Exhibit No. 5 Page 1 of 5 Witness: J. J. Spanos

# COLUMBIA GAS OF PENNSYLVANIA, INC. STATEMENT OF ANNUAL DEPRECIATION EXPENSE AT PRESENT RATES TWELVE MONTHS ENDED NOVEMBER 30, 2021

\$

Annual Depreciation Accruals related to Gas Plant in Service at November 30, 2021

85,655,615

Plus: 5 Year Amortization of Negative

Net Salvage at November 30, 2021

4,729,294

Total **90,384,909** 

# TABLE 1. ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF NOVEMBER 30, 2021

Acct		SURVIVOR	ORIGINAL COST AS OF	воок	FUTURE BOOK	CALCUL ANNUAL A		COMPOSITE REMAINING
<u>No.</u>	DEPRECIABLE GROUP	CURVE	NOVEMBER 30, 2021	RESERVE	ACCRUAL	AMOUNT	RATE	LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)=(5)/(6)
DEPREC	CIABLE PLANT							
	GROUND STORAGE PLANT							
350.2	RIGHTS OF WAY	SQUARE *	•	1,931	1	0	-	-
351	COMPRESSOR STATION STRUCTURES	65-R2.5 *	3,250,036.96	2,362,836	887,201	218,415	6.72	4.1
	WELLS							
352	CONSTRUCTION	SQUARE *	, ,	738,926	387,846	95,059	8.44	4.1
352	EQUIPMENT	50-S2.5 *	1,072,969.88	168,032	904,938	224,384	20.91	4.0
	TOTAL ACCOUNT 352		2,199,741.81	906,958	1,292,784	319,443		
352.1	STORAGE LEASEHOLDS AND RIGHTS	SQUARE *	206,940.78	206,932	9	2	-	4.5
353	LINES	50-S1.5 *	389,345.13	388,491	854	225	0.06	3.8
354	COMPRESSOR STATION EQUIPMENT	55-R2.5 *	948,176.70	816,990	131,187	32,451	3.42	4.0
355	MEASURING AND REGULATING EQUIPMENT	37-R1.5 *	104,476.92	104,477	0	0	-	-
	TOTAL UNDERGROUND STORAGE PLANT		7,100,650.38	4,788,615	2,312,036	570,536	8.03	
DISTRIB	SUTION PLANT							
	LAND AND LAND RIGHTS							
374.4	LAND RIGHTS	70-R2.5	3,812,368	866,132	2,946,236	63,812	1.67	46.2
374.5	RIGHTS OF WAY	80-S4	3,233,171	1,791,949	1,441,222	34,957	1.08	41.2
	TOTAL ACCOUNT 374		7,045,540	2,658,081	4,387,458	98,769	1.40	
	STRUCTURES AND IMPROVEMENTS							
375.34	MEASURING AND REGULATING	60-R1	6,014,289.33	1,418,913	4,595,376	132,567	2.20	34.7
375.6	INDUSTRIAL MEASURING AND REGULATING	55-R1	86,228	75,321	10,907	532	0.62	20.5
375.7	OTHER DISTRIBUTION SYSTEMS							
	DISTRIBUTION SYSTEM STRUCTURES	90-R1.5 *	1 1,000,07 0.0 1	3,302,678	11,602,391	422,405	2.83	27.5
	OTHER BUILDIINGS	35-R2	3,018,674.28	1,054,096	1,964,578	87,548	2.90	22.4
	TOTAL ACCOUNT 375.70		17,923,745.12	4,356,774	13,566,969	509,953	2.85	26.6
375.8	COMMUNICATION	45-R3	16,515.17	8,256	8,259	358	2.17	23.1
	TOTAL ACCOUNT 375		24,040,777.49	5,859,264	18,181,511	643,410	2.68	

# TABLE 1. ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF NOVEMBER 30, 2021

Acct	DEDDECIADI E ODOLID	SURVIVOR	ORIGINAL COST AS OF	BOOK	FUTURE BOOK	CALCULA ANNUAL AC	CRUAL	COMPOSITE REMAINING
<u>No.</u>	DEPRECIABLE GROUP (1)	(2)	NOVEMBER 30, 2021 (3)	RESERVE (4)	ACCRUAL (5)	AMOUNT (6)	$\frac{\text{RATE}}{(7)=(6)/(3)}$	LIFE (8)=(5)/(6)
	(1)	(2)	(3)	(4)	(5)	(0)	(1)-(0)/(3)	(0)–(3)/(0)
376	MAINS							
	CAST IRON	71-R1 *	161,465.15	134,755	26,710	13,382	8.29	2.0
	BARE STEEL	71-R1 *	63,279,781.89	42,879,976	20,399,806	1,638,654	2.59	12.4
	OTHER	71-R1	2,103,171,893.33	268,413,585	1,834,758,308	44,797,128	2.13	41.0
	TOTAL ACCOUNT 376		2,166,613,140.37	311,428,316	1,855,184,824	46,449,164	2.14	
378	MEASURING AND REGULATING STATION EQUIPMENT - GENERAL	45-O1	125,955,155.52	21,223,803	104,731,353	4,689,154	3.72	22.3
379.1	MEASURING AND REGULATING STATION EQUIPMENT - CITY GATE	35-S2	135,966.90	33,640	102,327	11,337	8.34	9.0
380	SERVICES							
300	BARE STEEL	50-R0.5 *	800,861.45	580,077	220,784	26,754	3.34	8.3
	OTHER	50-R0.5	687,163,553.40	135,905,920	551,257,633	20,722,730	3.02	26.6
	OTHER	00 110.0	001,100,000.40	100,000,020	001,207,000	20,722,700	0.02	20.0
	TOTAL ACCOUNT 380		687,964,414.85	136,485,997	551,478,417	20,749,484	3.02	
381	METERS	44-S1	42,389,554.30	17,559,361	24,830,193	1,025,511	2.42	24.2
381	METERS - AMR	15-S2.5	24,657,115.27	16,965,002	7,692,113	1,396,664	5.66	5.5
382	METER INSTALLATIONS	55-R3	42,326,880.57	15,071,634	27,255,247	793,284	1.87	34.4
383	HOUSE REGULATORS AND INSTALLATIONS	45-S2	19,129,585.26	7,894,716	11,234,869	389,770	2.04	28.8
385	INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT -							
	OTHER THAN METERS	30-R0.5	6,841,833.15	2,163,531	4,678,302	367,193	5.37	12.7
	OTHER EQUIPMENT							
387	GENERAL	32-R0.5	136,698.14	76,007	60,691	4,431	3.24	13.7
387.4	COMMUNICATION EQUIPMENT	25-R2	11,861,577.12	2,515,056	9,346,521	593,310	5.00	15.8
387.5	GPS EQUIPMENT	10-S3	2,201,371.95	1,527,423	673,949	216,274	9.82	3.1
	TOTAL ACCOUNT 387		14,199,647.21	4,118,486	10,081,161	814,015	5.73	
	TOTAL DISTRIBUTION PLANT		3,161,299,610.68	541,461,831	2,619,837,775	77,427,755	2.45	
GENERA	AL 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	2,112,569.94	990,474	1,122,096	84,271	3.99	13.3
391.11	EQUIPMENT	15-SQ	91,303.67	47,107	44,197	5,853	6.41	7.6
391.12	INFORMATION SYSTEMS	5-SQ	2,705,700.42	2,036,706	668,994	453,626	16.77	1.5
	TOTAL ACCOUNT 391		4,909,574.03	3,074,287	1,835,287	543,750	11.08	

# TABLE 1. ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF NOVEMBER 30, 2021

Acct	DEDDECIADI E ODOUD	SURVIVOR	ORIGINAL COST AS OF	BOOK	FUTURE BOOK	CALCULA ANNUAL AC	CRUAL	COMPOSITE REMAINING
<u>No.</u>	DEPRECIABLE GROUP (1)	(2)	NOVEMBER 30, 2021 (3)	RESERVE (4)	ACCRUAL (5)	AMOUNT (6)	RATE (7)=(6)/(3)	LIFE (8)=(5)/(6)
	(1)	(=)	(0)	(1)	(0)	(0)	(1) (0)/(0)	(0) (0)/(0)
392	TRANSPORTATION EQUIPMENT - TRAILERS	15-SQ	25,617	26,344	(727)	0	-	-
	TOOLS, SHOP AND GARAGE EQUIPMENT							
394	EQUIPMENT	25-SQ	17,641,803	7,091,300	10,550,503	632,461	3.59	16.7
394.12	CNG FACILITIES	12-S1.5	2,235,476	2,232,424	3,052	3,052	0.14	1.0
	TOTAL A 000 UNIT 00 4		40.077.000	0.000.704	40.550.555	225 542	2.22	
	TOTAL ACCOUNT 394		19,877,280	9,323,724	10,553,555	635,513	3.20	
395	LABORATORY EQUIPMENT	20-SQ	266,039	83,099	182,940	13,881	5.22	13.2
396	POWER OPERATED EQUIPMENT	13-L2	948,698	950,570	(1,872)	0	-	-
397.5	COMMUNICATION EQUIPMENT - TELEMETERING	19-R2.5	787,916	786,727	1,189	105	0.01	11.3
398	MISCELLANEOUS EQUIPMENT	15-SQ	952,065	478,961	473,104	57,726	6.06	8.2
	TOTAL GENERAL PLANT		27,817,010	14,773,533	13,043,476	1,250,975	4.50	
	SUBTOTAL DEPRECIABLE PLANT		3,196,217,271	561,023,979	2,635,193,287	79,249,266	2.48	
AMORTIZA	ABLE PLANT							
303	MISCELLANEOUS INTANGIBLE PLANT		41,069,860	17,729,680	23,340,180	5,491,032 **	:	
303.6	MISCELLANEOUS INTANGIBLE PLANT - CLOUD		5,766,616	1,006,579	4,760,037	661,848 **		
362.1	ENVIRONMENTAL REMEDIATION			(230,180)				
375.71	STRUCTURES AND IMPROVEMENTS - LEASED		5,981,680	2,547,985	3,433,695	253,469 **	•	
	SUBTOTAL AMORTIZABLE PLANT		52,818,157	21,054,064	31,533,912	6,406,349		
NONDEPR	RECIABLE PLANT		3,533,241	234,693				
	TOTAL GAS PLANT		3,252,568,669	582,312,736	2,666,727,199	85,655,615		

<sup>\*</sup> Indicates the use of an interim survivor curve and retirement date.

<sup>\*\*</sup> Accrual rate based on individual asset amortization.

Exhibit No. 5 Page 5 of 5 Witness: J. J. Spanos

# COLUMBIA GAS OF PENNSYLVANIA, INC.

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

<u>Year</u>	Cost of <u>Removal</u> \$	Gross <u>Salvage</u> \$	Net <u>Salvage</u> \$
2016	4,171,396	271,675	(3,899,721)
2017	3,900,213	35,806	(3,864,407)
2018	5,232,727	204,219	(5,028,508)
2019	5,398,454	607	(5,397,848)
2020	5,455,990	0	(5,455,990)
Total	24,158,780	512,306	(23,646,474)

Five Year Amortization of Negative Net Salvage

(4,729,294)

Exhibit No. 6 Schedule No. 1 Page 1 of 1 Witness: J. Harding

# 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.

Exhibit No. 6 Schedule No. 2 Page 1 of 4 Witness: J. Harding

# 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, Line 19.

Exhibit No. 6 Schedule No. 2 Page 2 of 4

Witness: J. Harding

# Columbia Gas Pennsylvania, Inc. Statement of Projected Taxes Other Than Income Taxes at Present Rates Twelve Months Ended November 30, 2021

		Per Books		Normalized
		Twelve Months		Twelve Months
Line		Ended		Ended
No.	<u>Description</u>	Nov. 30, 2021	<u>Adjustments</u>	Nov. 30, 2021
		\$	\$	\$
1	FICA	2,898,512	(147,718)	2,750,794
2	FUTA & SUTA	95,972	0	95,972
3	Property Tax	521,958	(34)	521,924
4	Capital Stock	0	0	0
5	License and Franchise	100	0	100
6	Sales and Use	182,687	0	182,687
7	Other	231	0	231
8	Total Taxes Other Than Income Taxes	3,699,459	(147,752)	3,551,707

Exhibit No. 6 Schedule No. 2 Page 3 of 4 Witness: J. Harding

# Columbia Gas Pennsylvania, Inc. Taxes Other Than Income Taxes To Annualized Increase In FICA Tax Twelve Months Ended November 30, 2021

Line <u>No.</u>	<u>Description</u>	<u>Amount</u>	<u>Reference</u>
	HTY Experience Ratio Calculation		
1	Labor charged to O&M per Books	39,717,599	Exh 4, Sch 1, Pg 2, Ln 1+2
2	Total FICA charged per Books	2,898,512	Exh 6, Sch 2, Pg 2
3	FICA Experience Factor	7.2978%	Ln 2 / Ln 1
	HTY FICA Adjustment		
4	O&M Payroll Adjustment	425,918	Exh 4, Sch 1, Pg 2, Ln 1
5	O&M Incentive Compensation Adjustment	(2,450,065)	Exh 4, Sch 1, Pg 2, Ln 2
6	Total O&M Payroll & Incentive Adjustment	(2,024,147)	Ln 4 + Ln 5
7	Annualized Payroll Tax FICA Adjustment	(147,718)	Ln 6 x Ln 3

Exhibit No. 6 Schedule No. 2 Page 4 of 4 Witness: J. Harding

# Columbia Gas Pennsylvania, Inc. Taxes Other Than Income Taxes To Annualized Increase In Property Tax Twelve Months Ended November 30, 2021

Line <u>No.</u>	<u>Description</u>		Annualized Nov. 30, 2021 \$
1	2021 PURTA Tax on property as of 12/31/2020		192,893
2	Locally Assessed PA Property Tax - Latest Paid		72,631
3	WV Tax Year as of 12/31/2018 Assessed Value on Stored Gas	12,051,585	
4 5	2020 WV Tax Year Effective Tax Rate Annualized WV Property Tax on Stored Gas	0.02127519	256,400
6	Total Property Tax Expense - Annualized	Line 1 + Line 2 + Line 5	521,924
7	Property Tax Expense - Per Books		521,958
8	Total Property Tax Adjustment	Line 6 - Line 7	(34)

Exhibit No. 6 Schedule No. 3 Page 1 of 1 Witness: J. Harding

# 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.

Exhibit No. 6 Schedule No. 4 Page 1 of 1 Witness: J. Harding

# 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 presented on Exhibit No. 6, Schedule No. 2, Page No. 4, Line No. 5 include property tax for gas storage maintained in West Virginia as follows:

Type of Tax

For the 12 Months Ended
11/30/2021

WV Property – Storage
256,400

Exhibit No. 7 Page 1 of 46 Witness: J. Harding

# 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
  - b. Annualized test year-end
  - c. Proposed test year-end

Response: See Exhibit No. 2, Schedule No. 3, Page No. 4 for detail of the debt interest computation for the actual test year (HTY) and Exhibit No. 102, Schedule No. 3, Page No. 4 for detail of the debt interest computation for the annualized test year (FPFTY) and proposed test year at proposed rates.

a.	Actual test year	\$45,932,535
b.	Annualized test year-end	\$58,870,071
c.	Proposed test year-end	\$58,870,071

- 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.

- 26. Provide the following income tax data:
  - a. Consolidated income tax adjustment, if applicable.
  - b. lnterest for tax purposes (basis.)

Response: The income tax data for the twelve months historic test year presented on the following schedules:

- a. The Company does not have a consolidated income tax adjustment.
- b. The Interest included in the tax computation is presented on Exhibit No. 7, Page No. 14, Line No. 6.

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

Line No.	Description	Ref	(1) 2018	(2) 2019	(3) 2020	(4) Total	(5) Average
1	Columbia Gas of Pennsylvania Taxable Income		92,747,604	50,382,751	52,614,675	195,745,030	65,248,343
2	Consolidated Income Companies Taxable Income		333,405,094	458,227,591	975,727,844	1,767,360,529	589,120,176
3	Taxable Income Percentage to Columbia Gas of Pennsylvania	IF L1 > 0, L1 / L2, 0	28%	11%	5%	11%	11%
4	Consolidated Loss Companies Taxable Loss		144,812,588	99,924,063	358,583,063	603,319,714	201,106,571
5	Columbia Gas of Pennsylvania Allocation of Loss for 2018 to 2020	L3 * L4					22,273,674
6	Tax Rate						21%
7	Section 1301.1(b) Differential	L5 * L6					4,677,471
8	50% for reliability or infrastructure related capital investment	L7 * 50%					2,338,736
9	50% for general corporate purposes	L7 * 50%					2,338,736

# NiSource Inc and Subsidiaries Calculation of Consolidated Tax Savings for Columbia Gas of Pennsylvania Modified Effective Tax Rate Method Based on Three Year Average

Line No	Company	2012 Taxable Income 1/	2013 Taxable Income 1/	2014 Taxable Income 1/	2012-2014 Taxable Income
		(1)	(2)	(3)	(4)
	Regulated				
	Positive Regulated Companies				
1	Columbia Gas of Kentucky, Inc.	4,693,457	502,062	144,816	5,340,335
	Kokomo Gas and Fuel Company	-	-	-	-
3	Northern Indiana Public Service Company	210,808,733	80,743,430	86,682,322	378,234,485
4	NiSource Corporate Services Company	(3,839,295)	12,140,384	3,157,437	11,458,526
5	Central Kentucky Transmission Company	48,440	48,493	46,860	143,793
6	Subtotal: Positive Regulated Companies	211,711,335	93,434,369	90,031,435	395,177,139
7					
8	Loss Regulated Companies				
9	Columbia Gas of Ohio, Inc.	(3,779,440)	(48,856,838)	(26,148,630)	(78,784,908)
10	Northern Indiana Fuel and Light Company, Inc.	-	-	-	-
11	Columbia Gas of Maryland, Inc.	(1,502,899)	(5,843,279)	(4,980,590)	(12,326,768)
12	Columbia Gas of Virginia, Inc.	142,030	(17,631,341)	(26,663,345)	(44, 152, 656)
13	Bay State Gas Company	(20,010,181)	5,099,512	(15,278,640)	(30, 189, 309)
14	Columbia Gas of Pennsylvania, Inc.	(39,340,808)	(6,012,965)	1,851,749	(43,502,024)
15					
16	Subtotal: Loss Regulated Companies	(64,491,298)	(73,244,911)	(71,219,456)	(208,955,665)
17					
18	Total Regulated Companies	147,220,037	20,189,458	18,811,979	186,221,474
19					

