	0.0153	624	0	0.0000	236
33	ADJUSTMENT	0	0.0000	(185)	0	0.0000	0
34	JANUARY, 2019	6,052,565	0.0153	92,604	0	0.0000	0
35	ADJUSTMENT	109,196	0.0153	1,671	64,524	0.0153	987
36	ADJUSTMENT	0	0.0000	(56)	0	0.0000	(23)
37	TOTAL	<u>23,436,201</u>		<u>365,998</u>	<u>17,110,332</u>		<u>258,651</u>

EXHIBIT 1-D
SCHEDULE 5
SHEET 11 OF 12

COLUMBIA GAS OF PENNSYLVANIA, INC.
DETAIL OF HISTORIC COST OF GAS
INJECTION/WITHDRAWAL CHARGES
DOMINION TRANSMISSION

LINE NO.	MONTH	WITHDRAWAL CHARGES			INJECTION CHARGES		
		VOLUME	RATE	AMOUNT	VOLUME	RATE	AMOUNT
		(1) DTH	(2) \$/DTH	(3=1x2) \$	(4) DTH	(5) \$/DTH	(6=4x5) \$
1	FEBRUARY, 2018	0	0.0000	0	0	0.0000	0
2	ADJUSTMENT	419,784	0.0184	7,739	0	0.0000	0
3	ADJUSTMENT	0	0.0000	(1,356)	0	0.0000	0
4	MARCH	0	0.0000	0	0	0.0000	0
5	ADJUSTMENT	329,324	0.0184	6,066	0	0.0000	0
6	ADJUSTMENT	0	0.0000	(613)	0	0.0000	0
7	APRIL	0	0.0000	0	195,840	0.0290	5,679
8	ADJUSTMENT	457,402	0.0180	8,244	0	0.0000	(866)
9	ADJUSTMENT	0	0.0000	(940)	0	0.0000	0
10	MAY	0	0.0000	0	255,936	0.0290	7,422
11	ADJUSTMENT	600	0.0210	13	0	0.0000	(1,096)
12	JUNE	0	0.0000	0	264,720	0.0290	7,677
13	ADJUSTMENT	875	0.0206	18	0	0.0000	(858)
14	JULY	0	0.0000	0	195,316	0.0290	5,664
15	ADJUSTMENT	0	0.0000	0	2,479	0.0290	72
16	ADJUSTMENT	0	0.0000	0	0	0.0000	(899)
17	AUGUST	0	0.0000	0	173,687	0.0290	5,037
18	ADJUSTMENT	0	0.0000	0	66,081	0.0290	1,916
19	ADJUSTMENT	0	0.0000	0	0	0.0000	(899)
20	SEPTEMBER	0	0.0000	0	228,453	0.0290	6,625
21	ADJUSTMENT	0	0.0000	0	81,496	0.0290	2,363
22	ADJUSTMENT	0	0.0000	0	0	0.0000	(870)
23	OCTOBER	0	0.0000	0	162,421	0.0290	4,710
24	ADJUSTMENT	8	0.0000	0	10,244	0.0290	297
25	ADJUSTMENT	0	0.0000	0	0	0.0000	(857)
26	NOVEMBER	7,072	0.0210	149	27,603	0.0290	800
27	DECEMBER	309,973	0.0210	6,509	0	0.0000	0
28	ADJUSTMENT	0	0.0000	(1,409)	0	0.0000	0
29	JANUARY, 2019	0	0.0000	0	0	0.0000	0
30	ADJUSTMENT	301,049	0.0172	5,182	0	0.0000	0
31	TOTAL	<u>1,826,087</u>		<u>29,602</u>	<u>1,664,276</u>		<u>41,919</u>

EXHIBIT 1-D
SCHEDULE 5
SHEET 12 OF 12

COLUMBIA GAS OF PENNSYLVANIA, INC.
DETAIL OF HISTORIC COST OF GAS
INJECTION/WITHDRAWAL CHARGES
EQUITRANS

LINE NO.	MONTH	WITHDRAWAL CHARGES			INJECTION CHARGES		
		VOLUME	RATE	AMOUNT	VOLUME	RATE	AMOUNT
		(1) DTH	(2) \$/DTH	(3=1x2) \$	(4) DTH	(5) \$/DTH	(6=4x5) \$
1	FEBRUARY, 2018	379,000	0.0069	2,615	0	0.0000	0
2	ADJUSTMENT	(379,000)	0.0069	(2,615)	0	0.0000	0
3	MARCH	230,000	0.0069	1,587	0	0.0000	0
4	ADJUSTMENT	(230,000)	0.0069	(1,587)	0	0.0000	0
5	APRIL	265,000	0.0069	1,829	0	0.0000	0
6	ADJUSTMENT	(265,000)	0.0069	(1,829)	0	0.0000	0
7	MAY	0	0.0000	0	198,742	0.0069	1,371
8	ADJUSTMENT	0	0.0000	0	(198,742)	0.0069	(1,371)
9	JUNE	0	0.0000	0	7,360	0.0069	51
10	ADJUSTMENT	0	0.0000	0	(7,360)	0.0069	(51)
11	JULY	0	0.0000	0	156,551	0.0069	1,080
12	ADJUSTMENT	0	0.0000	0	(156,551)	0.0069	(1,080)
13	AUGUST	0	0.0000	0	228,191	0.0069	1,575
14	ADJUSTMENT	0	0.0000	0	(228,191)	0.0069	(1,575)
15	SEPTEMBER	0	0.0000	0	228,191	0.0069	1,575
16	ADJUSTMENT	0	0.0000	0	(228,191)	0.0069	(1,575)
17	OCTOBER	0	0.0000	0	220,830	0.0069	1,524
18	ADJUSTMENT	0	0.0000	0	(220,830)	0.0069	(1,524)
19	NOVEMBER	0	0.0000	0	228,191	0.0069	1,575
20	ADJUSTMENT	0	0.0000	0	(228,191)	0.0069	(1,575)
21	DECEMBER	141,500	0.0069	976	0	0.0000	0
22	ADJUSTMENT	(141,500)	0.0069	(976)	0	0.0000	0
23	JANUARY, 2019	155,000	0.0069	1,070	0	0.0000	0
24	ADJUSTMENT	(155,000)	0.0069	(1,070)	0	0.0000	0
25	TOTAL	<u>0</u>		<u>0</u>	<u>0</u>		<u>0</u>

EXHIBIT 1-D
SCHEDULE 6
SHEET 1 OF 18

COLUMBIA GAS OF PENNSYLVANIA, INC.
SUMMARY OF HISTORIC COST OF GAS
TRANSPORTATION CHARGES

LINE NO.	MONTH	TRANSPORTATION SHRINKAGE VOLUMES 1/	TOTAL DEMAND COSTS	TOTAL COMMODITY COSTS	TOTAL TRANSPORTATION COSTS
		(1) Dth	(2) \$	(3) \$	(4=2+3) \$
1	FEBRUARY, 2018	(24,003)	3,976,272	126,555	4,102,827
2	MARCH	(29,357)	4,209,324	256,319	4,465,643
3	APRIL	(91,607)	2,724,026	150,609	2,874,635
4	MAY	(49,643)	2,735,299	37,306	2,772,605
5	JUNE	(60,144)	2,753,364	362,668	3,116,032
6	JULY	(62,805)	2,756,391	68,278	2,824,668
7	AUGUST	(51,453)	2,755,642	61,953	2,817,596
8	SEPTEMBER	(48,830)	2,746,554	70,327	2,816,881
9	OCTOBER	(50,534)	4,149,063	65,878	4,214,941
10	NOVEMBER	(24,305)	4,215,856	111,071	4,326,927
11	DECEMBER	(49,926)	4,304,147	117,783	4,421,930
12	JANUARY, 2019	<u>(24,034)</u>	<u>4,289,927</u>	<u>162,980</u>	<u>4,452,907</u>
13	TOTAL	<u>(566,641)</u>	<u>41,615,867</u>	<u>1,591,725</u>	<u>43,207,592</u>

1/ THESE VOLUMES REPRESENT RETAINAGE BY THE PIPLINES.

EXHIBIT 1-D
SCHEDULE 6
SHEET 2 OF 18

COLUMBIA GAS OF PENNSYLVANIA, INC.
DETAIL OF HISTORIC COST OF GAS
COLUMBIA GAS TRANSMISSION CORPORATION
RATE SCHEDULE FTS - TRANSPORTATION DEMAND CHARGES

LINE NO.	MONTH	DEMAND VOLUME	BILLING RATE	AMOUNT	CAPACITY RELEASE 1/	TOTAL FTS AMOUNT
		(1) Dth	(2) \$/Dth	(3=1x2) \$	(4) \$	(5=3+4) \$
1	FEBRUARY, 2018	127,588	6.2250	794,235	(161,614)	632,621
2	ADJUSTMENT			(54,863)	(183,655)	(238,518)
3	ADJUSTMENT				(32,463) 2/	(32,463)
4	ADJUSTMENT				183,655	183,655
5	ADJUSTMENT				13,454	13,454
6	MARCH	127,588	6.2250	794,235	(162,162)	632,073
7	ADJUSTMENT				(183,655)	(183,655)
8	ADJUSTMENT				(32,463) 2/	(32,463)
9	ADJUSTMENT				183,655	183,655
10	APRIL	127,588	6.2560	798,191	(162,356)	635,835
11	ADJUSTMENT				(94,650)	(94,650)
12	ADJUSTMENT				(32,625) 2/	(32,625)
13	ADJUSTMENT				94,650	94,650
14	MAY	127,588	6.2870	802,146	(162,488)	639,658
15	ADJUSTMENT				(94,650)	(94,650)
16	ADJUSTMENT				(32,787) 2/	(32,787)
17	ADJUSTMENT				94,650	94,650
18	JUNE	127,588	6.2870	802,146	(152,145)	650,000
19	ADJUSTMENT				(94,650)	(94,650)
20	ADJUSTMENT				(32,787) 2/	(32,787)
21	ADJUSTMENT				94,650	94,650
22	JULY	127,588	6.2870	802,146	(148,650)	653,496
23	ADJUSTMENT				(94,650)	(94,650)
24	ADJUSTMENT				(32,787) 2/	(32,787)
25	ADJUSTMENT				94,650	94,650
26	AUGUST	127,588	6.2870	802,146	(149,813)	652,333
27	ADJUSTMENT				(94,650)	(94,650)
28	ADJUSTMENT				(32,787) 2/	(32,787)
29	ADJUSTMENT				94,650	94,650
30	SEPTEMBER	127,588	6.2870	802,146	(151,140)	651,006
31	ADJUSTMENT				(94,650)	(94,650)
32	ADJUSTMENT				(32,787) 2/	(32,787)
33	ADJUSTMENT				94,650	94,650
34	OCTOBER	127,588	6.2870	802,146	(151,768)	650,377
35	ADJUSTMENT				(94,650)	(94,650)
36	ADJUSTMENT				(32,787) 2/	(32,787)
37	ADJUSTMENT				94,650	94,650
38	NOVEMBER	127,588	6.2870	802,146	(152,240)	649,906
39	ADJUSTMENT				(94,650)	(94,650)
40	ADJUSTMENT				(32,787) 2/	(32,787)
41	ADJUSTMENT				94,650	94,650
42	DECEMBER	127,588	6.3340	808,142	(155,069)	653,073
43	ADJUSTMENT				(94,650)	(94,650)
44	ADJUSTMENT				(33,032) 2/	(33,032)
45	ADJUSTMENT				94,650	94,650
46	JANUARY, 2019	127,588	6.3340	808,142	(154,628)	653,515
47	ADJUSTMENT				(94,650)	(94,650)
48	ADJUSTMENT				(33,032) 2/	(33,032)
49	ADJUSTMENT				94,650	94,650
50	TOTAL	<u>1,531,056</u>		<u>9,563,103</u>	<u>(2,243,741)</u>	<u>7,319,362</u>

1/ INCLUDES CAPACITY ALLOCATED TO SUPPLIERS PARTICIPATING IN COLUMBIA'S CHOICE PROGRAM.

2/ AMOUNT REPRESENTS 5,215 DTH OF CAPACITY RELEASED AT THE APPLICABLE MAXIMUM RATE TO A LARGE INDUSTRIAL CUSTOMER ON COLUMBIA'S SYSTEM AND NOT SUBJECT TO RECALL.

EXHIBIT 1-D
SCHEDULE 6
SHEET 3 OF 18

COLUMBIA GAS OF PENNSYLVANIA, INC.
DETAIL OF HISTORIC COST OF GAS
COLUMBIA GAS TRANSMISSION CORPORATION
RATE SCHEDULE SST - TRANSPORTATION DEMAND CHARGES

LINE NO.	MONTH	DEMAND VOLUME	BILLING RATE	AMOUNT	CAPACITY RELEASE	TOTAL SST AMOUNT
		(1) Dth	(2) \$/Dth	(3=1x2) \$	(4) \$	(5=3+4) \$
1	FEBRUARY, 2018	456,876	6.0650	2,770,953	(279,076)	2,491,877
2	ADJUSTMENT			0	279,076	279,076
3	ADJUSTMENT			(191,888)	0	(191,888)
4	MARCH	456,876	6.0650	2,770,953	(19,434)	2,751,519
5	ADJUSTMENT				19,434	19,434
6	APRIL	228,438	6.0960	1,392,558	(4,727)	1,387,832
7	ADJUSTMENT				4,727	4,727
8	MAY	228,438	6.1270	1,399,640	(42,048)	1,357,591
9	ADJUSTMENT				42,048	42,048
10	JUNE	228,438	6.1270	1,399,640	(87,252)	1,312,388
11	ADJUSTMENT				87,252	87,252
12	JULY	228,438	6.1270	1,399,640	(127,768)	1,271,872
13	ADJUSTMENT				127,768	127,768
14	AUGUST	228,438	6.1270	1,399,640	(17,549)	1,382,091
15	ADJUSTMENT				17,549	17,549
16	SEPTEMBER	228,438	6.1270	1,399,640	(3,642)	1,395,998
17	ADJUSTMENT				3,642	3,642
18	OCTOBER	456,876	6.1270	2,799,279	(9,497)	2,789,782
19	ADJUSTMENT				9,497	9,497
20	NOVEMBER	456,876	6.1270	2,799,279	(9,497)	2,789,782
21	ADJUSTMENT				9,497	9,497
22	DECEMBER	456,876	6.1740	2,820,752	(41,053)	2,779,700
23	ADJUSTMENT				41,053	41,053
24	JANUARY, 2019	456,876	6.1740	2,820,752	(44,351)	2,776,402
25	ADJUSTMENT				44,351	44,351
26	TOTAL	<u>4,111,884</u>		<u>24,980,838</u>	<u>0</u>	<u>24,980,838</u>

EXHIBIT 1-D
SCHEDULE 6
SHEET 4 of 18

COLUMBIA GAS OF PENNSYLVANIA, INC
DETAIL OF HISTORIC COST OF GAS
COLUMBIA GAS TRANSMISSION CORPORATION
RATE SCHEDULE FTS -TRANSPORTATION COMMODITY CHARGES

LINE NO.	MONTH	FTS		
		COMMODITY VOLUME (1) Dth	BILLING RATE (2) \$/Dth	FTS AMOUNT (3=1x2) \$
1	FEBRUARY, 2018	617,275	0.0224	13,827
2	MARCH	50,163	0.0224	1,124
3	APRIL	1,635,625	0.0202	33,040
4	MAY	1,530,044	0.0202	30,907
5	JUNE	1,575,766	0.0202	31,830
6	JULY	1,315,904	0.0202	26,581
7	AUGUST	1,419,521	0.0202	28,674
8	SEPTEMBER	1,230,771	0.0202	24,862
9	OCTOBER	1,697,795	0.0202	34,295
10	NOVEMBER	467,325	0.0202	9,440
11	DECEMBER	1,182,236	0.0202	23,881
12	JANUARY, 2019	565,593	0.0202	11,425
13	TOTAL	<u>13,288,018</u>		<u>269,886</u>

EXHIBIT 1-D
SCHEDULE 6
SHEET 5 of 18

COLUMBIA GAS OF PENNSYLVANIA, INC
DETAIL OF HISTORIC COST OF GAS
COLUMBIA GAS TRANSMISSION CORPORATION
RATE SCHEDULE SST -TRANSPORTATION COMMODITY CHARGES

LINE NO.	MONTH	SST		
		COMMODITY VOLUME (1) Dth	BILLING RATE (2) \$/Dth	SST AMOUNT (3=1x2) \$
1	FEBRUARY, 2018	3,764,315	0.0211	79,296
2	ADJUSTMENT			1,763
3	MARCH	5,497,705	0.0212	116,691
4	ADJUSTMENT			(5,487)
5	APRIL	5,206,250	0.0200	104,125
6	ADJUSTMENT			(5,036)
7	MAY	1,443,804	0.0200	28,876
8	ADJUSTMENT			(29,858)
9	JUNE	1,827,329	0.0200	36,547
10	ADJUSTMENT			(404)
11	JULY	2,210,522	0.0200	44,210
12	ADJUSTMENT			(100)
13	AUGUST	1,333,069	0.0200	26,661
14	ADJUSTMENT			(239)
15	SEPTEMBER	1,325,905	0.0200	26,518
16	ADJUSTMENT			(506)
17	OCTOBER	995,219	0.0200	19,904
18	ADJUSTMENT			(560)
19	NOVEMBER	3,854,117	0.0210	80,867
20	ADJUSTMENT			135
21	DECEMBER	3,852,828	0.0200	77,057
22	ADJUSTMENT			(9,977)
23	JANUARY, 2019	6,052,047	0.0200	121,041
24	ADJUSTMENT			(2,092)
25	TOTAL	<u>37,363,110</u>		<u>709,433</u>

EXHIBIT 1-D
SCHEDULE 6
SHEET 6 OF 18

COLUMBIA GAS OF PENNSYLVANIA, INC
DETAIL OF HISTORIC COST OF GAS
COLUMBIA GULF TRANSMISSION COMPANY
RATE SCHEDULE FTS-1 - TRANSPORTATION DEMAND CHARGES

LINE NO.	MONTH	DEMAND VOLUME	BILLING RATE	AMOUNT	CAPACITY RELEASE 1/	TOTAL FTS-1 AMOUNT
		(1) Dth	(2) \$/Dth	(3=1x2) \$	(4) \$	(5=3+4) \$
1	FEBRUARY, 2018	43,632	4.1700	181,945	(68,776)	113,170
2	MARCH	43,632	4.1700	181,945	(68,396)	113,549
3	APRIL	43,632	4.1700	181,945	(68,059)	113,887
4	MAY	43,632	4.1700	181,945	(67,529)	114,416
5	JUNE	43,632	4.1700	181,945	(59,806)	122,139
6	JULY	43,632	4.1700	181,945	(58,313)	123,632
7	AUGUST	43,632	4.1700	181,945	(58,880)	123,065
8	SEPTEMBER	43,632	4.1700	181,945	(59,669)	122,277
9	OCTOBER	43,632	4.1700	181,945	(60,240)	121,706
10	NOVEMBER	43,632	4.1700	181,945	(60,244)	121,701
11	DECEMBER	43,632	4.1700	181,945	(59,156)	122,790
12	JANUARY, 2019	<u>43,632</u>	4.1700	<u>181,945</u>	<u>(58,751)</u>	<u>123,194</u>
13	TOTAL	<u><u>523,584</u></u>		<u><u>2,183,345</u></u>	<u><u>(747,819)</u></u>	<u><u>1,435,527</u></u>

1/ INCLUDES CAPACITY ALLOCATED TO SUPPLIERS PARTICIPATING IN COLUMBIA'S CHOICE PROGRAM.

EXHIBIT 1-D
SCHEDULE 6
SHEET 7 OF 18

COLUMBIA GAS OF PENNSYLVANIA, INC
DETAIL OF HISTORIC COST OF GAS
DOMINION TRANSMISSION
RATE SCHEDULE FTNN - TRANSPORTATION DEMAND CHARGES

LINE NO.	MONTH	DEMAND VOLUME (1) Dth	BILLING RATE (2) \$/Dth	AMOUNT (3=1x2) \$	CAPACITY RELEASE 1/ (4) \$	TOTAL FTNN AMOUNT (5=3+4) \$
1	FEBRUARY, 2018	33,800	4.1743	141,091	0	141,091
2	ADJUSTMENT			(7,623)		(7,623)
3	ADJUSTMENT			(4,628)		(4,628)
4	MARCH	33,800	4.1743	141,091	0	141,091
5	ADJUSTMENT			(7,478)		(7,478)
6	ADJUSTMENT			(4,773)		(4,773)
7	APRIL	26,800	4.1743	111,871	0	111,871
8	ADJUSTMENT			(5,250)		(5,250)
9	ADJUSTMENT			(11,660)		(11,660)
10	MAY	26,800	4.1743	111,871	0	111,871
11	ADJUSTMENT			(4,836)		(4,836)
12	ADJUSTMENT			(12,074)		(12,074)
13	JUNE	26,800	4.1743	111,871	0	111,871
14	ADJUSTMENT			(3,900)		(3,900)
15	ADJUSTMENT			(13,010)		(13,010)
16	JULY	26,800	4.1743	111,871	(1,962)	109,909
17	ADJUSTMENT			(16,910)		(16,910)
18	AUGUST	26,800	4.1743	111,871	(2,004)	109,868
19	ADJUSTMENT			(16,910)		(16,910)
20	SEPTEMBER	26,800	4.1743	111,871	(2,050)	109,822
21	ADJUSTMENT			(16,910)		(16,910)
22	OCTOBER	26,800	4.1743	111,871	(2,112)	109,759
23	ADJUSTMENT			(3,881)		(3,881)
24	ADJUSTMENT			(13,029)		(13,029)
25	NOVEMBER	33,800	4.1742	141,088	(2,258)	138,830
26	ADJUSTMENT			(1,920)		(1,920)
27	ADJUSTMENT			(8,941)		(8,941)
28	DECEMBER	33,800	4.1742	141,088	(2,346)	138,742
29	ADJUSTMENT			(16,910)		(16,910)
30	JANUARY, 2019	33,800	4.1742	141,088	(2,509)	138,579
31	ADJUSTMENT			(10,861)		(10,861)
32	TOTAL	<u>356,600</u>		<u>1,307,039</u>	<u>(15,240)</u>	<u>1,291,799</u>

1/ INCLUDES CAPACITY ALLOCATED TO SUPPLIERS PARTICIPATING IN COLUMBIA'S CHOICE PROGRAM.

EXHIBIT 1-D
SCHEDULE 6
SHEET 8 OF 18

COLUMBIA GAS OF PENNSYLVANIA, INC
DETAIL OF HISTORIC COST OF GAS
DOMINION TRANSMISSION
RATE SCHEDULE FTNN - TRANSPORTATION COMMODITY CHARGES

LINE NO.	MONTH	COMMODITY VOLUME	BILLING RATE	TOTAL FTNN AMOUNT
		(1) Dth	(2) \$/Dth	(3=1x2) \$
1	FEBRUARY, 2018	318,000	0.0170	5,406
2	ADJUSTMENT			(760)
3	MARCH	332,044	0.0170	5,645
4	ADJUSTMENT			(787)
5	ADJUSTMENT			
6	APRIL	135,320	0.0170	2,300
7	ADJUSTMENT			(21)
8	MAY	157,945	0.0170	2,685
9	ADJUSTMENT			(1,266)
10	ADJUSTMENT			
11	JUNE	208,879	0.0170	3,551
12	ADJUSTMENT			(2,656)
13	JULY	188,071	0.0170	3,197
14	ADJUSTMENT			(2,126)
15	AUGUST	164,422	0.0170	2,795
16	ADJUSTMENT			(2,336)
17	SEPTEMBER	227,351	0.0170	3,865
18	ADJUSTMENT			(1,395)
19	OCTOBER	190,533	0.0170	3,239
20	ADJUSTMENT			(1,828)
21	NOVEMBER	328,490	0.0156	5,124
22	ADJUSTMENT			(2,261)
23	DECEMBER	373,525	0.0156	5,827
24	ADJUSTMENT			(36)
25	JANUARY, 2019	485,405	0.0156	7,572
26	ADJUSTMENT			(1,293)
27	TOTAL	<u>3,109,985</u>		<u>34,442</u>

EXHIBIT 1-D
SCHEDULE 6
SHEET 9 OF 18

COLUMBIA GAS OF PENNSYLVANIA, INC
DETAIL OF HISTORIC COST OF GAS
EQUITRANS
RATE SCHEDULE FTS - TRANSPORTATION DEMAND CHARGES

LINE NO.	MONTH	DEMAND VOLUME (1) Dth	BILLING RATE (2) \$/Dth	TOTAL FTS AMOUNT (3=1x2) \$
1	FEBRUARY, 2018	14,348	6.1206	87,818
2	ADJUSTMENT			(53,696)
3	MARCH	14,348	6.1206	87,818
4	ADJUSTMENT			(53,696)
5	APRIL	7,500	5.5559	41,669
6	ADJUSTMENT			(35,169)
7	MAY	7,500	5.5559	41,669
8	ADJUSTMENT			(35,169)
9	JUNE	7,500	5.5559	41,669
10	ADJUSTMENT			(35,169)
11	JULY	7,500	5.5559	41,669
12	ADJUSTMENT			(35,169)
13	AUGUST	7,500	5.5559	41,669
14	ADJUSTMENT			(35,169)
15	SEPTEMBER	7,500	5.5559	41,669
16	ADJUSTMENT			(35,169)
17	OCTOBER	7,500	5.5559	41,669
18	ADJUSTMENT			(35,169)
19	NOVEMBER	14,348	6.1206	87,818
20	ADJUSTMENT			(47,612)
21	DECEMBER	14,348	6.1206	87,818
22	ADJUSTMENT			(38,743)
23	JANUARY, 2019	14,348	6.1206	87,818
24	ADJUSTMENT			(47,612)
25	TOTAL	<u>124,240</u>		<u>243,235</u>

EXHIBIT 1-D
 SCHEDULE 6
 SHEET 10 OF 18

COLUMBIA GAS OF PENNSYLVANIA, INC
 DETAIL OF HISTORIC COST OF GAS
 TENNESSEE GAS PIPELINE CORPORATION
 RATE SCHEDULE FTA - TRANSPORTATION DEMAND CHARGES

LINE NO.	MONTH	DEMAND VOLUME	BILLING RATE	TOTAL FTA AMOUNT
		(1) Dth	(2) \$/Dth	(3=1x2) \$
1	FEBRUARY, 2018	23,600	11.7805	278,020
2	MARCH	23,600	11.7805	278,020
3	APRIL	23,600	11.7805	278,020
4	MAY	23,600	11.7805	278,020
5	JUNE	23,600	11.7805	278,020
6	JULY	23,600	11.7805	278,020
7	AUGUST	23,600	11.7805	278,020
8	SEPTEMBER	23,600	11.7805	278,020
9	OCTOBER	23,600	11.7805	278,020
10	NOVEMBER	23,600	11.5333	272,186
11	DECEMBER	23,600	11.5333	272,186
12	JANUARY, 2019	<u>23,600</u>	11.5333	<u>272,186</u>
13	TOTAL	<u><u>283,200</u></u>		<u><u>3,318,739</u></u>

EXHIBIT 1-D
SCHEDULE 6
SHEET 11 OF 18

COLUMBIA GAS OF PENNSYLVANIA, INC
DETAIL OF HISTORIC COST OF GAS
TENNESSEE GAS PIPELINE CORPORATION
RATE SCHEDULE FTA - TRANSPORTATION COMMODITY CHARGES

LINE NO.	MONTH	COMMODITY VOLUME (1) Dth	BILLING RATE (2) \$/Dth	TOTAL FTA AMOUNT (3=1x2) \$
1	FEBRUARY, 2018	318,722	0.0507	16,159
2	MARCH	375,239	0.0507	19,025
3	APRIL	296,563	0.0512	15,184
4	ADJUSTMENT			1
5	MAY	113,995	0.0512	5,836
6	ADJUSTMENT			(2)
7	JUNE	110,678	0.0512	5,667
8	JULY	146,727	0.0512	7,512
9	AUGUST	123,419	0.0512	6,319
10	SEPTEMBER	110,620	0.0512	5,664
11	OCTOBER	206,104	0.0512	10,553
12	NOVEMBER	360,472	0.0500	18,024
13	ADJUSTMENT			(1)
14	DECEMBER	344,315	0.0500	17,216
15	ADJUSTMENT			(2)
16	JANUARY, 2019	455,344	0.0500	22,767
17	ADJUSTMENT	(61)	0.0551	(3)
18	TOTAL	<u>2,962,137</u>		<u>149,918</u>

EXHIBIT 1-D
SCHEDULE 6
SHEET 12 OF 18

COLUMBIA GAS OF PENNSYLVANIA, INC
DETAIL OF HISTORIC COST OF GAS
TEXAS EASTERN TRANSMISSION CORPORATION
TRANSPORTATION DEMAND CHARGES

LINE NO.	MONTH	TOTAL CDS AND FT1 DEMAND 1/ (1) \$
1	FEBRUARY, 2018	268,304
2	MARCH	280,317
3	ADJUSTMENT	(11,958)
4	APRIL	230,977
5	ADJUSTMENT	(11,958)
6	MAY	230,977
7	ADJUSTMENT	(11,958)
8	JUNE	230,977
9	ADJUSTMENT	(11,958)
10	JULY	230,977
11	ADJUSTMENT	(11,958)
12	AUGUST	231,988
13	ADJUSTMENT	(11,958)
14	SEPTEMBER	223,184
15	ADJUSTMENT	(11,982)
16	OCTOBER	220,350
17	ADJUSTMENT	(3,178)
18	NOVEMBER	219,923
19	ADJUSTMENT	(344)
20	DECEMBER	281,580
21	ADJUSTMENT	83
22	JANUARY, 2019	281,580
23	ADJUSTMENT	(12,000)
24	TOTAL	<u>2,831,967</u>

1/ CDS AND FT1 DEMAND CHARGES ARE DETAILED ON SHEETS 13-14.