# NiSource Inc and Subsidiaries Calculation of Consolidated Tax Savings for Columbia Gas of Pennsylvania Modified Effective Tax Rate Method Based on Three Year Average

Total Regulated Companies  NiSource Calculation of Consolidated Tax Modified Effective Tax Rate Company NIPSCO Accounts Receivables Corporation Columbia Gas of Pennsylvania Receivables Corp Subtotal: Positive Unregulated Companies  Mirpsculated Loss Companies  Modified Effective Tax Rate Modified Effective Ta		nia Gas of Pennsylvania hree Year Average 2013 Taxable Income 1/ 7,989,406 3,911,55 1,058,770 530,969 13,490,699 19,640,967 (688,801) (6,741,686) (772,472) (778,859) 180,315 (2,272,418) (1,136,938)	(71,219,456)  18,811,979  2014 Taxable Income 1/  3,123,616 - 3,437,640 1,592,736 860,111 9,014,103  (2,730,203) - (585,654) (17,616,892) (730,343) (3,455,004) (89,748) (7,086,074)	2012-2014 Taxable Income  16,004,1 94,3 13,740,8 3,594 0,4 1,783,8 35,216,9
Nisource Calculation of Consolidated Tax Modified Effective Tax Rate  **Company**  **Company**  **Non Regulated Profitable Taxable Income Companies** Columbia Insurance Corporation Northern Indiana Trading Company NIPSCO Accounts Receivables Corporation Columbia Gas of Ohio Receivables Corp. Columbia Gas of Pennsylvania Receivables Corp Columbia Gas of Pennsylvania Receivables Corp Subtotal: Positive Unregulated Companies  **Unregulated Loss Companies of Three Year Period** Eliminations (Inter-Company profit on Columbia Transmission) EnergyUSA Inc. (IM) Lake Erie Land Company Indianapolis Water Company Florergy Hoehnologies, Inc. NiSource Capital Markets, Inc. IWC Resources Corp. NiSource Finance Corp. NiSource Pinance Corp. NiSource Corporate Group NiSource Corporate Group NiSource Corporate Group NiSOH Odding Company	Inc and Subsidiaries Savings for Columb Method Based on T 2012 Taxable Income 1/ 4,891,106 94,343 6,391,608 942,530 392,550 12,712,137 (14,819,951) - (775,856) (3,899,189) (1,222,276) (2,455,687) (2,245,444) (5,683,810) (3,129,213) (21,470,907) (27,850,847) - (27,850,847)	sola Gas of Pennsylvania hree Year Average 2013 Taxable Income 1/ 7,989,406 	2014 Taxable Income 1/ 3,123,616 3,437,640 1,592,736 860,111 9,014,103 (2,730,203) (585,654) (17,616,892) (730,343) (3,455,004) (89,748) (7,088,074)	2012-2014 Taxable Income  16,004,1 94,3,3 13,740,8 3,594,0 1,783,6 35,216,9 2,090,8 (2,050,3 (28,257,7 (2,725,6)
Calculation of Consolidated Tax Modified Effective Tax Rate Modified Effective Tax Rate Modified Effective Tax Rate Company  Non Regulated Non Regulated Profitable Taxable Income Companies Collumbia Insurance Corporation Northern Indiana Trading Company NIPSCO Accounts Receivables Corporation Collumbia Gas of Ohio Receivables Corpolumbia Gas of Pennsylvania Receivables Corp Subtotal: Positive Unregulated Companies  Unregulated Loss Companies of Three Year Period Eliminations (Inter-Company profit on Columbia Transmission) EnergyUSA Inc. (M) Lake Erie Land Company EnergyUSA Inc. (IN) Lake Erie Land Company NiSource Energy Technologies, Inc. NiSource Energy Technologies, Inc. NiSource Energy Technologies, Inc. NiSource Development Company, Inc. Primary Energy, Inc. EnergyUSA-TPC Corp. NiSource Corporate Group	Savings for Columbs  a whethod Based on T  2012  Taxable Income 1/  4,891,106 94,343 6,391,608 942,530 392,550 12,712,137  (14,819,951) - (775,856) (3,899,189) (1,222,276) (2,455,887) (2,245,444) (5,688,810) (3,129,213) - (21,470,907) (27,850,847)	nia Gas of Pennsylvania hree Year Average 2013 Taxable Income 1/ 7,989,406 3,911,55 1,058,770 530,969 13,490,699 19,640,967 (688,801) (6,741,686) (772,472) (778,859) 180,315 (2,272,418) (1,136,938)	Taxable Income 1/  3,123,616  3,437,640 1,592,736 880,111 9,014,103  (2,730,203)  (585,654) (17,616,892) (730,343) (3,455,004) (89,748) (7,088,074)	Taxable Income  16,004,1 94,3 13,740,8 3,594,0 1,783,6 35,216,9 2,090,8 (2,050,3 (28,257,7 (2,725,6)
Calculation of Consolidated Tax Modified Effective Tax Rate Modified Effective Tax Rate Modified Effective Tax Rate Company  Non Regulated  Non Regulated Profitable Taxable Income Companies  Columbia Insurance Corporation  Northern Indiana Trading Company  NIPSCO Accounts Receivables Corporation  Columbia Gas of Ofion Receivables Corpolumbia Gas of Pennsylvania Receivables Corpolumbia Gas of Pennsylvania Receivables Corpolumbia Gas of Pennsylvania Receivables  Unregulated Loss Companies of Three Year Period  Eliminations (Inter-Company profit on Columbia Transmission)  EnergyUSA Inc. (IN)  Lake Erie Land Company  NiSource Energy Technologies, Inc.  NiSource Energy Technologies, Inc.  NiSource Energy Technologies, Inc.  NiSource Corponate Company, Inc.  Primary Energy, Inc.  EnergyUSA-TPC Corp.  NiSource Corporate Group	Savings for Columbs  a whethod Based on T  2012  Taxable Income 1/  4,891,106 94,343 6,391,608 942,530 392,550 12,712,137  (14,819,951) - (775,856) (3,899,189) (1,222,276) (2,455,887) (2,245,444) (5,688,810) (3,129,213) - (21,470,907) (27,850,847)	nia Gas of Pennsylvania hree Year Average 2013 Taxable Income 1/ 7,989,406 3,911,55 1,058,770 530,969 13,490,699 19,640,967 (688,801) (6,741,686) (772,472) (778,859) 180,315 (2,272,418) (1,136,938)	Taxable Income 1/  3,123,616  3,437,640 1,592,736 880,111 9,014,103  (2,730,203)  (585,654) (17,616,892) (730,343) (3,455,004) (89,748) (7,088,074)	Taxable Income  16.004,1 94,3 13,740,8 3,594,4 1,783,6 2,090,6 (2,050,3 (28,257,7 (2,725,6)
Non Regulated Non Regulated Profitable Taxable Income Companies Columbia Insurance Corporation Northern Indiana Trading Company NIPSCO Accounts Receivables Corporation Columbia Gas of Ohio Receivables Corp. Columbia Gas of Pennsylvania Receivables Corp Subtotal: Positive Unregulated Companies  Unregulated Loss Companies of Three Year Period Eliminations (Inter-Company profit on Columbia Transmission) EnergyUSA Ind. (IM) Indianapolis Water Company EnergyUSA Ind. (IM) Lake Erie Land Company NiSource Energy Technologies, Inc. NiSource Capital Markets, Inc. WC Resources Corp. NiSource Prinance Corp. NiSource Prinance Corp. NiSource Prinance Corp. NiSource Development Company, Inc. EnergyUSA-TPC Corp. NiSource Corp. NiSou	Taxable Income 1/  4,891,106 94,343 6,391,608 942,530 392,550 12,712,137  (14,819,951) - (775,856) (3,899,189) (1,222,276) (2,455,687) (2,245,444) (5,683,810) (3,129,213) - (21,470,907) (27,850,847) -	7,989,406 7,989,406 3,911,553 1,058,770 530,969 13,490,697 (688,801) (6,741,886) (772,472) (776,859) 180,315 (2,272,418) (1,136,938)	Taxable Income 1/  3,123,616  3,437,640 1,592,736 880,111 9,014,103  (2,730,203)  (585,654) (17,616,892) (730,343) (3,455,004) (89,748) (7,088,074)	Taxable Income  16,004, 94, 13,740, 3,594, 1,783, 35,216, 2,090,8 (2,050, (28,257, (2,725, (2,
Non Regulated Non Regulated Profitable Taxable Income Companies Columbia Insurance Corporation Northerin Indiana Trading Company NIPSCO Accounts Receivables Corporation Columbia Gas of Ohio Receivables Corporation Subtotal: Positive Unregulated Companies  Unregulated Loss Companies of Three Year Period Eliminations (Inter-Company profit on Columbia Transmission) EnergyUSA Inc. (IMA) Indianapolis Water Company EnergyUSA Inc. (IMA) Indianapolis Water Company NiSoure Energy Technologies, Inc. NiSource Energy Technologies, Inc. NiSource Energy Technologies, Inc. NiSource Development Company, Inc. Primary Energy, Inc. EnergyUSA-TPC Corp. NiSource Inc. NiSource Inc. NiSource Inc. NiSource Corporate Group NGD Holding Company Subtotal: Loss Unregulated Companies	4,891,106 94,343 6,991,608 942,530 392,550 12,712,137 (14,819,951) - (775,856) (3,899,189) (1,222,276) (2,245,687) (2,245,444) (5,683,810) (3,129,213) (21,470,907) (27,850,847)	7,989,406  3,911,553 1,058,770 530,969 13,490,698  19,640,967 (688,801) (6,741,886) (772,472) (778,859 180,342) (778,859 180,315 (2,272,418) (1,136,938)	3,123,616 3,437,640 1,592,736 880,111 9,014,103 (2,730,203) (585,654) (17,616,892) (730,343) (3,455,004) (89,748) (7,088,074)	16,004, 94, 13,740, 3,594, 1,783, 35,216, 2,090,8 (2,050, (28,257, (2,725,
Non Regulated Profitable Taxable Income Companies Columbia Insurance Corporation Northern Indiana Trading Company NIPSCO Accounts Receivables Corporation Columbia Gas of Ohio Receivables Corp. Columbia Gas of Pennsylvania Receivables Corp Subtotal: Postitive Unregulated Companies  Unregulated Loss Companies of Three Year Period Eliminations (Inter-Company profit on Columbia Transmission) EnergyUSA Inc. (IM) Indianapolis Water Company EnergyUSA Inc. (IM) Lake Erie Land Company NiSource Energy Technologies, Inc. NiSource Capital Markets, Inc. IWC Resources Corp. NiSource Finance Corp. NiSource Finance Corp. NiSource Finance Corp. NiSource Penergy Inc. EnergyUSA-TPC Corp. NiSource Penergy Inc. EnergyUSA-TPC Corp. NiSource Corporate Group NiSource Corporate Group NiSource Corporate Group NiSOHolding Company Subtotal: Loss Unregulated Companies	94,343 6,391,608 942,530 392,550 12,712,137 (14,819,951) - (775,856) (3,889,189) (1,222,276) (2,455,687) (2,245,444) (5,683,810) (3,129,213) (21,470,907) (27,850,847)	3,911,553 1,058,770 530,969 13,490,698 19,640,967 (688,801) (6,741,686) (772,472) (2,986,342) (776,859) 180,315 (2,272,418) (1,136,938)	3,437,640 1,592,736 880,111 9,014,103 (2,730,203) (585,654) (17,616,892) (730,343) (3,455,004) (89,748) (7,088,074)	94,3 13,740,6 3,594,0 1,783,6 35,216,9 2,090,8 (2,050,3,7 (28,257,7 (2,725,0
Northern Indiana Trading Company NIPSCO Accounts Receivables Corporation Columbia Gas of Ohio Receivables Corp. Columbia Gas of Pennsylvania Receivables Corp Subtotal: Positive Unregulated Companies  Unregulated Loss Companies of Three Year Period Eliminations (Inter-Company profit on Columbia Transmission) EnergyUSA Inc. (IM) Indianapolis Water Company EnergyUSA Inc. (IM) Lake Erie Land Company NiSource Energy Technologies, Inc. NiSource Capital Markets, Inc. IWC Resources Corp. NiSource Development Company, Inc. Primary Energy, Inc. EnergyUSA-TPC Corp. NiSource Development Company, Inc. Primary Energy, Inc. EnergyUSA-TPC Corp. NiSource Corporate Group NGD Holding Company Subtotal: Loss Unregulated Companies	94,343 6,391,608 942,530 392,550 12,712,137 (14,819,951) - (775,856) (3,889,189) (1,222,276) (2,455,687) (2,245,444) (5,683,810) (3,129,213) (21,470,907) (27,850,847)	3,911,553 1,058,770 530,969 13,490,698 19,640,967 (688,801) (6,741,686) (772,472) (2,986,342) (776,859) 180,315 (2,272,418) (1,136,938)	3,437,640 1,592,736 880,111 9,014,103 (2,730,203) (585,654) (17,616,892) (730,343) (3,455,004) (89,748) (7,088,074)	94,3 13,740,6 3,594,0 1,783,6 35,216,9 2,090,8 (2,050,3,7 (28,257,7 (2,725,0
NIPSCO Accounts Receivables Corporation Columbia Gas of Ohio Receivables Corp Columbia Gas of Ohio Receivables Corp Subtotal: Positive Unregulated Companies  Unregulated Loss Companies of Three Year Period Eliminations (Inter-Company profit on Columbia Transmission) EnergyUSA Inc. (IM) Indianapolis Water Company Indianapolis Water Company NiSource Energy Technologies, Inc. NiSource Capital Markets, Inc. IWC Resources Corp. NiSource Finance Corp. NiSource Finance Corp. NiSource Pevelopment Company, Inc. Primary Energy, Inc. EnergyUSA-TPC Corp. NiSource Inc. NiSource Optograte Group NiSource Development Company Subtotal: Loss Unregulated Companies	6,391,608 942,530 392,550 12,712,137  (14,819,951) (775,856) (3,899,189) (1,222,276) (2,455,687) (2,245,444) (5,683,810) (3,129,213) - (21,470,907) (27,850,847) -	1,058,770 530,969 13,490,698 19,640,967 - (688,801) (6,741,686) (772,472) (2,986,342) (776,859) 180,315 (2,272,418) (1,136,938)	1,592,736 880,111 9,014,103 (2,730,203) - (585,654) (17,616,892) (730,343) (3,455,004) (89,748) (7,088,074)	13,740,8 3,594,( 1,783,6 35,216,9 2,090,8 (2,050,3 (28,257,7 (2,725,0
Columbia Gas of Pennsylvania Receivables Corp Subtotal: Positive Unregulated Companies  Unregulated Loss Companies of Three Year Period  Eliminations (Inter-Company profit on Columbia Transmission)  EnergyUSA Inc. (IMA)  Indianapolis Water Company  EnergyUSA Inc. (IM)  Lake Erie Land Company  NiSource Energy Technologies, Inc.  NiSource Energy Technologies, Inc.  NiSource Enjatl Markets, Inc.  IWC Resources Corp.  NiSource Development Company, Inc.  Primary Energy, Inc.  EnergyUSA-TPC Corp.  NiSource Inc.  NiSource Inc.  NiSource Inc.  NiSource Corporate Group  NGD Holding Company  Subtotal: Loss Unregulated Companies	392,550 12,712,137 (14,819,951) - (775,856) (3,889,189) (1,222,276) (2,455,687) (2,245,687) (2,245,644) (5,683,810) (3,129,213) - (21,470,907) (27,850,847)	530,969 13,490,699 19,640,967 (688,801) (6,741,686) (772,472) (776,859) 180,315 (2,272,418) (1,136,938)	860.111 9,014,103 (2,730,203) (585,654) (17,616,892) (730,343) (3,455,004) (89,748) (7,088,074)	1,783,6 35,216,9 2,090,6 (2,050,3 (28,257,7 (2,725,6
Subtotal: Positive Unregulated Companies  Unregulated Loss Companies of Three Year Period  Eliminations (Inter-Company profit on Columbia Transmission) EnergyUSA Inc. (IM) Indianapolis Water Company EnergyUSA Inc. (IN) Lake Erie Land Company NiSource Energy Technologies, Inc. NiSource Capital Markets, Inc. IVC Resources Corp. NiSource Development Company, Inc. Primary Energy, Inc. EnergyUSA-TPC Corp. NiSource Development Company, Inc. Primary Energy, Inc. EnergyUSA-TPC Corp. NiSource Inc. NiSource Inc. NiSource Corporate Group NGD Holding Company Subtotal: Loss Unregulated Companies	12,712,137 (14,819,951) (775,856) (3,899,189) (1,222,276) (2,455,687) (2,245,444) (5,883,810) (3,129,213) - (21,470,907) (27,850,847)	13,490,698 19,640,967 - (688,801) (6,741,686) (772,472) (2,986,342) (776,859) 180,315 (2,272,418) (1,136,938)	9,014,103 (2,730,203) - (585,654) (17,616,892) (730,343) (3,455,004) (89,748) (7,088,074)	2,090,8 2,090,8 (2,050,3 (28,257,7 (2,725,0
Unrequiated Loss Companies of Three Year Period Eliminations (inter-Company profit on Columbia Transmission) EnergyUSA Inc. (IMA) Indianapolis Water Company EnergyUSA Inc. (IN) Lake Erie Land Company NiSource Energy Technologies, Inc. NiSource Capital Markets, Inc. IWC Resources Corp. NiSource Finance Corp. NiSource Prinarce Corp. NiSource Prinarce Corp. NiSource Development Company, Inc. Primary Energy, Inc. EnergyUSA-TPC Corp. NiSource Inc. NiSource Inc. NiSource Inc. NiSource Inc. NiSource Inc. NiSource Corporate Group NGD Holding Company Subtotal: Loss Unregulated Companies	(775,856) (3,899,189) (1,222,276) (2,455,687) (2,245,444) (5,683,810) (3,129,213) (21,470,907) (27,850,647)	(688,801) (6,741,686) (772,472) (2,986,342) (776,859) 180,315 (2,272,418) (1,136,938)	(585,654) (17,616,892) (730,343) (3,455,004) (89,748) (7,058,074)	(2,050,3 (28,257,7 (2,725,0
Eliminations (Inter-Company profit on Columbia Transmission) EnergyUSA Inc. (MA) Indianapolis Water Company EnergyUSA Inc. (IN) Lake Erie Land Company NiSource Energy Technologies, Inc. NiSource Energy Technologies, Inc. NiSource Energy Technologies, Inc. NiSource Energy Technologies, Inc. NiSource Eniance Corp. NiSource Finance Corp. NiSource Development Company, Inc. Primary Energy, Inc. EnergyUSA-TPC Corp. NiSource Inc. NiSource Corporate Group NiSource Corporate Group NGD Holding Company Subtotal: Loss Unregulated Companies	(775,856) (3,899,189) (1,222,276) (2,455,687) (2,245,444) (5,683,810) (3,129,213) (21,470,907) (27,850,647)	(688,801) (6,741,686) (772,472) (2,986,342) (776,859) 180,315 (2,272,418) (1,136,938)	(585,654) (17,616,892) (730,343) (3,455,004) (89,748) (7,058,074)	(2,050,3 (28,257,7 (2,725,0
EnergyUSA Inc. (IN) Lake Erie Land Company NiSource Energy Technologies, Inc. NiSource Capital Markets, Inc. IWC Resources Corp. NiSource Eniance Corp. NiSource Development Company, Inc. Primary Energy, Inc. EnergyUSA-TPC Corp. NiSource Inc. NiSource Inc. NiSource Corporate Group NiSource Corporate Group NiSource Corporate Group NiSource Corporate Group Subtotal: Loss Unregulated Companies	(3,899,189) (1,222,276) (2,455,687) (2,245,444) (5,683,810) (3,129,213) - (21,470,907) (27,850,847) -	(6,741,686) (772,472) (2,986,342) (776,859) 180,315 (2,272,418) (1,136,938)	(17,616,892) (730,343) (3,455,004) (89,748) (7,058,074)	(28,257,7 (2,725,0
Lake Erie Land Company NiSource Energy Technologies, Inc. NiSource Capital Markets, Inc. NiSource Capital Markets, Inc. NiSource Finance Corp. NiSource Finance Corp. NiSource Development Company, Inc. Primary Energy, Inc. EnergyUSA-TPC Corp. NiSource Inc. NiSource Inc. NiSource Corporate Group NGD Holding Company Subtotal: Loss Unregulated Companies	(3,899,189) (1,222,276) (2,455,687) (2,245,444) (5,683,810) (3,129,213) - (21,470,907) (27,850,847) -	(6,741,686) (772,472) (2,986,342) (776,859) 180,315 (2,272,418) (1,136,938)	(17,616,892) (730,343) (3,455,004) (89,748) (7,058,074)	(28,257,7
NiSource Energy Technologies, Inc. NiSource Capital Markets, Inc. IWC Resources Corp. NiSource Inance Corp. NiSource Development Company, Inc. Primary Energy, Inc. Energy USA-TPC Corp. NiSource Inc. NiSource Corporate Group NiSource Corporate Group NiSource Corporate Group NiSource Substatis Loss Unregulated Companies	(2,455,687) (2,245,444) (5,683,810) (3,129,213) - (21,470,907) (27,850,847)	(2,986,342) (776,859) 180,315 (2,272,418) (1,136,938)	(730,343) (3,455,004) (89,748) (7,058,074)	(2,725,0
IWC Resources Corp.  NiSource Finance Corp.  NiSource Development Company, Inc.  Primary Energy, Inc.  EnergyUSA-TPC Corp.  NiSource Inc.  NiSource Corporate Group  NGD Holding Company  Subtotal: Loss Unregulated Companies	(2,245,444) (5,683,810) (3,129,213) - (21,470,907) (27,850,847)	(776,859) 180,315 (2,272,418) (1,136,938)	(89,748) (7,058,074)	(8,897.0
NiSource Finance Corp. NiSource Development Company, Inc. Primary Energy, Inc. EnergyUSA-TPC Corp. NiSource Inc. NiSource Corporate Group NGD Holding Company Subtotal: Loss Unregulated Companies	(5,683,810) (3,129,213) - (21,470,907) (27,850,847) -	180,315 (2,272,418) (1,136,938)	(7,058,074)	(3,112,0
Primary Energy, Inc. EnergyUSA-TPC Corp. NISource Inc. NISource Corporate Group NGD Holding Company	(21,470,907) (27,850,847)	(1,136,938)		(12,561,5
EnergyUSA-TPC Corp. NiSource Inc. NiSource Corporate Group NGD Holding Company Subtotal: Loss Unregulated Companies	(27,850,847)		(2,376,070) (1,727,397)	(7,777,7 (2,864,3
NiSource Inc.  NiSource Corporate Group  NGD Holding Company  Subtotal: Loss Unregulated Companies		(3,199,372)	(547,250)	(25,217,5
NGD Holding Company Subtotal: Loss Unregulated Companies	(83,553,180)	(29,327,888)	(52,697,869)	(109,876,6
Subtotal: Loss Unregulated Companies	(83,553,180)	(8,397,810) (8,603,910)		(8,397,8 (8,603,9
		(45,083,214)	(89,614,504)	(218,250,8
Company	2012 Taxable Income 1/	2013 Taxable Income 1/	2014 Taxable Income 1/	2012-2014 Taxable Income
NiSource Inc. Interest on Columbia Stock Purchase Allocated Under SEC Orc. Subtotal: Interest on Columbia Stock Purchase	(188,619,685)	(194,483,810)	(177,344,944)	(560,448,4
Subtotal: Interest on Columbia Stock Purchase	(188,619,685)	(194,483,810)	(177,344,944)	(560,448,4
Other Companies Sold or In Process of Being Sold/or Inactive  NDC Douglas Properties, Inc.	1,761,838	(539,820)	(407,489)	814,5
Columbia Energy Services Corporation	-	-	-	,-
Service Protection Group LLC NiSource Retail Services, Inc.	-	31,231,228	1,780,747	33,011,9
Crossroads Pipeline Company	3,010,003	1,869,638	748,087	5,627,7
Columbia Gulf Transmission Company	47,341,084 1,804,936	14,512,128	43,234,658	105,087,8
Columbia Hardy Corp.		2,567,494 (162,060,316)	2,226,517 (6,692,837)	6,598,9 62,118,2
		951,189	946,658	2,746,6
Columbia Energy Group CNS Microwave, Inc.	230,871,449 848,775			
Columbia Energy Group CNS Microwave, Inc.	230,871,449	(445,433)	(275,876)	(898,5
Columbia Energy Group CNS Microwave, Inc. Columbia Remainder Corporation Subtotal: Unregulated Companies Sold or In Process of Being Sold/o	230,871,449 848,775 (177,273) 285,460,812	(111,913,892)	41,560,465	215,107,3
Columbia Energy Group CNS Microwave, Inc. Columbia Remainder Corporation	230,871,449 848,775 (177,273)			215,107,3 (342,153,5
Columbia Energy Group CNS Microwave, Inc. Columbia Remainder Corporation Subtotal: Unregulated Companies Sold or In Process of Being Sold/o Total Consolidated Taxable Income  1/ Separate Return amount includes non-deductible Charitable Contributions as a res 2/ Company in process of being sold. An investment in real estate for benefit of low is 3/ Company sold in 2013	230,871,449 848,775 (177,273) 285,460,812 173,220,121 sult of Consolidated No	(111,913,892) (317,800,760) et Operating Loss	41,560,465	215,107,3
Columbia Energy Group CNS Microwave, Inc. Columbia Remainder Corporation Subtotal: Unregulated Companies Sold or In Process of Being Sold/o	230,871,449 848,775 (177,273) 285,460,812 173,220,121 sult of Consolidated No	(111,913,892) (317,800,760) et Operating Loss	41,560,465	215,107,3

# NiSource Inc and Subsidiaries Calculation of Consolidated Tax Savings for Columbia Gas of Pennsylvania Modified Effective Tax Rate Method Based on Three Year Average

65					
66 67	2012 Taxable	2013 Taxable	2014 Taxable	2012-2014 Taxable	
68 Company	Income 1/	Income 1/	Income 1/	Income	
69					
70 NiSource Inc. Interest on Columbia Stock Purchase Allocated Under SEC	Orc(188,619,685)	(194,483,810)	(177,344,944)	(560,448,439)	
71 Subtotal: Interest on Columbia Stock Purchase	(188,619,685)	(194,483,810)	(177,344,944)	(560,448,439)	
72					
73 Other Companies Sold or In Process of Being Sold/or Inactive					
74 NDC Douglas Properties, Inc.	1,761,838	(539,820)	(407,489)	814,529	2/
75 Columbia Energy Services Corporation	-	-	-	-	3/
76 Service Protection Group LLC	-	-	-		4/
77 NiSource Retail Services, Inc.	-	31,231,228	1,780,747	33,011,975	
78 Crossroads Pipeline Company	3,010,003	1,869,638	748,087	5,627,728	
79 Columbia Gulf Transmission Company	47,341,084	14,512,128	43,234,658	105,087,870	
80 Columbia Hardy Corp.	1,804,936	2,567,494	2,226,517	6,598,947	
81 Columbia Energy Group	230,871,449	(162,060,316)	(6,692,837)	62,118,296	
82 CNS Microwave, Inc.	848,775	951,189	946,658	2,746,622	
83 Columbia Remainder Corporation	(177,273)	(445,433)	(275,876)	(898,582)	4/
84					
85 Subtotal: Unregulated Companies Sold or In Process of Being Sol	d/o 285,460,812	(111,913,892)	41,560,465	215,107,385	
86					
87 Total Consolidated Taxable Income	173,220,121	(317,800,760)	(197,572,901)	(342, 153, 540)	
88					

4 Consolidated Income Companies Taxable Income	514,042,882	182,977,538	149,833,954
5 Consolidated Loss Companies Taxable Loss	(340,822,761)	(500,778,298)	(347,406,855)
o6 _			
7	173,220,121	(317,800,760)	(197,572,901)
18		-	_

# NiSource Inc and Subsidiaries Calculation of Consolidated Tax Savings for Columbia Gas of Pennsylvania Modified Effective Tax Rate Method Based on Three Year Average

e No Company	2014 Taxable Income 1/	2015 Taxable Income 1/	2016 Taxable Income 1/	2014-2016 Taxable Income
<u> </u>	(1)	(2)	(3)	(4)
Regulated				
Positive Regulated Companies				
1 Kokomo Gas and Fuel Company		-	-	-
2 Northern Indiana Public Service Company	86,682,322	(27,042,518)	(18,374,119)	41,265,68
3 NiSource Corporate Services Company	3,157,437	2,956,022	21,087,381	27,200,84
4 Central Kentucky Transmission Company	46,860	33,631	58,729	139,2
<li>5 Subtotal: Positive Regulated Compa</li>	es 89,886,619	(24,052,865)	2,771,991	68,605,7
6				
7 Loss Regulated Companies				
8 Columbia Gas of Ohio, Inc.	(26,148,630)	9,965,210	(66,018,630)	(82,202,0
9 Northern Indiana Fuel and Light Company, I				
10 Columbia Gas of Kentucky, Inc.	144,816	(111,117)	(12,033,547)	(11,999,8
11 Columbia Gas of Maryland, Inc.	(4,980,590)	(2,630,044)	(4,701,007)	(12,311,6
12 Columbia Gas of Virginia, Inc.	(26,663,345)	1,262,838	(13,877,899)	(39,278,4
13 Bay State Gas Company	(15,278,640)	(3,107,284)	(42,158,281)	(60,544,2
14 Columbia Gas of Pennsylvania, Inc.	1,851,749	12,882,108	(24,798,164)	(10,064,3
15	(74.074.040)	40.004.744	(400 507 500)	(040,400,4
16 Subtotal: Loss Regulated Companie 17	(71,074,640)	18,261,711	(163,587,528)	(216,400,4
17 18 Total Regulated Companies	18.811.979	(5,791,154)	(160.815.537)	(147,794,7
19	10,011,010	(0,701,101)	(100,010,001)	(111,101,1
20				
21				
22				
23				
24	NiSource Inc and Subsidiari	es		
25	Calculation of Consolidated Tax Savings for Colum		•	
26	Modified Effective Tax Pate Method Paced on		-	