COLUMBIA GAS OF PENNSYLVANIA, INC
DETAIL OF HISTORIC COST OF GAS
TEXAS EASTERN TRANSMISSION CORPORATION
TRANSPORTATION DEMAND CHARGES

LINE NO.	MONTH	CDS CONTRACT # 800387			CDS CONTRACT # 910463			CDS CONTRACT # 910464			TOTAL AMOUNT CDS
		DEMAND VOLUME (1) Dth	RATE (2) \$/Dth	AMOUNT (3=1x2) \$	DEMAND VOLUME (4) Dth	RATE (5) \$/Dth	AMOUNT (6=4x5) \$	DEMAND VOLUME (7) Dth	RATE (8) \$/Dth	AMOUNT (9=7x8) \$	
1	FEBRUARY, 2018	5,390	6.5163	35,123	364	6.5126	2,371	9,951	6.5032	64,714	102,207
2	MARCH	5,390	6.5163	35,123	364	6.5126	2,371	9,951	6.5032	64,714	102,207
3	APRIL	5,390	6.5163	35,123	364	6.5126	2,371	9,951	6.5032	64,714	102,207
4	MAY	5,390	6.5163	35,123	364	6.5126	2,371	9,951	6.5032	64,714	102,207
5	JUNE	5,390	6.5163	35,123	364	6.5126	2,371	9,951	6.5032	64,714	102,207
6	JULY	5,390	6.5163	35,123	364	6.5126	2,371	9,951	6.5032	64,714	102,207
7	AUGUST	5,390	6.5410	35,256	364	6.5373	2,380	9,951	6.5319	64,999	102,634
8	SEPTEMBER	5,390	6.5410	35,256	364	6.5373	2,380	9,951	6.5319	64,999	102,634
9	OCTOBER	5,390	6.5410	35,256	364	6.5373	2,380	9,951	6.5319	64,999	102,634
10	NOVEMBER	5,390	6.5163	35,123	364	6.5126	2,371	9,951	6.5032	64,714	102,207
11	DECEMBER	5,390	6.5420	35,261	364	6.5383	2,380	9,951	6.5329	65,009	102,650
12	ADJUSTMENT			134			9			285	428
13	JANUARY, 2019	5,390	6.5420	35,261	364	6.5383	2,380	9,951	6.5329	65,009	102,650
14	ADJUSTMENT			(1)							(1)
15	TOTAL	<u>64,680</u>		<u>422,283</u>	<u>4,368</u>		<u>28,502</u>	<u>119,412</u>		<u>778,294</u>	<u>1,229,078</u>

COLUMBIA GAS OF PENNSYLVANIA, INC
DETAIL OF HISTORIC COST OF GAS
TEXAS EASTERN TRANSMISSION CORPORATION
TRANSPORTATION DEMAND CHARGES

LINE NO.	MONTH	FT-1 CONTRACT # 830049			FT-1 CONTRACT # 910951			TOTAL AMOUNT FT-1 (17=13+16) \$	TOTAL CDS AND FT-1 DEMAND (18=10+17) \$
		DEMAND VOLUME (11) Dth	RATE (12) \$/Dth	AMOUNT (13=11x12) \$	DEMAND VOLUME (14) Dth	RATE (15) \$/Dth	AMOUNT (16=14x15) \$		
1	FEBRUARY, 2018	10,000	4.9340	49,340	15,335	8.3972	128,771	178,111	280,317
2	ADJUSTMENT						(12,014)	(12,014)	(12,014)
3	MARCH	10,000	4.9340	49,340	15,335	8.3972	128,771	178,111	280,317
4	ADJUSTMENT						(11,958)	(11,958)	(11,958)
5	APRIL	0	0.0000	0	15,335	8.3972	128,771	128,771	230,977
6	ADJUSTMENT						(11,958)	(11,958)	(11,958)
7	MAY	0	0.0000	0	15,335	8.3972	128,771	128,771	230,977
8	ADJUSTMENT						(11,958)	(11,958)	(11,958)
9	JUNE	0	0.0000	0	15,335	8.3972	128,771	128,771	230,977
10	ADJUSTMENT						(11,958)	(11,958)	(11,958)
11	JULY	0	0.0000	0	15,335	8.3972	128,771	128,771	230,977
12	ADJUSTMENT						(11,958)	(11,958)	(11,958)
13	AUGUST	0	0.0000	0	15,335	8.4352	129,354	129,354	231,988
14	ADJUSTMENT						(11,958)	(11,958)	(11,958)
15	SEPTEMBER	0	0.0000	0	15,335	7.8610	120,549	120,549	223,184
16	ADJUSTMENT						(11,982)	(11,982)	(11,982)
17	OCTOBER	0	0.0000	0	14,835	7.9350	117,716	117,716	220,350
18	ADJUSTMENT						(3,178)	(3,178)	(3,178)
19	NOVEMBER	0	0.0000	0	14,835	7.9350	117,716	117,716	219,923
20	ADJUSTMENT						(344)	(344)	(344)
21	DECEMBER	10,000	4.9530	49,530	15,335	8.4382	129,400	178,930	281,580
22	ADJUSTMENT						(344)	(344)	83
23	JANUARY, 2019	10,000	4.9530	49,530	15,335	8.4382	129,400	178,930	281,580
24	ADJUSTMENT						(12,000)	(12,000)	(12,000)
25	TOTAL	<u>40,000</u>		<u>197,740</u>	<u>183,020</u>		<u>1,405,149</u>	<u>1,602,889</u>	<u>2,831,967</u>

EXHIBIT 1-D
SCHEDULE 6
SHEET 15 OF 18

COLUMBIA GAS OF PENNSYLVANIA, INC
DETAIL OF HISTORIC COST OF GAS
TEXAS EASTERN TRANSMISSION CORPORATION
TRANSPORTATION COMMODITY CHARGES

LINE NO.	MONTH	COMMODITY VOLUME	BILLING RATE	TOTAL FT1 COMMODITY	COMMODITY VOLUME	BILLING RATE	TOTAL CDS COMMODITY	TOTAL FT1 CDS
		(1) Dth	(2) \$/Dth	(3=1x2) \$	(4) Dth	(5) \$/Dth	(6=4x5) \$	(7=3+6) \$
1	FEBRUARY, 2018	97,900	0.0198	1,938	0	0.0000	0	1,938
2	ADJUSTMENT	0	0.0000	915	0	0.0000	0	915
3	MARCH	75,400	0.0198	1,493	0	0.0000		1,493
4	ADJUSTMENT	0	0.0000	547	0	0.0000	0	547
5	APRIL	0	0.0000	0	0	0.0000	0	0
6	ADJUSTMENT	0	0.0000	427	0	0.0000	0	427
7	MAY	0	0.0000	0	0	0.0000	0	0
8	JUNE	0	0.0000	0	0	0.0000	0	0
9	JULY	0	0.0000	0	0	0.0000	0	0
10	AUGUST	0	0.0000	0	0	0.0000	0	0
11	SEPTEMBER	0	0.0000	0	0	0.0000	0	0
12	OCTOBER	0	0.0000	0	0	0.0000	0	0
13	NOVEMBER	0	0.0000	0	0	0.0000	0	0
14	DECEMBER	35,000	0.0303	1,061	0	0.0000	0	1,061
15	JANUARY, 2019	56,000	0.0303	1,697	0	0.0000	0	1,697
16	ADJUSTMENT	<u>0</u>	0.0000	<u>(74)</u>	<u>0</u>	0.0000	<u>0</u>	<u>(74)</u>
17	TOTAL	<u>264,300</u>		<u>8,004</u>	<u>0</u>		<u>0</u>	<u>8,004</u>

EXHIBIT 1-D
SCHEDULE 6
SHEET 16 OF 18

COLUMBIA GAS OF PENNSYLVANIA, INC
DETAIL OF HISTORIC COST OF GAS
NATIONAL FUEL GAS SUPPLY
RATE SCHEDULE FT - TRANSPORTATION DEMAND CHARGES

LINE NO.	MONTH	DEMAND VOLUME	BILLING RATE	TOTAL FT AMOUNT
		(1) Dth	(2) \$/Dth	(3=1x2) \$
1	FEBRUARY, 2018	4,304	3.6874	15,871
2	MARCH	4,304	3.6874	15,871
3	APRIL	4,304	3.6874	15,871
4	MAY	4,304	3.6874	15,871
5	JUNE	4,304	3.6874	15,871
6	JULY	4,304	3.6874	15,871
7	AUGUST	4,304	3.6874	15,871
8	SEPTEMBER	4,304	3.6874	15,871
9	OCTOBER	4,304	3.6874	15,871
10	NOVEMBER	4,304	3.6727	15,807
11	DECEMBER	4,304	3.6727	15,807
12	JANUARY, 2019	4,304	3.6727	15,807
13	TOTAL	51,648		190,257

EXHIBIT 1-D
SCHEDULE 6
SHEET 17 OF 18

COLUMBIA GAS OF PENNSYLVANIA, INC
DETAIL OF HISTORIC COST OF GAS
NATIONAL FUEL GAS SUPPLY
TRANSPORTATION COMMODITY CHARGES

LINE NO.	MONTH	COMMODITY VOLUME	BILLING RATE	TOTAL FT COMMODITY
		(1) Dth	(2) \$/Dth	(3=1x2) \$
1	FEBRUARY, 2018	47,187	0.0148	698
2	ADJUSTMENT			(53)
3	MARCH	52,359	0.0148	775
4	ADJUSTMENT			(11)
5	APRIL	38,662	0.0148	572
6	ADJUSTMENT			16
7	MAY	10,054	0.0148	149
8	ADJUSTMENT			(21)
9	JUNE	1,470	0.0148	22
10	ADJUSTMENT			9
11	JULY	8,099	0.0148	120
12	ADJUSTMENT			20
13	AUGUST	5,807	0.0148	86
14	ADJUSTMENT			(23)
15	SEPTEMBER	10,520	0.0148	156
16	ADJUSTMENT			10
17	OCTOBER	20,039	0.0148	297
18	ADJUSTMENT			(22)
19	NOVEMBER	44,947	0.0148	665
20	ADJUSTMENT			15
21	DECEMBER	51,303	0.0148	759
22	ADJUSTMENT			(4)
23	JANUARY, 2019	68,550	0.0148	1,015
24	ADJUSTMENT			(14)
25	TOTAL	<u>358,997</u>		<u>5,236</u>

EXHIBIT 1-D
SCHEDULE 6
SHEET 18 OF 18

COLUMBIA GAS OF PENNSYLVANIA, INC
DETAIL OF HISTORIC COST OF GAS
TRANSPORTATION SHRINKAGE VOLUMES AND OPERATIONAL BALANCING CHARGES
AND OTHER COMMODITY CHARGES

LINE NO.	MONTH	TRANSPORTATION SHRINKAGE VOLUMES	DEMAND OPERATIONAL BALANCING CHARGES	COMMODITY CASH IN/ CASH OUT EXCHANGE FEES	COMMODITY OTHER COMPLIANCE	TOTAL COMMODITY
		(1) Dth	(2) \$	(3) \$	(4) \$	(5=3+4) \$
1	FEBRUARY, 2018	(24,003)	131	0	7,366	7,366
2	MARCH	(29,357)	0	0	117,306	117,306
3	APRIL	(91,607)	0	0	0	0
4	MAY	(49,643)	0	0	0	0
5	JUNE	(60,144)	0	0	288,102	288,102
6	JULY	(62,805)	0	0	(11,137)	(11,137)
7	AUGUST	(51,453)	13	0	16	16
8	SEPTEMBER	(48,830)	1,914	0	11,153	11,153
9	OCTOBER	(50,534)	75	0	0	0
10	NOVEMBER	(24,305)	2,010	0	(939)	(939)
11	DECEMBER	(49,926)	0	0	2,002	2,002
12	JANUARY, 2019	(24,034)	0	0	939	939
13	TOTAL	(566,641)	4,143	0	414,807	414,807

COLUMBIA GAS OF PENNSYLVANIA, INC
53.53 III. BALANCE SHEET AND OPERATING STATEMENT
E. GAS UTILITIES

25. Submit calculations supporting energy cost per MCF and operating ratio used to determine increase in costs other than production to serve additional load.

Response:

For support of energy cost per Dth included in the base cost of gas, refer to Exhibit No. 12, Schedule No. 5 (31), Page 1.

The Company has not adjusted test year operating expenses to serve additional load other than to reflect the base cost of gas applicable to the adjusted sales volumes.

COLUMBIA GAS OF PENNSYLVANIA, INC
53.53 III. BALANCE SHEET AND OPERATING STATEMENT
E. GAS UTILITIES

31. Provide a schedule showing the determination of the fuel costs included in the base cost of fuel.

Response:

The cost of gas included in the base cost of fuel from October 1, 2018 through December 31, 2018 is detailed on Page 2. During this period, the PGC Rate was \$3.9807 per Dth with an E-Factor of (\$0.0971), which equals a combined Total Rate of \$3.8836 per Dth.

The cost of gas included in the base cost of fuel from January 1, 2019 through March 31, 2019 is detailed on Page 3. During this period, the PGC Rate was \$4.3763 per Dth with an E-Factor of (\$0.0655), which equals a combined Total Rate of \$4.3108 per Dth.

The cost of gas included in the base cost of fuel from April 1, 2019 through June 30, 2019 is detailed on Page 4. During this period, the PGC Rate was \$4.1639 per Dth with an E-Factor of (\$0.0655), which equals a combined Total Rate of \$4.0984 per Dth.

The cost of gas included in the base cost of fuel from July 1, 2019 through September 30, 2019 is detailed on Page 5. During this period, the PGC Rate was \$4.0123 per Dth with an E-Factor of (\$0.0655), which equals a combined Total Rate of \$3.9468 per Dth.

The cost of gas included in the base cost of fuel from October 1, 2019 through December 31, 2019 is detailed on Page 6. During this period, the PGC Rate was \$3.5962 per Dth with an E-Factor of \$0.0305, which equals a combined Total Rate of \$3.6267 per Dth.

Columbia has used its purchased gas cost rates effective January 1, 2020 in determining pro forma revenues and pro forma purchased gas cost expense for the historic and future test years in this case. Please refer to Exhibit No. 3, Schedule No. 1, and Exhibit No. 103, Schedule No. 1.

COLUMBIA GAS OF PENNSYLVANIA, INC.
COMPUTATION OF CHANGE IN RATE PURSUANT TO SECTION 1307(f)
APPLICATION PERIOD: OCTOBER, 2018 THROUGH SEPTEMBER, 2019

Line No.	Description	Amount
		(1)
1	<u>Purchased Gas Commodity Cost</u>	\$
2	Commodity Cost of Gas (Exhibit 1-B, Schedule 1)	104,595,154
3	Projected tariff sales for the twelve billing periods of	
4	October, 2018 through September, 2019	367,700,429 Therms
5	PGCC (Line 2/Line 4)	0.28446
6	<u>Commodity (Over)/Under Collection</u>	
7	Commodity E-Factor	
8	(Exhibit No. 1-E)	(2,795,242)
9	Projected sales for the twelve billing periods of	
10	October, 2018 through September, 2019	367,700,429 Therms
11	Commodity E-Factor (Line 8/ Line 10)	(0.00760)
12	<u>Purchased Gas Demand Cost</u>	
13	Demand cost of gas (Exhibit 1-B, Schedule 1)	62,342,775
14	Less: Purchased Gas Demand recovered under Rate SS	
15	(Exhibit 1-A, Schedule 2, Sheet 2)	433,003
16	Less: Purchased Gas Demand Cost allocated to Rates LTS, STS,	
17	SGS-TS and MLS (Exh 1-A, Sch 2, Page 3)	0
18	Subtotal (Line 13 - Line 15 - Line 17)	61,909,772
19	Projected sales for the twelve billing periods of	
20	October, 2018 through September, 2019	1 / 468,790,943 Therms
21	PGDC Rate prior to Capacity Release Credit (Line 18 / Line 20)	0.13206
22	Off System Sales and Capacity Release Credit	(0.01845)
23	PGDC Rate	0.11361
24	<u>Demand (Over)/Under Collection</u>	
25	Demand E- Factor	
26	(Exhibit No. 1-E)	(988,957)
27	Projected sales for the twelve billing periods of	
28	October, 2018 through September, 2019	1 / 468,790,943 Therms
29	Demand E-Factor (Line 26 / Line 28)	(0.00211)
30	<u>Total Purchased Gas Cost</u>	
31	PGCC Rate (Line 5)	0.28446
32	PGDC Rate (Line 23)	0.11361
33	PGC Rate	0.39807
34	Currently effective PGC	0.38077
35	Increase (Decrease) in PGC	0.01730
36	<u>Net (Over) Under Collection</u>	
37	Commodity E-Factor (Line 11)	(0.00760)
38	Demand E-Factor (Line 29)	(0.00211)
39	E-Factor	(0.00971)
40	Currently effective E-Factor	0.00332
41	Increase (Decrease) in E-Factor	(0.01303)
42	PGC Rate	0.39807
43	E-Factor	(0.00971)
44	Total Rate	0.38836
45	Currently effective Rate	0.38409
46	Increase (Decrease) in Rate	0.00427

1 / Includes 101,090,514 Therm Transportation Quantities for the Company's Choice Program

COLUMBIA GAS OF PENNSYLVANIA, INC.
COMPUTATION OF CHANGE IN RATE PURSUANT TO SECTION 1307(f)
APPLICATION PERIOD: OCTOBER, 2018 THROUGH SEPTEMBER, 2019

Line No.	Description	Amount (1)	Change in Rate (2=3-1)	Effective 1-1-19 (3)
1	<u>Purchased Gas Commodity Cost</u>	\$		
2	Commodity Cost of Gas (Exhibit 1-B, Schedule 1)	104,595,154		
3	Projected tariff sales for the twelve billing periods of			
4	October, 2018 through September, 2019	367,700,429 Therms		
5	PGCC (Line 2/Line 4)	0.28446	0.04220	0.32666
6	<u>Commodity (Over)/Under Collection</u>			
7	Commodity E-Factor			
8	(Exhibit No. 1-E)	(2,795,242)	1,369,617	(1,425,625)
9	Projected sales for the twelve billing periods of			
10	October, 2018 through September, 2019	367,700,429 Therms		367,700,429
11	Commodity E-Factor (Line 8/ Line 10)	(0.00760)	0.00372	(0.00388)
12	<u>Purchased Gas Demand Cost</u>			
13	Demand cost of gas (Exhibit 1-B, Schedule 1)	62,342,775		
14	Less: Purchased Gas Demand recovered under Rate SS			
15	(Exhibit 1-A, Schedule 2, Sheet 2)	433,003		
16	Less: Purchased Gas Demand Cost allocated to Rates LTS, STS,			
17	SGS-TS and MLS (Exh 1-A, Sch 2, Page 3)	0		
18	Subtotal (Line 13 - Line 15 - Line 17)	61,909,772		
19	Projected sales for the twelve billing periods of			
20	October, 2018 through September, 2019 1_ /	468,790,943 Therms		
21	PGDC Rate prior to Capacity Release Credit (Line 18 / Line 20)	0.13206	(0.00264)	0.12942
22	Off System Sales and Capacity Release Credit	(0.01845)	0.00000	(0.01845)
23	PGDC Rate	0.11361	(0.00264)	0.11097
24	<u>Demand (Over)/Under Collection</u>			
25	Demand E- Factor			
26	(Exhibit No. 1-E)	(988,957)	(260,855)	(1,249,812)
27	Projected sales for the twelve billing periods of			
28	October, 2018 through September, 2019 1_ /	468,790,943 Therms		468,790,943
29	Demand E-Factor (Line 26 / Line 28)	(0.00211)	(0.00056)	(0.00267)
30	<u>Total Purchased Gas Cost</u>			
31	PGCC Rate (Line 5)	0.28446	0.04220	0.32666
32	PGDC Rate (Line 23)	0.11361	(0.00264)	0.11097
33	PGC Rate	0.39807	0.03956	0.43763
34	Currently effective PGC	0.38077		0.39807
35	Increase (Decrease) in PGC	0.01730		0.03956
36	<u>Net (Over) Under Collection</u>			
37	Commodity E-Factor (Line 11)	(0.00760)	0.00372	(0.00388)
38	Demand E-Factor (Line 29)	(0.00211)	(0.00056)	(0.00267)
39	E-Factor	(0.00971)	0.00316	(0.00655)
40	Currently effective E-Factor	0.00332		(0.00971)
41	Increase (Decrease) in E-Factor	(0.01303)		0.00316
42	PGC Rate	0.39807	0.03956	0.43763
43	E-Factor	(0.00971)	0.00316	(0.00655)
44	Total Rate	0.38836	0.04272	0.43108
45	Currently effective Rate	0.38409		0.38836
46	Increase (Decrease) in Rate	0.00427		0.04272

11.00%

1_ / Includes 101,090,514 Therm Transportation Quantities for the Company's Choice Program

COLUMBIA GAS OF PENNSYLVANIA, INC.
COMPUTATION OF CHANGE IN RATE PURSUANT TO SECTION 1307(f)
APPLICATION PERIOD: OCTOBER, 2018 THROUGH SEPTEMBER, 2019

Line No.	Description	Amount	Change in Rate	Effective 1-1-19	Change in Rate	Effective 4-1-19
		(1)	(2=3-1)	(3)	(4=5-3)	(5)
1	<u>Purchased Gas Commodity Cost</u>	\$				
2	Commodity Cost of Gas (Exhibit 1-B, Schedule 1)	104,595,154				
3	Projected tariff sales for the twelve billing periods of					
4	October, 2018 through September, 2019	367,700,429 Therms				
5	PGCC (Line 2/Line 4)	0.28446	0.04220	0.32666	(0.03009)	0.29657
6	<u>Commodity (Over)/Under Collection</u>					
7	Commodity E-Factor					
8	(Exhibit No. 1-E)	(2,795,242)	1,369,617	(1,425,625)	0	(1,425,625)
9	Projected sales for the twelve billing periods of					
10	October, 2018 through September, 2019	367,700,429 Therms		367,700,429		367,700,429
11	Commodity E-Factor (Line 8/ Line 10)	(0.00760)	0.00372	(0.00388)	0.00000	(0.00388)
12	<u>Purchased Gas Demand Cost</u>					
13	Demand cost of gas (Exhibit 1-B, Schedule 1)	62,342,775				
14	Less: Purchased Gas Demand recovered under Rate SS					
15	(Exhibit 1-A, Schedule 2, Sheet 2)	433,003				
16	Less: Purchased Gas Demand Cost allocated to Rates LTS, STS,					
17	SGS-TS and MLS (Exh 1-A, Sch 2, Page 3)	0				
18	Subtotal (Line 13 - Line 15 - Line 17)	61,909,772				
19	Projected sales for the twelve billing periods of					
20	October, 2018 through September, 2019	468,790,943 Therms				
21	PGDC Rate prior to Capacity Release Credit (Line 18 / Line 20)	0.13206	(0.00264)	0.12942	0.00885	0.13827
22	Off System Sales and Capacity Release Credit	(0.01845)	0.00000	(0.01845)	0.00000	(0.01845)
23	PGDC Rate	0.11361	(0.00264)	0.11097	0.00885	0.11982
24	<u>Demand (Over)/Under Collection</u>					
25	Demand E-Factor					
26	(Exhibit No. 1-E)	(988,957)	(260,855)	(1,249,812)	0	(1,249,812)
27	Projected sales for the twelve billing periods of					
28	October, 2018 through September, 2019	468,790,943 Therms		468,790,943		468,790,943
29	Demand E-Factor (Line 26 / Line 28)	(0.00211)	(0.00056)	(0.00267)	0.00000	(0.00267)
30	<u>Total Purchased Gas Cost</u>					
31	PGCC Rate (Line 5)	0.28446	0.04220	0.32666	(0.03009)	0.29657
32	PGDC Rate (Line 23)	0.11361	(0.00264)	0.11097	0.00885	0.11982
33	PGC Rate	0.39807	0.03956	0.43763	(0.02124)	0.41639
34	Currently effective PGC	0.38077		0.39807		0.43763
35	Increase (Decrease) in PGC	0.01730		0.03956		(0.02124)
36	<u>Net (Over) Under Collection</u>					
37	Commodity E-Factor (Line 11)	(0.00760)	0.00372	(0.00388)	0.00000	(0.00388)
38	Demand E-Factor (Line 29)	(0.00211)	(0.00056)	(0.00267)	0.00000	(0.00267)
39	E-Factor	(0.00971)	0.00316	(0.00655)	0.00000	(0.00655)
40	Currently effective E-Factor	0.00332		(0.00971)		(0.00655)
41	Increase (Decrease) in E-Factor	(0.01303)		0.00316		0.00000
42	PGC Rate	0.39807	0.03956	0.43763	(0.02124)	0.41639
43	E-Factor	(0.00971)	0.00316	(0.00655)	0.00000	(0.00655)
44	Total Rate	0.38836	0.04272	0.43108	(0.02124)	0.40984
45	Currently effective Rate	0.38409		0.38836		0.43108
46	Increase (Decrease) in Rate	0.00427		0.04272		(0.02124)

1_/ Includes 101,090,514 Therm Transportation Quantities for the Company's Choice Program

COLUMBIA GAS OF PENNSYLVANIA, INC.
COMPUTATION OF CHANGE IN RATE PURSUANT TO SECTION 1307(f)
APPLICATION PERIOD: OCTOBER, 2018 THROUGH SEPTEMBER, 2019

Line No.	Description	Amount (1)	Change in Rate (2=3-1)	Effective 1-1-19 (3)	Change in Rate (4=5-3)	Effective 4-1-19 (5)	Change in Rate (6=7-5)	Effective 7-1-19 (7)
1	<u>Purchased Gas Commodity Cost</u>	\$						
2	Commodity Cost of Gas (Exhibit 1-B, Schedule 1)	104,595,154						
3	Projected tariff sales for the twelve billing periods of							
4	October, 2018 through September, 2019	367,700,429						
5	PGCC (Line 2/Line 4)	0.28446	0.04220	0.32666	(0.03009)	0.29657	(0.02171)	0.27486
6	<u>Commodity (Over)/Under Collection</u>							
7	Commodity E-Factor							
8	(Exhibit No. 1-E)	(2,795,242)	1,369,617	(1,425,625)	0	(1,425,625)	0	(1,425,625)
9	Projected sales for the twelve billing periods of							
10	October, 2018 through September, 2019	367,700,429		367,700,429		367,700,429		367,700,429
11	Commodity E-Factor (Line 8/ Line 10)	(0.00760)	0.00372	(0.00388)	0.00000	(0.00388)	0.00000	(0.00388)
12	<u>Purchased Gas Demand Cost</u>							
13	Demand cost of gas (Exhibit 1-B, Schedule 1)	62,342,775						
14	Less: Purchased Gas Demand recovered under Rate SS							
15	(Exhibit 1-A, Schedule 2, Sheet 2)	433,003						
16	Less: Purchased Gas Demand Cost allocated to Rates LTS, STS,							
17	SGS-TS and MLS (Exh 1-A, Sch 2, Page 3)	0						
18	Subtotal (Line 13 - Line 15 - Line 17)	61,909,772						
19	Projected sales for the twelve billing periods of							
20	October, 2018 through September, 2019	468,790,943						
21	PGDC Rate prior to Capacity Release Credit (Line 18 / Line 20)	0.13206	(0.00264)	0.12942	0.00885	0.13827	0.00655	0.14482
22	Off System Sales and Capacity Release Credit	(0.01845)	0.00000	(0.01845)	0.00000	(0.01845)	0.00000	(0.01845)
23	PGDC Rate	0.11361	(0.00264)	0.11097	0.00885	0.11982	0.00655	0.12637
24	<u>Demand (Over)/Under Collection</u>							
25	Demand E-Factor							
26	(Exhibit No. 1-E)	(988,957)	(260,855)	(1,249,812)	0	(1,249,812)	0.00000	(1,249,812)
27	Projected sales for the twelve billing periods of							
28	October, 2018 through September, 2019	468,790,943		468,790,943		468,790,943		468,790,943
29	Demand E-Factor (Line 26 / Line 28)	(0.00211)	(0.00056)	(0.00267)	0.00000	(0.00267)	0.00000	(0.00267)
30	<u>Total Purchased Gas Cost</u>							
31	PGCC Rate (Line 5)	0.28446	0.04220	0.32666	(0.03009)	0.29657	(0.02171)	0.27486
32	PGDC Rate (Line 23)	0.11361	(0.00264)	0.11097	0.00885	0.11982	0.00655	0.12637
33	PGC Rate	0.39807	0.03956	0.43763	(0.02124)	0.41639	(0.01516)	0.40123
34	Currently effective PGC	0.38077		0.39807		0.43763		0.41639
35	Increase (Decrease) in PGC	0.01730		0.03956		(0.02124)		(0.01516)
36	<u>Net (Over) Under Collection</u>							
37	Commodity E-Factor (Line 11)	(0.00760)	0.00372	(0.00388)	0.00000	(0.00388)	0.00000	(0.00388)
38	Demand E-Factor (Line 29)	(0.00211)	(0.00056)	(0.00267)	0.00000	(0.00267)	0.00000	(0.00267)
39	E-Factor	(0.00971)	0.00316	(0.00655)	0.00000	(0.00655)	0.00000	(0.00655)
40	Currently effective E-Factor	(0.01126)		(0.00971)		(0.00655)		(0.00655)
41	Increase (Decrease) in E-Factor	0.00155		0.00316		0.00000		0.00000
42	PGC Rate	0.39807	0.03956	0.43763	(0.02124)	0.41639	(0.01516)	0.40123
43	E-Factor	(0.00971)	0.00316	(0.00655)	0.00000	(0.00655)	0.00000	(0.00655)
44	Total Rate	0.38836	0.04272	0.43108	(0.02124)	0.40984	(0.01516)	0.39468
45	Currently effective Rate	0.36951		0.38836		0.43108		0.40984
46	Increase (Decrease) in Rate	0.01885		0.04272		(0.02124)		(0.01516)
				11.00%		-4.93%		-3.70%

1_/ Includes 101,090,514 Therm Transportation Quantities for the Company's Choice Program

COLUMBIA GAS OF PENNSYLVANIA, INC.
COMPUTATION OF CHANGE IN RATE PURSUANT TO SECTION 1307(f)
APPLICATION PERIOD: OCTOBER, 2019 THROUGH SEPTEMBER, 2020

Line No.	Description	Amount
		(1)
1	<u>Purchased Gas Commodity Cost</u>	\$
2	Commodity Cost of Gas (Exhibit 1-B, Schedule 1)	92,304,514
3	Projected tariff sales for the twelve billing periods of	
4	October, 2019 through September, 2020	<u>380,962,576</u> Therms
5	PGCC (Line 2/Line 4)	0.24229
6	<u>Commodity (Over)/Under Collection</u>	
7	Commodity E-Factor	
8	(Exhibit No. 1-E)	(3,087,828)
9	Projected sales for the twelve billing periods of	
10	October, 2019 through September, 2020	<u>380,962,576</u> Therms
11	Commodity E-Factor (Line 8/ Line 10)	(0.00811)
12	<u>Purchased Gas Demand Cost</u>	
13	Demand cost of gas (Exhibit 1-B, Schedule 1)	60,160,397
14	Less: Purchased Gas Demand recovered under Rate SS	
15	(Exhibit 1-A, Schedule 2, Sheet 2)	489,933
16	Less: Purchased Gas Demand Cost allocated to Rates LTS, STS,	
17	SGS-TS and MLS (Exh 1-A, Sch 2, Page 3)	<u>0</u>
18	Subtotal (Line 13 - Line 15 - Line 17)	59,670,464
19	Projected sales for the twelve billing periods of	
20	October, 2019 through September, 2020	<u>1 / 474,689,562</u> Therms
21	PGDC Rate prior to Capacity Release Credit (Line 18 / Line 20)	0.12570
22	Off System Sales and Capacity Release Credit	<u>(0.00837)</u>
23	PGDC Rate	0.11733
24	<u>Demand (Over)/Under Collection</u>	
25	Demand E- Factor	
26	(Exhibit No. 1-E)	5,296,818
27	Projected sales for the twelve billing periods of	
28	October, 2019 through September, 2020	<u>1 / 474,689,562</u> Therms
29	Demand E-Factor (Line 26 / Line 28)	0.01116
30	<u>Total Purchased Gas Cost</u>	
31	PGCC Rate (Line 5)	0.24229
32	PGDC Rate (Line 23)	<u>0.11733</u>
33	PGC Rate	0.35962
34	Currently effective PGC	<u>0.40123</u>
35	Increase (Decrease) in PGC	(0.04161)
36	<u>Net (Over) Under Collection</u>	
37	Commodity E-Factor (Line 11)	(0.00811)
38	Demand E-Factor (Line 29)	<u>0.01116</u>
39	E-Factor	0.00305
40	Currently effective E-Factor	<u>(0.00655)</u>
41	Increase (Decrease) in E-Factor	0.00960
42	PGC Rate	0.35962
43	E-Factor	<u>0.00305</u>
44	Total Rate	0.36267
45	Currently effective Rate	<u>0.39468</u>
46	Increase (Decrease) in Rate	(0.03201)

1 / Includes 93,726,986 Therm Transportation Quantities for the Company's Choice Program

COLUMBIA GAS OF PENNSYLVANIA, INC.
53.53 IV. RATE STRUCTURE
B. GAS UTILITIES

11. Supply the net fuel clause adjustment by month for the test year.

Response:

Columbia Gas of Pennsylvania, Inc. does not have a net fuel clause in its tariff.

Exhibit No. 12
Schedule No. 7
Page 1 of 2
Witness: M. J. Bell

COLUMBIA GAS OF PENNSYLVANIA, INC.
OPERATIONS AND MAINTENANCE EXPENSE ADJUSTMENTS
TO THE TWELVE MONTHS ENDED NOVEMBER 30, 2019
ADJUSTMENTS TO PURCHASED GAS EXPENSE
53.62

To adjust the Cost of Purchased Gas Expense to the level being recovered through base tariff rates.

Response:

The adjustment to the Cost of Purchased Gas Expense for the twelve months ended November 30, 2019 was \$30,512,884. Please see Page 2 of this schedule for detail of this adjustment by rate schedule.

Columbia Gas of Pennsylvania, Inc.
 Operations and Maintenance Expense Adjustments
 To the Twelve Months Ended November 30, 2019
 Adjustments to Purchased Gas Expense
 53.62

(1) Purchased Gas Costs
 Per Books for the Twelve Months Ended
 November 30, 2019

\$
172,060,016

(2) Purchased Gas Cost
 to be Recovered in Base Tariff Rates:

<u>Rate Schedule</u>	<u>Total Rate</u>	<u>Adjusted Volumes</u>	<u>Gas Cost</u>
<u>Gas Supply Expense</u>			
1/ Residential Sales Service - RSS	3.4808	28,876,789	100,514,327
Small General Sales Service - SGSS	3.4808	7,697,119	26,792,133
Negotiated Sales Service- NSS	Varies	70,864	221,579
Large General Sales Service - LGSS	3.4808	995,701	3,465,836
Residential Distribution Service - RDS	1.0763	5,629,584	6,059,121
Small Commercial Distribution - SCD	1.0763	3,311,648	3,564,327
Small General Distribution Service - SGDS	1.2724	730,752	<u>929,808</u>
 Total Gas Supply Expense			 141,547,132
 Gas Supply Expense Adjustment			 30,512,884

1/ Includes CAP volumes

COLUMBIA GAS OF PENNSYLVANIA, INC
SECTION 53.62 RECOVERIES OF FUEL COSTS BY GAS UTILITIES

In addition to information otherwise required to be filed by a jurisdictional natural gas distributor with gross intrastate annual operating revenues in excess of \$40 million seeking a change in its base rates, each gas utility must also file updates to the information required by Section 53.64(b) (relating to filing requirements for natural gas distributors with gross intrastate annual operating revenues in excess of \$40 million). In the case of a gas utility purchasing gas as defined at Section 53.61(a) (relating to purpose) from an affiliated interest, it shall also file updates to the information required at Section 53.65 (relating to special provisions relating to natural gas distributors with gross intrastate annual operating revenues in excess of \$40 million with affiliated interests). These updates shall be made at the time the base rate case under 66 Pa. C.S. Section 1308 (relating to voluntary changes in rates) is originally filed. Deficiencies in filing will be treated as set forth at Section 53.51(c) (relating to general).