Company	2014 Taxable Income 1/	2015 Taxable Income 1/	2016 Taxable Income 1/	2014-2016 Taxable Income
Non Regulated				
Non Regulated Profitable Taxable Income Companies				
NiSource Insurance Corporation Northern Indiana Trading Company	3,123,616	8,073,063	9,537,830	20,734,
NIPSCO Accounts Receivables Corporation	3,437,640	3,033,138	2,106,266	8,577,
Columbia Gas of Ohio Receivables Corp.	1,592,736	381,098	1,193,763	3,167,
Columbia Gas of Pennsylvania Receivables Corp Subtotal: Positive Unregulated Companies	860,111 9,014,103	758,446 12,245,745	715,432 13,553,291	2,333, 34,813,
	.,,	, ,	.,,	
<u>Unregulated Loss Companies of Three Year Period</u> Eliminations (Inter-Company profit on Columbia Transmission)	(2,730,203)	8,160,489	_	5,430,
EnergyUSA Inc. (MA)	-	-	-	-,,
Indianapolis Water Company				
EnergyUSA Inc. (IN) Lake Erie Land Company	(585,654) (17,616,892)	(265,008) 720,077	(428,542) (386,767)	(1,279, (17,283,
NiSource Energy Technologies, Inc.	(730,343)	(596,913)	225,256	(1,102,
NiSource Capital Markets, Inc.	(3,455,004)	(3,680,847)	(4,578,810)	(11,714,
IWC Resources Corp. NiSource Finance Corp.	(89,748) (7,058,074)	(92,022) 9,604,457	(90,552) (10,250,156)	(272, (7,703,
NiSource Finance Corp. NiSource Development Company, Inc.	(7,058,074) (2,376,070)	9,604,457 (2,268,585)	(10,250,156) (2,387,190)	(7,703, (7,031,
Primary Energy, Inc.	(1,727,397)	(1,368,627)	(2,348,188)	(5,444,
EnergyUSA-TPC Corp.	(547,250)	(476,070)	60,842	(962,
NiSource Inc. NiSource Corporate Group	(52,697,869)	(355,245,137)	(143,375,407)	(551,318,
NGD Holding Company				
Subtotal: Loss Unregulated Companies	(89,614,504)	(345,508,186)	(163,559,514)	(598,682,
NiSou Calculation of Consolidated Modified Effective Tax f	rce Inc and Subsidiarie Tax Savings for Colum Rate Method Based on 1 2014 Taxable	bia Gas of Pennsylvania	2016 Taxable	2014-2016 Taxable
NiSou Calculation of Consolidated Modified Effective Tax f Company	Tax Savings for Columi Rate Method Based on 7 2014	bia Gas of Pennsylvania Three Year Average 2015	2016	
NiSou  Calculation of Consolidated Modified Effective Tax i  Company  NiSource Inc. Interest on Columbia Stock Purchase Allocated Under SEC Orc.	Tax Savings for Columi Rate Method Based on T 2014 Taxable Income 1/ (177,344,944)	bia Gas of Pennsylvania Three Year Average 2015 Taxable	2016 Taxable Income 1/ (23,440,522)	Taxable Income (200,785,
NiSource Inc. Interest on Columbia Stock Purchase Allocated Under SEC Or Subtotal: Interest on Columbia Stock Purchase	Tax Savings for Columi Rate Method Based on 1 2014 Taxable Income 1/	bia Gas of Pennsylvania Three Year Average 2015 Taxable	2016 Taxable Income 1/	Taxable Income (200,785,
NiSour Calculation of Consolidated Modified Effective Tax is Company  NiSource Inc. Interest on Columbia Stock Purchase Allocated Under SEC Orc. Subtotal: Interest on Columbia Stock Purchase  Other Companies Sold or In Process of Being Sold/or Inactive	Tax Savings for Columi Rate Method Based on 1 2014 Taxable Income 1/ (177,344,944) (177,344,944)	bia Gas of Pennsylvania Three Year Average 2015 Taxable Income 1/	2016 Taxable Income 1/ (23,440,522) (23,440,522)	Taxable Income (200,785, (200,785,
NiSource Inc. Interest on Columbia Stock Purchase Allocated Under SEC Orc.  Subtotal: Interest on Columbia Stock Purchase Allocated Under SEC Orc.  Subtotal: Interest on Columbia Stock Purchase  Other Companies Sold or In	Tax Savings for Columi Rate Method Based on T 2014 Taxable Income 1/ (177,344,944)	bia Gas of Pennsylvania Three Year Average 2015 Taxable	2016 Taxable Income 1/ (23,440,522)	Taxable Income (200,785, (200,785,
NiSour Calculation of Consolidated Modified Effective Tax is Company  NiSource Inc. Interest on Columbia Stock Purchase Allocated Under SEC Orc. Subtotal: Interest on Columbia Stock Purchase  Other Companies Sold or In Process of Being Sold/or Inactive	Tax Savings for Columi Rate Method Based on 1 2014 Taxable Income 1/ (177,344,944) (407,489)	bia Gas of Pennsylvania Three Year Average 2015 Taxable Income 1/	2016 Taxable Income 1/ (23,440,522) (23,440,522)	Taxable Income (200,785, (200,785, 2,892,
NiSour Calculation of Consolidated Modified Effective Tax I Company  NiSource Inc. Interest on Columbia Stock Purchase Allocated Under SEC Orc Subtotal: Interest on Columbia Stock Purchase Allocated Under SEC Orc  Other Companies Sold or In Process of Being Sold/or Inactive NDC Douglas Properties, Inc.  Columbia Energy Services Corporation Service Protection Group LLC NiSource Retail Services, Inc.	Tax Savings for Columl 2014 Taxable Income 1/ (177,344,944) (177,344,944) (407,489) - 1,780,747	bia Gas of Pennsylvania Three Year Average 2015 Taxable Income 1/	2016 Taxable Income 1/ (23,440,522) (23,440,522)	Taxable Income (200,785, (200,785, 2,892, 2,221,
NiSource Inc. Interest on Columbia Stock Purchase Allocated Under SEC Orc.  Subtotal: Interest on Columbia Stock Purchase Allocated Under SEC Orc.  Subtotal: Interest on Columbia Stock Purchase  Other Companies Sold or In Process of Beina Sold/or Inactive  NDC Douglas Properties, Inc.  Columbia Energy Services Corporation  Service Protection Group LLC  NiSource Retail Services, Inc.  Crossroads Pipeline Company	Tax Savings for Column Rate Method Based on 1 2014 Taxable Income 1/ (177,344,944) (407,489) (407,489) 1,780,747 748,087	bia Gas of Pennsylvania Three Year Average 2015 Taxable Income 1/	2016 Taxable Income 1/ (23,440,522) (23,440,522)	Taxable Income (200,785, (200,785, 2,892, 2,221, 748,
NiSour Calculation of Consolidated Modified Effective Tax I Company  NiSource Inc. Interest on Columbia Stock Purchase Allocated Under SEC Orc Subtotal: Interest on Columbia Stock Purchase Allocated Under SEC Orc  Other Companies Sold or In Process of Being Sold/or Inactive NDC Douglas Properties, Inc.  Columbia Energy Services Corporation Service Protection Group LLC NiSource Retail Services, Inc.	Tax Savings for Column Rate Method Based on 1 2014 Taxable Income 1/ (177,344,944) (407,489) (407,489) 1,780,747 749,087 43,224,658 2,226,517	bia Gas of Pennsylvania Three Year Average 2015 Taxable Income 1/	2016 Taxable Income 1/ (23,440,522) (23,440,522)	Taxable Income (200,785, (200,785, 2,892, 2,221, 748, 43,234,
NiSource Inc. Interest on Columbia Stock Purchase Allocated Under SEC Orc. Subtotal: Interest on Columbia Stock Purchase Allocated Under SEC Orc. Subtotal: Interest on Columbia Stock Purchase Other Companies Sold or Inrocess of Being Sold/or Inactive NDC Douglas Properties, Inc. Columbia Energy Services Corporation Service Protection Group LL C NiSource Retail Services, Inc. Crossroads Pipeline Company Columbia Energy Group Columbia Hardy Corp. Columbia Energy Group	Tax Savings for Columi Rate Method Based on 1 2014 Taxable Income 1/ (177,344,944) (407,489) - 1,780,74 748,087 43,224,658 2,226,517 (6,692,937)	bia Gas of Pennsylvania Three Year Average 2015 Taxable Income 1/	2016 Taxable Income 1/ (23,440,522) (23,440,522)	Taxable Income (200,785, (200,785, 2.892, 2.221, 748, 43,234, 2.226, (155,650, (155,650, 200,785))
NiSource Inc. Interest on Columbia Stock Purchase Allocated Under SEC Orc.  Subtotal: Interest on Columbia Stock Purchase Allocated Under SEC Orc.  Subtotal: Interest on Columbia Stock Purchase  Other Companies Sold or In Process of Being Sold/or Inactive  NIDC Douglas Properties, Inc.  Columbia Energy Services Corporation  Service Protection Group LLC  NiSource Retail Services, Inc.  Crossroads Pipeline Company  Columbia Gulf Transmission Company  Columbia Hardy Corp.  Columbia Energy Group  CNS Microwave, Inc.	Tax Savings for Column Rate Method Based on 1 2014 Taxable Income 1/ (177,344,944) (407,489) - - 1,780,747 748,087 43,224,658 2,226,517 (6,692,837) 946,658	bia Gas of Pennsylvania Three Year Average 2015 Taxable Income 1/  3,385,008 133,982	2016 Taxable Income 1/ (23,440,522) (23,440,522)	(200,785, (200,785, 2,892, 2,221, 748, 43,234, 2,226, (155,569, 946, 946,
NISour Calculation of Consolidated Modified Effective Tax is Company  NiSource Inc. Interest on Columbia Stock Purchase Allocated Under SEC Orc. Subtotal: Interest on Columbia Stock Purchase  Other Companies Sold or In Process of Being Sold/or Inactive NDC Douglas Properties, Inc. Columbia Energy Services Corporation Service Protection Group LLC NiSource Retail Services, Inc. Crossroads Pipeline Company Columbia Gulf Transmission Company Columbia Hardy Corp. Columbia Energy Group CNS Microwave, Inc. Columbia Remainder Corporation	Tax Savings for Columi Rate Method Based on 1 2014 Taxable Income 1/ (177,344,944) (407,489) - - 1,780,747 748,087 43,234,658 2,225,517 (6,692,837) 946,658 (275,876)	bia Gas of Pennsylvania Three Year Average  2015 Taxable Income 1/  3,385,008	2016 Taxable Income 1/ (23,440,522) (23,440,522) (85,085) - - - 306,579 - - -	Taxable Income (200,785, (
NiSource Inc. Interest on Columbia Stock Purchase Allocated Under SEC Orc. Subtotal: Interest on Columbia Stock Purchase Allocated Under SEC Orc. Subtotal: Interest on Columbia Stock Purchase Other Companies Sold or In Process of Being Sold/or Inactive NDC Douglas Properties, Inc. Columbia Energy Services Corporation Service Protection Group LLC NiSource Retail Services, Inc. Crossroads Pipeline Company Columbia Gulf Transmission Company Columbia Hardy Corp. Columbia Hardy Corp. Columbia Energy Group CNS Microwave, Inc. Columbia Remainder Corporation Subtotal: Unregulated Companies Sold or In Process of Being Sold/o	Tax Savings for Column Rate Method Based on 1 2014 Taxable Income 1/ (177,344,944) (407,489) - 1,780,747 748,087 43,234,658 2,225,517 (6,692,837) 946,658 (275,876)	bia Gas of Pennsylvania Three Year Average 2015 Taxable Income 1/  3,385,008 133,982 - (148,957,804) - (145,438,614)	2016 Taxable Income 1/ (23,440,522) (23,440,522) (85,085) - - - - - - - - - - - - - - - - - - -	Taxable Income (200,785, (
NISour Calculation of Consolidated Modified Effective Tax is Company  NiSource Inc. Interest on Columbia Stock Purchase Allocated Under SEC Orc. Subtotal: Interest on Columbia Stock Purchase Allocated Under SEC Orc. Subtotal: Interest on Columbia Stock Purchase  Other Companies Sold or In Process of Beina Sold/or Inactive  NDC Douglas Properties, Inc. Columbia Energy Services Corporation Service Protection Group LLC NISource Retail Services, Inc. Crossroads Pipeline Company Columbia Gulf Transmission Company Columbia Gulf Transmission Company Columbia Energy Group CNS Microwave, Inc. Columbia Remainder Corporation Subtotal: Unregulated Companies Sold or In Process of Being Sold/o Total Consolidated Taxable Income	Tax Savings for Columi Rate Method Based on 1 2014 Taxable Income 1/ (177,344,944) (407,489) - - 1,780,747 748,087 43,234,658 2,225,517 (6,692,837) 946,658 (275,876)	bia Gas of Pennsylvania Three Year Average  2015 Taxable Income 1/  3,385,008	2016 Taxable Income 1/ (23,440,522) (23,440,522) (85,085) - - - 306,579 - - -	Taxable
NiSource Inc. Interest on Columbia Stock Purchase Allocated Under SEC Orc. Subtotal: Interest on Columbia Stock Purchase Allocated Under SEC Orc. Subtotal: Interest on Columbia Stock Purchase Other Companies Sold or In Process of Being Sold/or Inactive NDC Douglas Properties, Inc. Columbia Energy Services Corporation Service Protection Group LLC NiSource Retail Services, Inc. Crossroads Pipeline Company Columbia Gulf Transmission Company Columbia Energy Group CNS Microwave, Inc. Columbia Remainder Corporation Subtotal: Unregulated Companies Sold or In Process of Being Sold/o Total Consolidated Taxable Income  1/ Separate Return amount includes non-deductible Charitable Contributions as a 2/ Company in process of being sold. An investment in real estate for benefit of its 3/ Company sold in 2013 4/ Company no longer part of the consolidated group pursuant to a spin off in 201	Tax Savings for Column Rate Method Based on 1 2014 Taxable Income 1/ (177,344,944) (407,489) - - 1,780,747 748,087 43,224,658 2,226,517 (6,692,837) (6,692,837) 946,658 (275,876) 41,560,465	bia Gas of Pennsylvania Three Year Average 2015 Taxable Income 1/  3,385,008 (148,957,604) (145,438,614) (484,492,209)  let Operating Loss S	2016 Taxable Income 1/ (23,440,522) (23,440,522) (85,085) - - 306,579 - - - - - - - - - - - - - - - - - - -	Taxable Income (200,785, (
NiSource Inc. Interest on Columbia Stock Purchase Allocated Under SEC Orc. Subtotal: Interest on Columbia Stock Purchase Allocated Under SEC Orc. Subtotal: Interest on Columbia Stock Purchase  Other Companies Sold or In Process of Being Sold/or Inactive NDC Douglas Properties, Inc. Columbia Energy Services Corporation Service Protection Group LLC NiSource Retail Services, Inc. Crossroads Pipeline Company Columbia Hardy Corp. Columbia Hardy Corp. Columbia Hardy Corp. Columbia Hardy Corp. CNS Microwave, Inc. Columbia Remainder Corporation Subtotal: Unregulated Companies Sold or In Process of Being Sold/o  Total Consolidated Taxable Income  1/ Separate Return amount includes non-deductible Charitable Contributions as a 2/ Company in process of being sold. An investment in real estate for benefit of Ic 3/ Company nol onger part of the consolidated group pursuant to a spin off in 20/	Tax Savings for Columi Rate Method Based on 1 2014 Taxable Income 1/ (177,344,944) (407,489) 	bia Gas of Pennsylvania Three Year Average 2015 Taxable Income 1/  3,385,008 133,982 - (148,957,604) - (145,438,614) (484,492,209) let Operating Loss	2016 Taxable Income 1/ (23,440,522) (23,440,522) (85,085) - - - - - - - - - - - - - - - - - - -	Taxable Income (200,785, (
NiSource Inc. Interest on Columbia Stock Purchase Allocated Under SEC Orc. Subtotal: Interest on Columbia Stock Purchase Allocated Under SEC Orc. Subtotal: Interest on Columbia Stock Purchase Other Companies Sold or In Process of Being Sold/or Inactive NDC Douglas Properties, Inc. Columbia Energy Services Corporation Service Protection Group LLC NiSource Retail Services, Inc. Crossroads Pipeline Company Columbia Gulf Transmission Company Columbia Energy Group CNS Microwave, Inc. Columbia Energy Group CNS Microwave, Inc. Columbia Remainder Corporation Subtotal: Unregulated Companies Sold or In Process of Being Sold/o Total Consolidated Taxable Income  1/ Separate Return amount includes non-deductible Charitable Contributions as a 2/ Company in process of being sold. An investment in real estate for benefit of its 3/ Company not longer part of the consolidated group pursuant to a spin off in 201 Consolidated Income Companies Taxable Income	Tax Savings for Column 2014 Taxable Income 1/  (177,344,944)  (177,344,944)  (407,489)  -  1,780,747 748,087 748,087 43,234,658 2,226,517 (6,692,837) 946,658 (275,876)  41,560,465  -  11,780,745 -  11,780,747 -  11,780,747 -  11,780,747 -  11,780,747 -  11,780,747 -  11,780,747 -  11,780,747 -  11,780,747 -  11,780,465 -	bia Gas of Pennsylvania Three Year Average 2015 Taxable Income 1/  3,385,008 133,982 (148,957,604) (145,438,614) (484,492,209) let Operating Loss s	2016 Taxable Income 1/  (23,440,522) (23,440,522)  (85,085)	Taxable Income (200,785, (

# NiSource Inc and Subsidiaries Calculation of Consolidated Tax Savings for Columbia Gas of Pennsylvania Modified Effective Tax Rate Method Based on Three Year Average

35						
36 37		2014 Taxable	2015 Taxable	2016 Taxable	2014-2016 Taxable	
68	Company	Income 1/	Income 1/	Income 1/	Income	
69						
	nc. Interest on Columbia Stock Purchase Allocated Under SEC Orc	(177,344,944)	-	(23,440,522)	(200,785,466)	
71 Subtota	al: Interest on Columbia Stock Purchase	(177,344,944)	-	(23,440,522)	(200,785,466)	
72						
73 Other Co.	mpanies Sold or In Process of Being Sold/or Inactive					
74 NDC Doug	glas Properties, Inc.	(407,489)	3,385,008	(85,085)	2,892,434	2/
	Energy Services Corporation	-	-	-	-	3/
76 Service Pr	otection Group LLC		-	-	-	4/
	Retail Services, Inc.	1,780,747	133,982	306,579	2,221,308	
78 Crossroad	ls Pipeline Company	748,087	-	-	748,087	
79 Columbia	Gulf Transmission Company	43,234,658	-	-	43,234,658	4/
30 Columbia		2,226,517	-	-	2,226,517	4/
31 Columbia	Energy Group	(6,692,837)	(148,957,604)	-	(155,650,441)	
32 CNS Micro		946,658	-	-	946,658	4/
33 Columbia	Remainder Corporation	(275,876)	-	-	(275,876)	4/
34						
35 Sı	ubtotal: Unregulated Companies Sold or In Process of Being Sold/o	41,560,465	(145,438,614)	221,494	(103,656,655)	
36	<u></u>					
37 Total Cons	solidated Taxable Income	(197,572,901)	(484,492,209)	(334,040,788)	(1,016,105,898)	
38					<u> </u>	

4 Consolidated Income Companies Taxable Income	149,833,954	61,349,567	35,292,078
5 Consolidated Loss Companies Taxable Loss	(347,406,855)	(545,841,776)	(369, 332, 866)
6			
7	(197,572,901)	(484,492,209)	(334,040,788)

#### NiSource Inc and Subsidiaries Calculation of Consolidated Tax Savings for Columbia Gas of Pennsylvania Modified Effective Tax Rate Method Based on Three Year Average

1 Kokor 2 NiSou 2 NiSo	Modified Effe  Company  Non Regulated Regulated Profitable Taxable Income Companies  Irce Insurance Corporation ern Indiana Trading Company urce Energy Technologies, Inc. Inbia Gas of Pennsylvania Receivables Corp Subtotal: Positive Unregulated Companies  qualited Loss Companies of Three Year Period qualited Loss Company profit on Columbia Transmission) Inc. (IMA) Impolis Water Company Inc. (INA) Irie Land Company Irie Capital Markets, Inc. Irice Girategic Sourcing Inc. Irice Finance Corp.	(1)  23,736,899 25,016,097 65,358,338 81,953 107,552,351 8,359,652 92,747,604 322,852,894  (363,671,957)  (363,671,957)  (40,819,063)  NiSource Inc and Subsidiarie nsolidated Tax Savings for Columbetive Tax Rate Method Based on 12018 Taxable Income 1/  7,640,365 -2,385,438 526,397 10,552,200	bia Gas of Pennsylvania	11,850,181 3,470,543 18,234,496 333,283 42,776,846 5,484,694 52,614,675 134,764,718  221,797,962  221,797,962  356,562,680  2020 Taxable Income 1/ 10,452,710 148,559 592,395 11,193,664	(4)  51,295,648 34,322,356 98,137,552 495,982 242,534,627 20,527,048 195,745,030 643,056,243  (104,564,710  538,493,533  2018-2020 Taxable Income  31,387,752 2,496,044 1,517,665 35,401,461
1 Kokor 2 NiSou 2 NiSo	mo Gas and Fuel Company irree Corporate Services Company hibia Gas of Kentucky, Inc. hibia Gas of Kirginia, Inc. al Kentucky Transmission Company hibia Gas of Maryland, Inc. hibia Gas of Maryland, Inc. Subtotal: Positive Regulated Companies  Regulated Companies em Indiana Fuel and Light Company, Inc. em Indiana Public Service Company  Subtotal: Loss Regulated Companies  Regulated Companies  Calculation of Company  Non Regulated Companies  Regulated Profitable Taxable Income Companies  rice Insurance Corporation em Indiana Trading Company irree Energy Technologies, Inc. hibia Gas of Pensylvania Receivables Corp Subtotal: Positive Unregulated Companies  rucal Insurance Companies of Three Year Period hations (Inter-Company profit on Columbia Transmission) hyUSA Inc. (IMA) lapolis Water Company Ince Capital Markets, Inc. Irree Granted Markets, Inc. Irree Finance Corp.	25,016,097 65,388,338 81,953 107,552,351 8,359,652 92,747,604 322,852,894  (363,671,957)  (363,671,957)  (40,819,063)  NiSource Inc and Subsidiarie solidated Tax Savings for Columictive Tax Rate Method Based on 2018 12018	5,835,716 14,544,718 80,746 92,205,430 6,882,702 50,382,761 185,440,631 - 37,309,285 - 37,309,285 - 222,749,916 - 2019 Taxable Income 1/ 13,294,677 - (37,953) 398,873	3,470,543 18,224,496 333,283 42,776,846 5,484,694 52,614,675 134,764,718  221,797,962  221,797,962  356,562,680  2020 Taxable Income 1/  10,452,710 148,559 592,395	34,322,365 98,137,552 495,982 242,534,627 20,527,048 195,745,030 643,059,243 (104,564,710 538,493,533  2018-2020 Taxable Income  31,387,752 2,496,044 1,517,665
3 Colum 6 Column 7 Co	nbia Gas of Kentucky, Inc. nbia Gas of Virginia, Inc. al Kentucky Transmission Company nbia Gas of Originia, Inc. nbia Gas of Amayland, Inc. nbia Gas of Pennsylvania, Inc. Subtotal: Positive Regulated Companies  Regulated Companies em Indiana Fuel and Light Company, Inc. em Indiana Public Service Company  Subtotal: Loss Regulated Companies  Regulated Companies  Calculation of Com Modified Effe  Company  Non Regulated Companies  Regulated Profitable Taxable Income Companies  rice Insurance Corporation em Indiana Trading Company  rice Energy Technologies, Inc. hobia Gas of Pennsylvania Receivables Corp Subtotal: Positive Unregulated Companies  rudated Loss Companies of Three Year Period nations (Inter-Company profit on Columbia Transmission) nyUSA Inc. (MA) lapolis Water Company  yUSA Inc. (IN) Fire Land Company Fire Capital Markets, Inc. rice Strategic Sourcing Inc. rice Finance Corp.	25,016,097 65,388,338 81,953 107,552,351 8,359,652 92,747,604 322,852,894  (363,671,957)  (363,671,957)  (40,819,063)  NiSource Inc and Subsidiarie solidated Tax Savings for Columictive Tax Rate Method Based on 2018 12018	5,835,716 14,544,718 80,746 92,205,430 6,882,702 50,382,761 185,440,631 - 37,309,285 - 37,309,285 - 222,749,916 - 2019 Taxable Income 1/ 13,294,677 - (37,953) 398,873	3,470,543 18,224,496 333,283 42,776,846 5,484,694 52,614,675 134,764,718  221,797,962  221,797,962  356,562,680  2020 Taxable Income 1/  10,452,710 148,559 592,395	34,322,365 98,137,552 495,982 242,534,627 20,527,048 195,745,030 643,059,243 (104,564,710 538,493,533  2018-2020 Taxable Income  31,387,752 2,496,044 1,517,665
4 Columber 1 Columber 2 Columber	nbia Gas of Virginia, Inc. al Kentucky Transmission Company nbia Gas of Amayland, Inc. nbia Gas of Pennsylvania, Inc. Subtotal: Positive Regulated Companies Regulated Companies Per Indiana Public Service Company, Inc. em Indiana Public Service Company Subtotal: Loss Regulated Companies Regulated Companies  Calculation of Company Subtotal: Loss Regulated Companies Regulated Companies  Company Non Regulated Regulated Profitable Taxable Income Companies Ince Insurance Corporation em Indiana Trading Company Ince Energy Technologies, Inc. nbia Gas of Pennsylvania Receivables Corp Subtotal: Positive Unregulated Companies Indiano Indiano (Inter-Company profit on Columbia Transmission) Indiano Inter-Company profit on Columbia Transmission) Ingolis Water Company WIJSA Inc. (INI) Ene Land Company Inc. Ince Capital Markets, Inc. Ince Firance Corp.	65,358,338 81,953 107,552,351 8,359,652 92,747,604 322,852,894  (363,671,957)  (363,671,957)  (40,819,063)  NiSource Inc and Subsidiarie nsolidated Tax Savings for Columbetive Tax Rate Method Based on 2018 Taxable Income 1/  7,640,365 -2,385,438 -526,397 10,552,200	14,544,718 80,746 92,205,430 6,682,702 50,382,751 185,440,631 37,309,285 222,749,916 222,749,916 222,749,916 23,309,285 24,749,916 25,749,916 26,777 27,379,539 398,873 13,655,597	18,234,496 333,283 42,776,846 5,484,694 52,614,675 134,764,718  221,797,962  221,797,962  356,562,680  2020 Taxable Income 1/  10,452,710 148,559 592,395	98,137,552 495,982 242,534,627 20,527,048 195,745,030 643,059,243 (104,564,710 538,493,533  2018-2020 Taxable Income  31,387,752 2,496,044 1,517,665
6 Columber 1 Columber 2 Columber	nbia Gas of Chio, Inc. nbia Gas of Maryland, Inc. nbia Gas of Pennsylvania, Inc. subtotal: Positive Regulated Companies  Regulated Companies em Indiana Fuel and Light Company, Inc. em Indiana Fuel and Light Company  Subtotal: Loss Regulated Companies  Regulated Companies  Calculation of Company  Non Regulated Companies  Regulated Profitable Taxable Income Companies  rice Insurance Corporation em Indiana Trading Company urce Energy Technologies, Inc. habia Gas of Pennsylvania Receivables Corp Subtotal: Positive Unregulated Companies  suulated Loss Companies of Three Year Period nations (Inter-Company profit on Columbia Transmission) nytUSA Inc. (IM) Inpolis Water Company Ince Capital Markets, Inc. Irree Capital Markets, Inc. Irree Finance Corp.	107,552,351 8,359,652 92,747,604 322,852,894  (363,671,957)  (363,671,957)  (40,819,063)  NiSource Inc and Subsidiarie nsolidated Tax Savings for Colum ctive Tax Rate Method Based on 2018 Taxable Income 1/  7,640,365 2,385,438 526,397 10,552,200	92,205,40,682,702 60,382,751 185,440,831 37,309,285 37,309,285 222,749,916 222,749,916 2019 Taxable Income 1/ 13,294,677 (37,953) 398,873 13,655,597	42,776,846 5,484,694 52,614,675 134,764,718  221,797,962  221,797,962  356,562,680  2020 Taxable Income 1/  10,452,710 148,559 592,395	242,534,627,20,527,048 195,745,030 643,059,243 (104,564,710 (104,564,710 538,493,533  2018-2020 Taxable Income  31,387,752 2,496,044 1,517,665
7 Columber 9	nbia Gas of Maryland, Inc. hibia Gas of Pennsylvania, Inc. Subtotal: Positive Regulated Companies  Regulated Companies ern Indiana Fuel and Light Company, Inc. ern Indiana Fuel and Light Company  Subtotal: Loss Regulated Companies  Regulated Companies  Calculation of Common Modified Effect  Company  Non Regulated Regulated Profitable Taxable Income Companies  rore Insurance Corporation ern Indiana Trading Company urce Energy Technologies, Inc. hibia Gas of Pennsylvania Receivables Corp Subtotal: Positive Unregulated Companies  qualted Loss Companies of Three Year Period haitons (Inter-Company profit on Columbia Transmission) ptyUSA Inc. (MA) happolis Water Company ptyUSA Inc. (IN) Fire Land Company ptyUSA Inc. (IN) Fire Land Company ptyUSA Inc. (IN) Fire Land Company ptySA Inc. (IN) Fire Land Company ptySA Inc. (IN) Fire Land Company ptySA Inc. (Ins)	8,339,652 92,747,664 322,652,894 (363,671,957) (363,671,957) (40,819,063) NiSource Inc and Subsidiarie solidated Tax Savings for Colum sctive Tax Rate Method Based on ' 2018 Taxable Income 1/ 7,640,365 2,385,438 256,397 10,552,200	6.682,702 50.382,751 185,440,631 185,440,631 37,309,285 37,309,285 222,749,916 222,749,916 222,749,916 221,749,916 221,749,916 222,749,916 231,749,916 241,749,919 38,873 39,873 13,655,597	5,484,694 52,614,675 134,764,718  221,797,962  221,797,962  356,562,680  2020 Taxable Income 1/  10,452,710 148,559 592,395	20,527,048 195,745,030 643,058,243 - (104,564,710 538,493,533  2018-2020 Taxable Income  31,387,752 - 2,496,044 1,517,665
9 111 Loss 12 North 13 North 14 15 North 14 15 North 14 15 North 14 15 North 15 North 16 Nort	Subtotal: Positive Regulated Companies  **Regulated Companies**  **Regulated Companies**  **Ern Indiana Fuel and Light Company, Inc.  **Ern Indiana Fuel and Light Company, Inc.  **Ern Indiana Fuel and Light Company  Subtotal: Loss Regulated Companies  Regulated Companies  **Calculation of Commonies**  **Company**  **Non Regulated Regulated Profitable Taxable Income Companies**  **Irror Indiana Trading Company**  **Irror Indiana Trading Company**  **Irror Indiana Trading Company**  **Irror Indiana Trading Companies**  **Irror Indiana Trading Companies**  **Irror Indiana Trading Companies**  **Irror Indiana Trading Companies**  **Irror Indiana Transmission)  **Irror Indiana T	322,852,894  (363,671,957)  (363,671,957)  (40,819,063)  NiSource Inc and Subsidiarie nsolidated Tax Savings for Colum ctrive Tax Rate Method Based on Taxable Income 1/  7,640,365 - 2,385,438 - 526,397 - 10,552,200	185,440,631  37,309,285  37,309,285  222,749,916  222,749,916  2019  Taxable Income 1/  13,294,677  (37,953) 398,673  13,655,597	134,764,718  221,797,962  221,797,962  356,562,680  2020 Taxable Income 1/  10,452,710  148,559 592,395	643,058,243 (104,564,710 (104,564,710 538,493,533 2018-2020 Taxable Income 31,387,752 2,496,044 1,517,665
10 10 11 10 11 10 11 10 11 10 11 11 10 11 11	Regulated Companies ern Indiana Fuel and Light Company, Inc. ern Indiana Public Service Company  Subtotal: Loss Regulated Companies  Regulated Companies  Calculation of Company  Non Regulated  Regulated Profitable Taxable Income Companies irce Insurance Corporation ern Indiana Trading Company irce Energy Technologies, Inc. habia Gas of Pennsylvania Receivables Corp Subtotal: Positive Unregulated Companies  suulated Loss Companies of Three Year Period hations (Inter-Company profit on Columbia Transmission) hyUSA Inc. (IMA) hapolis Water Company hyUSA Inc. (INI) Erte Land Company Inc. Inc. Inc. Inc. Inc. Inc. Inc. Inc.	(363,671,957)  (363,671,957)  (40,819,063)  NiSource Inc and Subsidiarie nsolidated Tax Savings for Columctive Tax Rate Method Based on 2018  Taxable Income 1/  7,640,365  2,385,438  526,397  10,552,200	37,309,285  37,309,285  222,749,916  222,749,916  23 Gas of Pennsylvania Three Year Average  2019  Taxable Income 1/  13,294,677  (37,953)  398,873  13,655,597	221,797,962 221,797,962 356,562,680  2020 Taxable Income 1/  10,452,710 148,559 592,395	(104,564,710 (104,564,710 538,493,533 2018-2020 Taxable Income 31,387,752 2,496,044 1,517,665
12 North 14	em Indiana Fuel and Light Company, Inc. em Indiana Public Service Company  Subtotal: Loss Regulated Companies  Regulated Companies  Calculation of Common Modified Effe  Company  Non Regulated  Regulated Profitable Taxable Income Companies  rice Insurance Corporation em Indiana Trading Company  rice Energy Technologies, Inc. hibitalia Service Insurance Companies  rice Insurance Corporation em Indiana Trading Company  rice Energy Technologies, Inc. hibitalia Service Modified Companies  rice Insurance Company profit on Columbia Transmission)  pyUSA Inc. (MA) hapolis Water Company  pyUSA Inc. (IN)  Effe Land Company  pyUSA Inc. (IN)  Effe Land Company  pyUSA Inc. (IN)  Effe Land Company  pyUSA Inc. (Ins)  Effect Land Company  pyUSA Inc. (Ins)	(363,671,957)  (40,819,063)  NiSource Inc and Subsidiarie nsolidated Tax Savings for Columictive Tax Rate Method Based on 2018 Taxable Income 1/  7,640,365 2,335,438 256,397 10,552,200	37,309,285  222,749,916  28  bia Gas of Pennsylvania Three Year Average  2019 Taxable Income 1/  13,294,677 - (37,953) 398,873 13,655,597	221,797,962 356,562,680 2020 Taxable Income 1/ 10,452,710 148,559 592,395	(104,564,710 538,493,533 2018-2020 Taxable Income 31,387,752 2,496,044 1,517,665
141 15 16 17 17 18 Total 19 19 19 19 19 19 19 19 19 19 19 19 19	Subtotal: Loss Regulated Companies  Regulated Companies  Calculation of Common	(363,671,957)  (40,819,063)  NiSource Inc and Subsidiarie nsolidated Tax Savings for Columictive Tax Rate Method Based on 2018 Taxable Income 1/  7,640,365 2,335,438 256,397 10,552,200	37,309,285  222,749,916  28  bia Gas of Pennsylvania Three Year Average  2019 Taxable Income 1/  13,294,677 - (37,953) 398,873 13,655,597	221,797,962 356,562,680 2020 Taxable Income 1/ 10,452,710 148,559 592,395	(104,564,710 538,493,533 2018-2020 Taxable Income 31,387,752 2,496,044 1,517,665
16 17 7 18 Total 19 19 19 19 19 19 19 19 19 19 19 19 19	Regulated Companies  Calculation of Commodified Effe  Company  Non Regulated Regulated Profitable Taxable Income Companies urce Insurance Corporation ern Indiana Trading Company urce Energy Technologies, Inc. Inchia Gas of Pennsylvania Receivables Corp Subtotal: Positive Unregulated Companies  quality Company profit on Columbia Transmission) ptySA Inc. (IM) Ene Land Company ptySA Inc. (IM) Ene Land Company ptyCSA Inc. (IN) Energy Inc. Energy In	NiSource Inc and Subsidiarie nsolidated Tax Savings for Colum ctive Tax Rate Method Based on  2018 Taxable Income 1/  7,640,365 - 2,385,438 526,397 10,552,200	222,749,916  bia Gas of Pennsylvania Three Year Average  2019 Taxable Income 1/  13,294,677  (37,953) 398,873 13,655,597	2020 Taxable Income 1/ 10,452,710 148,559 592,395	2018-2020 Taxable Income 31,387,752 2,496,044 1,517,665
18 Total 18 Total 19 12 12 12 12 12 12 12 12 12 12 12 12 12	Calculation of Commodified Effe  Company  Non Regulated Regulated Profitable Taxable Income Companies urce Insurance Corporation ern Indiana Trading Company urce Energy Technologies, Inc. habia Gas of Pennsylvania Receivables Corp Subtotal: Positive Unregulated Companies gulated Loss Companies of Three Year Period tations (inter-Company profit on Columbia Transmission) yUSA Inc. (IM) pupolis Water Company yUSA Inc. (IM) Effe Land Company Tree Capital Markets, Inc. urce Strategic Sourcing Inc. urce Finance Corp.	NiSource Inc and Subsidiarie nsolidated Tax Savings for Colum ctive Tax Rate Method Based on  2018 Taxable Income 1/  7,640,365 - 2,385,438 526,397 10,552,200	222,749,916  bia Gas of Pennsylvania Three Year Average  2019 Taxable Income 1/  13,294,677  (37,953) 398,873 13,655,597	2020 Taxable Income 1/ 10,452,710 148,559 592,395	2018-2020 Taxable Income 31,387,752 2,496,044 1,517,666
19   19   19   19   19   19   19   19	Calculation of Commodified Effe  Company  Non Regulated Regulated Profitable Taxable Income Companies urce Insurance Corporation ern Indiana Trading Company urce Energy Technologies, Inc. habia Gas of Pennsylvania Receivables Corp Subtotal: Positive Unregulated Companies gulated Loss Companies of Three Year Period tations (inter-Company profit on Columbia Transmission) yUSA Inc. (IM) pupolis Water Company yUSA Inc. (IM) Effe Land Company Tree Capital Markets, Inc. urce Strategic Sourcing Inc. urce Finance Corp.	NiSource Inc and Subsidiarie nsolidated Tax Savings for Colum ctive Tax Rate Method Based on  2018 Taxable Income 1/  7,640,365 - 2,385,438 - 526,397 - 10,552,200	bia Gas of Pennsylvania Three Year Average 2019 Taxable Income 1/  13,294,677 (37,953) 398,873 13,655,597	2020 Taxable Income 1/ 10.452,710 148,559 592,395	2018-2020 Taxable Income 31,387,752 2,496,044 1,517,665
21 22 22 22 22 23 24 24 24 24 25 25 26 26 27 28 29 29 30 31 31 33 34 MISOL MARIE 1 2 1 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Modified Effe  Company  Non Regulated Regulated Profitable Taxable Income Companies  Irce Insurance Corporation ern Indiana Trading Company urce Energy Technologies, Inc. Inbia Gas of Pennsylvania Receivables Corp Subtotal: Positive Unregulated Companies  qualited Loss Companies of Three Year Period qualited Loss Company profit on Columbia Transmission) Inc. (IMA) Impolis Water Company Inc. (INA) Irie Land Company Irie Capital Markets, Inc. Irice Girategic Sourcing Inc. Irice Finance Corp.	xedidated Tax Savings for Columicitive Tax Rate Method Based on 1 2018 Taxable Income 1/  7,640,365 2,385,438 256,397 10,552,200	bia Gas of Pennsylvania Three Year Average 2019 Taxable Income 1/  13,294,677 (37,953) 398,873 13,655,597	2020 Taxable Income 1/ 10.452,710 148,559 592,395	Taxable Income 31,387,752 2,496,044 1,517,665
23	Modified Effe  Company  Non Regulated Regulated Profitable Taxable Income Companies  Irce Insurance Corporation ern Indiana Trading Company urce Energy Technologies, Inc. Inbia Gas of Pennsylvania Receivables Corp Subtotal: Positive Unregulated Companies  qualited Loss Companies of Three Year Period qualited Loss Company profit on Columbia Transmission) Inc. (IMA) Impolis Water Company Inc. (INA) Irie Land Company Irie Capital Markets, Inc. Irice Girategic Sourcing Inc. Irice Finance Corp.	xedidated Tax Savings for Columicitive Tax Rate Method Based on 1 2018 Taxable Income 1/  7,640,365 2,385,438 256,397 10,552,200	bia Gas of Pennsylvania Three Year Average 2019 Taxable Income 1/  13,294,677 (37,953) 398,873 13,655,597	2020 Taxable Income 1/ 10.452,710 148,559 592,395	Taxable Income 31,387,752 2,496,044 1,517,665
252 262 277 288 299 300 311 322 333	Modified Effe  Company  Non Regulated Regulated Profitable Taxable Income Companies  Irce Insurance Corporation ern Indiana Trading Company urce Energy Technologies, Inc. Inbia Gas of Pennsylvania Receivables Corp Subtotal: Positive Unregulated Companies  qualited Loss Companies of Three Year Period qualited Loss Company profit on Columbia Transmission) Inc. (IMA) Impolis Water Company Inc. (INA) Irie Land Company Irie Capital Markets, Inc. Irice Girategic Sourcing Inc. Irice Finance Corp.	xedidated Tax Savings for Columicitive Tax Rate Method Based on 1 2018 Taxable Income 1/  7,640,365 2,385,438 256,397 10,552,200	bia Gas of Pennsylvania Three Year Average 2019 Taxable Income 1/  13,294,677 (37,953) 398,873 13,655,597	2020 Taxable Income 1/ 10.452,710 148,559 592,395	Taxable Income 31,387,752 2,496,044 1,517,665
28 29 33	Non Regulated Regulated Profitable Taxable Income Companies irce Insurance Corporation ern Indiana Trading Company troe Energy Technologies, Inc. biblia Gas of Pennsylvania Receivables Corp Subtotal: Positive Unregulated Companies quated Loss Companies of Three Year Period hations (Inter-Company profit on Columbia Transmission) pyUSA Inc. (MA) hapolis Water Company yUSA Inc. (IN) Fire Land Company yUSA Inc. (IN) Fire Land Company troe Capital Markets, Inc. troe Strategic Sourcing Inc. troe Finance Corp.	Taxable Income 1/  7,640,365  2,385,438  526,397  10,552,200	Taxable Income 1/  13,294,677 (37,953) 398,673 13,655,597	Taxable Income 1/  10,452,710  148,559 592,395	Taxable Income 31,387,752 2,496,044 1,517,665
30 31 32 33 Non I 34 NiSot 35 North 36 NiSot 37 Colum 37 Colum 38 39 40 Unret 41 Elimir 42 Energ 43 Indiar 44 Energ 44 NiSot 47 NiSot 48 NiSot 49 NiSot 49 NiSot 49 NiSot 50 Prima 51 Energ 51 Energ 51 Energ 51 Energ 51 NiSot	Non Regulated Regulated Profitable Taxable Income Companies irce Insurance Corporation ern Indiana Trading Company troe Energy Technologies, Inc. biblia Gas of Pennsylvania Receivables Corp Subtotal: Positive Unregulated Companies quated Loss Companies of Three Year Period hations (Inter-Company profit on Columbia Transmission) pyUSA Inc. (MA) hapolis Water Company yUSA Inc. (IN) Fire Land Company yUSA Inc. (IN) Fire Land Company troe Capital Markets, Inc. troe Strategic Sourcing Inc. troe Finance Corp.	7,640,365 - 2,385,438 526,397 10,552,200	13,294,677 - (37,953) 398,873 13,655,597	10,452,710 148,559 592,395	31,387,752 - 2,496,044 1,517,665
32 33 32 34 34 35 36 37 38 38 39 39 40 41 42 42 43 43 44 43 44 43 44 44 45 44 44 45 44 45 45 45 46 47 47 48 48 48 48 48 48 48 48 48 48 48 48 48	Regulated Profitable Taxable Income Companies urce Insurance Corporation ern Indiana Trading Company urce Energy Technologies, inc. hibia Gas of Pennsylvania Receivables Corp Subtotal: Positive Unregulated Companies qualated Loss Companies of Three Year Period hations (Inter-Company profit on Columbia Transmission) pyUSA Inc. (MA) papolis Water Company pyUSA Inc. (IN) Erie Land Company pyUSA Inc. (IN) Erie Land Company pyUSA Inc. (IN) Lore Strategic Sourcing Inc. urce Strategic Sourcing Inc. urce Finance Corp.	2,385,438 526,397 10,552,200	(37,953) 398,873 13,655,597	148,559 592,395	2,496,044 1,517,665
34 NiSou 35 North 36 NiSou 37 Colun 38 39 40 <i>Unred</i> 41 Elimir 42 Energ 43 Indiar 44 Energ 45 Lake 46 NiSou 47 NiSou 48 NiSou 48 NiSou 51 Energ 51 Energ 52 NiSou	urce Insurance Corporation ern Indiana Trading Company urce Energy Technologies, Inc. hibia Gas of Pennsylvania Receivables Corp Subtotal: Positive Unregulated Companies guidated Loss Companies of Three Year Period nations (Inter-Company profit on Columbia Transmission) yUSA Inc. (IM) pupUSA Inc. (IM) Erie Land Company yUSA Inc. (IM) Erie Land Company urce Capital Markets, Inc. urce Strategic Sourcing Inc. urce Finance Corp.	2,385,438 526,397 10,552,200	(37,953) 398,873 13,655,597	148,559 592,395	2,496,044 1,517,665
36 NiSou 37 Colum 38 39 40 Unred 41 Elimir 42 Energ 43 Indiar 44 Energ 44 NiSou 47 NiSou 48 NiSou 49 NiSou 50 Prima 51 Energ 52 Pissou	urce Energy Technologies, Inc. his das of Pernsylvaria Receivables Corp Subtotal: Positive Unregulated Companies  qualated Loss Companies of Three Year Period  nations (Inter-Company profit on Columbia Transmission)  yUSA Inc. (IM)  yUSA Inc. (IM)  yUSA Inc. (IM)  Bre Land Company  yUSA Inc. (IM)  Gree Capital Markets, Inc.  urce Gapital Markets, Inc.  urce Finance Corp.	526,397 10,552,200	398,873 13,655,597 - -	592,395	1,517,665
37 Colun 38 39 40 <u>Unred</u> 41 Einerg 42 Energ 43 Indiar 44 Energ 45 Lake 46 NiSou 47 NiSou 48 NiSou 49 NiSou 50 Prima 51 Energ 52 NiSou	nbia Gas of Pennsylvania Receivables Corp Subtotal: Positive Unregulated Companies gulated Loss Companies of Three Year Period hations (Inter-Company profit on Columbia Transmission) yJUSA Inc. (IM) appolis Water Company yJUSA Inc. (IN) Erie Land Company urce Capital Markets, Inc. urce Strategic Sourcing Inc. urce Finance Corp.	526,397 10,552,200	398,873 13,655,597 - -	592,395	1,517,665
39 40 Unred 41 Elimir 42 Energ 43 Indiar 44 Energ 45 Lake 46 NiSou 47 NiSou 48 NiSou 49 NiSou 50 Prima 51 Energ 52 NiSou	gulated Loss Companies of Three Year Period hations (inter-Company profit on Columbia Transmission) yUSA Inc. (INA) napolis Water Company yUSA Inc. (IN) Erie Land Company urce Capital Markets, Inc. urce Strategic Sourcing Inc. urce Finance Corp.	:		11,193,664 - -	35,401,461 - -
40 <u>Unred</u> 41 Elimir 42 Energ 43 Indiar 44 Energ 45 Lake 46 NiSou 47 NiSou 48 NiSou 49 NiSou 50 Prima 51 Energ 52 NiSou	nations (Inter-Company profit on Columbia Transmission) yyUSA Inc. (IMA) hapolis Water Company yyUSA Inc. (IN) Erie Land Company urce Capital Markets, Inc. urce Strategic Sourcing Inc. urce Finance Corp.	(257,611)	(2.005.265)	-	:
42 Energ 43 Indiar 44 Energ 45 Lake 46 NiSou 47 NiSou 48 NiSou 49 NiSou 50 Prima 51 Energ 52 NiSou	lyUSA Inc. (MA) apolis Water Company ytUSA Inc. (IN) inc	(257,611)		:	:
43 Indiar 44 Energ 45 Lake 46 NiSou 47 NiSou 48 NiSou 49 NiSou 50 Prima 51 Energ 52 NiSou	napolis Water Company yyUSA Inc. (IN) Efie Land Company urce Capital Markets, Inc. urce Strategic Sourcing Inc. urce Finance Corp.	(257,611)	(2.005.266)		
45 Lake   46 NiSou 47 NiSou 48 NiSou 49 NiSou 50 Prima 51 Energ 52 NiSou	Erie Land Company urce Capital Markets, Inc. urce Strategic Sourcing Inc. urce Finance Corp.	(257,611)	(2.005.266)		-
46 NiSou 47 NiSou 48 NiSou 49 NiSou 50 Prima 51 Energ 52 NiSou	urce Capital Markets, Inc. urce Strategic Sourcing Inc. urce Finance Corp.	, , , ,		(3,064,088)	(6,316,965
48 NiSou 49 NiSou 50 Prima 51 Energ 52 NiSou	rce Finance Corp.				-
50 Prima 51 Energ 52 NiSou	rea Development Company Inc	-	-	12,054	12,054
51 Energ 52 NiSou	urce Development Company, Inc.	(5,225,967)	5,027,205	3,613,101	3,414,339
	yUSA-TPC Corp.				-
	urce Inc. CO Accounts Receivables Corporation	(138,670,447) (312,040)	(95,197,459) (1,106,602)	(355,518,975) 1,565,978	(589,386,881 147,336
54 Colun	nbia Gas of Ohio Receivables Corp.	(346,523)	(586,783)	716,592	(216,714
	ırce Corporate Group Holding Company	•	-	-	-
57	Subtotal: Loss Unregulated Companies	(144,812,588)	(94,858,905)	(352,675,338)	(592,346,831
58 59					
60 61					
62 63	Calculation of Cor	NiSource Inc and Subsidiarie nsolidated Tax Savings for Colum			
64 65		ective Tax Rate Method Based on			
66 67		2018 Taxable	2019 Taxable	2020 Taxable	2018-2020 Taxable
68	Company	Income 1/	Income 1/	Income 1/	Income
69 70 NiSou	arce Inc. Interest on Columbia Stock Purchase Allocated Under S	SEC Ord -	_		_
71 Su	ibtotal: Interest on Columbia Stock Purchase	-	-		-
72 73 <b>Othe</b> i	r Companies Sold or In Process of Being Sold/or Inactive				
74 NDC	Douglas Properties, Inc.	-			-
76 Service	nbia Energy Services Corporation be Protection Group LLC	:			
77 NiSou	urce Retail Services, Inc. groads Pipeline Company	•			-
79 Colun	nbia Gulf Transmission Company			-	-
	nbia Hardy Corp. nbia Energy Group	-	-	-	-
82 CNS I	Microwave, Inc.			-	
	nbia Remainder Corporation State Gas Company	(848,882,706)	216,756,920	602,063,775	(30,062,011
85	Subtotal: Unregulated Companies Sold or In Process of Being	Sold/oi (848,882,706)	216,756,920	602,063,775	(30,062,011
	Consolidated Taxable Income	(1,023,962,157)	358,303,528	617,144,781	(48,513,848
90 2/ Coi 91 3/ Coi	parate Return amount includes non-deductible Charitable Contrib mpany in process of being sold. An investment in real estate for I mpany sold in 2013	benefit of low income housing credits			
92 4/ Coi 93	mpany no longer part of the consolidated group pursuant to a spi	in off in 2015.			
94 Conso	olidated Income Companies Taxable Income	333,405,094	458,227,591	975,727,844	
95 Conso	olidated Loss Companies Taxable Loss	(1,357,367,251)			
			(99,924,063)	(358,583,063)	
96 97		(1,023,962,157)		(358,583,063)	
96 97 98	tment for Excluded Regulated Utility Losses	(1,023,962,157) - 1,212,554,663	(99,924,063)		