Columbia Gas of Pennsylvania, Inc. hereby incorporates by reference 1307(f) Case R-2019-3008255 consisting of 16 exhibits filed on March 1, 2019. On April 1, 2019, the Company filed its testimony and additional exhibits.

Copies of this filing can be provided upon request.

See Exhibit No. 12, Schedule No. 8, Pages 2-85 for the filing updates of purchased gas cost and revenues. The October 1, 2019 Quarterly PGC comprises Pages 2-41 with rates effective for October 1, 2019 through December 31, 2019. The January 1, 2020 Quarterly PGC comprises Pages 42-85 with rates effective for January 1, 2020 through March 31, 2020.

COLUMBIA GAS OF PENNSYLVANIA, INC.
COMPUTATION OF CHANGE IN RATE PURSUANT TO SECTION 1307(f)
APPLICATION PERIOD: OCTOBER, 2019 THROUGH SEPTEMBER, 2020

Line No.	Description	Amount
		(1)
1	<u>Purchased Gas Commodity Cost</u>	\$
2	Commodity Cost of Gas (Exhibit 1-B, Schedule 1)	92,304,514
3	Projected tariff sales for the twelve billing periods of	
4	October, 2019 through September, 2020	380,962,576 Therms
5	PGCC (Line 2/Line 4)	0.24229
6	<u>Commodity (Over)/Under Collection</u>	
7	Commodity E-Factor	
8	(Exhibit No. 1-E)	(3,087,828)
9	Projected sales for the twelve billing periods of	
10	October, 2019 through September, 2020	380,962,576 Therms
11	Commodity E-Factor (Line 8/ Line 10)	(0.00811)
12	<u>Purchased Gas Demand Cost</u>	
13	Demand cost of gas (Exhibit 1-B, Schedule 1)	60,160,397
14	Less: Purchased Gas Demand recovered under Rate SS	
15	(Exhibit 1-A, Schedule 2, Sheet 2)	489,933
16	Less: Purchased Gas Demand Cost allocated to Rates LTS, STS,	
17	SGS-TS and MLS (Exh 1-A, Sch 2, Page 3)	0
18	Subtotal (Line 13 - Line 15 - Line 17)	59,670,464
19	Projected sales for the twelve billing periods of	
20	October, 2019 through September, 2020	1 / 474,689,562 Therms
21	PGDC Rate prior to Capacity Release Credit (Line 18 / Line 20)	0.12570
22	Off System Sales and Capacity Release Credit	(0.00837)
23	PGDC Rate	0.11733
24	<u>Demand (Over)/Under Collection</u>	
25	Demand E- Factor	
26	(Exhibit No. 1-E)	5,296,818
27	Projected sales for the twelve billing periods of	
28	October, 2019 through September, 2020	1 / 474,689,562 Therms
29	Demand E-Factor (Line 26 / Line 28)	0.01116
30	<u>Total Purchased Gas Cost</u>	
31	PGCC Rate (Line 5)	0.24229
32	PGDC Rate (Line 23)	0.11733
33	PGC Rate	0.35962
34	Currently effective PGC	0.40123
35	Increase (Decrease) in PGC	(0.04161)
36	<u>Net (Over) Under Collection</u>	
37	Commodity E-Factor (Line 11)	(0.00811)
38	Demand E-Factor (Line 29)	0.01116
39	E-Factor	0.00305
40	Currently effective E-Factor	(0.00655)
41	Increase (Decrease) in E-Factor	0.00960
42	PGC Rate	0.35962
43	E-Factor	0.00305
44	Total Rate	0.36267
45	Currently effective Rate	0.39468
46	Increase (Decrease) in Rate	(0.03201)

1 / Includes 93,726,986 Therm Transportation Quantities for the Company's Choice Program

Exhibit 1-A
 Schedule 1
 Sheet 2 of 2

COLUMBIA GAS OF PENNSYLVANIA, INC.
 PURCHASED GAS COST RECOVERED UNDER RATES SS
 AND COMPUTATION OF DAILY PURCHASED GAS DEMAND
 APPLICATION PERIOD: OCTOBER, 2019 THROUGH SEPTEMBER, 2020

Line No.	Description	Detail (1)	Total (2)
1	Total estimated demand charges for the period		
2	October, 2019 through September, 2020	60,160,397	
3	Estimated Demand Quantity (Therms) 1_ /	81,426,120	
4	Daily purchased gas demand rate (Line 2 / line 3)	<u>\$0.73883</u> per Therm	
5	Daily purchased gas demand (Therms)	663,120 Therms	
6	Daily purchased gas demand rate per Therm	<u>\$0.73883</u>	
7	Total rate SS Daily Demand Cost to be		
8	Recovered (Line 5 x Line 6)		<u><u>\$489,933</u></u>

1_ / Monthly Demand Billing Determinants x 12

COLUMBIA GAS OF PENNSYLVANIA, INC.
SUMMARY OF PROJECTED SALES QUANTITIES AND REVENUES FOR THE PERIOD
SALES AT PGCC AND PGDC RATES
OCTOBER, 2019 THROUGH SEPTEMBER, 2020

Line No.	Month	Sales Subject To PGCC (1) Therms	PGCC Rate 1 / (2) \$/Therm	PGCC Revenue (3=1x2) \$	Sales Subject To PGDC (4) Therms	PGDC Rate 1 / (5) \$/Therm	PGDC Revenue (6=4x5) \$	Purchased Gas Cost Revenue (7=3+6) \$
1	October - 2019	8,774,447	0.24229	2,125,961	11,684,689	0.12570	1,468,765	3,594,726
2	November	25,481,199	0.24229	6,173,840	32,239,938	0.12570	4,052,560	10,226,400
3	December	51,812,059	0.24229	12,553,544	64,232,152	0.12570	8,073,982	20,627,526
4	January - 2020	75,332,926	0.24229	18,252,415	92,629,491	0.12570	11,643,527	29,895,942
5	February	75,268,006	0.24229	18,236,685	92,472,470	0.12570	11,623,789	29,860,474
6	March	61,496,985	0.24229	14,900,104	75,616,833	0.12570	9,505,036	24,405,140
7	April	39,225,993	0.24229	9,504,066	48,739,353	0.12570	6,126,537	15,630,603
8	May	18,227,751	0.24229	4,416,402	23,066,230	0.12570	2,899,425	7,315,827
9	June	9,033,329	0.24229	2,188,685	11,818,457	0.12570	1,485,580	3,674,265
10	July	5,587,475	0.24229	1,353,789	7,558,890	0.12570	950,152	2,303,941
11	August	5,156,715	0.24229	1,249,420	7,061,374	0.12570	887,615	2,137,035
12	September	<u>5,565,691</u>	0.24229	<u>1,348,511</u>	<u>7,569,685</u>	0.12570	<u>951,509</u>	<u>2,300,020</u>
13	Total	380,962,576		92,303,422	474,689,562		59,668,477	151,971,899

1 / Excludes refunds and experienced over/undercollections

COLUMBIA GAS OF PENNSYLVANIA, INC.
SUMMARY OF PROJECTED SALES QUANTITIES AND REVENUES FOR THE PERIOD
SALES AT STANDBY RATE
OCTOBER, 2019 THROUGH SEPTEMBER, 2020

Line No.	Month	Daily Purchased Gas Demand Quantity (1) Therms	Daily Gas Demand Rate (2) \$/Therm	Daily Purchased Gas Demand Revenue (3=1x2) \$
1	October - 2019	55,260	0.73883	40,828
2	November	55,260	0.73883	40,828
3	December	55,260	0.73883	40,828
4	January - 2020	55,260	0.73883	40,828
5	February	55,260	0.73883	40,828
6	March	55,260	0.73883	40,828
7	April	55,260	0.73883	40,828
8	May	55,260	0.73883	40,828
9	June	55,260	0.73883	40,828
10	July	55,260	0.73883	40,828
11	August	55,260	0.73883	40,828
12	September	<u>55,260</u>	0.73883	<u>40,828</u>
13	Total	663,120		489,933

COLUMBIA GAS OF PENNSYLVANIA, INC.
SUMMARY OF PROJECTED SALES QUANTITIES AND REVENUES FOR THE PERIOD
SALES AT BANKING AND BALANCING RATES
OCTOBER, 2019 THROUGH SEPTEMBER, 2020

Line No.	Month	Lg. Quantity GDS			Sm. Quantity GDS			Total Trans. Revenue
		Deliveries (1) Therms	Rate (2) \$/Therm	Revenue (3=1x2) \$	Deliveries (4) Therms	Rate (5) \$/Therm	Revenue (6=4x5) \$	(7=3+6) \$
1	October 2019	0	0.00226	0	0	0.00697	0	0
2	November	0	0.00226	0	0	0.00697	0	0
3	December	0	0.00226	0	0	0.00697	0	0
4	January 2020	0	0.00226	0	0	0.00697	0	0
5	February	0	0.00226	0	0	0.00697	0	0
6	March	0	0.00226	0	0	0.00697	0	0
7	April	0	0.00226	0	0	0.00697	0	0
8	May	0	0.00226	0	0	0.00697	0	0
9	June	0	0.00226	0	0	0.00697	0	0
10	July	0	0.00226	0	0	0.00697	0	0
11	August	0	0.00226	0	0	0.00697	0	0
12	September	0	0.00226	0	0	0.00697	0	0
13	Total	0		0	0		0	0

COLUMBIA GAS OF PENNSYLVANIA, INC.
SUMMARY OF PROJECTED TOTAL OVER/UNDERCOLLECTION
FOR THE 2019 1307(f) PERIOD
OCTOBER, 2019 THROUGH SEPTEMBER, 2020

Line No.	Month	Commodity Recoveries PGCC Revenue	Total Commodity Cost of Gas 1 /	Commodity Over/ (Under) collection	Demand Recoveries PGDC Revenue	Total Demand Cost of Gas 1 /	Demand Over/ (Under) collection	Total Over/ (Under) collection
		(1)	(2)	(3=1-2)	(4)	(5)	(6=4-5)	(7=3+6)
		\$	\$	\$	\$	\$	\$	\$
1	October 2019	2,125,961	3,439,560	(1,313,599)	1,509,593	6,153,784	(4,644,191)	(5,957,790)
2	November	6,173,840	9,608,327	(3,434,487)	4,093,388	5,844,749	(1,751,361)	(5,185,849)
3	December	12,553,544	16,592,199	(4,038,655)	8,114,810	5,894,279	2,220,531	(1,818,124)
4	January 2020	18,252,415	20,670,980	(2,418,565)	11,684,355	5,894,279	5,790,076	3,371,511
5	February	18,236,685	17,729,859	506,826	11,664,617	5,894,279	5,770,338	6,277,164
6	March	14,900,104	13,536,873	1,363,231	9,545,864	5,894,279	3,651,585	5,014,816
7	April	9,504,066	5,627,219	3,876,847	6,167,365	4,097,458	2,069,907	5,946,754
8	May	4,416,402	2,078,211	2,338,191	2,940,253	4,097,458	(1,157,205)	1,180,985
9	June	2,188,685	822,346	1,366,339	1,526,408	4,097,458	(2,571,050)	(1,204,711)
10	July	1,353,789	698,623	655,166	990,980	4,097,458	(3,106,478)	(2,451,313)
11	August	1,249,420	636,046	613,374	928,443	4,097,458	(3,169,015)	(2,555,641)
12	September	1,348,511	864,272	484,239	992,337	4,097,458	(3,105,121)	(2,620,882)
13	Total	92,303,422	92,304,514	(1,093)	60,158,410	60,160,397	(1,987)	(3,079)

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

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

Purchased Gas Demand Charge (PGDC) Paid By the CHOICE Customer
Rates Based on Projected Costs For 12 Months Ending September, 2020

\$60,160,397	1. Projected Demand Costs Oct. 2019 through Sept. 2020 (Exh. 1-B, Sch. 1)
(489,933)	1a. Less Purchased Gas Demand Costs Recovered Under Rate SS (Exhibit 1-A, Schedule 1, Sheet 2)
0	1b. Less Purchased Gas Demand Allocated to Rates LTS, STS, SGS-TS, and MLS
5,296,818	1c. Experienced Demand Net Under/(Over) Collection (Exhibit No. 1-E)
<u>\$64,967,282</u>	2. Total Adjusted Demand Costs per 1307(f) Filing (1) + (1a) + (1b) + (1c)
\$83.89 per Dth	3. Unit FT Demand Charge Per Dth of Gulf/TCO/DTI capacity the marketer would pay Gulf, TCO, and DTI. (Exhibit 1-A, Schedule 3, Sheet 2)
47,469 MMDth	4. Projected Sales & Choice Requirements for 12 billing periods of October, 2019 through September, 2020
48,243 MMDth	5. Projected Sales & Choice Requirements 12 months ended September 2020, including Unaccounted For @ 1.6%
21,755 MMDth	6. Annual Injections and Withdrawals, Normal Weather
1 Dth	7a. Quantity Delivered to the Customer
1.6%	7b. Unaccounted-for & Co. Use Factor from Volume Balancing System
1.0163 Dth	7c. Quantity Delivered to the City Gate. (7a)/(1-7b)
\$1.3686 per Dth	8. Unit Demand Charge: (2) / (4)
(\$0.0837) per Dth	9. OSS and Capacity Release Credit
0.0028 Dth	10. Average Daily FT Delivery: (7c) / 365 days
\$0.2349 per Dth	11. Annual Demand Charge for the Assigned FT Capacity payable to the pipeline(s): (3) X (10)
\$1.1337 per Dth	12. Annual Demand Charge for other capacity that CPA retains (8) - (11)
0.4583 Dth	13. Quantity Injected and Withdrawn to Deliver 1 Dth to the Customer: (6) / (4)
\$0.0070	14a. Injection Charge @ \$0.0153/Dth
\$0.0035	14b. FSS Shrinkage @ 0.35 percent for gas at \$2.2079/Dth
\$0.0070	14c. Withdrawal Charge @ \$0.0153/Dth
\$0.0080	14d. SST Commodity Charge @ \$0.0175/Dth
\$0.0151	14e. SST retention @ 1.492% for gas at \$2.2079/Dth
<u>\$0.0406</u> per Dth	14f. Total Annual Variable Storage Costs
\$0.2349 per Dth	15. Credit to Purchased Gas Demand Charge for the CHOICE Customer:
(\$0.0406) per Dth	15a. For Demand Cost Paid to Pipelines: = (11)
<u>\$0.1943</u> per Dth	15b. Less Storage Costs: = (14f)
<u>\$0.01943</u> per Therm	15c. Net Credit: (15a) + (15b)
	15d. Per Therm: (15c)/10 - Capacity Assignment Factor
<u>\$1.0906</u> per Dth	16. Purchased Gas Demand Charge Paid By the CHOICE Customer: (8)+(9) - (15c)
<u>\$0.10906</u> per Therm	17. Per Therm: (16)/10

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

	<u>TCO</u> FT Capacity	<u>Gulf</u> FTS-1 Capacity	<u>DTI</u> FT Capacity	<u>Total:</u> TCO, Gulf and DTI
<u>1. CPA FT Capacity on TCO, Gulf and DTI</u>				
2. CPA Contract: Dth/d	105,605	3,636	5,000	1/
<u>3. Projected Demand Costs</u>				
4. Annual Demand Cost 2/	\$8,581,840	\$181,945	\$250,452	
4a. Monthly Billing Determinants	105,605	3,636	5,000	
4b. Annual Demand Charge (4/ 4a)	\$81.26	\$50.04	\$50.09	
4c. Monthly Demand Charge (4b / number of months)	\$6.772	\$4.170	\$4.174	
<u>Allocation Capacity and Costs.</u>				
5. Retained Volume:	1.0000	1.0151	3/	1.0000
6. Number of Months	12	1		12
7. Capacity Allocation	0.9548	4/	0.9548	5/
			0.0452	6/
8. Unit Annual Cost of City Gate Capacity: (4c) x (5) x (6) x (7) \$/Dth	\$77.59	\$4.04	\$2.26	<u><u>\$83.89</u></u>

Notes:

1/ Non-storage DTI FT capacity

2/ Projected demand costs for the period 12 months ended September, 2020.

3/ $1.0151 \text{ Dth/day} = 1.000 / (1 - \text{retention}) = 1.000 / (1 - 0.01492)$

4/ $105,605 / (105,605 + 5,000) = 0.9548$

5/ CGT is downstream from TCO, so CHOICE allocation affects CGT at the same percentage as TCO

6/ $5,000 / (105,605 + 5,000) = 0.0452$

COLUMBIA GAS OF PENNSYLVANIA, INC.

Summary of Total Estimated Purchased Gas Costs
For the Period October 2019 Through September 2020

Line No.	Description	2019			2020									Total
		October	November	December	January	February	March	April	May	June	July	August	September	
1	Total Quantity													
2	DTH	1,629,000	4,165,000	6,909,000	8,605,000	7,399,000	5,726,000	2,623,000	914,000	316,000	263,000	235,000	358,000	39,142,000
3	Total Demand Costs	6,153,784	5,844,749	5,894,279	5,894,279	5,894,279	5,894,279	4,097,458	4,097,458	4,097,458	4,097,458	4,097,458	4,097,458	60,160,397
4	Total Commodity Costs	3,439,560	9,608,327	16,592,199	20,670,980	17,729,859	13,536,873	5,627,219	2,078,211	822,346	698,623	636,046	864,272	92,304,514
5	Total Estimated Gas Costs (Line 5 = Line 3 + Line 4)	9,593,344	15,453,076	22,486,478	26,565,259	23,624,138	19,431,152	9,724,677	6,175,669	4,919,804	4,796,081	4,733,504	4,961,730	152,464,911

COLUMBIA GAS OF PENNSYLVANIA, INC.

Summary of Total Estimated Purchased Gas Costs
Demand Costs

Line No.	Description	2019			2020									Total
		October	November	December	January	February	March	April	May	June	July	August	September	
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
1	Columbia Gas Transmission	5,265,169	5,252,979	5,252,979	5,252,979	5,252,979	5,252,979	3,537,782	3,537,782	3,537,782	3,537,782	3,537,782	3,537,782	52,756,756
2	Columbia Gulf Transmission	181,945	0	0	0	0	0	0	0	0	0	0	0	181,945
3	Texas Eastern Transmission	263,309	263,309	312,839	312,839	312,839	312,839	263,309	263,309	263,309	263,309	263,309	263,309	3,357,828
4	Dominion Transmission	169,227	198,446	198,446	198,446	198,446	198,446	172,366	172,366	172,366	172,366	172,366	172,366	2,195,653
5	Tennessee Gas	272,185	115,518	115,518	115,518	115,518	115,518	115,518	115,518	115,518	115,518	115,518	115,518	1,542,883
6	National Fuel Gas	15,621	15,621	15,621	15,621	15,621	15,621	15,621	15,621	15,621	15,621	15,621	15,621	187,452
7	Equitrans	11,328	23,876	23,876	23,876	23,876	23,876	17,862	17,862	17,862	17,862	17,862	17,862	237,880
8	Less Elective Balancing Svc. Credit	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	300,000
9	Total Demand Cost	<u>6,153,784</u>	<u>5,844,749</u>	<u>5,894,279</u>	<u>5,894,279</u>	<u>5,894,279</u>	<u>5,894,279</u>	<u>4,097,458</u>	<u>4,097,458</u>	<u>4,097,458</u>	<u>4,097,458</u>	<u>4,097,458</u>	<u>4,097,458</u>	<u>60,160,397</u>

COLUMBIA GAS OF PENNSYLVANIA, INC.

Summary of Total Estimated Purchased Gas Costs
Commodity Costs

Line No.	Description	2019			2020									Total
		October	November	December	January	February	March	April	May	June	July	August	September	
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
1	Term	1,270,902	1,424,045	2,910,949	3,002,082	2,801,763	1,564,915	1,282,052	1,311,389	1,291,355	1,359,439	1,364,234	1,309,931	20,893,056
2	Spot	4,277,574	659,178	4,861,609	1,424,470	1,313,148	1,001,324	10,063,276	9,841,284	8,557,752	8,473,334	8,420,982	5,854,378	64,748,309
3	Local	44,616	44,982	50,490	52,712	47,260	50,028	42,210	43,824	42,567	45,430	45,584	43,155	552,858
4	Storage	(2,153,532)	7,480,122	8,769,151	16,191,716	13,567,688	10,920,606	(5,760,319)	(9,118,286)	(9,069,328)	(9,179,580)	(9,194,754)	(6,343,192)	6,110,291
5	Total Commodity Cost	<u>3,439,560</u>	<u>9,608,327</u>	<u>16,592,199</u>	<u>20,670,980</u>	<u>17,729,859</u>	<u>13,536,873</u>	<u>5,627,219</u>	<u>2,078,211</u>	<u>822,346</u>	<u>698,623</u>	<u>636,046</u>	<u>864,272</u>	<u>92,304,514</u>

COLUMBIA GAS OF PENNSYLVANIA, INC.

Summary of Total Estimated Purchased Gas Costs
Commodity Quantities

Line No.	Description	2019			2020									Total
		October	November	December	January	February	March	April	May	June	July	August	September	
	<u>Term</u>													
1	Total-DTH	667,000	648,000	1,206,000	1,192,000	1,128,000	667,000	646,000	667,000	645,000	666,000	666,000	645,000	9,443,000
	<u>Spot</u>													
2	Total-DTH	1,997,000	295,000	1,972,000	527,000	492,000	387,000	4,729,000	4,665,000	3,990,000	3,884,000	3,851,000	2,697,000	29,486,000
	<u>Local</u>													
3	Total-DTH	22,000	21,000	22,000	22,000	20,000	22,000	21,000	22,000	21,000	22,000	22,000	21,000	258,000
	<u>Storage</u>													
4	Total-DTH	(1,057,000)	3,201,000	3,709,000	6,864,000	5,759,000	4,650,000	(2,773,000)	(4,440,000)	(4,340,000)	(4,309,000)	(4,304,000)	(3,005,000)	(45,000)
	<u>Total - All Sources</u>													
5	Total-DTH	<u>1,629,000</u>	<u>4,165,000</u>	<u>6,909,000</u>	<u>8,605,000</u>	<u>7,399,000</u>	<u>5,726,000</u>	<u>2,623,000</u>	<u>914,000</u>	<u>316,000</u>	<u>263,000</u>	<u>235,000</u>	<u>358,000</u>	<u>39,142,000</u>

COLUMBIA GAS OF PENNSYLVANIA, INC.

Summary of Total Estimated Purchased Gas Demand Costs
Columbia Gas Transmission Corporation

Line No.	Description	2019			2020									Total
		October	November	December	January	February	March	April	May	June	July	August	September	
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<u>Columbia Gas Transmission</u>														
<u>FTS</u>														
1	Billing Determinant-Dth	127,588	125,788	125,788	125,788	125,788	125,788	95,551	95,551	95,551	95,551	95,551	95,551	95,551
2	Less Capacity Release (1)	5,215	5,215	5,215	5,215	5,215	5,215	5,215	5,215	5,215	5,215	5,215	5,215	5,215
3	Net Billing Determinant - Dth	122,373	120,573	120,573	120,573	120,573	120,573	90,336	90,336	90,336	90,336	90,336	90,336	90,336
4	Demand Rate	6.7720	6.7720	6.7720	6.7720	6.7720	6.7720	6.7720	6.7720	6.7720	6.7720	6.7720	6.7720	6.7720
5	Demand Cost	828,710	816,520	816,520	816,520	816,520	816,520	611,755	611,755	611,755	611,755	611,755	611,755	8,581,840
<u>FSS-Reservation</u>														
6	Billing Determinant-Dth	456,876	456,876	456,876	456,876	456,876	456,876	456,876	456,876	456,876	456,876	456,876	456,876	456,876
7	Demand Rate	1.5010	1.5010	1.5010	1.5010	1.5010	1.5010	1.5010	1.5010	1.5010	1.5010	1.5010	1.5010	1.5010
8	Demand Cost	685,771	685,771	685,771	685,771	685,771	685,771	685,771	685,771	685,771	685,771	685,771	685,771	8,229,252
<u>FSS-Capacity</u>														
9	Total-DTH	25,341,126	25,341,126	25,341,126	25,341,126	25,341,126	25,341,126	25,341,126	25,341,126	25,341,126	25,341,126	25,341,126	25,341,126	25,341,126
10	Demand Rate	0.0288	0.0288	0.0288	0.0288	0.0288	0.0288	0.0288	0.0288	0.0288	0.0288	0.0288	0.0288	0.0288
11	Demand Cost	729,824	729,824	729,824	729,824	729,824	729,824	729,824	729,824	729,824	729,824	729,824	729,824	8,757,888
<u>SST</u>														
12	Billing Determinant-Dth	456,876	456,876	456,876	456,876	456,876	456,876	228,438	228,438	228,438	228,438	228,438	228,438	228,438
13	Demand Rate	6.6120	6.6120	6.6120	6.6120	6.6120	6.6120	6.6120	6.6120	6.6120	6.6120	6.6120	6.6120	6.6120
14	Demand Cost	3,020,864	3,020,864	3,020,864	3,020,864	3,020,864	3,020,864	1,510,432	1,510,432	1,510,432	1,510,432	1,510,432	1,510,432	27,187,776
15	Total TCO Demand Cost	5,265,169	5,252,979	5,252,979	5,252,979	5,252,979	5,252,979	3,537,782	3,537,782	3,537,782	3,537,782	3,537,782	3,537,782	52,756,756

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

COLUMBIA GAS OF PENNSYLVANIA, INC.
Summary of Total Estimated Purchased Gas Demand Costs
Columbia Gulf Transmission Company

Line No.	Description	2019			2020									Total
		October	November	December	January	February	March	April	May	June	July	August	September	
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
	<u>Columbia Gulf Transmission</u>													
	<u>FTS-1</u>													
1	Billing Determinant-Dth	43,632	0	0	0	0	0	0	0	0	0	0	0	
2	Demand Rate	4.1700	4.1700	4.1700	4.1700	4.1700	4.1700	4.1700	4.1700	4.1700	4.1700	4.1700	4.1700	
3	Demand Cost	181,945	0	0	0	0	0	0	0	0	0	0	0	181,945
4	Total Columbia Gulf Demand Cost	181,945	0	0	0	0	0	0	0	0	0	0	0	181,945

COLUMBIA GAS OF PENNSYLVANIA, INC.

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

Line No.	Description	2019			2020									Total
		October	November	December	January	February	March	April	May	June	July	August	September	
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<u>FT1-TCO Delmont</u>														
1	Billing Determinant-Dth	3,082	3,082	3,082	3,082	3,082	3,082	3,082	3,082	3,082	3,082	3,082	3,082	
2	Demand Rate	7.9350	7.9350	7.9350	7.9350	7.9350	7.9350	7.9350	7.9350	7.9350	7.9350	7.9350	7.9350	
3	Demand Cost	24,456	24,456	24,456	24,456	24,456	24,456	24,456	24,456	24,456	24,456	24,456	24,456	293,472
<u>FT1-Uniontown</u>														
4	Billing Determinant-Dth	11,753	11,753	11,753	11,753	11,753	11,753	11,753	11,753	11,753	11,753	11,753	11,753	
5	Demand Rate	7.9350	7.9350	7.9350	7.9350	7.9350	7.9350	7.9350	7.9350	7.9350	7.9350	7.9350	7.9350	
6	Demand Cost	93,260	93,260	93,260	93,260	93,260	93,260	93,260	93,260	93,260	93,260	93,260	93,260	1,119,120
<u>CDS - Eagle/Rockwood</u>														
7	Billing Determinant-Dth	2,342	2,342	2,342	2,342	2,342	2,342	2,342	2,342	2,342	2,342	2,342	2,342	
8	Demand Rate	21.3489	21.3489	21.3489	21.3489	21.3489	21.3489	21.3489	21.3489	21.3489	21.3489	21.3489	21.3489	
9	Demand Cost	49,999	49,999	49,999	49,999	49,999	49,999	49,999	49,999	49,999	49,999	49,999	49,999	599,988
<u>CDS - Rockwood</u>														
10	Billing Determinant-Dth	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	
11	Demand Rate	18.4438	18.4438	18.4438	18.4438	18.4438	18.4438	18.4438	18.4438	18.4438	18.4438	18.4438	18.4438	
12	Demand Cost	92,219	92,219	92,219	92,219	92,219	92,219	92,219	92,219	92,219	92,219	92,219	92,219	1,106,628
<u>CDS - Chambersburg</u>														
13	Billing Determinant-Dth	158	158	158	158	158	158	158	158	158	158	158	158	
14	Demand Rate	21.3594	21.3594	21.3594	21.3594	21.3594	21.3594	21.3594	21.3594	21.3594	21.3594	21.3594	21.3594	
15	Demand Cost	3,375	3,375	3,375	3,375	3,375	3,375	3,375	3,375	3,375	3,375	3,375	3,375	40,500
<u>FT1-TCO @ Eagle Zone 3 Zone 3</u>														
16	Billing Determinant-Dth	0	0	10,000	10,000	10,000	10,000	0	0	0	0	0	0	
17	Demand Rate	0.0000	0.0000	4.9530	4.9530	4.9530	4.9530	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
18	Demand Cost	0	0	49,530	49,530	49,530	49,530	0	0	0	0	0	0	198,120
19	Total TETCO Demand Cost	263,309	263,309	312,839	312,839	312,839	312,839	263,309	263,309	263,309	263,309	263,309	263,309	3,357,828

COLUMBIA GAS OF PENNSYLVANIA, INC.

Summary of Total Estimated Purchased Gas Demand Costs
Dominion Transmission

Line No.	Description	2019			2020								Total	
		October	November	December	January	February	March	April	May	June	July	August		September
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<u>Dominion Transmission</u>														
<u>GSS - Reservation</u>														
1	Billing Determinant-Dth	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	
2	Demand Rate	1.8673	1.8673	1.8673	1.8673	1.8673	1.8673	1.8673	1.8673	1.8673	1.8673	1.8673	1.8673	
3	Demand Cost	44,815	44,815	44,815	44,815	44,815	44,815	44,815	44,815	44,815	44,815	44,815	44,815	537,780
<u>GSS - Capacity</u>														
4	Billing Determinant-Dth	1,871,176	1,871,176	1,871,176	1,871,176	1,871,176	1,871,176	1,871,176	1,871,176	1,871,176	1,871,176	1,871,176	1,871,176	
5	Demand Rate	0.0145	0.0145	0.0145	0.0145	0.0145	0.0145	0.0145	0.0145	0.0145	0.0145	0.0145	0.0145	
6	Demand Cost	27,132	27,132	27,132	27,132	27,132	27,132	27,132	27,132	27,132	27,132	27,132	27,132	325,584
<u>FTNN</u>														
7	Billing Determinant-Dth	0	6,000	6,000	6,000	6,000	6,000	0	0	0	0	0	0	
8	Total-DTH	0.0000	4.1742	4.1742	4.1742	4.1742	4.1742	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
9	Demand Cost	0	25,045	25,045	25,045	25,045	25,045	0	0	0	0	0	0	125,225
<u>FT</u>														
10	Billing Determinant-Dth	23,305	24,305	24,305	24,305	24,305	24,305	24,057	24,057	24,057	24,057	24,057	24,057	
11	Total-DTH	4.1742	4.1742	4.1742	4.1742	4.1742	4.1742	4.1742	4.1742	4.1742	4.1742	4.1742	4.1742	
12	Demand Cost	97,280	101,454	101,454	101,454	101,454	101,454	100,419	100,419	100,419	100,419	100,419	100,419	1,207,064
13	Total DTI Demand Cost	169,227	198,446	198,446	198,446	198,446	198,446	172,366	172,366	172,366	172,366	172,366	172,366	2,195,653

COLUMBIA GAS OF PENNSYLVANIA, INC.

Summary of Total Estimated Purchased Gas Demand Costs
Tennessee Gas Pipeline Company

Line No.	Description	2019			2020									Total
		October	November	December	January	February	March	April	May	June	July	August	September	
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<u>Tennessee Gas FT-A (Direct) New Castle - 219 Line</u>														
1	Billing Determinant-Dth	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000
2	Demand Rate	14.5567	4.7650	4.7650	4.7650	4.7650	4.7650	4.7650	4.7650	4.7650	4.7650	4.7650	4.7650	4.7650
3	Demand Cost	232,907	76,240	76,240	76,240	76,240	76,240	76,240	76,240	76,240	76,240	76,240	76,240	1,071,547
<u>Tennessee Gas FT-A (Direct) Pitt Terminal - 219 Line</u>														
4	Billing Determinant-Dth	7,600	7,600	7,600	7,600	7,600	7,600	7,600	7,600	7,600	7,600	7,600	7,600	7,600
5	Demand Rate	5.1682	5.1682	5.1682	5.1682	5.1682	5.1682	5.1682	5.1682	5.1682	5.1682	5.1682	5.1682	5.1682
6	Demand Cost	39,278	39,278	39,278	39,278	39,278	39,278	39,278	39,278	39,278	39,278	39,278	39,278	471,336
7	Total Tennessee Gas Demand Cost	272,185	115,518	115,518	115,518	115,518	115,518	115,518	115,518	115,518	115,518	115,518	115,518	1,542,883

COLUMBIA GAS OF PENNSYLVANIA, INC.

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

Line No.	Description	2019			2020									Total
		October	November	December	January	February	March	April	May	June	July	August	September	
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
	<u>National</u>													
1	Billing Determinant-Dth	4,304	4,304	4,304	4,304	4,304	4,304	4,304	4,304	4,304	4,304	4,304	4,304	
2	Demand Rate	3.6293	3.6293	3.6293	3.6293	3.6293	3.6293	3.6293	3.6293	3.6293	3.6293	3.6293	3.6293	
3	Demand Cost	15,621	15,621	15,621	15,621	15,621	15,621	15,621	15,621	15,621	15,621	15,621	15,621	187,452
4	Total National Fuel Demand Cost	<u>15,621</u>	<u>15,621</u>	<u>15,621</u>	<u>15,621</u>	<u>15,621</u>	<u>15,621</u>	<u>15,621</u>	<u>15,621</u>	<u>15,621</u>	<u>15,621</u>	<u>15,621</u>	<u>15,621</u>	<u>187,452</u>

COLUMBIA GAS OF PENNSYLVANIA, INC.

Summary of Total Estimated Purchased Gas Demand Costs
Equitrans

Line No.	Description	2019			2020									Total
		October	November	December	January	February	March	April	May	June	July	August	September	
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
	<u>Equitrans FTS</u>													
1	Billing Determinant-Dth	2,039	3,901	3,901	3,901	3,901	3,901	3,215	3,215	3,215	3,215	3,215	3,215	
2	Demand Rate	5.5559	6.1206	6.1206	6.1206	6.1206	6.1206	5.5559	5.5559	5.5559	5.5559	5.5559	5.5559	
3	Demand Cost	11,328	23,876	23,876	23,876	23,876	23,876	17,862	17,862	17,862	17,862	17,862	17,862	237,880
4	Total Equitrans Demand Cost	11,328	23,876	23,876	23,876	23,876	23,876	17,862	17,862	17,862	17,862	17,862	17,862	237,880

COLUMBIA GAS OF PENNSYLVANIA, INC.

Summary of Total Estimated Purchased Gas Commodity Costs
Term Contracts

Line No.	Description	2019			2020									Total
		October	November	December	January	February	March	April	May	June	July	August	September	
<u>TERM</u>														
<u>COLUMBIA GULF</u>														
1	Quantity - DTH	0	0	0	0	0	0	0	0	0	0	0	0	0
2	Rate-\$/DTH	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	Cost-\$	0	0	0	0	0	0	0	0	0	0	0	0	0
<u>COLUMBIA TRANSMISSION</u>														
4	Quantity - DTH	0	0	311,000	311,000	291,000	0	0	0	0	0	0	0	913,000
5	Rate-\$/DTH	0.0000	0.0000	2.3475	2.4500	2.4165	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	Cost-\$	0	0	730,073	761,950	703,202	0	0	0	0	0	0	0	2,195,225
<u>TEXAS EASTERN</u>														
7	Quantity - DTH	667,000	648,000	667,000	653,000	624,000	667,000	646,000	667,000	645,000	666,000	666,000	645,000	7,861,000
8	Rate-\$/DTH	1.9054	2.1976	2.3679	2.4724	2.4382	2.3462	1.9846	1.9661	2.0021	2.0412	2.0484	2.0309	0.0000
9	Cost-\$	1,270,902	1,424,045	1,579,389	1,614,477	1,521,437	1,564,915	1,282,052	1,311,389	1,291,355	1,359,439	1,364,234	1,309,931	16,893,565
<u>TENNESSEE GAS PIPELINE</u>														
10	Quantity - DTH	0	0	228,000	228,000	213,000	0	0	0	0	0	0	0	669,000
11	Rate-\$/DTH	0.0000	0.0000	2.6381	2.7441	2.7095	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12	Cost-\$	0	0	601,487	625,655	577,124	0	0	0	0	0	0	0	1,804,266
<u>CAP</u>														
13	Quantity - DTH	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Rate-\$/DTH	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
15	Cost-\$	0	0	0	0	0	0	0	0	0	0	0	0	0
<u>LESS CAP BILLING</u>														
16	Quantity - DTH	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Rate-\$/DTH	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
18	Cost-\$	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Total - DTH	667,000	648,000	1,206,000	1,192,000	1,128,000	667,000	646,000	667,000	645,000	666,000	666,000	645,000	9,443,000
20	Total Term Commodity													
21	Cost-\$	1,270,902	1,424,045	2,910,949	3,002,082	2,801,763	1,564,915	1,282,052	1,311,389	1,291,355	1,359,439	1,364,234	1,309,931	20,893,056

*Beginning July 1, 2017, CAP customers will be served by Columbia sales service until a new supplier submits a successful bid to provide CAP gas supply.

COLUMBIA GAS OF PENNSYLVANIA, INC.

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

Line No.	Description	2019			2020									Total
		October	November	December	January	February	March	April	May	June	July	August	September	
	<u>SPOT</u>													
	<u>Base</u>													
1	Quantity - DTH	1,997,000	295,000	913,000	515,000	492,000	386,000	4,472,000	4,665,000	3,990,000	3,884,000	3,851,000	2,697,000	28,157,000
2	Rate-\$/DTH	2.1420	2.2345	2.5209	2.7027	2.6690	2.5874	2.1284	2.1096	2.1448	2.1816	2.1867	2.1707	
3	Cost-\$	4,277,574	659,178	2,301,582	1,391,891	1,313,148	998,736	9,518,205	9,841,284	8,557,752	8,473,334	8,420,982	5,854,378	61,608,044
	<u>Swing</u>													
4	Quantity - DTH	0	0	1,059,000	12,000	0	1,000	257,000	0	0	0	0	0	1,329,000
5	Rate-\$/DTH	0.0000	0.0000	2.4174	2.7149	0.0000	2.5880	2.1209	0.0000	0.0000	0.0000	0.0000	0.0000	
6	Cost-\$	0	0	2,560,027	32,579	0	2,588	545,071	0	0	0	0	0	3,140,265
7	Total - DTH	1,997,000	295,000	1,972,000	527,000	492,000	387,000	4,729,000	4,665,000	3,990,000	3,884,000	3,851,000	2,697,000	29,486,000
8	Total Spot													
9	Commodity Cost - \$	4,277,574	659,178	4,861,609	1,424,470	1,313,148	1,001,324	10,063,276	9,841,284	8,557,752	8,473,334	8,420,982	5,854,378	64,748,309
	<u>Local Direct</u>													
10	Quantity - DTH	22,000	21,000	22,000	22,000	20,000	22,000	21,000	22,000	21,000	22,000	22,000	21,000	258,000
11	Rate-\$/DTH	2.0280	2.1420	2.2950	2.3960	2.3630	2.2740	2.0100	1.9920	2.0270	2.0650	2.0720	2.0550	
12	Cost-\$	44,616	44,982	50,490	52,712	47,260	50,028	42,210	43,824	42,567	45,430	45,584	43,155	552,858
13	Total - DTH	22,000	21,000	22,000	22,000	20,000	22,000	21,000	22,000	21,000	22,000	22,000	21,000	258,000
14	Total Local													
15	Commodity Cost - \$	44,616	44,982	50,490	52,712	47,260	50,028	42,210	43,824	42,567	45,430	45,584	43,155	552,858

COLUMBIA GAS OF PENNSYLVANIA, INC.

Summary of Total Estimated Purchased Gas Commodity Costs

Storage

Line No.	Description	2019			2020									Total
		October	November	December	January	February	March	April	May	June	July	August	September	
<u>DOMINION TRANSMISSION - GSS</u>														
1	Injections - DTH	(222,000)	0	0	0	0	0	(226,000)	(226,000)	(226,000)	(228,000)	(226,000)	(226,000)	(1,580,000)
2	Injection Rate - \$/Dth	2.0823	2.2077	2.4672	2.6146	2.5792	2.4315	2.1104	2.0912	2.1245	2.1606	2.1659	2.1432	
3	Withdrawals - DTH	0	106,000	380,000	528,000	317,000	253,000	0	0	0	0	0	0	1,584,000
4	Withdrawal Rate - \$/Dth	2.2964	2.2964	2.2964	2.2964	2.2964	2.2964	2.1945	2.1446	2.1380	2.1436	2.1480	2.1474	
5	Cost-\$	(462,271)	243,418	872,632	1,212,499	727,959	580,989	(476,950)	(472,611)	(480,137)	(492,617)	(489,493)	(484,363)	279,055
6	Injection Rate \$/Dth	0.0287	0.0287	0.0287	0.0287	0.0287	0.0287	0.0287	0.0287	0.0287	0.0287	0.0287	0.0287	
7	Withdrawal Rate \$/Dth	0.0151	0.0151	0.0151	0.0151	0.0151	0.0151	0.0151	0.0151	0.0151	0.0151	0.0151	0.0151	
8	Cost - \$	6,371	1,601	5,738	7,973	4,787	3,820	6,486	6,486	6,486	6,544	6,486	6,486	69,264
<u>EQUITRANS - SS</u>														
9	Injections - DTH	(226,000)	0	0	0	0	0	(161,000)	(161,000)	(161,000)	(162,000)	(161,000)	(161,000)	(1,193,000)
10	Injection Rate - \$/Dth	2.0823	2.2077	2.4672	2.6146	2.5792	2.4315	2.1104	2.0912	2.1245	2.1606	2.1659	2.1432	
11	Withdrawals - DTH	0	430,000	245,000	0	300,000	150,000	0	0	0	0	0	0	1,125,000
12	Withdrawal Rate - \$/Dth	2.2964	2.2964	2.2964	2.2964	2.2964	2.2964	2.1945	2.1446	2.1380	2.1436	2.1480	2.1474	
13	Cost-\$	(470,600)	987,452	562,618	0	688,920	344,460	(339,774)	(336,683)	(342,045)	(350,017)	(348,710)	(345,055)	50,566
14	Inject/With. Rate \$/DTH	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
15	Cost - \$	0	0	0	0	0	0	0	0	0	0	0	0	0
<u>TCO - FSS</u>														
16	Injections - DTH	(887,000)	0	0	0	0	0	(2,464,000)	(4,480,000)	(4,478,000)	(4,478,000)	(4,478,000)	(3,130,000)	(24,395,000)
17	Injection Rate - \$/Dth	2.0823	2.2077	2.4672	2.6146	2.5792	2.4315	2.1104	2.0912	2.1245	2.1606	2.1659	2.1432	
18	Withdrawals - DTH	0	2,842,000	3,720,000	7,275,000	5,894,000	4,683,000	0	0	0	0	0	0	24,414,000
19	Withdrawal Rate - \$/Dth	2.2964	2.2964	2.2964	2.2964	2.2964	2.2964	2.1945	2.1446	2.1380	2.1436	2.1480	2.1474	
20	Cost-\$	(1,847,000)	6,526,369	8,542,608	16,706,310	13,534,982	10,754,041	(5,200,026)	(9,368,576)	(9,513,511)	(9,675,167)	(9,698,900)	(6,708,216)	4,052,914
21	Inject/With. Rate \$/DTH	0.0153	0.0153	0.0153	0.0153	0.0153	0.0153	0.0153	0.0153	0.0153	0.0153	0.0153	0.0153	
22	Cost - \$	13,571	43,483	56,916	111,308	90,178	71,650	37,699	68,544	68,513	68,513	68,513	47,889	746,777
23	Quantity - DTH	(1,335,000)	3,378,000	4,345,000	7,803,000	6,511,000	5,086,000	(2,851,000)	(4,867,000)	(4,865,000)	(4,868,000)	(4,865,000)	(3,517,000)	(45,000)
24	Total Purchase Cost	(2,779,871)	7,757,239	9,977,858	17,918,809	14,951,861	11,679,490	(6,016,750)	(10,177,870)	(10,335,693)	(10,517,801)	(10,537,103)	(7,537,634)	4,382,535
25	Total Inject/With. Cost	19,942	45,084	62,654	119,281	94,965	75,470	44,185	75,030	74,999	75,057	74,999	54,375	816,041

COLUMBIA GAS OF PENNSYLVANIA, INC.

Summary of Total Estimated Purchased Gas Commodity Costs
Storage Transportation Charges

Line No.	Description	2019			2020									Total
		October	November	December	January	February	March	April	May	June	July	August	September	
<u>TCO - SST</u>														
1	Injections - DTH	(887,000)	0	0	0	0	0	(2,464,000)	(4,480,000)	(4,478,000)	(4,478,000)	(4,478,000)	(3,130,000)	(24,395,000)
2	Withdrawals - DTH	0	2,842,000	3,720,000	7,275,000	5,894,000	4,683,000	0	0	0	0	0	0	24,414,000
3	Trans. Chrg. \$/Dth	0.0177	0.0175	0.0175	0.0175	0.0175	0.0175	0.0177	0.0177	0.0177	0.0177	0.0177	0.0177	
4	Cost-\$	15,700	49,735	65,100	127,313	103,145	81,953	43,613	79,296	79,261	79,261	79,261	55,401	859,039
<u>DOMINION TRANSMISSION - GSS</u>														
5	Injections - DTH	(222,000)	0	0	0	0	0	(226,000)	(226,000)	(226,000)	(228,000)	(226,000)	(226,000)	(1,580,000)
6	Withdrawals - DTH	0	106,000	380,000	528,000	317,000	253,000	0	0	0	0	0	0	1,584,000
7	Rate-\$/DTH	0.0177	0.0156	0.0156	0.0156	0.0156	0.0156	0.0177	0.0177	0.0177	0.0177	0.0177	0.0177	
8	Cost-\$	3,929	1,654	5,928	8,237	4,945	3,947	4,000	4,000	4,000	4,036	4,000	4,000	52,676
<u>EQUITRANS - SS</u>														
9	Injections - DTH	(226,000)	0	0	0	0	0	(161,000)	(161,000)	(161,000)	(162,000)	(161,000)	(161,000)	(1,193,000)
10	Withdrawals - DTH	0	430,000	245,000	0	300,000	150,000	0	0	0	0	0	0	1,125,000
11	Rate-\$/DTH	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
12	Cost-\$	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Total Storage - DTH	(1,335,000)	3,378,000	4,345,000	7,803,000	6,511,000	5,086,000	(2,851,000)	(4,867,000)	(4,865,000)	(4,868,000)	(4,865,000)	(3,517,000)	(45,000)
14	Total EUB - DTH	278,000	(177,000)	(636,000)	(939,000)	(752,000)	(436,000)	78,000	427,000	525,000	559,000	561,000	512,000	0
15	Total DTH	(1,057,000)	3,201,000	3,709,000	6,864,000	5,759,000	4,650,000	(2,773,000)	(4,440,000)	(4,340,000)	(4,309,000)	(4,304,000)	(3,005,000)	(45,000)
16	Total Purchase Cost	(2,779,871)	7,757,239	9,977,858	17,918,809	14,951,861	11,679,490	(6,016,750)	(10,177,870)	(10,335,693)	(10,517,801)	(10,537,103)	(7,537,634)	4,382,535
17	Total Choice Bank Cost	586,768	(373,590)	(1,342,389)	(1,981,924)	(1,587,228)	(920,254)	164,633	901,258	1,108,105	1,179,867	1,184,089	1,080,666	0
18	Total Inject/With. Cost	19,942	45,084	62,654	119,281	94,965	75,470	44,185	75,030	74,999	75,057	74,999	54,375	816,041
19	Total Transp. Charge	19,629	51,389	71,028	135,550	108,090	85,900	47,613	83,296	83,261	83,297	83,261	59,401	911,715
20	Total Storage Cost	(2,153,532)	7,480,122	8,769,151	16,191,716	13,567,688	10,920,606	(5,760,319)	(9,118,286)	(9,069,328)	(9,179,580)	(9,194,754)	(6,343,192)	6,110,291

COLUMBIA GAS OF PENNSYLVANIA, INC.
STATEMENT OF EXPERIENCED NET OVER (UNDER) COLLECTION
OCTOBER, 2018 THROUGH SEPTEMBER, 2019

<u>Line No.</u>	<u>Description</u>	<u>Total Demand</u> \$	<u>Total Commodity</u> \$	<u>Total Amount</u> \$
1	Remaining Balance - Over (Under) Collection from 2018 - 1307(f)			
2	(See Schedule 2a and 2b)	175,098	(456,191)	(281,093)
3	Unified Credit for Off-system Sales and Capacity Release for the period			
4	October, 2018 through September, 2019 (See Schedule 3 herein)	(5,684,405)	0	(5,684,405)
5	Over (Under) Collection for the period October, 2018 through			
6	September 2019 (See Schedule 4 herein)	(208,483)	3,659,189	3,450,706
7	Interest on Over (Under) Collection for the period October, 2018. through			
8	September, 2019 (See Schedule 4 herein)	287,087	(115,170)	171,917
9	Penalty Credits/Supplier Refunds Received October, 2018 through			
10	September, 2019 (See Schedule 5 herein)	133,886	0	133,886
11	TOTAL EXPERIENCED NET OVER (UNDER) COLLECTION	<u>(5,296,818)</u>	<u>3,087,828</u>	<u>(2,208,990)</u>

COLUMBIA GAS OF PENNSYLVANIA, INC.
RECONCILIATION OF COMMODITY COST OF GAS
FROM 2018 - 1307(f)
OCTOBER, 2018 THROUGH SEPTEMBER, 2019

Line No.	Month	Sales Subject to Commodity		Amount Recovered	Net Commodity Over (Under) Collection
		E-Factor Therm	Rate \$/ Therm		
1	True-up of Net Commodity Costs Included in 2018 1307(f):				1,425,625
2	Beginning Balance Adjustment				108,300 <u>2_</u>
3	October, 2018	4,766,236	(0.00760)	(36,223)	
4		4,415,485	(0.00525)	(23,181)	
5	November	32,133,552	(0.00760)	(244,215)	
6		458,045	(0.00525)	(2,405)	
7	December	60,483,174	(0.00760)	(459,672)	
8	January, 2019 <u>1_</u>	34,336,078	(0.00388)	(133,224)	
9		33,629,083	(0.00760)	(255,581)	
10	February	74,654,445	(0.00388)	(289,659)	
11		(39,577)	(0.00760)	301	
12	March	62,972,207	(0.00388)	(244,332)	
13	April	36,712,616	(0.00388)	(142,445)	
14	May	14,847,717	(0.00388)	(57,609)	
15	June	8,613,499	(0.00388)	(33,420)	
16	July	6,455,425	(0.00388)	(25,047)	
17	August	5,739,946	(0.00388)	(22,271)	
18	September	5,446,534	(0.00388)	(21,133)	
19	Amount Collected/(Passed Back) during 2018 1307(f) Period				<u>(1,990,116)</u>
20	Remaining Balance to be Collected in the 2019 1307(f)				<u>(456,191)</u>

1_ / Rate in effect January 1, 2019.

2_ / Represents a commodity interest adjustment for the period of February 2018 to September 2018 increasing the interest rate from 4.50% to the prime rate as of January 31, 2019 of 5.50%. Please refer to Exh. 1-E, Schedule 2a, Sheet 2 for a detailed calculation for this adjustment.

COLUMBIA GAS OF PENNSYLVANIA, INC.
STATEMENT OF COMMODITY OVER/(UNDER) COLLECTIONS FROM GAS COST RATE
FEBRUARY, 2018 THROUGH SEPTEMBER, 2018

Line No.	Month	Total Commodity Purchase Gas Cost Recovery (1)	Total Cost of Fuel (2)	Total Over (Under) Collection (3 = 1 - 2)	Number of Months (4)	Rate (5)	Over (Under) Collection Interest (6=3x4x5)	Rate (7)	Over (Under) Collection Interest (8=3x4x7)	Interest Difference (9=8-6)
1	February, 2018	19,692,412	14,612,581	5,079,831	14 / 12	4.50%	266,691	5.50%	325,956	59,265
2	March	15,707,957	17,389,812	(1,681,856)	13 / 12	4.50%	(81,990)	5.50%	(100,211)	(18,221)
3	April	14,221,600	13,126,755	1,094,845	12 / 12	4.50%	49,268	5.50%	60,216	10,948
4	May	5,631,880	(1,134,071)	6,765,951	11 / 12	4.50%	279,095	5.50%	341,117	62,022
5	June	2,040,795	1,262,075	778,720	10 / 12	4.50%	29,202	5.50%	35,691	6,489
6	July	1,723,127	1,995,426	(272,298)	9 / 12	4.50%	(9,190)	5.50%	(11,232)	(2,042)
7	August	1,597,722	2,258,995	(661,273)	8 / 12	4.50%	(19,838)	5.50%	(24,247)	(4,409)
8	September	<u>1,721,839</u>	<u>2,707,826</u>	<u>(985,987)</u>	7 / 12	4.50%	<u>(25,882)</u>	5.50%	<u>(31,634)</u>	<u>(5,752)</u>
9	TOTAL	<u>62,337,333</u>	<u>52,219,399</u>	<u>10,117,934</u>			<u>487,356</u>		<u>595,656</u>	<u>108,300</u>

Exhibit 1-E
Schedule 2b
Sheet 1 of 2

COLUMBIA GAS OF PENNSYLVANIA, INC.

RECONCILIATION OF DEMAND COST OF GAS
FROM 2018 - 1307(f)
OCTOBER, 2018 THROUGH SEPTEMBER, 2019

DEMAND

Line No.	Month	Sales Subject to Demand E-Factor Therm	Rate \$/ Therm	Amount \$	Net Demand Over (Under) Collection \$
1	True-up of Net Demand Costs Included in 2018 1307(f):				1,249,812
2	Beginning Balance Adjustment				30,741 <u>2</u> / ₁
3	Beginning Balance Adjustment				18,107 <u>3</u> / ₁
4	October, 2018	6,019,767	(0.00211)	(12,702)	
5		5,448,298	0.00857	46,692	
6	November	39,768,539	(0.00211)	(83,913)	
7		391,822	0.00857	3,358	
8	December	74,905,000	(0.00211)	(158,050)	
9	January, 2019 <u>1</u> / ₁	42,545,919	(0.00267)	(113,598)	
10		41,899,676	(0.00211)	(88,408)	
11	February	92,367,025	(0.00267)	(246,620)	
12		(54,913)	(0.00211)	116	
13	March	78,085,200	(0.00267)	(208,487)	
14	April	45,617,010	(0.00267)	(121,797)	
15	May	18,681,063	(0.00267)	(49,878)	
16	June	10,804,062	(0.00267)	(28,847)	
17	July	8,190,948	(0.00267)	(21,870)	
18	August	7,325,209	(0.00267)	(19,558)	
19	September	7,490,786	(0.00267)	(20,000)	
20	Amount Collected/(Passed Back) in the 2018 1307(f) Period				<u>(1,123,562)</u>
21	Remaining Balance to be Passed Back in the 2019 1307(f)				<u><u>175,098</u></u>

1/₁ Rate in effect January 1, 2019.

2/₁ Represents a demand interest adjustment for the period of February 2018 to September 2018 increasing the interest rate from 4.50% to the prime rate as of January 31, 2019 of 5.50%. Please refer to Exh. 1-E, Schedule 2b, Sheet 2 for a detailed calculation for this adjustment.

3/₁ Represents a standby demand recovery adjustment, including applicable interest, for the period of January 2016 through February 2019.

COLUMBIA GAS OF PENNSYLVANIA, INC.
STATEMENT OF DEMAND OVER/(UNDER) COLLECTIONS FROM GAS COST RATE
FEBRUARY, 2018 THROUGH SEPTEMBER, 2018

Line No.	Month	Total Purchased Gas Cost Recovery (1)	Total Cost of Fuel (2)	Total Over (Under) Collection (3 = 1 - 2)	Number of Months (4)	Rate (5)	Over (Under) Collection Interest (6=3x4x5)	Rate (7)	Over (Under) Collection Interest (8=3x4x7)	Interest Difference (9=8-6)
1	February, 2018	10,736,990	5,438,812	5,298,177	14 / 12	4.50%	278,154	5.50%	339,966	61,812
2	March	8,582,723	5,671,865	2,910,858	13 / 12	4.50%	141,904	5.50%	173,439	31,535
3	April	7,839,152	4,186,567	3,652,585	12 / 12	4.50%	164,366	5.50%	200,892	36,526
4	May	3,192,760	4,197,840	(1,005,080)	11 / 12	4.50%	(41,460)	5.50%	(50,673)	(9,213)
5	June	1,201,973	4,215,905	(3,013,932)	10 / 12	4.50%	(113,022)	5.50%	(138,139)	(25,117)
6	July	997,826	4,218,931	(3,221,105)	9 / 12	4.50%	(108,712)	5.50%	(132,871)	(24,159)
7	August	931,614	4,218,183	(3,286,568)	8 / 12	4.50%	(98,597)	5.50%	(120,508)	(21,911)
8	September	<u>997,926</u>	<u>4,209,094</u>	<u>(3,211,168)</u>	7 / 12	4.50%	<u>(84,293)</u>	5.50%	<u>(103,025)</u>	<u>(18,732)</u>
9	TOTAL	<u>34,480,963</u>	<u>36,357,197</u>	<u>(1,876,233)</u>			<u>138,340</u>		<u>169,081</u>	<u>30,741</u>

COLUMBIA GAS OF PENNSYLVANIA, INC.

RECONCILIATION OF OFF SYSTEM SALES CREDIT
FROM 2018 - 1307(f)
OCTOBER, 2018 THROUGH SEPTEMBER, 2019

DEMAND

Line No.	Month	Sales Subject to Off-System Sales Credit	Rate	Amount	Net Demand Over (Under) Collection
		Therm	\$/Therm	\$	\$
1	October, 2018	6,019,767	(0.01845)	(111,065)	
2		5,448,298	(0.01856)	(101,120)	
3	November	39,768,539	(0.01845)	(733,730)	
4		391,822	(0.01856)	(7,272)	
5	December	74,905,000	(0.01845)	(1,381,997)	
6	January, 2019 1_/	84,445,595	(0.01845)	(1,558,021)	
7	February	92,312,113	(0.01845)	(1,703,158)	
8	March	78,085,200	(0.01845)	(1,440,672)	
9	April	45,617,010	(0.01845)	(841,634)	
10	May	18,681,063	(0.01845)	(344,666)	
11	June	10,804,062	(0.01845)	(199,335)	
12	July	8,190,948	(0.01845)	(151,123)	
13	August	7,325,209	(0.01845)	(135,150)	
14	September	7,490,786	(0.01845)	(138,205)	
15	Amount Passed Back in the 2018 1307(f)				<u>(8,847,148)</u>
16	Current Estimate Unified Sharing Mechanism - \$3,162,743				3,162,743
17	Amount to be Collected in the 2019 1307(f)				<u><u>(5,684,405)</u></u>

1_ / Rate in effect January 1, 2019.

COLUMBIA GAS OF PENNSYLVANIA, INC.
STATEMENT OF COMMODITY OVER/(UNDER) COLLECTIONS FROM GAS COST RATE
OCTOBER, 2018 THROUGH SEPTEMBER, 2019

Line No.	Month	Total Commodity Sales Revenue (1) \$	Rate Schedule NSS Gas Cost Recovery (2) \$	Total Commodity Purchase Gas Cost Recovery (3 = 1 + 2) \$	Total Commodity Cost of Fuel (4) \$	Total Commodity Over/(Under) Collection (5 = 3 - 4) \$	Number of Months (6)	Rate (7)	Commodity Over/(Under) Collection Interest (8 = 5 x 6 x 7)	Total Commodity Over/(Under) Collection (9 = 5 + 8)
Reference:		Sch. 4, Pg. 2	Sch. 4, Pg. 3							
<i>Actuals through August 2019; Projections for September 2019</i>										
1	October, 2018	2,556,243	10,004	2,566,247	5,862,138	(3,295,891)	18 / 12	5.50%	(271,911)	(3,567,802)
2	November	9,265,445	18,796	9,284,242	16,705,783	(7,421,541)	17 / 12	5.50%	(578,262)	(7,999,803)
3	December	17,205,018	43,764	17,248,781	21,702,938	(4,454,157)	16 / 12	5.50%	(326,638)	(4,780,795)
4	January, 2019	20,783,568	66,071	20,849,639	23,298,740	(2,449,101)	15 / 12	5.50%	(168,376)	(2,617,477)
5	February	24,370,944	16,451	24,387,395	17,023,909	7,363,487	14 / 12	5.50%	472,490	7,835,977
6	March	20,569,778	26,805	20,596,583	15,643,460	4,953,123	13 / 12	5.50%	295,124	5,248,247
7	April	11,611,337	17,522	11,628,859	5,716,080	5,912,779	12 / 12	5.50%	325,203	6,237,982
8	May	4,404,370	12,171	4,416,541	2,692,046	1,724,495	11 / 12	5.50%	86,943	1,811,438
9	June	2,554,171	3,178	2,557,349	2,053,585	503,764	10 / 12	5.50%	23,089	526,853
10	July	1,847,405	4,381	1,851,786	1,915,788	(64,002)	9 / 12	5.50%	(2,640)	(66,642)
11	August	1,574,431	4,603	1,579,035	1,279,027	300,008	8 / 12	5.50%	11,000	311,008
12	September - Est.	1,497,034	0	1,497,034	910,809	586,225	7 / 12	5.50%	18,808	605,033
13	TOTAL	118,239,744	223,747	118,463,491	114,804,303	3,659,189			(115,170)	3,544,019

COLUMBIA GAS OF PENNSYLVANIA, INC.
STATEMENT OF DEMAND OVER/(UNDER) COLLECTIONS FROM GAS COST RATE
OCTOBER, 2018 THROUGH SEPTEMBER, 2019

Line No.	Month	Total Demand Sales Revenue (1) \$	Total Banking and Balancing Revenue (2) \$	Total Standby Demand Revenue (3) \$	NSS Capacity Release Revenue (4) \$	Demand Purchased Gas Cost Recovery (5=1+2+3+4) \$	Demand Cost of Fuel (6) \$	Total Demand Over/(Under) Collection (7 = 5 - 6) \$	Number of Months (8)	Rate (9)	Demand Over/(Under) Collection Interest (10 = 7 x 8 x 9)	Total Demand Over/(Under) Collection (11 = 7 + 10)
	Reference:	Sch. 4, Pg. 4	Sch. 4, Pg. 6	Sch. 4, Pg. 5	Sch. 4, Pg. 6							
	<i>Actuals through August 2019; Projections for September 2019</i>											
1	October, 2018	1,430,235	83	36,256	34	1,466,608	5,611,603	(4,144,995)	18 / 12	5.50%	(341,962)	(4,486,957)
2	November	5,096,225	143	34,816	59	5,131,243	5,678,400	(547,157)	17 / 12	5.50%	(42,633)	(589,790)
3	December	9,486,747	240	35,023	652	9,522,662	5,766,690	3,755,972	16 / 12	5.50%	275,438	4,031,410
4	January, 2019	10,591,103	356	35,023	1,537	10,628,019	5,752,469	4,875,550	15 / 12	5.50%	335,194	5,210,744
5	February	11,453,755	146	37,586	644	11,492,132	5,983,285	5,508,847	14 / 12	5.50%	353,484	5,862,331
6	March	9,689,224	215	44,429	951	9,734,819	5,981,206	3,753,613	13 / 12	5.50%	223,653	3,977,266
7	April	5,798,426	156	44,076	22	5,842,680	4,355,541	1,487,139	12 / 12	5.50%	81,793	1,568,932
8	May	2,480,425	119	44,706	48	2,525,299	4,362,975	(1,837,677)	11 / 12	5.50%	(92,650)	(1,930,327)
9	June	1,434,292	30	43,904	12	1,478,239	4,533,817	(3,055,579)	10 / 12	5.50%	(140,047)	(3,195,626)
10	July	1,111,707	49	43,047	20	1,154,822	4,301,276	(3,146,454)	9 / 12	5.50%	(129,791)	(3,276,245)
11	August	1,018,983	53	43,122	21	1,062,179	4,416,083	(3,353,905)	8 / 12	5.50%	(122,977)	(3,476,882)
12	September - Est.	<u>1,084,816</u>	<u>0</u>	<u>43,122</u>	<u>0</u>	<u>1,127,938</u>	<u>4,631,776</u>	<u>(3,503,838)</u>	7 / 12	5.50%	<u>(112,415)</u>	<u>(3,616,253)</u>
13	TOTAL	<u>60,675,937</u>	<u>1,590</u>	<u>485,111</u>	<u>4,001</u>	<u>61,166,638</u>	<u>61,375,122</u>	<u>(208,483)</u>			<u>287,087</u>	<u>78,604</u>

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COLUMBIA GAS OF PENNSYLVANIA, INC.
DETAIL OF COMMODITY GAS COST RECOVERY
OCTOBER, 2018 THROUGH SEPTEMBER, 2019