Exhibit No. 7 Page 5 of 46 Witness: J. Harding

## 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 No. 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 2020 and 2021 accrual for the twelve months ended November 30, 2021. 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 for years prior to 2018) of \$86,809,129 is the annual tax depreciation at the end of the test year.
- b. See Exhibit No. 7, Page 7.

Exhibit No. 7 Witness: J. Harding Page 6 of 46

# COLUMBIA GAS OF PENNSYLVANIA, INC.

## IRS REFUNDS RECEIVED IN PAST FIVE YEARS

# PRIOR YEARS' CLAIMS

Tax Year Year Ending Settled	Tax	Interest	Total
12/31/2016 N/A	-	-	-
12/31/2017 N/A	-	-	-
12/31/2018 N/A	-	-	-
12/31/2019 N/A	-	-	-
12/31/2020 N/A	-	-	-
	-	-	-
=		•	

Tax & Book Depreciation Expense

Exhibit No. 7 Witness: J. Harding Page 7 of 46

		2020		F	Fiscal Year Ending 11/2020			
•		Composite			-	Tax	Deferred	
	Basis	Depr Rate	Tax Depr	Book Depr	Difference	Rate	Taxes	
Class Life ADR (Pre-1971) Book Depr. On Basis Diff	87,181,317	0.00000001	0	1,629,688 23,259,511	(1,629,688) (23,259,511)		N/A N/A	
ADR ACRS MACRS Other-MAPCO Book Depr. Normalized Total	84,327,594 70,549,960 1,036,095,638 - - - 1,278,154,509	0.00003964 0.000048884 0.065940196 - - 1 Mo Allocation Tax Depreciation	334 3,449 68,320,350 - - 68,324,133 0.0833 5,693,678	N/A N/A N/A N/A 50,013,877 74,903,076 1 Mo Allocation	334 3,449 68,320,350 - (50,013,877) 18,310,256 0.0833 1,525,855	0.21 0.21 0.21 0.21 0.21 0.21	70 724 14,347,273 - (10,502,914) 3,845,153 0.0833 320,429	
		2021		F	iscal Year Ending	11/2021		
	Basis	Composite Depr Rate	Tax Depr	Book Depr	Difference	Tax Rate	Deferred Taxes	
Class Life ADR (Pre-1971) Book Depr. On Basis Diff	86,799,286	-	-	1,679,804 22,635,458	(1,679,804) (22,635,458)		N/A N/A	
ADR ACRS MACRS Other-MAPCO Book Depr. Normalized Total	84,327,594 68,703,616 1,273,761,655.23 - - 1,513,592,151	0.00003964 0.000050197 0.069468098 - - - 11 Mo Allocation Tax Depreciation	334 3,449 88,485,800.13 - - 88,489,583 0.9167 81,115,451	N/A N/A N/A N/A 58,203,963 82,519,224 11 Mo Allocation	334 3,449 88,485,800 - (58,203,963) 30,285,620 0.9167 27,761,819 (14,990,298)	0.21 0.21 0.21 0.21 0.21 0.21 0.21	70 724 18,582,018 - (12,222,832) 6,359,980 0.9167 5,829,982 (3,147,963)	
Total Test Year Tax Depreciation			86,809,129	Total Test Year	14,297,375	0.21	3,002,449	

Exhibit No. 7 Page 8 of 46 Witness: J. Harding

# $\frac{\text{COLUMBIA GAS OF PENNSYLVANIA, INC}}{53.53~\text{III. BALANCE SHEET AND OPERATING STATEMENT}}{\text{A. ALL UTILITIES}}$

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.

#### CALCULATION OF DEFERRED TAX BALANCES

Sub		Book Balances	Pro-Forma Adjustments	Pro-Forma Balance	Pro-Forma Adjustments	Pro-Forma Balance
Account	_	11/30/21	Existing Rates	11/30/21	Proposed Rates	11/30/21
	Account 190 - Deferred Income Taxes					
19005000	Tax Inventory Adj - Fed	6,973,737	-	6,973,737	-	6,973,737
19006000	Tax Inventory Adj - St	3,685,709	-	3,685,709	-	3,685,709
19005000	Capitalized Inventory - Fed	1,015,878	-	1,015,878	-	1,015,878
19006000	Capitalized Inventory - St	536,904	-	536,904	-	536,904
19005000	Customer Advances - Fed	576,188	-	576,188	-	576,188
19006000	Customer Advances - St	304,523	-	304,523	-	304,523
19005000	Federal Net Operating Loss	33,775,318	-	33,775,318	-	33,775,318
19005000	Deficient Deferred Taxes 190- NOL, Inventory & Customer Advances	26,700,995		26,700,995		26,700,995
	Subtotal Rate Base	73,569,252	-	73,569,252	-	73,569,252
19005400	SFAS 109 Offset - Fed	38,765,479	(38,765,479)	-	-	-
19006400	SFAS 109 Offset - St	10,768,177	(10,768,177)	-	-	-
19006000	Pennsylvania Net Operating Loss	7,902,747	(7,902,747)	-	-	-
	All Other Deferred 190 Income Taxes	(16,859,417)	16,859,417	-	-	-
	Subtotal Non Rate Base	40,576,986	(40,576,986)	-	-	-
	Total Account 190	114,146,238	(40,576,986)	73,569,252	-	73,569,252
	Account 255 - Deferred Investment Tax Credits					
	Investment Tax Credits (1962-1969)	-	-	-	-	-
	Job Development Tax Credits (1971-1988)	(1,008,071)	1,008,071			
	Total Account 255 (Non Rate Base)	(1,008,071)	1,008,071	<del>-</del>		
	Account 282 - Deferred Income Taxes-Depreciation					
28205000	Excess Accelerated Tax Depreciation - Fed	(481,410,449)		(481,410,449)		(481,410,449)
	Subtotal Rate Base	(481,410,449)	-	(481,410,449)	-	(481,410,449)
20205000	SFAS 109 Offset - Fed	104,416,004	(104 116 004)			
28205000		, ,	(104,416,004)	-	-	-
28206000	SFAS 109 Offset - St	(129,168,223)	129,168,223	-	-	-
28205000	Non-Utility Book Gain on Sale Property - Fed	(04.750.040)	24,752,219			
	Subtotal Non Rate Base	(24,752,219) -	24,752,219	-	-	-
	Total Account 282	(506,162,668)	24,752,219	(481,410,449)	-	(481,410,449)
00005000	Described in Net Occupies I are Follows Office	(4.050.577)	4.050.577			
28305000	Pennsylvania Net Operating Loss: Federal Offset	(1,659,577)	1,659,577			
	All Other Deferred 283 Income Taxes	(4,177,076)	4,177,076			
	Subtotal Non Rate Base	(5,836,653)	5,836,653	-	-	-
	Total Account 283	(5,836,653)	5,836,653	-	-	
	Total Accumulated Deferred Taxes	(398,861,154)	(8,980,043)	(407,841,197)	-	(407,841,197)

Exhibit No. 7 Page 10 of 46 Witness: J. Harding

# $\frac{\text{COLUMBIA GAS OF PENNSYLVANIA, INC}}{53.53~\text{III. BALANCE SHEET AND OPERATING STATEMENT}}{\text{A. ALL UTILITIES}}$

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.

# ACCUMULATED UNAMORTIZED INVESTMENT TAX CREDIT AS OF NOVEMBER 30, 2021

Line No.	Vintage Year (1) \$	J.D.C. 4% 1/ (2) \$	J.D.C. 10% (3) \$	J.D.C. 1/ 8% (4) \$	1/ Amortizable Credit (5) \$	Amortization
1	1971	0	0	0	0	-
2	1973	2,419	0	0	2,419	4,248
3	1974	29,458	0	0	29,458	5,292
4	1978	0	0	0	0	14,348
5	1979	0	0	0	0	-
6	1980	0	334,994	0	334,994	34,968
7	1981	0	109,948	0	109,948	42,588
8	1982	0	199,170	0	199,170	43,452
9	1983	0	21,587	131,335	152,922	33,348
10	1984	0	430	87,525	87,955	34,020
11	1985	0	0	61,931	61,931	39,132
12	1986	0	29,274	0	29,274	8,148
13	Total	31,877	695,403	280,791	1,008,071	259,544

<sup>1/</sup> 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.

Exhibit No. 7 Witness: J. Harding Page 12 of 46

# 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.

# RECONCILIATION OF TAXABLE NET INCOME PER BOOKS AND TAXABLE NET INCOME PRO FORMA TEST YEAR BASE RATES TWELVE MONTHS ENDED NOVEMBER 30, 2021 Pro Forma

					Pro Forma		Pro Forma
				Adjustments	Test Year	Adjustments	Test Year
Line		Per	Pro Forma	@ Present	@ Present	@ Proposed	@ Proposed
No.	Description	Books	Reference	Rates	Rates	Rates	Rates
		(1)	(2)	(3)	(4)		
		\$		\$	\$	(00.000.000)	
1	Operating Revenues	652,705,000	(1)	139,970,603	792,675,603	(26,825,376)	765,850,227
2	Net Gas Purchased for Resale	(173,678,777)	(1)	(52,502,870)	(226,181,647)	0	(226,181,647)
3	Operation and Maintenance Expense	(207,141,559)	(2)	(10,825,422)	(217,966,981)	336,397	(217,630,584)
4	Depreciation & Amortization Expense	(86,865,263)	(3)	(3,519,646)	(90,384,909)	0	(90,384,909)
5	Taxes Other Than Income Taxes	(3,699,459)	. (4)	147,752	(3,551,707)	0	(3,551,707)
6	Net Operating Income Before Income Taxes	181,319,942		73,270,417	254,590,359	(26,488,979)	228,101,380
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
	3		. (-/				
10	Net Income Before Income Taxes	181,319,942		73,270,417	254,590,359	(26,488,979)	228,101,380
11	Less: Investment in Subsidiary Income	0		0	0	0	0
12	Net Income Before Income Taxes	181,319,942	•	73,270,417	254,590,359	(26,488,979)	228,101,380
13	Statutory Adjustments (Page 14, Line 36)	(56,904,426)	Exh 7 ng14	(50,523,509)	(107,427,935)	0	(107,427,935)
14	Deductible State Income Tax	, , , ,	Exh 7 pg 20	(3,849,572)	(8,059,213)	1,587,749	(6,471,464)
		( ,,,,, , , ,		(=,= :=,=:=)	(=,===,= :=)	1,001,110	(=, , . = . )
15	Taxable Income	120,205,876		18,897,335	139,103,211	(24,901,230)	114,201,981
16	Federal Income Tax	25,243,234		3,968,438	29,211,672	(5,229,258)	23,982,414
17	Federal Net Operating Loss Carryforward	(923,459)	Exh 7 pg 19	923,459	-, ,-	0	0
18	Prior Year Adjustments	, ,	Exh 7 pg 19	(179,618)	0	0	0
19	Job Development Credit Allowance	0	13	0	0	0	0
	·		•				
20	Federal Income Tax	24,499,393		4,712,279	29,211,672	(5,229,258)	23,982,414
21	Deferred Federal Income Tax - Net	13,423,522	Exh 7 pg 19	765,591	14,189,113	0	14,189,113
22	Other Direct Federal Deferred Adjustments	(10,555,998)	Exh 7 pg 19	10,555,998	0	0	0
23	Amortization of Tax Refund	0	Exh 7 pg 19	0	0	0	0
24	Federal Net Operating Loss Carryforward	923,459	Exh 7 pg 19	(923,459)	0	0	0
25	Flow Back of Excess Deferred Income Taxes	(2,467,701)	Exh 7 pg 19	0	(2,467,701)	0	(2,467,701)
26	Effect of CNIT Deferred Tax	(2,022,633)	Exh 7 pg 19	2,106,183	83,550	0	83,550
27	Total Federal Income Tax	23,800,042	Exh 7 pg 19	17,216,592	41,016,634	(5,229,258)	35,787,376
28	Deferral of Current Job Development Credit	0		0	0	0	0
29	Amortization of Investment Tax Credits	(259,544)		0	(259,544)	0	(259,544)
30	Net Federal Income Tax Expense	23,540,498	Exh 7 pg 19	17,216,592	40,757,090	(5,229,258)	35,527,832
31	State Income Tax Expense	6,444,384	Exh 7 pg 19	1,216,972	7,661,356	(1,587,749)	6,073,607
32	Total Income Tax Expense	29,984,882	Exh 7 pg 19	18,433,565	48,418,446	(6,817,007)	41,601,439
33	NET INCOME	151,335,060	Exh 2 pg 3	54,836,853	206,171,913	(19,671,972)	186,499,941

# RECONCILIATION OF TAXABLE NET INCOME PER BOOKS AND TAXABLE NET INCOME PRO FORMA TEST YEAR BASE RATES TWELVE MONTHS ENDED NOVEMBER 30, 2021

TWELVE MONTHS ENDED NOVEMBER 30, 2021								
Line		Per Pro For						
No.	Description	Books	Reference	Amount	Base Rates			
	<u> </u>	(1)	(2)	(3)	(4=1+3)			
		\$		\$	\$			
1	Flow Through Adjustments							
2	Book/Tax Depreciation, Net	5,274,676		-	5,274,676			
3	Book Depreciation- Net Salvage Amts	4,958,395		-	4,958,395			
4	Property Removal Costs - ADR Property	(552,359)		-	(552,359)			
5	Loss on Retirement - ACRS/MACRS Removal Costs	(3,878,008)		-	(3,878,008)			
6	Interest on Debt	<u>-</u>	(7)	(45,932,535)	(45,932,535)			
7	Political Action Expenses (Sec. 162E)	731,417	(6)	(731,417)	-			
8	Employee Business Expense Disallowance	208,006	. ,	-	208,006			
9	Employee Stock Purchase Plan	66,310		-	66,310			
10	NCS Allocation- Perm Taxes	_		-	-			
11	Parking	(5,217)		-	(5,217)			
12	AFUDC Equity	(878,764)	(6)	878,764	-			
13	Penalties	1,092,652	(8)	(1,092,652)	-			
14	Total Flow Through Adjustments	7,017,108	. ,	(46,877,840)	(39,860,732)			
15	Deferred Adjustments							
16	Excess Tax Depreciation Over Book	(14,297,375)		-	(14,297,375)			
17	Repairs on Gas Pipeline	(55,031,543)		-	(55,031,543)			
18	Bonus Depreciation	-		-	-			
19	Sec 263A Mixed Service Costs	(1,559,268)		-	(1,559,268)			
20	Avoided Cost Interest	(49,097)		-	(49,097)			
21	Loss on Retirement - ACRS/MACRS Property Basis	(3,863,500)		-	(3,863,500)			
22	Builder Incentives Capitalized	(4,186)		-	(4,186)			
23	Stored Gas Losses	1,712		-	1,712			
24	Contributions In Aid of Construction	3,253,485		-	3,253,485			
25	Tax Inventory Adj	4,460,926		-	4,460,926			
26	Capitalized Inventory	317,098		-	317,098			
27	Customer Advances	(795,457)		-	(795,457)			
28	Deferred Compensation	5,209,530	(6)	(5,209,530)	-			
29	Off System Sales	1,708,029	(6)	(1,708,029)	-			
30	Customer Assistance Plan (Cap)	1,176,644	(6)	(1,176,644)	_			
31	Uncollectible	(20,413)	(6)	20,413	_			
32	OPEB	(1,531,411)	(6)	1,531,411	_			
33	Accrued Interest Income	(192,531)	(6)	192,531	-			
34	Other	(2,704,179)	(6)	2,704,179				
35	Total Deferred Adjustments	(63,921,534)		(3,645,669)	(67,567,203)			
36	Total Statutory Adjustments	(56,904,426)		(50,523,509)	(107,427,935)			

<sup>()</sup> Denotes Credit

Exhibit No. 7 Page 15 of 46 Witness: J. Harding

### 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 and property tax related to stored gas. See Exhibit No. 6, Schedule 2, Page 2, Lines 1 and 3.
- (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.

Exhibit No. 7 Page 16 of 46 Witness: J. Harding

## COLUMBIA GAS OF PENNSYLVANIA, INC

# <u>DESCRIPTION OF PRO FORMA ADJUSTMENTS</u> <u>AS REFERENCED ON PAGES 13 AND 14, HEREIN</u>

- (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.

Exhibit No. 7 Page 17 of 46 Witness: J. Harding

# 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.

# CALCULATION OF FEDERAL AND STATE INCOME TAXES PRO FORMA AT TEST YEAR BASE RATES AND PROPOSED BASE RATES TWELVE MONTHS ENDED NOVEMBER 30, 2021

Line No.	Description	Pro Forma At Test Year Base Rates	Pro Forma At Proposed Base Rates
		(1)	(2)
		\$	\$
1	Operating Income Before Income Taxes (Exhibit No. 2, Sch 3, Pg 3)	254,590,359	228,101,380
2	Pennsylvania Corporate Net Income Tax Deductible (P20, L8)	(8,059,213)	(6,471,464)
3	Statutory Adjustments		
4	Flow-Through Adjustments		
5	Book/ Tax Depreciation, Net	5,274,676	5,274,676
6	Book Depreciation- Net Salvage Amts	4,958,395	4,958,395
7	Property Removal Costs - ADR	(552,359)	(552,359)
8	Loss on Retirement - ACRS/MACRS Removal Costs	(3,878,008)	(3,878,008)
9	Interest on Debt (1)	(45,932,535)	(45,932,535)
10	Employee Business Expense Disallowance	208,006	208,006
11	AFUDC Equity	0	0
12	Employee Stock Purchase Plan	66,310	66,310
13	NCS Allocation- Perm Taxes	0	0
14	Parking	(5,217)	(5,217)
15	Total Flow Through Adjustments	(39,860,732)	(39,860,732)
16	Deferred Adjustments		
17	Excess Tax Depreciation Over Book	(14,297,375)	(14,297,375)
18	Repairs on Gas Pipeline	(55,031,543)	(55,031,543)
19	Bonus Depreciation	0	0
20	Sec 263A Mixed Service Costs	(1,559,268)	(1,559,268)
21	Loss On Retirement - ACRS/MACRS Property Basis	(49,097)	(49,097)
22	Avoided Cost Interest	(3,863,500)	(3,863,500)
23	Builder Incentives Capitalized	(4,186)	(4,186)
24	Stored Gas Losses	1,712	1,712
25	Contributions In Aid of Construction	3,253,485	3,253,485
26	Tax Inventory Adj	4,460,926	4,460,926
27	Capitalized Inventory	317,098	317,098
28	Customer Advances	(795,457)	(795,457)
29	Total Deferred Adjustments	(67,567,203)	(67,567,203)
30	Taxable Income (Lines 1,2,15,29)	139,103,211	114,201,981
31	Federal Income Tax Payable @ 21%	29,211,674	23,982,416
32	Deferred Income Taxes (Line 29 @ 21%)	14,189,113	14,189,113
33	Amortization of Tax Refund	0	0
34	Flow Back Of Excess Deferred Taxes	(2,467,701)	(2,467,701)
35	Effect of CNIT Deferred Tax on FIT (P20, Lines 9-12 @21%)	83,550	83,550
36	Net Federal Income Tax Expense (Lines 31-35)	41,016,636	35,787,378
37	State Income Tax Expense (P20, L13)	7,661,354	6,073,605
38	Total Income Tax Expense	48,677,990	41,860,983

<sup>(1)</sup> Interest expense for rate purposes has been calculated as follows: 1.99% weighted cost of short-term and long-term debt x original cost rate base of \$2,308,167,584 = \$45,932,535

Exhibit No. 7 Witness: J.Harding Page 20 of 46

## **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, 2021

Line No.	Description	Pro Forma At Test Year Base Rates (1) \$	Pro Forma At Proposed Base Rates (2) \$
1	Calculation of Pennsylvania Corporate Net Income Tax		
2	Operating Income Before Income Taxes (Page 19, Line 1)	254,590,359	228,101,380
3	Statutory Adjustments (Page 19, Lines 15 & 29)	(107,427,935)	(107,427,935)
4	Pennsylvania Bonus Depreciation Adj	(12,707,746)	(12,707,746)
5	CNIT Taxable Income	134,454,678	107,965,699
6	Net Operating Loss Deduction	53,781,871	43,186,279
7	PA Taxable Income	80,672,807	64,779,420
8	CNIT Payable at Base Rate of 9.99%	8,059,213	6,471,464
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%)	(445,647)	(445,647)
11	Deferred Tax on Capitalized Inventory (\$157,677 @ 9.99%)	(31,678)	(31,678)
12	Deferred Tax on Customer Advances (\$784,275 @ 9.99%)	79,466	79,466
13	Pennsylvania Corporate Income Tax Expense	7,661,354	6,073,605

Exhibit No. 7 Page 21 of 46 Witness: J. Harding

## 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.

Exhibit No. 7 Page 22 of 46 Witness: J. Harding

# 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 affect 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 and 2011, see Exhibit No.7, Page 23. The Company notes that the State net operating loss carryforward is fully utilized in the Fully Projected Future Test Year.

# COLUMBIA GAS OF PENNSYLVANIA, INC. PA Net Operating Loss Carryforward

	ORIGINAL NOL INCURRED IN:											HOWNER	UTV	FTV	EDETY	
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	NOV YTD 2020	HTY 2021	FTY 2022	FPFTY 2023
Original NOL Amount (Enter as positive amt)	144,975,996		3,663,502	69,764,304												
Year Utilized (Enter amt used each year as negative)																
2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022		(3,282,934)			(3,000,000)	(8,917,559)	(17,621,904)	(20,264,264)	(13,096,855)	(8,070,124)	(26,495,177)	(12,265,535)	(670,221)	(53,781,871)	(43,139,432)	(7,797,926)
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)	(113,014,352)	(113,684,573)	(167,466,444)	(210,605,876)	(175,264,370)
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	105,389,450	104,719,229	50,937,358	7,797,926	

Exhibit No. 7 Page 24 of 46 Witness: J. Harding

# 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.

Exhibit No. 7 Page 25 of 47 Witness: J. Harding

# $\frac{\text{COLUMBIA GAS OF PENNSYLVANIA, INC}}{53.53~\text{III. BALANCE SHEET AND OPERATING STATEMENT}}{\text{A. ALL UTILITIES}}$

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, 2021

Taxes Accrued Balance	Amount \$	Basis for Accrued Tax
Federal Income Tax	(14,838,240)	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)	(5,501,415)	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% (for 2020, \$137,700 wage base, and rate of 6.20%). The wage base for the 1.45% Medicare tax was applied to total taxable wages.
Federal Unemployment Insurance (FUTA)	(35,965)	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	(3,863,352)	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	(522,181)	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.

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#### COLUMBIA GAS OF PENNSYLVANIA, INC. ACCRUED TAXES AND BASIS FOR ACCRUALS AS OF NOVEMBER 30, 2021

Taxes Accrued Balance	Amount \$	Basis for Accrued Tax
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)	(148,332)	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	(27,656)	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	(24,937,141)	

#### COLUMBIA GAS OF PENNSYLVANIA, INC. MONTHLY TAX ACCRUALS TWELVE MONTHS ENDED NOVEMBER 30, 2021

			Federal	Taxes		Pennsylvania State and Other Taxes							
		Income	Tax			Corporate N	Net Income						
Line			Prior	Social	Unemploy-		Prior		Capital	Unemploy-	Sales	License &	All
No.	Month	Current	Years	Security FICA	ment FUTA	Current	Years	Property	Stock Tax	ment SUTA	and Use	Franchise	Other
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
1	December-2020	(7,627,383)	-	(102,523)	(128)	(2,211,747)		(41,940)	-	(541)	27,347	-	0
2	January	(6,702,384)	-	(356,319)	(28,061)	(2,110,541)	-	(289,865)	-	(95,200)	0	-	-
3	February	(5,844,427)	-	(470,566)	(4,444)	(1,831,725)	-	(19,038)	-	(128,996)	-	-	-
4	March	(5,903,368)	-	(1,580,203)	(309)	(1,872,893)	-	(19,038)	-	88,385	(14,740)	-	-
5	April	(332,859)	-	(372,130)	(539)	(47,935)	-	(19,038)	-	(2,009)	-	-	-
6	May	1,755,613	-	(341,192)	(440)	630,768	-	(19,038)	-	(2,003)	-	-	-
7	June	3,116,898	-	(375,680)	(82)	1,073,154	-	(19,038)	-	(585)	(20,055)	-	-
8	July	3,100,358	-	(345,736)	(88)	1,067,779	-	(19,038)	-	(436)	-	-	-
9	August	3,379,623	-	(356,947)	(322)	1,158,532	-	(19,038)	-	(1,022)	-	-	-
10	September	2,514,182	-	(431,454)	(486)	877,286	-	(19,038)	-	(1,745)	(20,208)	-	-
11	October	970,795	-	(381,985)	(458)	375,721	-	(19,038)	-	(1,877)	-	-	-
12	November-2021	(3,265,288)		(386,680)	(608)	(971,751)		(19,038)		(2,302)			
13	TOTAL	(14,838,240)	0	(5,501,415)	(35,965)	(3,863,352)	0	(522,181)	0	(148,332)	(27,656)	0	0

# 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 \$3,002,449. See Exhibit No. 7, Page 7.
- c. None.
- d. For the twelve months ended November 30, 2021 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 \$259,544. (Note: This amortization includes portions of JDC accrued at 4%, 10%, and 8%) on Exhibit No. 7, Page 11.
- e. None.

Exhibit No. 7 Page 30 of 46 Witness: J. Harding

# 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, 2021

Accounting entries per Books for:

a. Accelerated Depreciation Deferred

Cr. 28205000 Deferred Federal Income Tax	\$3,002,449
Dr. 41011000 Accumulated Deferred Income Taxes	\$3,002,449

b. Amortization of Job Development Credits

Dr. 25500000 Deferred Investment Tax Credit	\$ 259,544
Cr. 41141000 Deferred Federal Income Tax	\$ 259,544

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:

Schedule No. <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

Exhibit No. 7 Page 31 of 46 Witness: J. Harding

# 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, Page 3 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, 2021.

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, 2021.

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# 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.

Exhibit No. 7 Page 33 of 46 Witness: J. Harding

# 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 46) which was revised effective March 27, 2020, as approved by the Commission in Docket No. G-2020-3019409. 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 2018, 2019 and 2020 were provided with response to SDR-GASRR-055.

March 27, 2020

#### 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 in Exhibit A, 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 members of the Consolidated Group as of April 7, 2016 entered into that Amended and Restated Intercompany Income Tax Allocation Agreement dated April 7, 2016, for the allocation of U.S. federal income taxes and the members of the Consolidated Group as of August 17, 2016 ratified the First Amendment to Amended and Restated Intercompany Income Tax Allocation Agreement dated August 17, 2016 (together the "2016 Agreement"); and

WHEREAS, the Parties desire to amend and restate the 2016 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.

"<u>Designated Official</u>" 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. Provided, however, that Northern Indiana Public Service Company LLC will also be treated as a Member for purposes of this agreement.

"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.

"<u>Person</u>" means any individual, partnership, form, 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.

"<u>Standalone</u>" 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) to the extent the corporate alternative minimum tax is applicable in a Taxable Period, then on the assumption that the "exemption amount" previously 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.

"<u>Taxable Period</u>" 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 <u>Reference, Etc.</u> 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".

Exhibit No. 007 Page 37 of 46 Witness: J. Harding

#### 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) To the extent the Consolidated Group is subject to a limitation on interest deductions under Section 163(j) and corresponding regulations, the tax liability associated with the Consolidated Group's section 163(j) limitation will be allocated among the Members consistent with the principles of Section 2.1(b), and payments associated with such liability shall be required under the principles of Sections 2.1(c) and (d). Similar allocation and payment principles shall be applied to any interest deduction carryforwards that are permitted under Section 163(j) and corresponding regulations.
- ("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

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NOL as of the relevant effective date of this Agreement shall be equal to the amount allocated to such Member under the 2002 Agreement or 2016 Agreement, as applicable, immediately prior to the time such prior Agreement was superseded.

(g) 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

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decide which of the Members should, to the extent permitted by law, join in filing each such return.

Section 2.3 <u>Member Tax Information</u>. 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 15<sup>th</sup> day of the 4<sup>th</sup>, 6<sup>th</sup>, 9<sup>th</sup>, and 12<sup>th</sup> 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 <u>Payment Mechanics</u>. (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 Article II.