LINE NO.	MONTH	SALES	COMMODITY	TOTAL
		SUBJECT TO	COST OF	COMMODITY
		COMMODITY	GAS	COST
		(1)	(2)	(3 = 1 x 2)
		THERM	\$/THERM	\$
1	October, 2018 Est. Old	4,329,635	0.27183	1,176,925
2	October, 2018 Est. New	4,766,236	0.28446	1,355,803
3	September, 2018 Est.	(6,247,069)	0.27183	(1,698,141)
4	September, 2018 Act.	6,332,919	0.27183	1,721,477
5	September Act. Prior Period Adjustments		0.00000	178
6	Total	9,181,721		2,556,243
7	November, 2018 Est. New	31,629,317	0.28446	8,997,276
8	October, 2018 Est. Old	(4,329,635)	0.27183	(1,176,925)
9	October, 2018 Est. New	(4,766,236)	0.28446	(1,355,803)
10	October, 2018 Act. Old	4,787,680	0.27183	1,301,435
11	October, 2018 Act. New	5,270,471	0.28446	1,499,238
12	October Act. Prior Period Adjustments		-	225
13	Total	32,591,597		9,265,445
14	December, 2018 Est.	61,233,224	0.28446	17,418,403
15	November, 2018 Est.	(31,629,317)	0.28446	(8,997,276)
16	November, 2018 Act.	30,879,267	0.28446	8,783,916
17	November Act. Prior Period Adjustments		-	(26)
18	Total	60,483,174		17,205,018
19	January, 2019 Est. Old	33,521,783	0.28446	9,535,606
20	January, 2019 Est. New	34,336,078	0.32666	11,216,223
21	December, 2018 Est.	(61,233,224)	0.28446	(17,418,403)
22	December, 2018 Act.	61,340,524	0.28446	17,448,925
23	December Act. Prior Period Adjustments		-	1,216
24	Total	67,965,161		20,783,568
25	February, 2019 Est. New	74,694,983	0.32666	24,399,863
26	January, 2019 Est. Old	33,482,207	0.28446	9,524,348
27	January, 2019 Est. New	34,295,539	0.32666	11,202,981
28	January, 2019 Act. Old	(33,521,783)	0.28446	(9,535,606)
29	January, 2019 Act. New	(34,336,078)	0.32666	(11,216,223)
30	January Act. Prior Period Adjustments		-	(4,419)
31	Total	74,614,868		24,370,944
32	March, 2019 Est.	63,038,517	0.32666	20,592,162
33	February, 2019 Est.	(74,694,983)	0.32666	(24,399,863)
34	February, 2019 Act.	74,628,673	0.32666	24,378,202
35	February Act. Prior Period Adjustments		-	(723)
36	Total	62,972,207		20,569,778

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COLUMBIA GAS OF PENNSYLVANIA, INC.
DETAIL OF COMMODITY GAS COST RECOVERY
OCTOBER, 2018 THROUGH SEPTEMBER, 2019

LINE NO.	MONTH	SALES SUBJECT TO COMMODITY COST OF GAS	COMMODITY COST OF GAS	TOTAL COMMODITY COST RECOVERY
		(1) THERM	(2) \$/THERM	(3 = 1 x 2) \$
1	April, 2019 Est. Old	24,068,529	0.32666	7,862,226
2	April, 2019 Est. New	12,677,317	0.29657	3,759,712
3	March, 2019 Est.	(63,038,517)	0.32666	(20,592,162)
4	March, 2019 Act.	63,005,287	0.32666	20,581,307
5	March Act. Prior Period Adjustments		-	254
6	Total	<u>36,712,616</u>		<u>11,611,337</u>
7	May, 2019 Est.	14,785,397	0.29657	4,384,905
8	April, 2019 Est. Old	(24,068,529)	0.32666	(7,862,226)
9	April, 2019 Est. New	(12,677,317)	0.29657	(3,759,712)
10	April, 2019 Act. Old	24,109,349	0.32666	7,875,560
11	April, 2019 Act. New	12,698,817	0.29657	3,766,088
12	April Act. Prior Period Adjustments		-	(246)
13	Total	<u>14,847,717</u>		<u>4,404,370</u>
14	June, 2019 Est.	8,483,859	0.29657	2,516,058
15	May, 2019 Est.	(14,785,397)	0.29657	(4,384,905)
16	May, 2019 Act.	14,915,037	0.29657	4,423,353
17	May Act. Prior Period Adjustments		-	(334)
18	Total	<u>8,613,499</u>		<u>2,554,171</u>
19	July, 2019 Est. Old	3,296,113	0.29657	977,528
20	July, 2019 Est. New	3,091,702	0.27486	849,785
21	June, 2019 Est.	(8,483,859)	0.29657	(2,516,058)
22	June, 2019 Act.	8,551,469	0.29657	2,536,109
23	June Act. Prior Period Adjustments		-	40
24	Total	<u>6,455,425</u>		<u>1,847,405</u>
25	August, 2019 Est.	3,137,941	0.27486	862,494
26	July, 2019 Est. Old	(3,296,113)	0.29657	(977,528)
27	July, 2019 Est. New	(3,091,702)	0.27486	(849,785)
28	July, 2019 Act. Old	3,345,408	0.29657	992,148
29	July, 2019 Act. New	5,644,412	0.27486	1,551,423
30	July Act. Prior Period Adjustments		-	(4,320)
31	Total	<u>5,739,946</u>		<u>1,574,431</u>
32	September, 2019 Est.	<u>5,446,534</u>	0.27486	<u>1,497,034</u>
33	Total	<u>5,446,534</u>		<u>1,497,034</u>
34	TOTAL	<u><u>385,624,465</u></u>		<u><u>118,239,744</u></u>

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COLUMBIA GAS OF PENNSYLVANIA, INC.
DETAIL OF NSS COMMODITY COST RECOVERY
OCTOBER, 2018 THROUGH SEPTEMBER, 2019

LINE NO.	MONTH	RATE SCHEDULE NSS VOLUMES		NSS GAS COST RECOVERY
		(1) THERM	(2) \$/THERM	(3=1*2) \$
1	October, 2018 Est.	35,994	0.27196	9,789
2	September, 2018 Act.	23,800	0.26959	6,416
3	September, 2018 Est.	<u>(23,002)</u>	0.26959	<u>(6,201)</u>
4		36,792		10,004
5	November, 2018 Est.	58,995	0.29899	17,639
6	October, 2018 Act.	40,250	0.27196	10,946
7	October, 2018 Est.	<u>(35,994)</u>	0.27196	<u>(9,789)</u>
8		63,251		18,796
9	December, 2018 Est.	77,998	0.45320	35,349
10	November, 2018 Act.	87,140	0.29899	26,054
11	November, 2018 Est.	<u>(58,995)</u>	0.29899	<u>(17,639)</u>
12		106,143		43,764
13	January, 2019 Est.	137,000	0.41445	56,780
14	December, 2018 Act.	98,500	0.45320	44,640
15	December, 2018 Est.	<u>(77,998)</u>	0.45320	<u>(35,349)</u>
16		157,502		66,071
17	February, 2019 Est.	102,003	0.31365	31,993
18	January, 2019 Act.	99,500	0.41445	41,238
19	January, 2019 Est.	<u>(137,000)</u>	0.41445	<u>(56,780)</u>
20		64,503		16,451
21	March, 2019 Est.	93,002	0.28108	26,141
22	February, 2019 Act.	104,120	0.31365	32,657
23	February, 2019 Est.	<u>(102,003)</u>	0.31365	<u>(31,993)</u>
24		95,119		26,805
25	April, 2019 Est.	74,005	0.25459	18,841
26	March, 2019 Act.	88,310	0.28108	24,822
27	March, 2019 Est.	<u>(93,002)</u>	0.28108	<u>(26,141)</u>
28		69,313		17,522
29	May, 2019 Est.	51,993	0.23156	12,040
30	April, 2019 Act.	74,520	0.25459	18,972
31	April, 2019 Est.	<u>(74,005)</u>	0.25459	<u>(18,841)</u>
32		52,508		12,171
33	June, 2019 Est.	27,005	0.23356	6,307
34	May, 2019 Act.	38,480	0.23156	8,910
35	May, 2019 Est.	<u>(51,993)</u>	0.23156	<u>(12,040)</u>
36		13,492		3,178
37	July, 2019 Est.	23,000	0.20546	4,726
38	June, 2019 Act.	25,530	0.23356	5,963
39	June, 2019 Est.	<u>(27,005)</u>	0.23356	<u>(6,307)</u>
40		21,525		4,381
41	August, 2019 Est.	23,000	0.19800	4,554
42	July, 2019 Act.	23,240	0.20546	4,775
43	July, 2019 Est.	<u>(23,000)</u>	0.20546	<u>(4,726)</u>
44		23,240		4,603
45	September, 2019 Est.	<u>0</u>	0.00000	<u>0</u>
46		0		0
47	TOTAL	<u>703,388</u>		<u>223,747</u>

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COLUMBIA GAS OF PENNSYLVANIA, INC.
DETAIL OF DEMAND GAS COST RECOVERY
OCTOBER, 2018 THROUGH SEPTEMBER, 2019

LINE NO.	MONTH	VOLUMES SUBJ.	COST OF	DEMAND
		TO DEMAND	GAS	COST
		COST OF GAS	GAS	RECOVERY
		(1)	(2)	(3 = 1 x 2)
		THERM	\$/THERM	\$
1	October, 2018 Est. Old	4,329,635	0.12750	552,028
2	October, 2018 Est. New	4,766,236	0.13206	629,429
3	October Choice - Est. Old	941,541	0.09686	91,198
4	October Choice - Est. New	1,024,098	0.10222	104,683
5	October Est. Priority One Transportation Old	208,417	0.12750	26,573
6	October Est. Priority One Transportation New	229,433	0.13206	30,299
7	September, 2018 Est.	(6,247,069)	0.12750	(796,501)
8	September 2018 Act.	6,332,919	0.12750	807,447
9	September Choice - Est.	(1,346,983)	0.09686	(130,469)
10	September Choice - Act.	1,346,508	0.09686	130,423
11	September Est. Priority One Transportation	(331,920)	0.12750	(42,320)
12	September Act. Priority One Transportation	215,250	0.12750	27,444
13	Total	11,468,065		1,430,235
14	November, 2018 Est. New	31,629,317	0.13206	4,176,968
15	November Choice - Est. New	6,888,251	0.10222	704,117
16	November Est. Priority One Transportation New	819,640	0.13206	108,242
17	October Est. Old	(4,329,635)	0.12750	(552,028)
18	October Est. New	(4,766,236)	0.13206	(629,429)
19	October Act. Old	4,787,680	0.12750	610,429
20	October Act. New	5,270,471	0.13206	696,018
21	October Choice - Est. Old	(941,541)	0.09686	(91,198)
22	October Choice - Est. New	(1,024,098)	0.10222	(104,683)
23	October Choice - Act. Old	941,854	0.09686	91,228
24	October Choice - Act. New	1,024,438	0.10222	104,718
25	October Est. Priority One Transportation Old	(208,417)	0.12750	(26,573)
26	October Est. Priority One Transportation New	(229,433)	0.13206	(30,299)
27	October Act. Priority One Transportation Old	141,881	0.12750	18,090
28	October Act. Priority One Transportation New	156,189	0.13206	20,626
29	Total	40,160,361		5,096,225
30	December, 2018 Est.	61,233,224	0.13206	8,086,460
31	December Choice - Est.	13,553,590	0.10222	1,385,448
32	December Est. Priority One Transportation	934,800	0.13206	123,450
33	November Est.	(31,629,317)	0.13206	(4,176,968)
34	November Act.	30,879,267	0.13206	4,077,916
35	November Choice - Est.	(6,888,251)	0.10222	(704,117)
36	November Choice - Act.	6,913,997	0.10222	706,749
37	November Est. Priority One Transportation	(819,640)	0.13206	(108,242)
38	November Act. Priority One Transportation	727,330	0.13206	96,051
39	Total	74,905,000		9,486,747
40	January, 2019 Est. Old	33,521,783	0.13206	4,426,887
41	January, 2019 Est. New	34,336,078	0.12942	4,443,775
42	January Choice - Est. Old	7,441,851	0.10222	760,706
43	January Choice - Est. New	7,592,192	0.09975	757,321
44	January Est. Priority One Transportation Old	603,001	0.13206	79,632
45	January Est. Priority One Transportation New	617,649	0.12942	79,936
46	December 2018 Est.	(61,233,224)	0.13206	(8,086,460)
47	December 2018 Act.	61,340,524	0.13206	8,100,630
48	December Choice - Est.	(13,553,590)	0.10222	(1,385,448)
49	December Choice - Act.	13,591,661	0.10222	1,389,340
50	December Est. Priority One Transportation	(934,800)	0.13206	(123,450)
51	December Act. Priority One Transportation	1,122,470	0.13206	148,233
52	Total	84,445,595		10,591,103

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COLUMBIA GAS OF PENNSYLVANIA, INC.
DETAIL OF DEMAND GAS COST RECOVERY
OCTOBER, 2018 THROUGH SEPTEMBER, 2019

LINE NO.	MONTH	VOLUMES SUBJ.	COST OF	DEMAND
		TO DEMAND	GAS	COST
		COST OF GAS	(1)	RECOVERY
		(1)	(2)	(3 = 1 x 2)
		THERM	\$/THERM	\$
1	February, 2019 Est. New	74,694,983	0.12942	9,667,025
2	February Choice - Est. New	16,572,097	0.09975	1,653,067
3	February Est. Priority One Transportation New	1,156,290	0.12942	149,647
4	January Est. Old	(33,521,783)	0.13206	(4,426,887)
5	January Est. New	(34,336,078)	0.12942	(4,443,775)
6	January Act. Old	33,482,207	0.13206	4,421,660
7	January Act. New	34,295,539	0.12942	4,438,529
8	January Choice - Est. Old	(7,441,851)	0.10222	(760,706)
9	January Choice - Est. New	(7,592,192)	0.09975	(757,321)
10	January Choice - Act. Old	7,465,798	0.10222	763,154
11	January Choice - Act. New	7,616,623	0.09975	759,758
12	January Est. Priority One Transportation Old	(603,001)	0.13206	(79,632)
13	January Est. Priority One Transportation New	(617,649)	0.12942	(79,936)
14	January Act. Priority One Transportation Old	563,718	0.13206	74,445
15	January Act. Priority One Transportation New	577,412	0.12942	74,729
16	Total	92,312,113		11,453,755
17	March, 2019 Est.	63,038,517	0.12942	8,158,445
18	March Choice - Est.	13,972,158	0.09975	1,393,723
19	March Est. Priority One Transportation	1,045,980	0.12942	135,371
20	February Est.	(74,694,983)	0.12942	(9,667,025)
21	February Act.	74,628,673	0.12942	9,658,443
22	February Choice - Est.	(16,572,097)	0.09975	(1,653,067)
23	February Choice - Act.	16,639,812	0.09975	1,659,821
24	February Est. Priority One Transportation	(1,156,290)	0.12942	(149,647)
25	February Act. Priority One Transportation	1,183,430	0.12942	153,160
26	Total	78,085,200		9,689,224
27	April, 2019 Est. Old	24,068,529	0.12942	3,114,949
28	April, 2019 Est. New	12,677,317	0.13827	1,752,893
29	April Choice - Est. Old	5,311,302	0.09975	529,802
30	April Choice - Est. New	2,834,867	0.10801	306,194
31	April Est. Priority One Transportation Old	473,683	0.12942	61,304
32	April Est. Priority One Transportation New	249,497	0.13827	34,498
33	March Est.	(63,038,517)	0.12942	(8,158,445)
34	March Act.	63,005,287	0.12942	8,154,144
35	March Choice - Est.	(13,972,158)	0.09975	(1,393,723)
36	March Choice - Act.	14,021,003	0.09975	1,398,595
37	March Est. Priority One Transportation	(1,045,980)	0.12942	(135,371)
38	March Act. Priority One Transportation	1,032,180	0.12942	133,585
39	Total	45,617,010		5,798,426
40	May, 2019 Est.	14,785,397	0.13827	2,044,377
41	May Choice - Est.	3,359,573	0.10801	362,867
42	May Est. Priority One Transportation New	496,770	0.13827	68,688
43	April, 2019 Est. Old	(24,068,529)	0.12942	(3,114,949)
44	April, 2019 Est. New	(12,677,317)	0.13827	(1,752,893)
45	April, 2019 Act. Old	24,109,349	0.12942	3,120,232
46	April, 2019 Act. New	12,698,817	0.13827	1,755,865
47	April Choice - Est. Old	(5,311,302)	0.09975	(529,802)
48	April Choice - Est. New	(2,834,867)	0.10801	(306,194)
49	April Choice - Act. Old	5,326,972	0.09975	531,365
50	April Choice - Act. New	2,843,230	0.10801	307,097
51	April Est. Priority One Transportation Old	(473,683)	0.12942	(61,304)
52	April Est. Priority One Transportation New	(249,497)	0.13827	(34,498)
53	April Act. Priority One Transportation Old	442,878	0.12942	57,317
54	April Act. Priority One Transportation New	233,272	0.13827	32,254
55	Total	18,681,063		2,480,425

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COLUMBIA GAS OF PENNSYLVANIA, INC.
DETAIL OF DEMAND GAS COST RECOVERY
OCTOBER, 2018 THROUGH SEPTEMBER, 2019

LINE NO.	MONTH	VOLUMES SUBJ. TO DEMAND	COST OF GAS	DEMAND COST RECOVERY
		(1) THERM	(2) \$/THERM	(3 = 1 x 2) \$
1	June, 2019 Est.	8,483,859	0.13827	1,173,063
2	June Choice - Est.	1,966,047	0.10801	212,353
3	June Est. Priority One Transportation	345,290	0.13827	47,743
4	May Est.	(14,785,397)	0.13827	(2,044,377)
5	May Act.	14,915,037	0.13827	2,062,302
6	May Choice - Est.	(3,359,573)	0.10801	(362,867)
7	May Choice - Act.	3,362,649	0.10801	363,200
8	May Est. Priority One Transportation	(496,770)	0.13827	(68,688)
9	May Act. Priority One Transportation	372,920	0.13827	51,564
10	Total	10,804,062		1,434,292
11	July, 2019 Est. Old	3,296,113	0.13827	455,753
12	July, 2019 Est. New	3,091,702	0.14482	447,740
13	July Choice - Est. Old	788,131	0.10801	85,126
14	July Choice - Est. New	748,187	0.11407	85,346
15	July Est. Priority One Transportation Old	148,342	0.13827	20,511
16	July Est. Priority One Transportation New	139,143	0.14482	20,151
17	June 2019 Est.	(8,483,859)	0.13827	(1,173,063)
18	June 2019 Act.	8,551,469	0.13827	1,182,412
19	June Choice - Est.	(1,966,047)	0.10801	(212,353)
20	June Choice - Act.	1,968,097	0.10801	212,574
21	June Est. Priority One Transportation	(345,290)	0.13827	(47,743)
22	June Act. Priority One Transportation	254,960	0.13827	35,253
23	Total	8,190,948		1,111,707
24	August, 2019 Est.	5,644,412	0.14482	817,424
25	August Choice - Est.	1,359,139	0.11407	155,037
26	August Est. Priority One Transportation	303,916	0.14482	44,013
27	July, 2019 Est. Old	(3,296,113)	0.13827	(455,753)
28	July, 2019 Est. New	(3,091,702)	0.14482	(447,740)
29	July 2019 Act. Old	3,345,408	0.13827	462,570
30	July 2019 Act. New	3,137,941	0.14482	454,437
31	July Choice - Est. Old	(788,131)	0.10801	(85,126)
32	July Choice - Est. New	(748,187)	0.11407	(85,346)
33	July Choice - Act. Old	788,138	0.10801	85,127
34	July Choice - Act. New	748,193	0.11407	85,346
35	July Est. Priority One Transportation Old	(148,342)	0.13827	(20,511)
36	July Est. Priority One Transportation New	(139,143)	0.14482	(20,151)
37	July Act. Priority One Transportation Old	108,195	0.13827	14,960
38	July Act. Priority One Transportation New	101,485	0.14482	14,697
39	Total	7,325,209		1,018,983
40	September, 2019 Est.	7,490,786	0.14482	1,084,816
41	Total	7,490,786		1,084,816
42	TOTAL	479,485,412		60,675,937

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COLUMBIA GAS OF PENNSYLVANIA, INC.
DETAIL OF STANDBY DEMAND COST RECOVERY
OCTOBER, 2018 THROUGH SEPTEMBER, 2019

LINE NO.	MONTH	STANDBY VOLUMES (1) THERM	STANDBY DEMAND RATE (2) \$/THERM	STANDBY GAS DEMAND RECOVERIES (3 = 1 x 2) \$
1	October, 2018 Est.	0		0
2	September, 2018 Act.	46,960	0.77206	36,256
3	September, 2018 Est.	0	-	0
4		<u>46,960</u>		<u>36,256</u>
5	November, 2018 Est.	0	-	0
6	October, 2018 Act.	45,310	0.76839	34,816
7	October, 2018 Est.	0	-	0
8		<u>45,310</u>		<u>34,816</u>
9	December, 2018 Est.	0	-	0
10	November, 2018 Act.	45,580	0.76839	35,023
11	November, 2018 Est.	0	-	0
12		<u>45,580</u>		<u>35,023</u>
13	January, 2019 Est.	0	-	0
14	December, 2018 Act.	45,580	0.76839	35,023
15	December, 2018 Est.	0	-	0
16		<u>45,580</u>		<u>35,023</u>
17	February, 2019 Est.	0	-	0
18	January, 2019 Act.	48,940	0.76801	37,586
19	January, 2019 Est.	0	-	0
20		<u>48,940</u>		<u>37,586</u>
21	March, 2019 Est.	0	-	0
22	February, 2019 Act.	57,850	0.76801	44,429
23	February, 2019 Est.	0	-	0
24		<u>57,850</u>		<u>44,429</u>
25	April, 2019	0	-	0
26	March, 2019 Act.	57,390	0.76801	44,076
27	March, 2019 Est.	0	-	0
28		<u>57,390</u>		<u>44,076</u>
29	May, 2019	0	-	0
30	April, 2019 Act.	57,390	0.77899	44,706
31	April, 2019 Est.	0	-	0
32		<u>57,390</u>		<u>44,706</u>
33	June, 2019	0	-	0
34	May, 2019 Act.	56,360	0.77899	43,904
35	May, 2019 Est.	0	-	0
36		<u>56,360</u>		<u>43,904</u>
37	July, 2019	0	-	0
38	June, 2019 Act.	55,260	0.77899	43,047
39	June, 2019 Est.	0	-	0
40		<u>55,260</u>		<u>43,047</u>
41	August, 2019	0	-	0
42	July, 2019 Act.	55,260	0.78034	43,122
43	July, 2019 Est.	0	-	0
44		<u>55,260</u>		<u>43,122</u>
45	September, 2019	0	-	0
46	August, 2019 Act	0	-	0
47	August, 2019 Est.	55,260	0.78034	43,122
48		<u>55,260</u>		<u>43,122</u>
49	TOTAL	<u>627,140</u>		<u>485,111</u>

Exhibit 1-E
Schedule 4
Sheet 6 of 6

COLUMBIA GAS OF OF PENNSYLVANIA, INC.
DETAIL OF NSS BANKING & BALANCING AND CAPACITY RELEASE REVENUE
OCTOBER, 2018 THROUGH SEPTEMBER, 2019

LINE NO.	DESCRIPTION	NSS-BANKING & BALANCING			NSS-CAPACITY RELEASE		
		VOLUME	RATE	AMOUNT	VOLUME	RATE	AMOUNT
		(1)	(2)	(3=1 x 2)	(4)	(5)	(6=4 x 5)
		THERM	\$/THERM	\$	THERM	\$/THERM	\$
1	October, 2018 Est.	35,994	0.00226	81	35,994	0.00093	33
2	September, 2018 Act.	23,800	0.00226	54	23,800	0.00093	22
3	September, 2018 Est.	<u>(23,002)</u>	0.00226	<u>(52)</u>	<u>(23,002)</u>	0.00093	<u>(21)</u>
4		36,792		83	36,792		34
5	November, 2018 Est.	58,995	0.00226	133	58,995	0.00093	55
6	October, 2018 Act.	40,250	0.00226	91	40,250	0.00093	37
7	October, 2018 Est.	<u>(35,994)</u>	0.00226	<u>(81)</u>	<u>(35,994)</u>	0.00093	<u>(33)</u>
8		63,251		143	63,251		59
9	December, 2018 Est.	77,998	0.00226	176	77,998	0.00802	626
10	November, 2018 Act.	87,140	0.00226	197	87,140	0.00093	81
11	November, 2018 Est.	<u>(58,995)</u>	0.00226	<u>(133)</u>	<u>(58,995)</u>	0.00093	<u>(55)</u>
12		106,143		240	106,143		652
13	January, 2019 Est.	137,000	0.00226	310	137,000	0.01002	1,373
14	December, 2018 Act.	98,500	0.00226	223	98,500	0.00802	790
15	December, 2018 Est.	<u>(77,998)</u>	0.00226	<u>(176)</u>	<u>(77,998)</u>	0.00802	<u>(626)</u>
16		157,502		356	157,502		1,537
17	February, 2019 Est.	102,003	0.00226	231	102,003	0.01000	1,020
18	January, 2019 Act.	99,500	0.00226	225	99,500	0.01002	997
19	January, 2019 Est.	<u>(137,000)</u>	0.00226	<u>(310)</u>	<u>(137,000)</u>	0.01002	<u>(1,373)</u>
20		64,503		146	64,503		644
21	March, 2019 Est.	93,002	0.00226	210	93,002	0.01000	930
22	February, 2019 Act.	104,120	0.00226	235	104,120	0.01000	1,041
23	February, 2019 Est.	<u>(102,003)</u>	0.00226	<u>(231)</u>	<u>(102,003)</u>	0.01000	<u>(1,020)</u>
24		95,119		215	95,119		951
25	April, 2019 Est.	74,005	0.00226	167	74,005	0.00093	69
26	March, 2019 Act.	88,310	0.00226	200	88,310	0.01000	883
27	March, 2019 Est.	<u>(93,002)</u>	0.00226	<u>(210)</u>	<u>(93,002)</u>	0.01000	<u>(930)</u>
28		69,313		156	69,313		22
29	May, 2019 Est.	51,993	0.00226	118	51,993	0.00093	48
30	April, 2019 Act.	74,520	0.00226	168	74,520	0.00093	69
31	April, 2019 Est.	<u>(74,005)</u>	0.00226	<u>(167)</u>	<u>(74,005)</u>	0.00093	<u>(69)</u>
32		52,508		119	52,508		48
33	June, 2019 Est.	27,005	0.00226	61	27,005	0.00093	25
34	May, 2019 Act.	38,480	0.00226	87	38,480	0.00093	36
35	May, 2019 Est.	<u>(51,993)</u>	0.00226	<u>(118)</u>	<u>(51,993)</u>	0.00093	<u>(48)</u>
36		13,492		30	13,492		12
37	July, 2019 Est.	23,000	0.00226	52	23,000	0.00093	21
38	June, 2019 Act.	25,530	0.00226	58	25,530	0.00093	24
39	June, 2019 Est.	<u>(27,005)</u>	0.00226	<u>(61)</u>	<u>(27,005)</u>	0.00093	<u>(25)</u>
40		21,525		49	21,525		20
41	August, 2019 Est.	23,000	0.00226	52	23,000	0.00093	21
42	July, 2019 Act.	23,240	0.00226	53	23,240	0.00093	22
43	July, 2019 Est.	<u>(23,000)</u>	0.00226	<u>(52)</u>	<u>(23,000)</u>	0.00093	<u>(21)</u>
44		23,240		53	23,240		21
45	September, 2019 Est.	<u>0</u>	0.00000	<u>0</u>	<u>0</u>	0.00000	<u>0</u>
46		0		0	0		0
47	TOTAL	<u>703,388</u>		<u>1,590</u>	<u>703,388</u>		<u>4,001</u>

COLUMBIA GAS OF PENNSYLVANIA, INC.
DEMAND PENALTY CREDITS/SUPPLIER REFUNDS RECEIVED OCTOBER 2018 - SEPTEMBER 2019
FROM VARIOUS SUPPLIERS

<u>Line No.</u>	<u>Refund Type</u>	<u>Date Received</u>	<u>Total</u>
1	Texas Eastern Transmission: Penalty Credit Docket No. RP18-1192	November 2018	939
2	Columbia Gas Transmission, LLC: Penalty Credit Docket No. RP19-508	December 2018	128,189
3	Texas Eastern Transmission: Penalty Credit Docket No. RP19-889	April 2019	40
4	Dominion Transmission: Penalty Revenue Distribution Docket No. RP19-1373	June 2019	3,088
5	Texas Eastern Transmission: Penalty Credit Docket No. RP19-1342	July 2019	<u>1,629</u>
6	Total Penalty Credits/Supplier Refunds to Pass Back		<u><u>133,886</u></u>

COLUMBIA GAS OF PENNSYLVANIA, INC.
COMPUTATION OF CHANGE IN RATE PURSUANT TO SECTION 1307(f)
APPLICATION PERIOD: OCTOBER, 2019 THROUGH SEPTEMBER, 2020

Line No.	Description	Amount	Change in Rate	Effective 1-1-20
		(1)	(2=3-1)	(3)
1	<u>Purchased Gas Commodity Cost</u>	\$		
2	Commodity Cost of Gas (Exhibit 1-B, Schedule 1)	92,304,514		
3	Projected tariff sales for the twelve billing periods of			
4	October, 2019 through September, 2020	380,962,576	Therms	
5	PGCC (Line 2/Line 4)	0.24229	(0.01465)	0.22764
6	<u>Commodity (Over)/Under Collection</u>			
7	Commodity E-Factor			
8	(Exhibit No. 1-E)	(3,087,828)	498,877	(2,588,951)
9	Projected sales for the twelve billing periods of			
10	October, 2019 through September, 2020	380,962,576	Therms	380,962,576
11	Commodity E-Factor (Line 8/ Line 10)	(0.00811)	0.00131	(0.00680)
12	<u>Purchased Gas Demand Cost</u>			
13	Demand cost of gas (Exhibit 1-B, Schedule 1)	60,160,397		
14	Less: Purchased Gas Demand recovered under Rate SS			
15	(Exhibit 1-A, Schedule 2, Sheet 2)	489,933		
16	Less: Purchased Gas Demand Cost allocated to Rates LTS, STS,			
17	SGS-TS and MLS (Exh 1-A, Sch 2, Page 3)	0		
18	Subtotal (Line 13 - Line 15 - Line 17)	59,670,464		
19	Projected sales for the twelve billing periods of			
20	October, 2019 through September, 2020	474,689,562	Therms	
21	PGDC Rate prior to Capacity Release Credit (Line 18 / Line 20)	0.12570	(0.00072)	0.12498
22	Off System Sales and Capacity Release Credit	(0.00837)	0.00000	(0.00837)
23	PGDC Rate	0.11733	(0.00072)	0.11661
24	<u>Demand (Over)/Under Collection</u>			
25	Demand E-Factor			
26	(Exhibit No. 1-E)	5,296,818	(248,780)	5,048,037
27	Projected sales for the twelve billing periods of			
28	October, 2019 through September, 2020	474,689,562	Therms	474,689,562
29	Demand E-Factor (Line 26 / Line 28)	0.01116	(0.00053)	0.01063
30	<u>Total Purchased Gas Cost</u>			
31	PGCC Rate (Line 5)	0.24229	(0.01465)	0.22764
32	PGDC Rate (Line 23)	0.11733	(0.00072)	0.11661
33	PGC Rate	0.35962	(0.01537)	0.34425
34	Currently effective PGC	0.40123		0.35962
35	Increase (Decrease) in PGC	(0.04161)		(0.01537)
36	<u>Net (Over) Under Collection</u>			
37	Commodity E-Factor (Line 11)	(0.00811)	0.00131	(0.00680)
38	Demand E-Factor (Line 29)	0.01116	(0.00053)	0.01063
39	E-Factor	0.00305	0.00078	0.00383
40	Currently effective E-Factor	(0.00655)		0.00305
41	Increase (Decrease) in E-Factor	0.00960		0.00078
42	PGC Rate	0.35962	(0.01537)	0.34425
43	E-Factor	0.00305	0.00078	0.00383
44	Total Rate	0.36267	(0.01459)	0.34808
45	Currently effective Rate	0.39468		0.36267
46	Increase (Decrease) in Rate	(0.03201)		(0.01459)

1_/ Includes 93,726,986 Therm Transportation Quantities for the Company's Choice Program

COLUMBIA GAS OF PENNSYLVANIA, INC.
QUARTERLY PURCHASED GAS ADJUSTMENT
INCREMENTAL CHANGE EFFECTIVE JANUARY 1, 2020

	Projected Over/(Under) Collection (1) \$	Actual Over/(Under) Collection (2) \$	Difference (3) \$	Projected Sales (4) (Therms)	Change In Rate (5=3/4) (\$/Therm)
<u>C-FACTOR</u>					
<u>Commodity Cost of Gas</u>					
1	October , 2019	(1,313,599)	(717,395)		
2	November, 2019	<u>(3,434,487)</u>	<u>(4,367,486)</u>		
3	<i>Change in PGCC -- January 1</i>	(4,748,086)	(5,084,882)	380,962,576	0.00088
4	December, 2019	0	0		
5	January, 2020	0	0		
6	February, 2020	<u>0</u>	<u>0</u>		
7	<i>Change in PGCC -- April 1</i>	0	0	380,962,576	0.00000
8	March, 2020	0	0		
9	April, 2020	0	0		
10	May, 2020	<u>0</u>	<u>0</u>		
11	<i>Change in PGCC -- July 1</i>	0	0	380,962,576	0.00000
<u>Demand Cost of Gas</u>					
12	October , 2019	(4,644,191)	(4,461,222)		
13	November, 2019	<u>(1,751,361)</u>	<u>(1,413,148)</u>		
14	<i>Change in PGDC -- January 1</i>	(6,395,552)	(5,874,370)	474,689,562	(0.00110)
15	December, 2019	0	0		
16	January, 2020	0	0		
17	February, 2020	<u>0</u>	<u>0</u>		
18	<i>Change in PGDC -- April 1</i>	0	0	474,689,562	0.00000
19	March, 2020	0	0		
20	April, 2020	0	0		
21	May, 2020	<u>0</u>	<u>0</u>		
22	<i>Change in PGDC -- July 1</i>	0	0	474,689,562	0.00000
<u>E-FACTOR</u>					
23	Commodity E Factor	3,087,828	2,588,951	380,962,576	0.00131
24	Demand E Factor	(5,296,818)	(5,048,037)	474,689,562	(0.00053)
25	<i>Change in PGCC (line 3 + line 7 + line 11 + line 23)</i>				0.00219
26	<i>Change in PGDC (line 14 + line 18 + line 22 + line 24)</i>				(0.00163)

COLUMBIA GAS OF PENNSYLVANIA, INC.
QUARTERLY PURCHASED GAS ADJUSTMENT - COMMODITY
INCREMENTAL CHANGE EFFECTIVE JANUARY 1, 2020

	Original Projected Exhibit 1-B Schedule 1	Updated for 1/1/20 Exhibit 1-B Schedule 1	Difference Included in 1/1/20 GCR	Updated for 4/1/20 Exhibit 1-B Schedule 1	Difference Included in 4/1/20 GCR	Updated for 7/1/20 Exhibit 1-B Schedule 1	Difference Included in 7/1/20 GCR
	(1)	(2)	(3=2-1)	(4)	(5=4-2)	(6)	(7=6-4)
	\$	\$	\$	\$	\$	\$	\$
<u>C-FACTOR</u>							
<u>Commodity Cost of Gas</u>							
1 December, 2019	16,592,199	16,592,199	0				
2 January, 2020	20,670,980	19,088,805	(1,582,175)				
3 February	17,729,859	16,356,475	(1,373,385)				
4 March	13,536,873	12,927,288	(609,585)				
5 April	5,627,219	4,884,699	(742,520)				
6 May	2,078,211	1,892,313	(185,898)				
7 June	822,346	793,801	(28,545)				
8 July	698,623	683,437	(15,186)				
9 August	636,046	624,552	(11,494)				
10 September	864,272	833,277	(30,994)				
11 Total	79,256,627	74,676,844	(4,579,783)				
12 Projected Sales			294,894,871				
13 Change in PGCC Rate per Therm			(0.01553)				

COLUMBIA GAS OF PENNSYLVANIA, INC.
QUARTERLY PURCHASED GAS ADJUSTMENT - DEMAND
INCREMENTAL CHANGE EFFECTIVE JANUARY 1, 2020

	Original Projected Exhibit 1-B Schedule 1	Updated for 1/1/20 Exhibit 1-B Schedule 1	Difference Included in 1/1/20 GCR	Updated for 4/1/20 Exhibit 1-B Schedule 1	Difference Included in 4/1/20 GCR	Updated for 7/1/20 Exhibit 1-B Schedule 1	Difference Included in 7/1/20 GCR
	(1)	(2)	(3=2-1)	(4)	(5=4-2)	(6)	(7=6-4)
	\$	\$	\$	\$	\$	\$	\$
<u>D-FACTOR</u>							
<u>Demand Cost of Gas</u>							
1	December, 2019	5,894,279	5,894,279	0			
2	January, 2020	5,894,279	5,892,501	(1,778)			
3	February	5,894,279	5,892,501	(1,778)			
4	March	5,894,279	5,892,501	(1,778)			
5	April	4,097,458	4,201,591	104,133			
6	May	4,097,458	4,105,591	8,133			
7	June	4,097,458	4,105,591	8,133			
8	July	4,097,458	4,105,591	8,133			
9	August	4,097,458	4,105,591	8,133			
10	September	4,097,458	4,105,591	8,133			
11	Total	48,161,864	48,301,328	139,464			
12	Projected Sales			366,532,783			
13	Change in PGDC Rate per Therm			0.00038			

COLUMBIA GAS OF PENNSYLVANIA, INC.
ACTUAL OVER/(UNDER)COLLECTION FOR THE PERIOD
OCTOBER, 2019 THROUGH SEPTEMBER, 2020

Line No.		Commodity			Demand		
		Actual Recoveries (1) \$	Actual Gas Costs (2) \$	Over/ (Under)Collection (3=1-2) \$	Actual Recoveries (4) \$	Actual Gas Costs (5) \$	Over/ (Under)Collection (6=4-5) \$
	Actuals through November 2019						
1	October, 2019	2,240,386	2,957,781	(717,395)	1,478,880	5,940,102	(4,461,222)
2	November	6,708,085	11,075,571	(4,367,486)	4,263,565	5,676,713	(1,413,148)
3	December			0			0
4	January, 2020			0			0
5	February			0			0
6	March			0			0
7	April			0			0
8	May			0			0
9	June			0			0
10	July			0			0
11	August			0			0
12	September			0			0
13	Total	8,948,471	14,033,352	(5,084,882)	5,742,446	11,616,815	(5,874,370)

COLUMBIA GAS OF PENNSYLVANIA, INC.
 PURCHASED GAS COST RECOVERED UNDER RATES SS
 AND COMPUTATION OF DAILY PURCHASED GAS DEMAND
 APPLICATION PERIOD: OCTOBER, 2019 THROUGH SEPTEMBER, 2020

Line No.	Description	Detail <u>(1)</u>	Total <u>(2)</u>
1	Total estimated demand charges for the period		
2	October, 2019 through September, 2020	60,299,861	
3	Estimated Demand Quantity (Therms) 1_ /	81,426,120	
4	Daily purchased gas demand rate (Line 2 / line 3)	<u>\$0.74055</u> per Therm	
5	Daily purchased gas demand (Therms)	663,120 Therms	
6	Daily purchased gas demand rate per Therm	<u>\$0.74055</u>	
7	Total rate SS Daily Demand Cost to be		
8	Recovered (Line 5 x Line 6)		<u>\$491,074</u>
9	Total Rate SS Daily Demand Cost to be		
10	Recovered (Effective October 1, 2019)		<u>\$489,933</u>
11	Difference (Line 8 minus Line 10)		\$1,141
12	Projected Sales for the Period October 2019 through September 2020		474,689,562
13	Rate Differential		\$ -

1_ / Monthly Demand Billing Determinants x 12

COLUMBIA GAS OF PENNSYLVANIA, INC.
SUMMARY OF PROJECTED SALES QUANTITIES AND REVENUES FOR THE PERIOD
SALES AT PGCC AND PGDC RATES
OCTOBER, 2019 THROUGH SEPTEMBER, 2020

Line No.	Month	Sales Subject To PGCC (1) Therms	PGCC Rate 1 / (2) \$/Therm	PGCC Revenue (3=1x2) \$	Sales Subject To PGDC (4) Therms	PGDC Rate 1 / (5) \$/Therm	PGDC Revenue (6=4x5) \$	Purchased Gas Cost Revenue (7=3+6) \$
1	October - 2019	8,774,447	0.24229	2,125,961	11,684,689	0.12570	1,468,765	3,594,726
2	November	25,481,199	0.24229	6,173,840	32,239,938	0.12570	4,052,560	10,226,400
3	December	51,812,059	0.24229	12,553,544	64,232,152	0.12570	8,073,982	20,627,526
4	January - 2020	75,332,926	0.23497	17,700,601	92,629,491	0.12534	11,610,180	29,310,781
5	February	75,268,006	0.22764	17,134,009	92,472,470	0.12498	11,557,209	28,691,218
6	March	61,496,985	0.22764	13,999,174	75,616,833	0.12498	9,450,592	23,449,766
7	April	39,225,993	0.22764	8,929,405	48,739,353	0.12498	6,091,444	15,020,849
8	May	18,227,751	0.22764	4,149,365	23,066,230	0.12498	2,882,817	7,032,182
9	June	9,033,329	0.22764	2,056,347	11,818,457	0.12498	1,477,071	3,533,418
10	July	5,587,475	0.22764	1,271,933	7,558,890	0.12498	944,710	2,216,643
11	August	5,156,715	0.22764	1,173,875	7,061,374	0.12498	882,531	2,056,406
12	September	<u>5,565,691</u>	0.22764	<u>1,266,974</u>	<u>7,569,685</u>	0.12498	<u>946,059</u>	<u>2,213,033</u>
13	Total	380,962,576		88,535,028	474,689,562		59,437,920	147,972,948

1_/ Excludes refunds and experienced over/undercollections

COLUMBIA GAS OF PENNSYLVANIA, INC.
SUMMARY OF PROJECTED SALES QUANTITIES AND REVENUES FOR THE PERIOD
SALES AT STANDBY RATE
OCTOBER, 2019 THROUGH SEPTEMBER, 2020

Line No.	Month	Daily Purchased Gas Demand Quantity (1) Therms	Daily Gas Demand Rate (2) \$/Therm	Daily Purchased Gas Demand Revenue (3=1x2) \$
1	October - 2019	55,260	0.73883	40,828
2	November	55,260	0.73883	40,828
3	December	55,260	0.73883	40,828
4	January - 2020	55,260	0.74055	40,923
5	February	55,260	0.74055	40,923
6	March	55,260	0.74055	40,923
7	April	55,260	0.74055	40,923
8	May	55,260	0.74055	40,923
9	June	55,260	0.74055	40,923
10	July	55,260	0.74055	40,923
11	August	55,260	0.74055	40,923
12	September	<u>55,260</u>	0.74055	<u>40,923</u>
13	Total	663,120		490,788

COLUMBIA GAS OF PENNSYLVANIA, INC.
SUMMARY OF PROJECTED SALES QUANTITIES AND REVENUES FOR THE PERIOD
SALES AT BANKING AND BALANCING RATES
OCTOBER, 2019 THROUGH SEPTEMBER, 2020

Line No.	Month	Lg. Quantity GDS			Sm. Quantity GDS			Total Trans.
		Deliveries (1) Therms	Rate (2) \$/Therm	Revenue (3=1x2) \$	Deliveries (4) Therms	Rate (5) \$/Therm	Revenue (6=4x5) \$	Revenue (7=3+6) \$
1	October - 2019	0	0.00226	0	0	0.00697	0	0
2	November	0	0.00226	0	0	0.00697	0	0
3	December	0	0.00226	0	0	0.00697	0	0
4	January - 2020	0	0.00226	0	0	0.00697	0	0
5	February	0	0.00226	0	0	0.00697	0	0
6	March	0	0.00226	0	0	0.00697	0	0
7	April	0	0.00226	0	0	0.00697	0	0
8	May	0	0.00226	0	0	0.00697	0	0
9	June	0	0.00226	0	0	0.00697	0	0
10	July	0	0.00226	0	0	0.00697	0	0
11	August	0	0.00226	0	0	0.00697	0	0
12	September	<u>0</u>	<u>0.00226</u>	<u>0</u>	<u>0</u>	<u>0.00697</u>	<u>0</u>	<u>0</u>
13	Total	0		0	0		0	0

COLUMBIA GAS OF PENNSYLVANIA, INC.
SUMMARY OF PROJECTED TOTAL OVER/UNDERCOLLECTION
FOR THE 2019 1307(f) PERIOD
OCTOBER, 2019 THROUGH SEPTEMBER, 2020

Line No.	Month	Commodity Recoveries PGCC Revenue	Total Commodity Cost of Gas 1 /	Commodity Over/ (Under) collection	Demand Recoveries PGDC Revenue	Total Demand Cost of Gas 1 /	Demand Over/ (Under) collection	Total Over/ (Under) collection
		(1)	(2)	(3=1-2)	(4)	(5)	(6=4-5)	(7=3+6)
		\$	\$	\$	\$	\$	\$	\$
1	October - 2019	2,125,961	3,439,560	(1,313,599)	1,509,593	6,153,784	(4,644,191)	(5,957,790)
2	November	6,173,840	9,608,327	(3,434,487)	4,093,388	5,844,749	(1,751,361)	(5,185,849)
3	December	12,553,544	16,592,199	(4,038,655)	8,114,810	5,894,279	2,220,531	(1,818,124)
4	January - 2020	17,700,601	19,088,805	(1,388,204)	11,651,103	5,892,501	5,758,602	4,370,398
5	February	17,134,009	16,356,475	777,534	11,598,132	5,892,501	5,705,631	6,483,165
6	March	13,999,174	12,927,288	1,071,886	9,491,515	5,892,501	3,599,014	4,670,900
7	April	8,929,405	4,884,699	4,044,706	6,132,367	4,201,591	1,930,776	5,975,482
8	May	4,149,365	1,892,313	2,257,052	2,923,740	4,105,591	(1,181,851)	1,075,201
9	June	2,056,347	793,801	1,262,547	1,517,994	4,105,591	(2,587,597)	(1,325,051)
10	July	1,271,933	683,437	588,496	985,633	4,105,591	(3,119,958)	(2,531,463)
11	August	1,173,875	624,552	549,323	923,454	4,105,591	(3,182,137)	(2,632,814)
12	September	1,266,974	833,277	433,697	986,982	4,105,591	(3,118,609)	(2,684,913)
13	Total	88,535,028	87,724,731	810,296	59,928,708	60,299,861	(371,153)	439,144

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

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

Purchased Gas Demand Charge (PGDC) Paid By the CHOICE Customer
Rates Based on Projected Costs For 12 Months Ending September, 2020

\$60,160,397		1. Projected Demand Costs Oct. 2019 through Sept. 2020 (Exh. 1-B, Sch. 1 from Oct. 2019 PGC)
(491,074)		1a. Less Purchased Gas Demand Costs Recovered Under Rate SS (Exhibit 1-A, Schedule 1, Sheet 6)
0		1b. Less Purchased Gas Demand Allocated to Rates LTS, STS, SGS-TS, and MLS
5,048,037		1c. Experienced Demand Net Under/(Over) Collection (Exhibit No. 1-E)
<u>\$64,717,361</u>		2. Total Adjusted Demand Costs per 1307(f) Filing (1) + (1a) + (1b) + (1c)
\$83.89	per Dth	3. Unit FT Demand Charge Per Dth of Gulf/TCO/DTI capacity the marketer would pay Gulf and TCO. (Exhibit 1-A, Schedule 3, Sheet 2)
47,469	MMDth	4. Projected Sales & Choice Requirements for 12 billing periods of October, 2019 through September, 2020
48,338	MMDth	5. Projected Sales & Choice Requirements 12 months ended September 2020, including Unaccounted For @ 1.8%
21,755	MMDth	6. Annual Injections and Withdrawals, Normal Weather
1	Dth	7a. Quantity Delivered to the Customer
1.8%		7b. Unaccounted-for & Co. Use Factor from Volume Balancing System
1.0183	Dth	7c. Quantity Delivered to the City Gate. (7a)/(1-7b)
\$1.3633	per Dth	8. Unit Demand Charge: (2) / (4)
(\$0.0110)		9a. Quarterly Purchased Gas Demand Adjustment (Jan. 1, 2019 Filing, Schedule 1, Sheet 2)
\$0.0038		9b. Quarterly Purchased Gas Demand Adjustment (Jan. 1, 2019 Filing, Schedule 1, Sheet 4)
<u>\$1.3561</u>		10. Net Unit Demand Charge (8) + (9a) + (9b)
(\$0.0837)	per Dth	11. OSS and Capacity Release Credit
0.0028	Dth	12. Average Daily FT Delivery: (7c) / 365 days
\$0.2349	per Dth	13. Annual Demand Charge for the Assigned FT Capacity payable to the pipeline(s): (3) X (12)
\$1.1284	per Dth	14. Annual Demand Charge for other capacity that CPA retains (8) - (13)
0.4583	Dth	15. Quantity Injected and Withdrawn to Deliver 1 Dth to the Customer: (6) / (4)
\$0.0070		14a. Injection Charge @ \$0.0153/Dth
\$0.0032		14b. FSS Shrinkage @ 0.35 percent for gas at \$1.9887/Dth
\$0.0070		14c. Withdrawal Charge @ \$0.0153/Dth
\$0.0080		14d. SST Commodity Charge @ \$0.0175/Dth
<u>\$0.0136</u>		14e. SST retention @ 1.492% for gas at \$1.9887/Dth
<u>\$0.0388</u>	per Dth	16f. Total Annual Variable Storage Costs
\$0.2349	per Dth	17. Credit to Purchased Gas Demand Charge for the CHOICE Customer:
(\$0.0388)	per Dth	17a. For Demand Cost Paid to Pipelines: = (13)
<u>\$0.1961</u>	per Dth	17b. Less Storage Costs: = (16f)
<u>\$0.01961</u>	per Therm	17c. Net Credit: (17a) + (17b)
		17d. Per Therm: (17c)/10 - Capacity Assignment Factor
<u>\$1.0763</u>	per Dth	18. Purchased Gas Demand Charge Paid By the CHOICE Customer: (10)+(11) - (17c)
<u>\$0.10763</u>	per Therm	19. Per Therm: (18)/10

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

	<u>TCO</u> FT Capacity	<u>Gulf</u> FTS-1 Capacity	<u>DTI</u> FT Capacity	<u>Total:</u> TCO, Gulf and DTI
1. <u>CPA FT Capacity on TCO, Gulf and DTI</u>				
2. CPA Contract: Dth/d	105,605	3,636	5,000	1/
3. <u>Projected Demand Costs</u>				
4. Annual Demand Cost 2/	\$8,581,840	\$181,945	\$250,160	
4a. Monthly Billing Determinants	105,605	3,636	5,000	
4b. Annual Demand Charge (4/ 4a)	\$81.26	\$50.04	\$50.03	
4c. Monthly Demand Charge (4b / number of months)	\$6.772	\$4.170	\$4.169	
<u>Allocation Capacity and Costs.</u>				
5. Retained Volume:	1.0000	1.0151	3/	1.0000
6. Number of Months	12	1		12
7. Capacity Allocation	0.9548	4/	0.9548	5/
8. Unit Annual Cost of City Gate Capacity: (4c) x (5) x (6) x (7) \$/Dth	\$77.59	\$4.04	\$2.26	<u><u>\$83.89</u></u>

Notes:

1/ Non-storage DTI FT capacity

2/ Projected demand costs for the period 12 months ended September, 2020.

3/ $1.0151 \text{ Dth/day} = 1.000 / (1 - \text{retention}) = 1.000 / (1 - 0.01492)$

4/ $105,605 / (105,605 + 5,000) = 0.9548$

5/ CGT is downstream from TCO, so CHOICE allocation affects CGT at the same percentage as TCO

6/ $5,000 / (105,605 + 5,000) = 0.0452$

COLUMBIA GAS OF PENNSYLVANIA, INC.

Summary of Total Estimated Purchased Gas Costs
 For the Period October 2019 Through September 2020

Line No.	Description	2019			2020									Total
		October	November	December	January	February	March	April	May	June	July	August	September	
1	Total Quantity													
2	DTH	1,629,000	4,165,000	6,909,000	8,587,000	7,382,000	5,728,000	2,618,000	908,000	310,000	258,000	230,000	353,000	39,077,000
3	Total Demand Costs	6,153,784	5,844,749	5,894,279	5,892,501	5,892,501	5,892,501	4,201,591	4,105,591	4,105,591	4,105,591	4,105,591	4,105,591	60,299,861
4	Total Commodity Costs	3,439,560	9,608,327	16,592,199	19,088,805	16,356,475	12,927,288	4,884,699	1,892,313	793,801	683,437	624,552	833,277	87,724,731
5	Total Estimated Gas Costs (Line 5 = Line 3 + Line 4)	9,593,344	15,453,076	22,486,478	24,981,306	22,248,976	18,819,789	9,086,290	5,997,904	4,899,392	4,789,028	4,730,143	4,938,868	148,024,592

COLUMBIA GAS OF PENNSYLVANIA, INC.

Summary of Total Estimated Purchased Gas Costs
Demand Costs

Line No.	Description	2019			2020									Total
		October	November	December	January	February	March	April	May	June	July	August	September	
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
1	Columbia Gas Transmission	5,265,169	5,252,979	5,252,979	5,252,979	5,252,979	5,252,979	3,439,795	3,439,795	3,439,795	3,439,795	3,439,795	3,439,795	52,168,834
2	Columbia Gulf Transmission	181,945	0	0	0	0	0	0	0	0	0	0	0	181,945
3	Texas Eastern Transmission	263,309	263,309	312,839	314,482	314,482	314,482	264,952	264,952	264,952	264,952	264,952	264,952	3,372,615
4	Dominion Transmission	169,227	198,446	198,446	198,309	198,309	198,309	172,269	172,269	172,269	172,269	172,269	172,269	2,194,660
5	Tennessee Gas	272,185	115,518	115,518	112,234	112,234	112,234	112,234	112,234	112,234	112,234	112,234	112,234	1,513,327
6	National Fuel Gas	15,621	15,621	15,621	15,621	15,621	15,621	15,621	15,621	15,621	15,621	15,621	15,621	187,452
7	Equitrans	11,328	23,876	23,876	23,876	23,876	23,876	221,720	125,720	125,720	125,720	125,720	125,720	981,028
8	Less Elective Balancing Svc. Credit	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	300,000
9	Total Demand Cost	<u>6,153,784</u>	<u>5,844,749</u>	<u>5,894,279</u>	<u>5,892,501</u>	<u>5,892,501</u>	<u>5,892,501</u>	<u>4,201,591</u>	<u>4,105,591</u>	<u>4,105,591</u>	<u>4,105,591</u>	<u>4,105,591</u>	<u>4,105,591</u>	<u>60,299,861</u>

COLUMBIA GAS OF PENNSYLVANIA, INC.

Summary of Total Estimated Purchased Gas Costs
Commodity Costs

Line No.	Description	2019			2020									Total
		October	November	December	January	February	March	April	May	June	July	August	September	
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
1	Term	1,270,902	1,424,045	2,910,949	2,455,928	2,338,584	1,323,808	1,180,371	1,230,568	1,222,472	1,299,315	1,308,877	1,261,467	19,227,286
2	Spot	4,277,574	659,178	4,861,609	4,219,564	3,909,209	832,834	8,725,146	8,190,462	6,964,701	6,954,105	6,923,446	5,353,580	61,871,408
3	Local	44,616	44,982	50,490	43,054	39,180	42,196	37,275	39,490	38,787	41,822	42,130	39,963	503,985
4	Storage	(2,153,532)	7,480,122	8,769,151	12,370,259	10,069,502	10,728,450	(5,058,093)	(7,568,207)	(7,432,160)	(7,611,805)	(7,649,901)	(5,821,733)	6,122,052
5	Total Commodity Cost	<u>3,439,560</u>	<u>9,608,327</u>	<u>16,592,199</u>	<u>19,088,805</u>	<u>16,356,475</u>	<u>12,927,288</u>	<u>4,884,699</u>	<u>1,892,313</u>	<u>793,801</u>	<u>683,437</u>	<u>624,552</u>	<u>833,277</u>	<u>87,724,731</u>

COLUMBIA GAS OF PENNSYLVANIA, INC.

Summary of Total Estimated Purchased Gas Costs
Commodity Quantities

Line No.	Description	2019			2020									Total
		October	November	December	January	February	March	April	May	June	July	August	September	
	<u>Term</u>													
1	Total-DTH	667,000	648,000	1,206,000	1,192,000	1,128,000	666,000	646,000	666,000	643,000	664,000	664,000	644,000	9,434,000
	<u>Spot</u>													
2	Total-DTH	1,997,000	295,000	1,972,000	2,058,000	1,904,000	386,000	4,779,000	4,437,000	3,669,000	3,567,000	3,531,000	2,746,000	31,341,000
	<u>Local</u>													
3	Total-DTH	22,000	21,000	22,000	22,000	20,000	22,000	21,000	22,000	21,000	22,000	22,000	21,000	258,000
	<u>Storage</u>													
4	Total-DTH	(1,057,000)	3,201,000	3,709,000	5,315,000	4,330,000	4,654,000	(2,828,000)	(4,217,000)	(4,023,000)	(3,995,000)	(3,987,000)	(3,058,000)	(1,956,000)
	<u>Total - All Sources</u>													
5	Total-DTH	<u>1,629,000</u>	<u>4,165,000</u>	<u>6,909,000</u>	<u>8,587,000</u>	<u>7,382,000</u>	<u>5,728,000</u>	<u>2,618,000</u>	<u>908,000</u>	<u>310,000</u>	<u>258,000</u>	<u>230,000</u>	<u>353,000</u>	<u>39,077,000</u>

COLUMBIA GAS OF PENNSYLVANIA, INC.

Summary of Total Estimated Purchased Gas Demand Costs
Columbia Gas Transmission Corporation

Line No.	Description	2019			2020									Total
		October	November	December	January	February	March	April	May	June	July	August	September	
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<u>Columbia Gas Transmission</u>														
<u>FTS</u>														
1	Billing Determinant-Dth	127,588	125,788	125,788	125,788	125,788	125,788	95,551	95,551	95,551	95,551	95,551	95,551	95,551
2	Less Capacity Release (1)	5,215	5,215	5,215	5,215	5,215	5,215	5,215	5,215	5,215	5,215	5,215	5,215	5,215
3	Net Billing Determinant - Dth	122,373	120,573	120,573	120,573	120,573	120,573	90,336	90,336	90,336	90,336	90,336	90,336	90,336
4	Demand Rate	6.7720	6.7720	6.7720	6.7720	6.7720	6.7720	6.7720	6.7720	6.7720	6.7720	6.7720	6.7720	6.7720
5	Demand Cost	828,710	816,520	816,520	816,520	816,520	816,520	611,755	611,755	611,755	611,755	611,755	611,755	8,581,840
<u>FSS-Reservation</u>														
6	Billing Determinant-Dth	456,876	456,876	456,876	456,876	456,876	456,876	441,576	441,576	441,576	441,576	441,576	441,576	441,576
7	Demand Rate	1.5010	1.5010	1.5010	1.5010	1.5010	1.5010	1.5010	1.5010	1.5010	1.5010	1.5010	1.5010	1.5010
8	Demand Cost	685,771	685,771	685,771	685,771	685,771	685,771	662,806	662,806	662,806	662,806	662,806	662,806	8,091,462
<u>FSS-Capacity</u>														
9	Total-DTH	25,341,126	25,341,126	25,341,126	25,341,126	25,341,126	25,341,126	24,492,495	24,492,495	24,492,495	24,492,495	24,492,495	24,492,495	24,492,495
10	Demand Rate	0.0288	0.0288	0.0288	0.0288	0.0288	0.0288	0.0288	0.0288	0.0288	0.0288	0.0288	0.0288	0.0288
11	Demand Cost	729,824	729,824	729,824	729,824	729,824	729,824	705,384	705,384	705,384	705,384	705,384	705,384	8,611,248
<u>SST</u>														
12	Billing Determinant-Dth	456,876	456,876	456,876	456,876	456,876	456,876	220,788	220,788	220,788	220,788	220,788	220,788	220,788
13	Demand Rate	6.6120	6.6120	6.6120	6.6120	6.6120	6.6120	6.6120	6.6120	6.6120	6.6120	6.6120	6.6120	6.6120
14	Demand Cost	3,020,864	3,020,864	3,020,864	3,020,864	3,020,864	3,020,864	1,459,850	1,459,850	1,459,850	1,459,850	1,459,850	1,459,850	26,884,284
15	Total TCO Demand Cost	5,265,169	5,252,979	5,252,979	5,252,979	5,252,979	5,252,979	3,439,795	3,439,795	3,439,795	3,439,795	3,439,795	3,439,795	52,168,834

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

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

Line No.	Description	2019			2020									Total
		October	November	December	January	February	March	April	May	June	July	August	September	
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
	<u>Columbia Gulf Transmission</u>													
	<u>FTS-1</u>													
1	Billing Determinant-Dth	43,632	0	0	0	0	0	0	0	0	0	0	0	
2	Demand Rate	4.1700	4.1700	4.1700	4.1700	4.1700	4.1700	4.1700	4.1700	4.1700	4.1700	4.1700	4.1700	
3	Demand Cost	181,945	0	0	0	0	0	0	0	0	0	0	0	181,945
4	Total Columbia Gulf Demand Cost	181,945	0	0	0	0	0	0	0	0	0	0	0	181,945

COLUMBIA GAS OF PENNSYLVANIA, INC.

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

Line No.	Description	2019			2020									Total
		October	November	December	January	February	March	April	May	June	July	August	September	
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<u>FT1-TCO Delmont</u>														
1	Billing Determinant-Dth	3,082	3,082	3,082	3,082	3,082	3,082	3,082	3,082	3,082	3,082	3,082	3,082	3,082
2	Demand Rate	7.9350	7.9350	7.9350	7.9350	7.9350	7.9350	7.9350	7.9350	7.9350	7.9350	7.9350	7.9350	7.9350
3	Demand Cost	24,456	24,456	24,456	24,456	24,456	24,456	24,456	24,456	24,456	24,456	24,456	24,456	293,472
<u>FT1-Uniontown</u>														
4	Billing Determinant-Dth	11,753	11,753	11,753	11,753	11,753	11,753	11,753	11,753	11,753	11,753	11,753	11,753	11,753
5	Demand Rate	7.9350	7.9350	7.9350	7.9350	7.9350	7.9350	7.9350	7.9350	7.9350	7.9350	7.9350	7.9350	7.9350
6	Demand Cost	93,260	93,260	93,260	93,260	93,260	93,260	93,260	93,260	93,260	93,260	93,260	93,260	1,119,120
<u>CDS - Eagle/Rockwood</u>														
7	Billing Determinant-Dth	2,342	2,342	2,342	2,342	2,342	2,342	2,342	2,342	2,342	2,342	2,342	2,342	2,342
8	Demand Rate	21.3489	21.3489	21.3489	21.5682	21.5682	21.5682	21.5682	21.5682	21.5682	21.5682	21.5682	21.5682	21.5682
9	Demand Cost	49,999	49,999	49,999	50,513	50,513	50,513	50,513	50,513	50,513	50,513	50,513	50,513	604,614
<u>CDS - Rockwood</u>														
10	Billing Determinant-Dth	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
11	Demand Rate	18.4438	18.4438	18.4438	18.6628	18.6628	18.6628	18.6628	18.6628	18.6628	18.6628	18.6628	18.6628	18.6628
12	Demand Cost	92,219	92,219	92,219	93,314	93,314	93,314	93,314	93,314	93,314	93,314	93,314	93,314	1,116,483
<u>CDS - Chambersburg</u>														
13	Billing Determinant-Dth	158	158	158	158	158	158	158	158	158	158	158	158	158
14	Demand Rate	21.3594	21.3594	21.3594	21.5786	21.5786	21.5786	21.5786	21.5786	21.5786	21.5786	21.5786	21.5786	21.5786
15	Demand Cost	3,375	3,375	3,375	3,409	3,409	3,409	3,409	3,409	3,409	3,409	3,409	3,409	40,806
<u>FT1-TCO @ Eagle Zone 3 Zone 3</u>														
16	Billing Determinant-Dth	0	0	10,000	10,000	10,000	10,000	0	0	0	0	0	0	0
17	Demand Rate	0.0000	0.0000	4.9530	4.9530	4.9530	4.9530	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
18	Demand Cost	0	0	49,530	49,530	49,530	49,530	0	0	0	0	0	0	198,120
19	Total TETCO Demand Cost	263,309	263,309	312,839	314,482	314,482	314,482	264,952	264,952	264,952	264,952	264,952	264,952	3,372,615

COLUMBIA GAS OF PENNSYLVANIA, INC.

Summary of Total Estimated Purchased Gas Demand Costs
Dominion Transmission

Line No.	Description	2019			2020									Total
		October	November	December	January	February	March	April	May	June	July	August	September	
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
	<u>Dominion Transmission</u>													
	<u>GSS - Reservation</u>													
1	Billing Determinant-Dth	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	
2	Demand Rate	1.8673	1.8673	1.8673	1.8698	1.8698	1.8698	1.8698	1.8698	1.8698	1.8698	1.8698	1.8698	
3	Demand Cost	44,815	44,815	44,815	44,875	44,875	44,875	44,875	44,875	44,875	44,875	44,875	44,875	538,320
	<u>GSS - Capacity</u>													
4	Billing Determinant-Dth	1,871,176	1,871,176	1,871,176	1,871,176	1,871,176	1,871,176	1,871,176	1,871,176	1,871,176	1,871,176	1,871,176	1,871,176	
5	Demand Rate	0.0145	0.0145	0.0145	0.0145	0.0145	0.0145	0.0145	0.0145	0.0145	0.0145	0.0145	0.0145	
6	Demand Cost	27,132	27,132	27,132	27,132	27,132	27,132	27,132	27,132	27,132	27,132	27,132	27,132	325,584
	<u>FTNN</u>													
7	Billing Determinant-Dth	0	6,000	6,000	6,000	6,000	6,000	0	0	0	0	0	0	
8	Total-DTH	0.0000	4.1742	4.1742	4.1677	4.1677	4.1677	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
9	Demand Cost	0	25,045	25,045	25,006	25,006	25,006	0	0	0	0	0	0	125,108
	<u>FT</u>													
10	Billing Determinant-Dth	23,305	24,305	24,305	24,305	24,305	24,305	24,057	24,057	24,057	24,057	24,057	24,057	
11	Total-DTH	4.1742	4.1742	4.1742	4.1677	4.1677	4.1677	4.1677	4.1677	4.1677	4.1677	4.1677	4.1677	
12	Demand Cost	97,280	101,454	101,454	101,296	101,296	101,296	100,262	100,262	100,262	100,262	100,262	100,262	1,205,648
13	Total DTI Demand Cost	169,227	198,446	198,446	198,309	198,309	198,309	172,269	172,269	172,269	172,269	172,269	172,269	2,194,660

COLUMBIA GAS OF PENNSYLVANIA, INC.

Summary of Total Estimated Purchased Gas Demand Costs
Tennessee Gas Pipeline Company

Line No.	Description	2019			2020									Total
		October	November	December	January	February	March	April	May	June	July	August	September	
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<u>Tennessee Gas FT-A (Direct) New Castle - 219 Line</u>														
1	Billing Determinant-Dth	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000
2	Demand Rate	14.5567	4.7650	4.7650	4.7650	4.7650	4.7650	4.7650	4.7650	4.7650	4.7650	4.7650	4.7650	4.7650
3	Demand Cost	232,907	76,240	76,240	76,240	76,240	76,240	76,240	76,240	76,240	76,240	76,240	76,240	1,071,547
<u>Tennessee Gas FT-A (Direct) Pitt Terminal - 219 Line</u>														
4	Billing Determinant-Dth	7,600	7,600	7,600	7,600	7,600	7,600	7,600	7,600	7,600	7,600	7,600	7,600	7,600
5	Demand Rate	5.1682	5.1682	5.1682	4.7360	4.7360	4.7360	4.7360	4.7360	4.7360	4.7360	4.7360	4.7360	4.7360
6	Demand Cost	39,278	39,278	39,278	35,994	35,994	35,994	35,994	35,994	35,994	35,994	35,994	35,994	441,780
7	Total Tennessee Gas Demand Cost	<u>272,185</u>	<u>115,518</u>	<u>115,518</u>	<u>112,234</u>	<u>112,234</u>	<u>112,234</u>	<u>112,234</u>	<u>112,234</u>	<u>112,234</u>	<u>112,234</u>	<u>112,234</u>	<u>112,234</u>	<u>1,513,327</u>

COLUMBIA GAS OF PENNSYLVANIA, INC.

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

Line No.	Description	2019			2020									Total
		October	November	December	January	February	March	April	May	June	July	August	September	
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
	<u>National</u>													
1	Billing Determinant-Dth	4,304	4,304	4,304	4,304	4,304	4,304	4,304	4,304	4,304	4,304	4,304	4,304	
2	Demand Rate	3.6293	3.6293	3.6293	3.6293	3.6293	3.6293	3.6293	3.6293	3.6293	3.6293	3.6293	3.6293	
3	Demand Cost	15,621	15,621	15,621	15,621	15,621	15,621	15,621	15,621	15,621	15,621	15,621	15,621	187,452
4	Total National Fuel Demand Cost	15,621	15,621	15,621	15,621	15,621	15,621	15,621	15,621	15,621	15,621	15,621	15,621	187,452

COLUMBIA GAS OF PENNSYLVANIA, INC.

Summary of Total Estimated Purchased Gas Demand Costs
Equitrans

Line No.	Description	2019			2020									Total
		October	November	December	January	February	March	April	May	June	July	August	September	
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
	<u>Equitrans</u>													
	<u>FTS</u>													
1	Billing Determinant-Dth	2,039	3,901	3,901	3,901	3,901	3,901	27,715	15,715	15,715	15,715	15,715	15,715	15,715
2	Demand Rate	5.5559	6.1206	6.1206	6.1206	6.1206	6.1206	8.0000	8.0000	8.0000	8.0000	8.0000	8.0000	8.0000
3	Demand Cost	11,328	23,876	23,876	23,876	23,876	23,876	221,720	125,720	125,720	125,720	125,720	125,720	981,028
4	Total Equitrans Demand Cost	11,328	23,876	23,876	23,876	23,876	23,876	221,720	125,720	125,720	125,720	125,720	125,720	981,028

COLUMBIA GAS OF PENNSYLVANIA, INC.

Summary of Total Estimated Purchased Gas Commodity Costs
Term Contracts

Line No.	Description	2019			2020									Total
		October	November	December	January	February	March	April	May	June	July	August	September	
<u>TERM</u>														
<u>COLUMBIA GULF</u>														
1	Quantity - DTH	0	0	0	0	0	0	0	0	0	0	0	0	0
2	Rate-\$/DTH	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	Cost-\$	0	0	0	0	0	0	0	0	0	0	0	0	0
<u>COLUMBIA TRANSMISSION</u>														
4	Quantity - DTH	0	0	311,000	311,000	291,000	0	0	0	0	0	0	0	913,000
5	Rate-\$/DTH	0.0000	0.0000	2.3475	2.0043	2.0064	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	Cost-\$	0	0	730,073	623,337	583,862	0	0	0	0	0	0	0	1,937,272
<u>TEXAS EASTERN</u>														
7	Quantity - DTH	667,000	648,000	667,000	653,000	624,000	666,000	646,000	666,000	643,000	664,000	664,000	644,000	7,852,000
8	Rate-\$/DTH	1.9054	2.1976	2.3679	2.0073	2.0301	1.9877	1.8272	1.8477	1.9012	1.9568	1.9712	1.9588	1.9588
9	Cost-\$	1,270,902	1,424,045	1,579,389	1,310,767	1,266,782	1,323,808	1,180,371	1,230,568	1,222,472	1,299,315	1,308,877	1,261,467	15,678,763
<u>TENNESSEE GAS PIPELINE</u>														
10	Quantity - DTH	0	0	228,000	228,000	213,000	0	0	0	0	0	0	0	669,000
11	Rate-\$/DTH	0.0000	0.0000	2.6381	2.2887	2.2908	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12	Cost-\$	0	0	601,487	521,824	487,940	0	0	0	0	0	0	0	1,611,251
<u>CAP</u>														
13	Quantity - DTH	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Rate-\$/DTH	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
15	Cost-\$	0	0	0	0	0	0	0	0	0	0	0	0	0
<u>LESS CAP BILLING</u>														
16	Quantity - DTH	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Rate-\$/DTH	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
18	Cost-\$	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Total - DTH	667,000	648,000	1,206,000	1,192,000	1,128,000	666,000	646,000	666,000	643,000	664,000	664,000	644,000	9,434,000
20	Total Term Commodity													
21	Cost-\$	1,270,902	1,424,045	2,910,949	2,455,928	2,338,584	1,323,808	1,180,371	1,230,568	1,222,472	1,299,315	1,308,877	1,261,467	19,227,286

*Beginning July 1, 2017, CAP customers will be served by Columbia sales service until a new supplier submits a successful bid to provide CAP gas supply.

COLUMBIA GAS OF PENNSYLVANIA, INC.

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

Line No.	Description	2019			2020									Total
		October	November	December	January	February	March	April	May	June	July	August	September	
	<u>SPOT</u>													
	<u>Base</u>													
1	Quantity - DTH	1,997,000	295,000	913,000	916,000	856,000	386,000	4,243,000	4,127,000	3,455,000	3,351,000	3,317,000	2,532,000	26,388,000
2	Rate-\$/DTH	2.1420	2.2345	2.5209	2.1077	2.1104	2.1576	1.8265	1.8464	1.8986	1.9497	1.9607	1.9496	
3	Cost-\$	4,277,574	659,178	2,301,582	1,930,653	1,806,502	832,834	7,749,840	7,620,093	6,559,663	6,533,445	6,503,642	4,936,387	51,711,393
	<u>Swing</u>													
4	Quantity - DTH	0	0	1,059,000	1,142,000	1,048,000	0	536,000	310,000	214,000	216,000	214,000	214,000	4,953,000
5	Rate-\$/DTH	0.0000	0.0000	2.4174	2.0043	2.0064	0.0000	1.8196	1.8399	1.8927	1.9475	1.9617	1.9495	
6	Cost-\$	0	0	2,560,027	2,288,911	2,102,707	0	975,306	570,369	405,038	420,660	419,804	417,193	10,160,015
7	Total - DTH	1,997,000	295,000	1,972,000	2,058,000	1,904,000	386,000	4,779,000	4,437,000	3,669,000	3,567,000	3,531,000	2,746,000	31,341,000
8	Total Spot													
9	Commodity Cost - \$	4,277,574	659,178	4,861,609	4,219,564	3,909,209	832,834	8,725,146	8,190,462	6,964,701	6,954,105	6,923,446	5,353,580	61,871,408
	<u>Local Direct</u>													
10	Quantity - DTH	22,000	21,000	22,000	22,000	20,000	22,000	21,000	22,000	21,000	22,000	22,000	21,000	258,000
11	Rate-\$/DTH	2.0280	2.1420	2.2950	1.9570	1.9590	1.9180	1.7750	1.7950	1.8470	1.9010	1.9150	1.9030	
12	Cost-\$	44,616	44,982	50,490	43,054	39,180	42,196	37,275	39,490	38,787	41,822	42,130	39,963	503,985
13	Total - DTH	22,000	21,000	22,000	22,000	20,000	22,000	21,000	22,000	21,000	22,000	22,000	21,000	258,000
14	Total Local													
15	Commodity Cost - \$	44,616	44,982	50,490	43,054	39,180	42,196	37,275	39,490	38,787	41,822	42,130	39,963	503,985

COLUMBIA GAS OF PENNSYLVANIA, INC.

Summary of Total Estimated Purchased Gas Commodity Costs

Storage

Line No.	Description	2019			2020									Total
		October	November	December	January	February	March	April	May	June	July	August	September	
<u>DOMINION TRANSMISSION - GSS</u>														
1	Injections - DTH	(222,000)	0	0	0	0	0	(226,000)	(226,000)	(226,000)	(228,000)	(226,000)	(226,000)	(1,580,000)
2	Injection Rate - \$/Dth	2.0823	2.2077	2.4672	2.0533	2.0600	2.0473	1.8257	1.8460	1.8984	1.9504	1.9622	1.9510	
3	Withdrawals - DTH	0	106,000	380,000	528,000	317,000	253,000	0	0	0	0	0	0	1,584,000
4	Withdrawal Rate - \$/Dth	2.2964	2.2964	2.2964	2.2483	2.2483	2.2483	2.1034	2.0123	1.9830	1.9763	1.9739	1.9712	
5	Cost-\$	(462,271)	243,418	872,632	1,187,102	712,711	568,820	(412,608)	(417,196)	(429,038)	(444,691)	(443,457)	(440,926)	534,496
6	Injection Rate \$/Dth	0.0287	0.0287	0.0287	0.0268	0.0268	0.0268	0.0268	0.0268	0.0268	0.0268	0.0268	0.0268	
7	Withdrawal Rate \$/Dth	0.0151	0.0151	0.0151	0.0140	0.0140	0.0140	0.0140	0.0140	0.0140	0.0140	0.0140	0.0140	
8	Cost - \$	6,371	1,601	5,738	7,392	4,438	3,542	6,057	6,057	6,057	6,110	6,057	6,057	65,477
<u>EQUITRANS - SS</u>														
9	Injections - DTH	(226,000)	0	0	0	0	0	(243,000)	(310,000)	(214,000)	(216,000)	(214,000)	(214,000)	(1,637,000)
10	Injection Rate - \$/Dth	2.0823	2.2077	2.4672	2.0533	2.0600	2.0473	1.8257	1.8460	1.8984	1.9504	1.9622	1.9510	
11	Withdrawals - DTH	0	430,000	245,000	185,000	300,000	150,000	0	0	0	0	0	0	1,310,000
12	Withdrawal Rate - \$/Dth	2.2964	2.2964	2.2964	2.2483	2.2483	2.2483	2.1034	2.0123	1.9830	1.9763	1.9739	1.9712	
13	Cost-\$	(470,600)	987,452	562,618	415,936	674,490	337,245	(443,645)	(572,260)	(406,258)	(421,286)	(419,911)	(417,514)	(173,733)
14	Inject/With. Rate \$/DTH	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
15	Cost - \$	0	0	0	0	0	0	0	0	0	0	0	0	0
<u>TCO - FSS</u>														
16	Injections - DTH	(887,000)	0	0	0	0	0	(2,437,000)	(4,108,000)	(4,108,000)	(4,110,000)	(4,108,000)	(3,130,000)	(22,888,000)
17	Injection Rate - \$/Dth	2.0823	2.2077	2.4672	2.0533	2.0600	2.0473	1.8257	1.8460	1.8984	1.9504	1.9622	1.9510	
18	Withdrawals - DTH	0	2,842,000	3,720,000	5,541,000	4,465,000	4,687,000	0	0	0	0	0	0	21,255,000
19	Withdrawal Rate - \$/Dth	2.2964	2.2964	2.2964	2.2483	2.2483	2.2483	2.1034	2.0123	1.9830	1.9763	1.9739	1.9712	
20	Cost-\$	(1,847,000)	6,526,369	8,542,608	12,457,830	10,038,660	10,537,782	(4,449,231)	(7,583,368)	(7,798,627)	(8,016,144)	(8,060,718)	(6,106,630)	4,241,531
21	Inject/With. Rate \$/DTH	0.0153	0.0153	0.0153	0.0153	0.0153	0.0153	0.0153	0.0153	0.0153	0.0153	0.0153	0.0153	
22	Cost - \$	13,571	43,483	56,916	84,777	68,315	71,711	37,286	62,852	62,852	62,883	62,852	47,889	675,387
23	Quantity - DTH	(1,335,000)	3,378,000	4,345,000	6,254,000	5,082,000	5,090,000	(2,906,000)	(4,644,000)	(4,548,000)	(4,554,000)	(4,548,000)	(3,570,000)	(1,956,000)
24	Total Purchase Cost	(2,779,871)	7,757,239	9,977,858	14,060,868	11,425,861	11,443,847	(5,305,484)	(8,572,824)	(8,633,923)	(8,882,121)	(8,924,086)	(6,965,070)	4,602,294
25	Total Inject/With. Cost	19,942	45,084	62,654	92,169	72,753	75,253	43,343	68,909	68,909	68,993	68,909	53,946	740,864

COLUMBIA GAS OF PENNSYLVANIA, INC.

Summary of Total Estimated Purchased Gas Commodity Costs
Storage Transportation Charges

Line No.	Description	2019			2020									Total
		October	November	December	January	February	March	April	May	June	July	August	September	
<u>TCO - SST</u>														
1	Injections - DTH	(887,000)	0	0	0	0	0	(2,437,000)	(4,108,000)	(4,108,000)	(4,110,000)	(4,108,000)	(3,130,000)	(22,888,000)
2	Withdrawals - DTH	0	2,842,000	3,720,000	5,541,000	4,465,000	4,687,000	0	0	0	0	0	0	21,255,000
3	Trans. Chrg. \$/Dth	0.0177	0.0175	0.0175	0.0175	0.0175	0.0175	0.0177	0.0177	0.0177	0.0177	0.0177	0.0177	
4	Cost-\$	15,700	49,735	65,100	96,968	78,138	82,023	43,135	72,712	72,712	72,747	72,712	55,401	777,083
<u>DOMINION TRANSMISSION - GSS</u>														
5	Injections - DTH	(222,000)	0	0	0	0	0	(226,000)	(226,000)	(226,000)	(228,000)	(226,000)	(226,000)	(1,580,000)
6	Withdrawals - DTH	0	106,000	380,000	528,000	317,000	253,000	0	0	0	0	0	0	1,584,000
7	Rate-\$/DTH	0.0177	0.0156	0.0156	0.0175	0.0175	0.0175	0.0177	0.0177	0.0177	0.0177	0.0177	0.0177	
8	Cost-\$	3,929	1,654	5,928	9,240	5,548	4,428	4,000	4,000	4,000	4,036	4,000	4,000	54,763
<u>EQUITRANS - SS</u>														
9	Injections - DTH	(226,000)	0	0	0	0	0	(243,000)	(310,000)	(214,000)	(216,000)	(214,000)	(214,000)	(1,637,000)
10	Withdrawals - DTH	0	430,000	245,000	185,000	300,000	150,000	0	0	0	0	0	0	1,310,000
11	Rate-\$/DTH	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
12	Cost-\$	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Total Storage - DTH	(1,335,000)	3,378,000	4,345,000	6,254,000	5,082,000	5,090,000	(2,906,000)	(4,644,000)	(4,548,000)	(4,554,000)	(4,548,000)	(3,570,000)	(1,956,000)
14	Total EUB - DTH	278,000	(177,000)	(636,000)	(939,000)	(752,000)	(436,000)	78,000	427,000	525,000	559,000	561,000	512,000	0
15	Total DTH	(1,057,000)	3,201,000	3,709,000	5,315,000	4,330,000	4,654,000	(2,828,000)	(4,217,000)	(4,023,000)	(3,995,000)	(3,987,000)	(3,058,000)	(1,956,000)
16	Total Purchase Cost	(2,779,871)	7,757,239	9,977,858	14,060,868	11,425,861	11,443,847	(5,305,484)	(8,572,824)	(8,633,923)	(8,882,121)	(8,924,086)	(6,965,070)	4,602,294
17	Total Choice Bank Cost	586,768	(373,590)	(1,342,389)	(1,888,986)	(1,512,798)	(877,101)	156,913	858,996	1,056,143	1,124,540	1,128,564	1,029,990	(52,952)
18	Total Inject/With. Cost	19,942	45,084	62,654	92,169	72,753	75,253	43,343	68,909	68,909	68,993	68,909	53,946	740,864
19	Total Transp. Charge	19,629	51,389	71,028	106,208	83,686	86,451	47,135	76,712	76,712	76,783	76,712	59,401	831,846
20	Total Storage Cost	(2,153,532)	7,480,122	8,769,151	12,370,259	10,069,502	10,728,450	(5,058,093)	(7,568,207)	(7,432,160)	(7,611,805)	(7,649,901)	(5,821,733)	6,122,052

COLUMBIA GAS OF PENNSYLVANIA, INC.
STATEMENT OF EXPERIENCED NET OVER (UNDER) COLLECTION
OCTOBER, 2018 THROUGH SEPTEMBER, 2019

<u>Line No.</u>	<u>Description</u>	<u>Total Demand</u> \$	<u>Total Commodity</u> \$	<u>Total Amount</u> \$
1	Remaining Balance - Over (Under) Collection from 2018 - 1307(f)			
2	(See Schedule 2a and 2b)	173,829	(454,402)	(280,573)
3	Unified Credit for Off-system Sales and Capacity Release for the period			
4	October, 2018 through September, 2019 (See Schedule 3 herein)	(5,682,208)	0	(5,682,208)
5	Over (Under) Collection for the period October, 2018 through			
6	September 2019 (See Schedule 4 herein)	31,664	3,174,087	3,205,751
7	Interest on Over (Under) Collection for the period October, 2018. through			
8	September, 2019 (See Schedule 4 herein)	294,792	(130,734)	164,058
9	Penalty Credits/Supplier Refunds Received October, 2018 through			
10	September, 2019 (See Schedule 5 herein)	133,886	0	133,886
11	TOTAL EXPERIENCED NET OVER (UNDER) COLLECTION	<u>(5,048,037)</u>	<u>2,588,951</u>	<u>(2,459,087)</u>

COLUMBIA GAS OF PENNSYLVANIA, INC.
RECONCILIATION OF COMMODITY COST OF GAS
FROM 2018 - 1307(f)
OCTOBER, 2018 THROUGH SEPTEMBER, 2019

COMMODITY

Line No.	Month	Sales Subject to Commodity	Rate	Amount Recovered	Net Commodity Over (Under) Collection
		E-Factor Therm	\$/ Therm	\$	\$
1	True-up of Net Commodity Costs Included in 2018 1307(f):				1,425,625
2	Beginning Balance Adjustment				108,300 2_/
3	Beginning Balance Adjustment				5,019 3_/
4	October, 2018	4,766,236	(0.00760)	(36,223)	
5		4,415,485	(0.00525)	(23,181)	
6	November	32,133,552	(0.00760)	(244,215)	
7		458,045	(0.00525)	(2,405)	
8	December	60,483,174	(0.00760)	(459,672)	
9	January, 2019 1_/	34,336,078	(0.00388)	(133,224)	
10		33,629,083	(0.00760)	(255,581)	
11	February	74,654,445	(0.00388)	(289,659)	
12		(39,577)	(0.00760)	301	
13	March	62,972,207	(0.00388)	(244,332)	
14	April	36,712,616	(0.00388)	(142,445)	
15	May	14,847,717	(0.00388)	(57,609)	
16	June	8,613,499	(0.00388)	(33,420)	
17	July	6,455,425	(0.00388)	(25,047)	
18	August	5,739,946	(0.00388)	(22,271)	
19	September	6,279,237	(0.00388)	(24,363)	
20	Amount Collected/(Passed Back) during 2018 1307(f) Period				<u>(1,993,346)</u>
21	Remaining Balance to be Collected in the 2019 1307(f)				<u>(454,402)</u>

1_/ Rate in effect January 1, 2019.

2_/ Represents a commodity interest adjustment for the period of February 2018 to September 2018 increasing the interest rate from 4.50% to the prime rate as of January 31, 2019 of 5.50%. Please refer to Exh. 1-E, Schedule 2a, Sheet 2 for a detailed calculation for this adjustment.

3_/ Interest credit relating to Auditing Finding No. 1 found in Docket No. D-2018-3004889 from the Company's Purchased Gas Cost Audit Draft Audit Report.

COLUMBIA GAS OF PENNSYLVANIA, INC.
STATEMENT OF COMMODITY OVER/(UNDER) COLLECTIONS FROM GAS COST RATE
FEBRUARY, 2018 THROUGH SEPTEMBER, 2018

Line No.	Month	Total Commodity Purchase Gas Cost Recovery (1)	Total Cost of Fuel (2)	Total Over (Under) Collection (3 = 1 - 2)	Number of Months (4)	Rate (5)	Over (Under) Collection Interest (6=3x4x5)	Rate (7)	Over (Under) Collection Interest (8=3x4x7)	Interest Difference (9=8-6)
1	February, 2018	19,692,412	14,612,581	5,079,831	14 / 12	4.50%	266,691	5.50%	325,956	59,265
2	March	15,707,957	17,389,812	(1,681,856)	13 / 12	4.50%	(81,990)	5.50%	(100,211)	(18,221)
3	April	14,221,600	13,126,755	1,094,845	12 / 12	4.50%	49,268	5.50%	60,216	10,948
4	May	5,631,880	(1,134,071)	6,765,951	11 / 12	4.50%	279,095	5.50%	341,117	62,022
5	June	2,040,795	1,262,075	778,720	10 / 12	4.50%	29,202	5.50%	35,691	6,489
6	July	1,723,127	1,995,426	(272,298)	9 / 12	4.50%	(9,190)	5.50%	(11,232)	(2,042)
7	August	1,597,722	2,258,995	(661,273)	8 / 12	4.50%	(19,838)	5.50%	(24,247)	(4,409)
8	September	<u>1,721,839</u>	<u>2,707,826</u>	<u>(985,987)</u>	7 / 12	4.50%	<u>(25,882)</u>	5.50%	<u>(31,634)</u>	<u>(5,752)</u>
9	TOTAL	<u>62,337,333</u>	<u>52,219,399</u>	<u>10,117,934</u>			<u>487,356</u>		<u>595,656</u>	<u>108,300</u>

Exhibit 1-E
Schedule 2b
Sheet 1 of 2

COLUMBIA GAS OF PENNSYLVANIA, INC.

RECONCILIATION OF DEMAND COST OF GAS
FROM 2018 - 1307(f)
OCTOBER, 2018 THROUGH SEPTEMBER, 2019

DEMAND

Line No.	Month	Sales Subject to Demand E-Factor Therm	Rate \$/ Therm	Amount \$	Net Demand Over (Under) Collection \$
1	True-up of Net Demand Costs Included in 2018 1307(f):				1,249,812
2	Beginning Balance Adjustment				30,741 2_/
3	Beginning Balance Adjustment				18,107 3_/
4	October, 2018	6,019,767	(0.00211)	(12,702)	
5		5,448,298	0.00857	46,692	
6	November	39,768,539	(0.00211)	(83,913)	
7		391,822	0.00857	3,358	
8	December	74,905,000	(0.00211)	(158,050)	
9	January, 2019 1_/	42,545,919	(0.00267)	(113,598)	
10		41,899,676	(0.00211)	(88,408)	
11	February	92,367,025	(0.00267)	(246,620)	
12		(54,913)	(0.00211)	116	
13	March	78,085,200	(0.00267)	(208,487)	
14	April	45,617,010	(0.00267)	(121,797)	
15	May	18,681,063	(0.00267)	(49,878)	
16	June	10,804,062	(0.00267)	(28,847)	
17	July	8,190,948	(0.00267)	(21,870)	
18	August	7,325,209	(0.00267)	(19,558)	
19	September	7,965,911	(0.00267)	(21,269)	
20	Amount Collected/(Passed Back) in the 2018 1307(f) Period				<u>(1,124,831)</u>
21	Remaining Balance to be Passed Back in the 2019 1307(f)				<u><u>173,829</u></u>

1_/ Rate in effect January 1, 2019.

2_/ Represents a demand interest adjustment for the period of February 2018 to September 2018 increasing the interest rate from 4.50% to the prime rate as of January 31, 2019 of 5.50%. Please refer to Exh. 1-E, Schedule 2b, Sheet 2 for a detailed calculation for this adjustment.

3_/ Represents a standby demand recovery adjustment, including applicable interest, for the period of January 2016 through February 2019.

COLUMBIA GAS OF PENNSYLVANIA, INC.
STATEMENT OF DEMAND OVER/(UNDER) COLLECTIONS FROM GAS COST RATE
FEBRUARY, 2018 THROUGH SEPTEMBER, 2018

Line No.	Month	Total Purchased Gas Cost Recovery (1)	Total Cost of Fuel (2)	Total Over (Under) Collection (3 = 1 - 2)	Number of Months (4)	Rate (5)	Over (Under) Collection Interest (6=3x4x5)	Rate (7)	Over (Under) Collection Interest (8=3x4x7)	Interest Difference (9=8-6)
1	February, 2018	10,736,990	5,438,812	5,298,177	14 / 12	4.50%	278,154	5.50%	339,966	61,812
2	March	8,582,723	5,671,865	2,910,858	13 / 12	4.50%	141,904	5.50%	173,439	31,535
3	April	7,839,152	4,186,567	3,652,585	12 / 12	4.50%	164,366	5.50%	200,892	36,526
4	May	3,192,760	4,197,840	(1,005,080)	11 / 12	4.50%	(41,460)	5.50%	(50,673)	(9,213)
5	June	1,201,973	4,215,905	(3,013,932)	10 / 12	4.50%	(113,022)	5.50%	(138,139)	(25,117)
6	July	997,826	4,218,931	(3,221,105)	9 / 12	4.50%	(108,712)	5.50%	(132,871)	(24,159)
7	August	931,614	4,218,183	(3,286,568)	8 / 12	4.50%	(98,597)	5.50%	(120,508)	(21,911)
8	September	<u>997,926</u>	<u>4,209,094</u>	<u>(3,211,168)</u>	7 / 12	4.50%	<u>(84,293)</u>	5.50%	<u>(103,025)</u>	<u>(18,732)</u>
9	TOTAL	<u>34,480,963</u>	<u>36,357,197</u>	<u>(1,876,233)</u>			<u>138,340</u>		<u>169,081</u>	<u>30,741</u>

Exhibit 1-E
Schedule 3

COLUMBIA GAS OF PENNSYLVANIA, INC.

RECONCILIATION OF OFF SYSTEM SALES CREDIT
FROM 2018 - 1307(f)
OCTOBER, 2018 THROUGH SEPTEMBER, 2019

DEMAND

Line No.	Month	Sales Subject to Off-System Sales Credit Therm	Rate \$/Therm	Amount \$	Net Demand Over (Under) Collection \$
1	October, 2018	6,019,767	(0.01845)	(111,065)	
2		5,448,298	(0.01856)	(101,120)	
3	November	39,768,539	(0.01845)	(733,730)	
4		391,822	(0.01856)	(7,272)	
5	December	74,905,000	(0.01845)	(1,381,997)	
6	January, 2019 1_ /	84,445,595	(0.01845)	(1,558,021)	
7	February	92,312,113	(0.01845)	(1,703,158)	
8	March	78,085,200	(0.01845)	(1,440,672)	
9	April	45,617,010	(0.01845)	(841,634)	
10	May	18,681,063	(0.01845)	(344,666)	
11	June	10,804,062	(0.01845)	(199,335)	
12	July	8,190,948	(0.01845)	(151,123)	
13	August	7,325,209	(0.01845)	(135,150)	
14	September	7,965,911	(0.01845)	(146,971)	
15	Amount Passed Back in the 2018 1307(f)				<u>(8,855,914)</u>
16	Current Estimate Unified Sharing Mechanism - \$3,173,706				3,173,706
17	Amount to be Collected in the 2019 1307(f)				<u><u>(5,682,208)</u></u>

1_ / Rate in effect January 1, 2019.

COLUMBIA GAS OF PENNSYLVANIA, INC.
STATEMENT OF COMMODITY OVER/(UNDER) COLLECTIONS FROM GAS COST RATE
OCTOBER, 2018 THROUGH SEPTEMBER, 2019

Line No.	Month	Total Commodity Sales Revenue (1) \$	Rate Schedule NSS Gas Cost Recovery (2) \$	Total Commodity Purchase Gas Cost Recovery (3 = 1 + 2) \$	Total Commodity Cost of Fuel (4) \$	Total Commodity Over/(Under) Collection (5 = 3 - 4) \$	Number of Months (6)	Rate (7)	Commodity Over/(Under) Collection Interest (8 = 5 x 6 x 7)	Total Commodity Over/(Under) Collection (9 = 5 + 8)
Reference:		Sch. 4, Pg. 2	Sch. 4, Pg. 3							
<i>Actuals through September 2019</i>										
1	October, 2018	2,556,243	10,004	2,566,247	5,862,138	(3,295,891)	18 / 12	5.50%	(271,911)	(3,567,802)
2	November	9,265,445	18,796	9,284,242	16,705,783	(7,421,541)	17 / 12	5.50%	(578,262)	(7,999,803)
3	December	17,205,018	43,764	17,248,781	21,702,938	(4,454,157)	16 / 12	5.50%	(326,638)	(4,780,795)
4	January, 2019	20,783,568	66,071	20,849,639	23,298,740	(2,449,101)	15 / 12	5.50%	(168,376)	(2,617,477)
5	February	24,370,944	16,451	24,387,395	17,023,909	7,363,487	14 / 12	5.50%	472,490	7,835,977
6	March	20,569,778	26,805	20,596,583	15,643,460	4,953,123	13 / 12	5.50%	295,124	5,248,247
7	April	11,611,337	17,522	11,628,859	5,716,080	5,912,779	12 / 12	5.50%	325,203	6,237,982
8	May	4,404,370	12,171	4,416,541	2,692,046	1,724,495	11 / 12	5.50%	86,943	1,811,438
9	June	2,554,171	3,178	2,557,349	2,053,585	503,764	10 / 12	5.50%	23,089	526,853
10	July	1,847,405	4,381	1,851,786	1,915,788	(64,002)	9 / 12	5.50%	(2,640)	(66,642)
11	August	1,574,431	4,603	1,579,035	1,279,027	300,008	8 / 12	5.50%	11,000	311,008
12	September	<u>1,726,120</u>	<u>4,382</u>	<u>1,730,502</u>	<u>1,629,378</u>	<u>101,124</u>	7 / 12	5.50%	<u>3,244</u>	<u>104,368</u>
13	TOTAL	<u>118,468,830</u>	<u>228,129</u>	<u>118,696,959</u>	<u>115,522,872</u>	<u>3,174,087</u>			<u>(130,734)</u>	<u>3,043,353</u>

COLUMBIA GAS OF PENNSYLVANIA, INC.
STATEMENT OF DEMAND OVER/(UNDER) COLLECTIONS FROM GAS COST RATE
OCTOBER, 2018 THROUGH SEPTEMBER, 2019

Line No.	Month	Total Demand Sales Revenue (1) \$	Total Banking and Balancing Revenue (2) \$	Total Standby Demand Revenue (3) \$	NSS Capacity Release Revenue (4) \$	Demand Purchased Gas Cost Recovery (5 = 1+2+3+4) \$	Demand Cost of Fuel (6) \$	Total Demand Over/(Under) Collection (7 = 5 - 6) \$	Number of Months (8)	Rate (9)	Demand Over/(Under) Collection Interest (10 = 7 x 8 x 9)	Total Demand Over/(Under) Collection (11 = 7 + 10)
	Reference:	Sch. 4, Pg. 4	Sch. 4, Pg. 6	Sch. 4, Pg. 5	Sch. 4, Pg. 6							
	<i>Actuals through September 2019</i>											
1	October, 2018	1,430,235	83	36,256	34	1,466,608	5,611,603	(4,144,995)	18 / 12	5.50%	(341,962)	(4,486,957)
2	November	5,096,225	143	34,816	59	5,131,243	5,678,400	(547,157)	17 / 12	5.50%	(42,633)	(589,790)
3	December	9,486,747	240	35,023	652	9,522,662	5,766,690	3,755,972	16 / 12	5.50%	275,438	4,031,410
4	January, 2019	10,591,103	356	35,023	1,537	10,628,019	5,752,469	4,875,550	15 / 12	5.50%	335,194	5,210,744
5	February	11,453,755	146	37,586	644	11,492,132	5,983,285	5,508,847	14 / 12	5.50%	353,484	5,862,331
6	March	9,689,224	215	44,429	951	9,734,819	5,981,206	3,753,613	13 / 12	5.50%	223,653	3,977,266
7	April	5,798,426	156	44,076	22	5,842,680	4,355,541	1,487,139	12 / 12	5.50%	81,793	1,568,932
8	May	2,480,425	119	44,706	48	2,525,299	4,362,975	(1,837,677)	11 / 12	5.50%	(92,650)	(1,930,327)
9	June	1,434,292	30	43,904	12	1,478,239	4,533,817	(3,055,579)	10 / 12	5.50%	(140,047)	(3,195,626)
10	July	1,111,707	49	43,047	20	1,154,822	4,301,276	(3,146,454)	9 / 12	5.50%	(129,791)	(3,276,245)
11	August	1,018,983	53	43,122	21	1,062,179	4,416,083	(3,353,905)	8 / 12	5.50%	(122,977)	(3,476,882)
12	September	<u>1,107,620</u>	<u>53</u>	<u>44,955</u>	<u>22</u>	<u>1,152,650</u>	<u>4,416,341</u>	<u>(3,263,691)</u>	<u>7 / 12</u>	<u>5.50%</u>	<u>(104,710)</u>	<u>(3,368,401)</u>
13	TOTAL	<u>60,698,741</u>	<u>1,643</u>	<u>486,944</u>	<u>4,023</u>	<u>61,191,351</u>	<u>61,159,686</u>	<u>31,664</u>			<u>294,792</u>	<u>326,456</u>

Exhibit 1-E
Schedule 4
Sheet 2a of 6

COLUMBIA GAS OF PENNSYLVANIA, INC.
DETAIL OF COMMODITY GAS COST RECOVERY
OCTOBER, 2018 THROUGH SEPTEMBER, 2019

LINE NO.	MONTH	SALES SUBJECT TO COMMODITY COST OF GAS	COMMODITY COST OF GAS	TOTAL COMMODITY COST RECOVERY
		(1) THERM	(2) \$/THERM	(3 = 1 x 2) \$
1	October, 2018 Est. Old	4,329,635	0.27183	1,176,925
2	October, 2018 Est. New	4,766,236	0.28446	1,355,803
3	September, 2018 Est.	(6,247,069)	0.27183	(1,698,141)
4	September, 2018 Act.	6,332,919	0.27183	1,721,477
5	September Act. Prior Period Adjustments		-	178
6	Total	9,181,721		2,556,243
7	November, 2018 Est. New	31,629,317	0.28446	8,997,276
8	October, 2018 Est. Old	(4,329,635)	0.27183	(1,176,925)
9	October, 2018 Est. New	(4,766,236)	0.28446	(1,355,803)
10	October, 2018 Act. Old	4,787,680	0.27183	1,301,435
11	October, 2018 Act. New	5,270,471	0.28446	1,499,238
12	October Act. Prior Period Adjustments		-	225
13	Total	32,591,597		9,265,445
14	December, 2018 Est.	61,233,224	0.28446	17,418,403
15	November, 2018 Est.	(31,629,317)	0.28446	(8,997,276)
16	November, 2018 Act.	30,879,267	0.28446	8,783,916
17	November Act. Prior Period Adjustments		-	(26)
18	Total	60,483,174		17,205,018
19	January, 2019 Est. Old	33,521,783	0.28446	9,535,606
20	January, 2019 Est. New	34,336,078	0.32666	11,216,223
21	December, 2018 Est.	(61,233,224)	0.28446	(17,418,403)
22	December, 2018 Act.	61,340,524	0.28446	17,448,925
23	December Act. Prior Period Adjustments		-	1,216
24	Total	67,965,161		20,783,568
25	February, 2019 Est. New	74,694,983	0.32666	24,399,863
26	January, 2019 Est. Old	33,482,207	0.28446	9,524,348
27	January, 2019 Est. New	34,295,539	0.32666	11,202,981
28	January, 2019 Act. Old	(33,521,783)	0.28446	(9,535,606)
29	January, 2019 Act. New	(34,336,078)	0.32666	(11,216,223)
30	January Act. Prior Period Adjustments		-	(4,419)
31	Total	74,614,868		24,370,944
32	March, 2019 Est.	63,038,517	0.32666	20,592,162
33	February, 2019 Est.	(74,694,983)	0.32666	(24,399,863)
34	February, 2019 Act.	74,628,673	0.32666	24,378,202
35	February Act. Prior Period Adjustments		-	(723)
36	Total	62,972,207		20,569,778

Exhibit 1-E
Schedule 4
Sheet 2b of 6

COLUMBIA GAS OF PENNSYLVANIA, INC.
DETAIL OF COMMODITY GAS COST RECOVERY
OCTOBER, 2018 THROUGH SEPTEMBER, 2019

LINE NO.	MONTH	SALES	COMMODITY	TOTAL
		SUBJECT TO	COST OF	COMMODITY
		COST OF GAS	GAS	COST
		(1)	(2)	(3 = 1 x 2)
		THERM	\$/THERM	\$
1	April, 2019 Est. Old	24,068,529	0.32666	7,862,226
2	April, 2019 Est. New	12,677,317	0.29657	3,759,712
3	March, 2019 Est.	(63,038,517)	0.32666	(20,592,162)
4	March, 2019 Act.	63,005,287	0.32666	20,581,307
5	March Act. Prior Period Adjustments		-	254
6	Total	<u>36,712,616</u>		<u>11,611,337</u>
7	May, 2019 Est.	14,785,397	0.29657	4,384,905
8	April, 2019 Est. Old	(24,068,529)	0.32666	(7,862,226)
9	April, 2019 Est. New	(12,677,317)	0.29657	(3,759,712)
10	April, 2019 Act. Old	24,109,349	0.32666	7,875,560
11	April, 2019 Act. New	12,698,817	0.29657	3,766,088
12	April Act. Prior Period Adjustments		-	(246)
13	Total	<u>14,847,717</u>		<u>4,404,370</u>
14	June, 2019 Est.	8,483,859	0.29657	2,516,058
15	May, 2019 Est.	(14,785,397)	0.29657	(4,384,905)
16	May, 2019 Act.	14,915,037	0.29657	4,423,353
17	May Act. Prior Period Adjustments		-	(334)
18	Total	<u>8,613,499</u>		<u>2,554,171</u>
19	July, 2019 Est. Old	3,296,113	0.29657	977,528
20	July, 2019 Est. New	3,091,702	0.27486	849,785
21	June, 2019 Est.	(8,483,859)	0.29657	(2,516,058)
22	June, 2019 Act.	8,551,469	0.29657	2,536,109
23	June Act. Prior Period Adjustments		-	40
24	Total	<u>6,455,425</u>		<u>1,847,405</u>
25	August, 2019 Est.	5,644,412	0.27486	1,551,423
26	July, 2019 Est. Old	(3,296,113)	0.29657	(977,528)
27	July, 2019 Est. New	(3,091,702)	0.27486	(849,785)
28	July, 2019 Act. Old	3,345,408	0.29657	992,148
29	July, 2019 Act. New	3,137,941	0.27486	862,494
30	July Act. Prior Period Adjustments		-	(4,320)
31	Total	<u>5,739,946</u>		<u>1,574,431</u>
32	September, 2019 Est.	6,175,516	0.27486	1,697,402
33	August, 2019 Est.	(5,644,412)	0.27486	(1,551,423)
34	August, 2019 Act.	5,748,133	0.27486	1,579,932
35	August Act. Prior Period Adjustments		-	209
36	Total	<u>6,279,237</u>		<u>1,726,120</u>
37	TOTAL	<u><u>386,457,168</u></u>		<u><u>118,468,830</u></u>

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COLUMBIA GAS OF PENNSYLVANIA, INC.
DETAIL OF NSS COMMODITY COST RECOVERY
OCTOBER, 2018 THROUGH SEPTEMBER, 2019

LINE NO.	MONTH	RATE SCHEDULE NSS		NSS GAS COST RECOVERY
		VOLUMES (1) THERM	RATE (2) \$/THERM	(3=1*2) \$
1	October, 2018 Est.	35,994	0.27196	9,789
2	September, 2018 Act.	23,800	0.26959	6,416
3	September, 2018 Est.	<u>(23,002)</u>	0.26959	<u>(6,201)</u>
4		36,792		10,004
5	November, 2018 Est.	58,995	0.29899	17,639
6	October, 2018 Act.	40,250	0.27196	10,946
7	October, 2018 Est.	<u>(35,994)</u>	0.27196	<u>(9,789)</u>
8		63,251		18,796
9	December, 2018 Est.	77,998	0.45320	35,349
10	November, 2018 Act.	87,140	0.29899	26,054
11	November, 2018 Est.	<u>(58,995)</u>	0.29899	<u>(17,639)</u>
12		106,143		43,764
13	January, 2019 Est.	137,000	0.41445	56,780
14	December, 2018 Act.	98,500	0.45320	44,640
15	December, 2018 Est.	<u>(77,998)</u>	0.45320	<u>(35,349)</u>
16		157,502		66,071
17	February, 2019 Est.	102,003	0.31365	31,993
18	January, 2019 Act.	99,500	0.41445	41,238
19	January, 2019 Est.	<u>(137,000)</u>	0.41445	<u>(56,780)</u>
20		64,503		16,451
21	March, 2019 Est.	93,002	0.28108	26,141
22	February, 2019 Act.	104,120	0.31365	32,657
23	February, 2019 Est.	<u>(102,003)</u>	0.31365	<u>(31,993)</u>
24		95,119		26,805
25	April, 2019 Est.	74,005	0.25459	18,841
26	March, 2019 Act.	88,310	0.28108	24,822
27	March, 2019 Est.	<u>(93,002)</u>	0.28108	<u>(26,141)</u>
28		69,313		17,522
29	May, 2019 Est.	51,993	0.23156	12,040
30	April, 2019 Act.	74,520	0.25459	18,972
31	April, 2019 Est.	<u>(74,005)</u>	0.25459	<u>(18,841)</u>
32		52,508		12,171
33	June, 2019 Est.	27,005	0.23356	6,307
34	May, 2019 Act.	38,480	0.23156	8,910
35	May, 2019 Est.	<u>(51,993)</u>	0.23156	<u>(12,040)</u>
36		13,492		3,178
37	July, 2019 Est.	23,000	0.20546	4,726
38	June, 2019 Act.	25,530	0.23356	5,963
39	June, 2019 Est.	<u>(27,005)</u>	0.23356	<u>(6,307)</u>
40		21,525		4,381
41	August, 2019 Est.	23,000	0.19800	4,554
42	July, 2019 Act.	23,240	0.20546	4,775
43	July, 2019 Est.	<u>(23,000)</u>	0.20546	<u>(4,726)</u>
44		23,240		4,603
45	September, 2019 Est.	23,000	0.18613	4,281
46	August, 2019 Act.	23,510	0.19800	4,655
47	August, 2019 Est.	<u>(23,000)</u>	0.19800	<u>(4,554)</u>
48		23,510		4,382
49	TOTAL	<u>726,898</u>		<u>228,129</u>

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COLUMBIA GAS OF PENNSYLVANIA, INC.
DETAIL OF DEMAND GAS COST RECOVERY
OCTOBER, 2018 THROUGH SEPTEMBER, 2019

LINE NO.	MONTH	VOLUMES SUBJ.	COST OF	DEMAND
		TO DEMAND	GAS	COST
		COST OF GAS		RECOVERY
		(1)	(2)	(3 = 1 x 2)
		THERM	\$/THERM	\$
1	October, 2018 Est. Old	4,329,635	0.12750	552,028
2	October, 2018 Est. New	4,766,236	0.13206	629,429
3	October Choice - Est. Old	941,541	0.09686	91,198
4	October Choice - Est. New	1,024,098	0.10222	104,683
5	October Est. Priority One Transportation Old	208,417	0.12750	26,573
6	October Est. Priority One Transportation New	229,433	0.13206	30,299
7	September, 2018 Est.	(6,247,069)	0.12750	(796,501)
8	September 2018 Act.	6,332,919	0.12750	807,447
9	September Choice - Est.	(1,346,983)	0.09686	(130,469)
10	September Choice - Act.	1,346,508	0.09686	130,423
11	September Est. Priority One Transportation	(331,920)	0.12750	(42,320)
12	September Act. Priority One Transportation	215,250	0.12750	27,444
13	Total	11,468,065		1,430,235
14	November, 2018 Est. New	31,629,317	0.13206	4,176,968
15	November Choice - Est. New	6,888,251	0.10222	704,117
16	November Est. Priority One Transportation New	819,640	0.13206	108,242
17	October Est. Old	(4,329,635)	0.12750	(552,028)
18	October Est. New	(4,766,236)	0.13206	(629,429)
19	October Act. Old	4,787,680	0.12750	610,429
20	October Act. New	5,270,471	0.13206	696,018
21	October Choice - Est. Old	(941,541)	0.09686	(91,198)
22	October Choice - Est. New	(1,024,098)	0.10222	(104,683)
23	October Choice - Act. Old	941,854	0.09686	91,228
24	October Choice - Act. New	1,024,438	0.10222	104,718
25	October Est. Priority One Transportation Old	(208,417)	0.12750	(26,573)
26	October Est. Priority One Transportation New	(229,433)	0.13206	(30,299)
27	October Act. Priority One Transportation Old	141,881	0.12750	18,090
28	October Act. Priority One Transportation New	156,189	0.13206	20,626
29	Total	40,160,361		5,096,225
30	December, 2018 Est.	61,233,224	0.13206	8,086,460
31	December Choice - Est.	13,553,590	0.10222	1,385,448
32	December Est. Priority One Transportation	934,800	0.13206	123,450
33	November Est.	(31,629,317)	0.13206	(4,176,968)
34	November Act.	30,879,267	0.13206	4,077,916
35	November Choice - Est.	(6,888,251)	0.10222	(704,117)
36	November Choice - Act.	6,913,997	0.10222	706,749
37	November Est. Priority One Transportation	(819,640)	0.13206	(108,242)
38	November Act. Priority One Transportation	727,330	0.13206	96,051
39	Total	74,905,000		9,486,747
40	January, 2019 Est. Old	33,521,783	0.13206	4,426,887
41	January, 2019 Est. New	34,336,078	0.12942	4,443,775
42	January Choice - Est. Old	7,441,851	0.10222	760,706
43	January Choice - Est. New	7,592,192	0.09975	757,321
44	January Est. Priority One Transportation Old	603,001	0.13206	79,632
45	January Est. Priority One Transportation New	617,649	0.12942	79,936
46	December 2018 Est.	(61,233,224)	0.13206	(8,086,460)
47	December 2018 Act.	61,340,524	0.13206	8,100,630
48	December Choice - Est.	(13,553,590)	0.10222	(1,385,448)
49	December Choice - Act.	13,591,661	0.10222	1,389,340
50	December Est. Priority One Transportation	(934,800)	0.13206	(123,450)
51	December Act. Priority One Transportation	1,122,470	0.13206	148,233
52	Total	84,445,595		10,591,103

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COLUMBIA GAS OF PENNSYLVANIA, INC.
DETAIL OF DEMAND GAS COST RECOVERY
OCTOBER, 2018 THROUGH SEPTEMBER, 2019

LINE NO.	MONTH	VOLUMES SUBJ. TO DEMAND	COST OF GAS	DEMAND COST RECOVERY
		(1) THERM	(2) \$/THERM	(3 = 1 x 2) \$
1	February, 2019 Est. New	74,694,983	0.12942	9,667,025
2	February Choice - Est. New	16,572,097	0.09975	1,653,067
3	February Est. Priority One Transportation New	1,156,290	0.12942	149,647
4	January Est. Old	(33,521,783)	0.13206	(4,426,887)
5	January Est. New	(34,336,078)	0.12942	(4,443,775)
6	January Act. Old	33,482,207	0.13206	4,421,660
7	January Act. New	34,295,539	0.12942	4,438,529
8	January Choice - Est. Old	(7,441,851)	0.10222	(760,706)
9	January Choice - Est. New	(7,592,192)	0.09975	(757,321)
10	January Choice - Act. Old	7,465,798	0.10222	763,154
11	January Choice - Act. New	7,616,623	0.09975	759,758
12	January Est. Priority One Transportation Old	(603,001)	0.13206	(79,632)
13	January Est. Priority One Transportation New	(617,649)	0.12942	(79,936)
14	January Act. Priority One Transportation Old	563,718	0.13206	74,445
15	January Act. Priority One Transportation New	577,412	0.12942	74,729
16	Total	92,312,113		11,453,755
17	March, 2019 Est.	63,038,517	0.12942	8,158,445
18	March Choice - Est.	13,972,158	0.09975	1,393,723
19	March Est. Priority One Transportation	1,045,980	0.12942	135,371
20	February Est.	(74,694,983)	0.12942	(9,667,025)
21	February Act.	74,628,673	0.12942	9,658,443
22	February Choice - Est.	(16,572,097)	0.09975	(1,653,067)
23	February Choice - Act.	16,639,812	0.09975	1,659,821
24	February Est. Priority One Transportation	(1,156,290)	0.12942	(149,647)
25	February Act. Priority One Transportation	1,183,430	0.12942	153,160
26	Total	78,085,200		9,689,224
27	April, 2019 Est. Old	24,068,529	0.12942	3,114,949
28	April, 2019 Est. New	12,677,317	0.13827	1,752,893
29	April Choice - Est. Old	5,311,302	0.09975	529,802
30	April Choice - Est. New	2,834,867	0.10801	306,194
31	April Est. Priority One Transportation Old	473,683	0.12942	61,304
32	April Est. Priority One Transportation New	249,497	0.13827	34,498
33	March Est.	(63,038,517)	0.12942	(8,158,445)
34	March Act.	63,005,287	0.12942	8,154,144
35	March Choice - Est.	(13,972,158)	0.09975	(1,393,723)
36	March Choice - Act.	14,021,003	0.09975	1,398,595
37	March Est. Priority One Transportation	(1,045,980)	0.12942	(135,371)
38	March Act. Priority One Transportation	1,032,180	0.12942	133,585
39	Total	45,617,010		5,798,426
40	May, 2019 Est.	14,785,397	0.13827	2,044,377
41	May Choice - Est.	3,359,573	0.10801	362,867
42	May Est. Priority One Transportation New	496,770	0.13827	68,688
43	April, 2019 Est. Old	(24,068,529)	0.12942	(3,114,949)
44	April, 2019 Est. New	(12,677,317)	0.13827	(1,752,893)
45	April, 2019 Act. Old	24,109,349	0.12942	3,120,232
46	April, 2019 Act. New	12,698,817	0.13827	1,755,865
47	April Choice - Est. Old	(5,311,302)	0.09975	(529,802)
48	April Choice - Est. New	(2,834,867)	0.10801	(306,194)
49	April Choice - Act. Old	5,326,972	0.09975	531,365
50	April Choice - Act. New	2,843,230	0.10801	307,097
51	April Est. Priority One Transportation Old	(473,683)	0.12942	(61,304)
52	April Est. Priority One Transportation New	(249,497)	0.13827	(34,498)
53	April Act. Priority One Transportation Old	442,878	0.12942	57,317
54	April Act. Priority One Transportation New	233,272	0.13827	32,254
55	Total	18,681,063		2,480,425

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COLUMBIA GAS OF PENNSYLVANIA, INC.
DETAIL OF DEMAND GAS COST RECOVERY
OCTOBER, 2018 THROUGH SEPTEMBER, 2019

LINE NO.	MONTH	VOLUMES SUBJ. TO DEMAND	COST OF GAS	DEMAND COST RECOVERY
		(1) THERM	(2) \$/THERM	(3 = 1 x 2) \$
1	June, 2019 Est.	8,483,859	0.13827	1,173,063
2	June Choice - Est.	1,966,047	0.10801	212,353
3	June Est. Priority One Transportation	345,290	0.13827	47,743
4	May Est.	(14,785,397)	0.13827	(2,044,377)
5	May Act.	14,915,037	0.13827	2,062,302
6	May Choice - Est.	(3,359,573)	0.10801	(362,867)
7	May Choice - Act.	3,362,649	0.10801	363,200
8	May Est. Priority One Transportation	(496,770)	0.13827	(68,688)
9	May Act. Priority One Transportation	372,920	0.13827	51,564
10	Total	10,804,062		1,434,292
11	July, 2019 Est. Old	3,296,113	0.13827	455,753
12	July, 2019 Est. New	3,091,702	0.14482	447,740
13	July Choice - Est. Old	788,131	0.10801	85,126
14	July Choice - Est. New	748,187	0.11407	85,346
15	July Est. Priority One Transportation Old	148,342	0.13827	20,511
16	July Est. Priority One Transportation New	139,143	0.14482	20,151
17	June 2019 Est.	(8,483,859)	0.13827	(1,173,063)
18	June 2019 Act.	8,551,469	0.13827	1,182,412
19	June Choice - Est.	(1,966,047)	0.10801	(212,353)
20	June Choice - Act.	1,968,097	0.10801	212,574
21	June Est. Priority One Transportation	(345,290)	0.13827	(47,743)
22	June Act. Priority One Transportation	254,960	0.13827	35,253
23	Total	8,190,948		1,111,707
24	August, 2019 Est.	5,644,412	0.14482	817,424
25	August Choice - Est.	1,359,139	0.11407	155,037
26	August Est. Priority One Transportation	303,916	0.14482	44,013
27	July, 2019 Est. Old	(3,296,113)	0.13827	(455,753)
28	July, 2019 Est. New	(3,091,702)	0.14482	(447,740)
29	July 2019 Act. Old	3,345,408	0.13827	462,570
30	July 2019 Act. New	3,137,941	0.14482	454,437
31	July Choice - Est. Old	(788,131)	0.10801	(85,126)
32	July Choice - Est. New	(748,187)	0.11407	(85,346)
33	July Choice - Act. Old	788,138	0.10801	85,127
34	July Choice - Act. New	748,193	0.11407	85,346
35	July Est. Priority One Transportation Old	(148,342)	0.13827	(20,511)
36	July Est. Priority One Transportation New	(139,143)	0.14482	(20,151)
37	July Act. Priority One Transportation Old	108,195	0.13827	14,960
38	July Act. Priority One Transportation New	101,485	0.14482	14,697
39	Total	7,325,209		1,018,983
40	September, 2019 Est.	6,175,516	0.14482	894,338
41	September Choice - Est.	1,494,364	0.11407	170,462
42	September Est. Priority One Transportation	303,207	0.14482	43,910
43	August Est.	(5,644,412)	0.14482	(817,424)
44	August Act.	5,748,133	0.14482	832,445
45	August Choice - Est.	(1,359,139)	0.11407	(155,037)
46	August Choice - Act.	1,360,818	0.11407	155,229
47	August Est. Priority One Transportation	(303,916)	0.14482	(44,013)
48	August Act. Priority One Transportation	191,340	0.14482	27,710
49	Total	7,965,911		1,107,620
50	TOTAL	479,960,537		60,698,741

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COLUMBIA GAS OF PENNSYLVANIA, INC.
DETAIL OF STANDBY DEMAND COST RECOVERY
OCTOBER, 2018 THROUGH SEPTEMBER, 2019

LINE NO.	MONTH	STANDBY VOLUMES (1) THERM	STANDBY DEMAND RATE (2) \$/THERM	STANDBY GAS DEMAND RECOVERIES (3 = 1 x 2) \$
1	October, 2018 Est.	0		0
2	September, 2018 Act.	46,960	0.77206	36,256
3	September, 2018 Est.	0	-	0
4		<u>46,960</u>		<u>36,256</u>
5	November, 2018 Est.	0	-	0
6	October, 2018 Act.	45,310	0.76839	34,816
7	October, 2018 Est.	0	-	0
8		<u>45,310</u>		<u>34,816</u>
9	December, 2018 Est.	0	-	0
10	November, 2018 Act.	45,580	0.76839	35,023
11	November, 2018 Est.	0	-	0
12		<u>45,580</u>		<u>35,023</u>
13	January, 2019 Est.	0	-	0
14	December, 2018 Act.	45,580	0.76839	35,023
15	December, 2018 Est.	0	-	0
16		<u>45,580</u>		<u>35,023</u>
17	February, 2019 Est.	0	-	0
18	January, 2019 Act.	48,940	0.76801	37,586
19	January, 2019 Est.	0	-	0
20		<u>48,940</u>		<u>37,586</u>
21	March, 2019 Est.	0	-	0
22	February, 2019 Act.	57,850	0.76801	44,429
23	February, 2019 Est.	0	-	0
24		<u>57,850</u>		<u>44,429</u>
25	April, 2019	0	-	0
26	March, 2019 Act.	57,390	0.76801	44,076
27	March, 2019 Est.	0	-	0
28		<u>57,390</u>		<u>44,076</u>
29	May, 2019	0	-	0
30	April, 2019 Act.	57,390	0.77899	44,706
31	April, 2019 Est.	0	-	0
32		<u>57,390</u>		<u>44,706</u>
33	June, 2019	0	-	0
34	May, 2019 Act.	56,360	0.77899	43,904
35	May, 2019 Est.	0	-	0
36		<u>56,360</u>		<u>43,904</u>
37	July, 2019	0	-	0
38	June, 2019 Act.	55,260	0.77899	43,047
39	June, 2019 Est.	0	-	0
40		<u>55,260</u>		<u>43,047</u>
41	August, 2019	0	-	0
42	July, 2019 Act.	55,260	0.78034	43,122
43	July, 2019 Est.	0	-	0
44		<u>55,260</u>		<u>43,122</u>
45	September, 2019	0	-	0
46	August, 2019 Act	57,610	0.78034	44,955
47	August, 2019 Est.	0	-	0
48		<u>57,610</u>		<u>44,955</u>
49	TOTAL	<u>629,490</u>		<u>486,944</u>

COLUMBIA GAS OF PENNSYLVANIA, INC.
DETAIL OF NSS BANKING & BALANCING AND CAPACITY RELEASE REVENUE
OCTOBER, 2018 THROUGH SEPTEMBER, 2019

LINE NO.	DESCRIPTION	NSS-BANKING & BALANCING			NSS-CAPACITY RELEASE		
		VOLUME	RATE	AMOUNT	VOLUME	RATE	AMOUNT
		(1)	(2)	(3=1 x 2)	(4)	(5)	(6=4 x 5)
		THERM	\$/THERM	\$	THERM	\$/THERM	\$
1	October, 2018 Est.	35,994	0.00226	81	35,994	0.00093	33
2	September, 2018 Act.	23,800	0.00226	54	23,800	0.00093	22
3	September, 2018 Est.	<u>(23,002)</u>	0.00226	<u>(52)</u>	<u>(23,002)</u>	0.00093	<u>(21)</u>
4		36,792		83	36,792		34
5	November, 2018 Est.	58,995	0.00226	133	58,995	0.00093	55
6	October, 2018 Act.	40,250	0.00226	91	40,250	0.00093	37
7	October, 2018 Est.	<u>(35,994)</u>	0.00226	<u>(81)</u>	<u>(35,994)</u>	0.00093	<u>(33)</u>
8		63,251		143	63,251		59
9	December, 2018 Est.	77,998	0.00226	176	77,998	0.00802	626
10	November, 2018 Act.	87,140	0.00226	197	87,140	0.00093	81
11	November, 2018 Est.	<u>(58,995)</u>	0.00226	<u>(133)</u>	<u>(58,995)</u>	0.00093	<u>(55)</u>
12		106,143		240	106,143		652
13	January, 2019 Est.	137,000	0.00226	310	137,000	0.01002	1,373
14	December, 2018 Act.	98,500	0.00226	223	98,500	0.00802	790
15	December, 2018 Est.	<u>(77,998)</u>	0.00226	<u>(176)</u>	<u>(77,998)</u>	0.00802	<u>(626)</u>
16		157,502		356	157,502		1,537
17	February, 2019 Est.	102,003	0.00226	231	102,003	0.01000	1,020
18	January, 2019 Act.	99,500	0.00226	225	99,500	0.01002	997
19	January, 2019 Est.	<u>(137,000)</u>	0.00226	<u>(310)</u>	<u>(137,000)</u>	0.01002	<u>(1,373)</u>
20		64,503		146	64,503		644
21	March, 2019 Est.	93,002	0.00226	210	93,002	0.01000	930
22	February, 2019 Act.	104,120	0.00226	235	104,120	0.01000	1,041
23	February, 2019 Est.	<u>(102,003)</u>	0.00226	<u>(231)</u>	<u>(102,003)</u>	0.01000	<u>(1,020)</u>
24		95,119		215	95,119		951
25	April, 2019 Est.	74,005	0.00226	167	74,005	0.00093	69
26	March, 2019 Act.	88,310	0.00226	200	88,310	0.01000	883
27	March, 2019 Est.	<u>(93,002)</u>	0.00226	<u>(210)</u>	<u>(93,002)</u>	0.01000	<u>(930)</u>
28		69,313		156	69,313		22
29	May, 2019 Est.	51,993	0.00226	118	51,993	0.00093	48
30	April, 2019 Act.	74,520	0.00226	168	74,520	0.00093	69
31	April, 2019 Est.	<u>(74,005)</u>	0.00226	<u>(167)</u>	<u>(74,005)</u>	0.00093	<u>(69)</u>
32		52,508		119	52,508		48
33	June, 2019 Est.	27,005	0.00226	61	27,005	0.00093	25
34	May, 2019 Act.	38,480	0.00226	87	38,480	0.00093	36
35	May, 2019 Est.	<u>(51,993)</u>	0.00226	<u>(118)</u>	<u>(51,993)</u>	0.00093	<u>(48)</u>
36		13,492		30	13,492		12
37	July, 2019 Est.	23,000	0.00226	52	23,000	0.00093	21
38	June, 2019 Act.	25,530	0.00226	58	25,530	0.00093	24
39	June, 2019 Est.	<u>(27,005)</u>	0.00226	<u>(61)</u>	<u>(27,005)</u>	0.00093	<u>(25)</u>
40		21,525		49	21,525		20
41	August, 2019 Est.	23,000	0.00226	52	23,000	0.00093	21
42	July, 2019 Act.	23,240	0.00226	53	23,240	0.00093	22
43	July, 2019 Est.	<u>(23,000)</u>	0.00226	<u>(52)</u>	<u>(23,000)</u>	0.00093	<u>(21)</u>
44		23,240		53	23,240		21
45	September, 2019 Est.	23,000	0.00226	52	23,000	0.00093	21
46	August, 2019 Act.	23,510	0.00226	53	23,510	0.00093	22
47	August, 2019 Est.	<u>(23,000)</u>	0.00226	<u>(52)</u>	<u>(23,000)</u>	0.00093	<u>(21)</u>
48		23,510		53	23,510		22
49	TOTAL	<u>726,898</u>		<u>1,643</u>	<u>726,898</u>		<u>4,023</u>

COLUMBIA GAS OF PENNSYLVANIA, INC.
DEMAND PENALTY CREDITS/SUPPLIER REFUNDS RECEIVED OCTOBER 2018 - SEPTEMBER 2019
FROM VARIOUS SUPPLIERS

<u>Line No.</u>	<u>Refund Type</u>	<u>Date Received</u>	<u>Total</u>
1	Texas Eastern Transmission: Penalty Credit Docket No. RP18-1192	November 2018	939
2	Columbia Gas Transmission, LLC: Penalty Credit Docket No. RP19-508	December 2018	128,189
3	Texas Eastern Transmission: Penalty Credit Docket No. RP19-889	April 2019	40
4	Dominion Transmission: Penalty Revenue Distribution Docket No. RP19-1373	June 2019	3,088
5	Texas Eastern Transmission: Penalty Credit Docket No. RP19-1342	July 2019	<u>1,629</u>
6	Total Penalty Credits/Supplier Refunds to Pass Back		<u><u>133,886</u></u>