Exhibit No. 007 Page 41 of 46 Witness: J. Harding

- (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 <u>Departing Members</u>. 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 53, 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 <u>Administration</u>. 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.
- Section 3.7 <u>Refunds.</u> For the avoidance of doubt, NiSource will be entitled to receive any and all federal income tax refunds and will be the owner thereof and not the Members that may have generated losses or other tax attributes giving rise to the refund. NiSource will then treat refunds received according to Article II and Sections 3.2, 3.3, and 3.4(b) of this Agreement.

#### ARTICLE IV.

#### **Miscellaneous Provisions**

- Section 4.1 <u>Effect</u>. 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, 2020 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 and 2016 Agreement shall be deemed to have been superseded and replaced in their 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 or 2016 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 and 2016 Agreement shall survive only with respect to Taxable Periods or portions thereof ending prior to July 1, 2020, 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 State Public Utility Commission Requirements. Section 4.3 State Public Utility Commission Requirements. This Agreement shall only be effective once filed with the Massachusetts Department of Public Utilities and the Indiana Utility Regulatory Commission under Indiana Code 8-1-2-49(2) and Indiana Utility Regulatory Commission General Administrative Order 2016-5, and approved by the Virginia State Corporation Commission under Virginia Code Sections 56-76, et seq., and approved by the Pennsylvania Public Utility Commission under 66 Pennsylvania Consolidated Statutes § 2102. Pursuant to Indiana Utility Regulatory Commission General Administrative Order 2016-5, this agreement shall terminate 5 years from the effective date in Section 4.2.
- Section 4.4 <u>Notices</u>. 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 4.5 <u>Expenses</u>. 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 4.6 <u>Benefit and Burden</u>. This Agreement shall inure to the benefit of, and shall be binding upon, the parties hereto and their respective successors.

- Section 4.7 <u>Amendments and Waiver</u>. 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 4.8 <u>Assignments</u>. 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 4.9 <u>Tax Reporting</u>. 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 4.10 <u>Severability</u>. 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 4.11 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 4.12 <u>Applicable Law</u>. **THIS AGREEMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF INDIANA.**

Section 4.13 <u>Counterparts</u>. 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.

Exhibit No. 007 Page 44 of 46 Witness: J. Harding

- Section 4.14 <u>Attorneys' Fees</u>. 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 4.15 <u>No Third Party Rights</u>. 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 4.16 <u>Further Documents</u>. 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 4.17 <u>Headings and Captions</u>. 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.

Exhibit No. 007 Page 45 of 46 Witness: J. Harding

EXECUTED as of the date and year first above written.

By: \_\_\_\_\_\_Bonall & Brain

Printed Name: Donald E. Brown Title: Executive Vice President

NiSource Inc.

Printed Name: Sandra Brummitt

Title: Vice President and Chief Tax Officer [List of companies attached as Exhibit A to

Agreement]

By: \_\_\_\_\_\_ Wage Locard W. Mul

Printed Name: Joseph W. Mulpas

Title: Vice President and Chief Accounting Officer

NiSource Insurance Corporation, Inc.

#### Exhibit A

#### NiSource Inc. - Subsidiaries

#### As of March 27, 2020

- 1. NiSource Gas Distribution Group, Inc.
- 2. NiSource Corporate Group, LLC
- 3. Northern Indiana Public Service Company LLC
- 4. NIPSCO Accounts Receivable Corporation
- 5. NiSource Corporate Services Company
- 6. NiSource Energy Technologies, Inc.
- 7. Columbia Gas of Ohio, Inc.
- 8. Columbia Gas of Ohio Receivables Corporation
- 9. Bay State Gas Company dba Columbia Gas of Massachusetts
- 10. Columbia Gas of Kentucky, Inc.
- 11. Central Kentucky Transmission Company
- 12. Columbia Gas of Maryland, Inc.
- 13. Columbia Gas of Pennsylvania. Inc.
- 14. Columbia Gas of Pennsylvania Receivables Corporation
- 15. Columbia Gas of Virginia, Inc.
- 16. NiSource Development Company, Inc.
- 17. Lake Erie Land Company
- 18. NiSource Retail Services, Inc.
- 19. EnergyUSA–TPC Corp.
- 20. NiSource Insurance Corporation, Inc.
- 21. NiSource Strategic Sourcing Inc.

Exhibit No. 8 Page 1 of 12 Witness: J. E. Covert

#### 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.

Exhibit No. 8 Page 2 of 12 Witness: J. E. Covert

#### 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, 2021 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, 2021, and Exhibit No. 8, Page 4, for Columbia's rate base using a fully projected future test year ending December 31, 2022 from the last base rate case R-2021-3024296, which was a negotiated settlement.

#### Columbia Gas of Pennsylvania, Inc. Statement of Rate Base at Present Rates November 30, 2021

Line	Acct.					
<u>No.</u>	<u>No.</u>	<u>Description</u>	Per Books	<u>Adjustments</u>	Pro Forma	<u>Reference</u>
			(1)	(2)	(3)	(4)
			\$	\$	\$	
1		Property Plant and Equipment				
2	101	Gas Plant in Service - excluding leases	3,112,715,080	0	3,112,715,080	Exh 8, Schedule 1
3	106	Completed Construction Not Classified	139,853,589	0	139,853,589	Exh 8, Schedule 1
4	101	Gas Plant in Service - Leases	31,101,165	(31,101,165)	0	,
5	107	Construction Work in Progress	103,631,256	(103,631,256)	0	Exh 8, Schedule 2
6	117/191	Gas Stored Underground - Non-Current	3,794,693	0	3,794,693	,
7	108-111	Depreciation Reserve	(586,090,378)	3,777,642	(582,312,736)	Exh 8, Schedule 3
8	117	Accum. Provision Gas Lost - Underground Storage	(163,467)	0	(163,467)	Exh 1, Schedule 1
9		Net Plant in Service	2,804,841,939	(130,954,780)	2,673,887,159	·
10		Working Capital				
11	154-163-186	Materials and Supplies	1,315,943	(79,204)	1,236,739	Exh 8, Schedule 5
12	165	Prepayments	6,667,675	(2,735,105)	3,932,570	Exh 8, Schedule 6
13	164	Gas Storage Underground	72,970,484	(32,532,795)	40,437,689	Exh 8, Schedule 7
14		Cash Allowance	0	0	0	Exh 8, Schedule 4
15		Total Working Capital	80,954,101	(35,347,103)	45,606,998	
16		Deferred Income Taxes				
17	190	Income Taxes	73,569,252	0	73,569,252	Exh 8, Schedule 8
18	282	Depreciation	(481,410,449)	0	(481,410,449)	Exh 8, Schedule 8
19	283	Other	0	0	(101,110,110)	Exh 8, Schedule 8
20	200	Total Deferred Income Taxes	(407,841,197)	0	(407,841,197)	Zin e, concade e
21						
22	235	Customer Deposits	(3,870,887)	383,679	(3,487,208)	Exh 8, Schedule 9
00			,		,	
23	050/400	Customer Advances for Construction	4.000	•	4.000	F. J. O. O. J. J. J. 40
24	252/186	Cash Deposits	1,832	0	1,832	Exh 8, Schedule 10
25		Total Rate Base	2,474,085,788	(165,918,204)	2,308,167,584	

# Columbia Gas of Pennsylvania, Inc. Statement of Rate Base at Present Rates Forcasted December 2022 per Case No. R2021-3024296

Line <u>No.</u>	Acct. <u>No.</u>	<u>Description</u>	<u>Amount</u> 1/ (1) \$
1		Property Plant and Equipment	
2	101, 106	Gas Plant in Service	3,669,424,653
3	101	Gas Plant in Service - Leases	0
4	107	Construction Work in Progress - In Service	0
5	117/191	Gas Stored Underground - Non-Current	3,794,693
6	108-111	Depreciation Reserve	(614,186,255)
7	117	Accum. Provision Gas Lost - Underground Storage	(163,467)
8		Net Plant in Service	3,058,869,624
9		Working Capital	
10	154-163-186	Materials and Supplies	1,212,895
11	165	Prepayments	3,707,519
12	164/242	Gas Storage Underground	34,854,214
13		Cash Allowance	0
14		Total Working Capital	39,774,628
15		Deferred Income Taxes	
16	190	Income Taxes	70,060,268
17	282	Depreciation	(492,255,641)
18	283	Other	0
19		Total Deferred Income Taxes	(422,195,373)
20		Customer Deposits	
21	235	13 Month Average	(3,456,339)
22		Customer Advances for Construction	
23	252	Cash Deposits	19,525
24		Total Rate Base	2,673,012,065
4		I Viai Nate Dase	<u> </u>

#### Note:

<sup>1/</sup> Rate base for the Fully Projected Future Test Year from the company's last rate case at R-2021-3024296. See Exhibit No. 108, Page 3 of 11, Column 5 of that case. Case was a negotiated settlement.

Exhibit No. 8 Page 5 of 12 Witness: J. E. Covert

# 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.

Exhibit No. 8 Page 6 of 12

Witness: J. E. Covert

# 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).

Exhibit No. 8 Page 7 of 12 Witness: J. E. Covert

# 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).

Exhibit No. 8 Page 8 of 12 Witness: J. E. Covert

# 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, 2021. 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.

Exhibit No. 8 Page 9 of 12 Witness: J. E. Covert

# 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.

Exhibit No. 8 Page 10 of 12 Witness: J. E. Covert

# 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.

Exhibit No. 8 Page 11 of 12 Witness: J. E. Covert

# 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, 2021 is found above under Regulation 53.53 I.A.2 at Exhibit No. 8, Page 2.

Exhibit No.8
Page 12 of 12

Witness: J. E. Covert

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

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

#### Response:

j

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.

Any adjustment related to the above items for ratemaking purposes.

#### 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, 2021 Contribution In Aid of Customer Contribution Construction Non-Taxable Advances Completed Gas Plant In Aid of Affiliated for Construction Construction Relocation Construction In Service Construction Companies Reimbursements (Deposits) Not Work In Total Line Account Account Account Account Account Account Classified Progress Gas Plant No. No. Description 101-1000 101-2000 101-3000 101-4000 101-4005 Account 106 Account 107 1/ In Service (1) (2) (3) (4) (6) (7) (8) (9)=(1 thru 8) \$ \$ \$ \$ \$ \$ \$ \$ Intangible Plant 301.00 Organization Costs 100,099 0 0 0 0 0 0 100,099 302.10 2 Franchises/Consent, Perpetual 26,216 0 0 0 0 0 0 26,216 4.809.062 0 4,809,062 3 303.00 Intangible Plant, General n n Ω 0 Ω 4 303.30 Intangible Plant, Miscellaneous Software 36.260.798 0 0 0 0 0 36.260.798 0 5 303.99 Intangible Plant, Miscellaneous Cloud 5,613,167 0 0 0 0 153,449 0 5,766,616 Total Intangible Plant 46,809,343 0 0 0 0 153,449 0 46,962,792 6 **Underground Storage Plant** 7 350.10 23.882 0 23.882 Land n 0 Ω 0 0 8 350.20 Rights of Way 1,932 0 0 0 0 0 0 1,932 9 351.20 Compressor Station Structures 3.220.858 0 0 0 0 29.179 0 3.250.037 10 352.01 Wells Construction 738,941 0 0 387,831 0 0 0 1,126,772 11 352.02 Wells Equipment 168.032 0 0 0 0 904.938 0 1,072,970 12 352.10 Storage Leasehold and Rights 139,442 Λ Λ 0 Λ 139,442 Λ Λ 352.12 13 Other Leases 67,498 0 0 Λ 0 0 67,498 Λ 14 353.00 389.345 0 0 0 0 0 0 389.345 Lines 15 354.00 Compressor Station Equipment 948,177 0 0 0 0 0 0 948,177 16 355.00 Measuring & Regulating Equipment 104,477 0 0 n 0 0 104,477 1,321,947 17 Total Underground Storage Plant 5,802,585 0 0 0 0 0 7,124,532 Distribution Plant 374.10 0 18 Land, City Gate/Main Line Industrial 21.944 0 0 0 0 0 21.944 19 374.20 Land, Other Distribution System 3.361.100 0 0 0 0 0 0 3.361.100 20 374.30 Land Rights, City Gate/Main Line 95,361 n 0 n 0 Ω 0 95,361 21 374.40 Land Rights, City Other Distribution System 3,722,289 (11,729)0 (106, 236)0 112,671 0 3,716,994 22 374.41 Land Rights, City Other Distribution System, Loc 0 O 0 13 13 0 0 0 (5,147) 23 374.50 Rights of Way 3,257,482 (19,163)0 0 Λ 0 3,233,171 24 0 375.20 Structures, City Gate Measurement & Regulating 7.026 0 n 0 0 0 7.026 25 375.31 Structures, General Meas & Reg Local Gas 4.012 0 0 0 0 0 0 4.012 26 375.40 Structures, Regulating 6,053,781 (82,237)0 (40,624)0 72,330 0 6,003,251 27 Structures, Distribution Industrial M&R 375.60 0 86,228 0 0 0 0 0 86,228 28 375.70 Structures, Other Distribution System 17,907,440 0 16,305 0 0 0 0 17,923,745 29 375.71 Structures. Other Distribution System. Leased 5.981.680 0 0 0 0 5.981.680 0 Ω 30 375.80 Structures, Communication 0 0 16,515 n n 0 16,515 31 376.00 Mains 1,990,233,571 (8,654,232)(8,637)(3,662,314)(19,760)101,670,766 0 2,079,559,395 32 376.08 Mains - CSL Replacements 23,515,481 n 0 n 0 0 0 23,515,481 33 376.30 Mains - Bare Steel 63,368,272 0 0 0 0 0 0 63,368,272 34 376 80 Mains - Cast Iron 169.992 n 0 n 0 Ω Ω 169.992 35 378.10 (162,340) 0 Measuring & Regulating Equipment General 1.608.065 (1.068)0 0 0 1.444.656 36 378.20 Measuring & Regulating Equipment Regulating 89,875,911 (133,773)0 (180,688)0 34,529,812 0 124,091,263 37 378.30 Measuring & Regulating Equipment Local Gas 605,549 (190,096)0 0 0 3.784 0 419.236 38 379.10 Measuring & Regulating Equipment City Gate 136,417 0 0 0 0 0 136,417 379.11 39 Measuring & Regulating Equipment Exchange Gas 9.244 (9,694)0 (450)0 0 0 0 40 380.00 Services 688.586.925 (832,898)0 (17,664)0 228.053 0 687,964,415

1/ See Exhibit 8, Schedule 2

### $\frac{\text{COLUMBIA GAS OF PENNSYLVANIA, INC}}{53.52 \text{ C } 3}$

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, 2021

		•			Contribution		·			
					In Aid of		Customer			
				Contribution	Construction	Non-Taxable	Advances	Completed		
			Gas Plant	In Aid of	Affiliated	Relocation	for Construction	Construction	Construction	
			In Service	Construction	Companies	Reimbursements	(Deposits)	Not	Work In	Total
Line	Account		Account	Account	Account	Account	Account	Classified	Progress	Gas Plant
No.	No.	<u>Description</u>	<u>101-1000</u>	101-2000	101-3000	101-4000	101-4005	Account 106	Account 107 1/	In Service
			(1)	(2)	(3)	(4)	(6)	(7)	(8)	(9)=(1 thru 8)
			\$	\$	\$	\$	\$	\$	\$	\$
1	381.00	Meters	42,384,883	0	0	0	0	4,671	0	42,389,554
2	381.10	Auto Meter Reading Devices	24,658,144	0	0	0	0	(1,029)	0	24,657,115
3	382.00	Meter Installations	42,379,840	(52,412)	0	(547)	0	0	0	42,326,881
4	383.00	House Regulators	15,683,974	(38,809)	0	(368)	0	0	0	15,644,797
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	5,702,717	(137,663)	0	(15,248)	0	269,600	0	5,819,406
7	385.10	Industrial M&R Equipment. Large Volume	1,068,891	(26,526)	0	(19,937)	0	0	0	1,022,427
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	622,664	0	0	0	0	0	0	622,664
12	387.45	Other Equipment, Telemetering	9,454,286	0	0	0	0	1,405,582	0	10,859,868
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	3,046,789,337	(10,358,452)	(8,637)	(4,050,699)	(19,760)	138,312,545	0	3,170,664,334
		General Plant		(2.22)						
16	390.10	Structures, Communications	52,901	(3,080)	0	0	0	0	0	49,821
17	391.10	Office Furniture & Equipment, Unspecified	2,109,563	0	0	0	0	0	0	2,109,563
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	2,705,700	0	0	0	0	0	0	2,705,700
20	391.20	Office Furniture & Equipment, Air Condition Equip	3,007	0	0	0	•	•	0	3,007
21	392.20	Transportation Equipment, Trailers > \$1,000	14,787	•	•	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	57,140 2,235,476	0	0	0	0	0	0	57,140
25 26	394.11 394.12	Tools, CNG Equipment, Stationary	2,235,476	0	0	0	0	0	0	2,235,476 0
26 27	394.12 394.20	Tools, CNG Equipment, Portable Tools, Shop Equipment	17,534	0	0	0	0	0	0	17,534
28	394.20	Tools and Other	17,490,635	0	0	0	0	65,647	0	17,556,282
29	394.31	Tools, High Pressure Stopping	10,847	0	0	0	0	03,047	0	10,847
30	395.00	Laboratory Equipment Gas	266,039	0	0	0	0	0	0	266,039
31	396.00	Power Operated Equipment	948.698	0	0	0	0	0	0	948,698
32	397.00	Communication Equipment	940,096	0	0	0	0	0	0	946,096
33	397.10	Communication Equipment, Telephone	0	0	0	0	0	0	0	0
34	397.10	Communication Equipment, Telephone 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, Other	787,916	0	0	0	0	0	0	787,916
37	398.00	Miscellaneous Equipment	952,065	0	0	0	0	U	0	952,065
38	330.00	Total General Plant	27,754,442	(3,080)	0	0	0	65,647	0	27,817,010
39		Total Gas Plant in Service	3,127,155,707	(10,361,531)	(8,637)	(4,050,699)	(19,760)	139,853,589	0	3,252,568,669
					_					

## $\frac{\text{COLUMBIA GAS OF PENNSYLVANIA, INC}}{53.52 \text{ C } 3}$

#### ACCOUNT 107 CONSTRUCTION WORK IN PROGRESS

			As	s of November 30, 2021	
			Construction	Construction	Construction
			Work	Work	Work
			In Progress	In Progress	In Progress
Line	Account		Account 107	Account 107	Account 107
No.	No.	Description	Per Books	Not In Rate Base	In Rate Base
			\$	\$	\$
1		Intangible Plant	Ť	<b>*</b>	•
2	301.00	Organization Costs	0	0	0
3	302.10	Franchises/Consent, Perpetual	0	0	0
4	303.00	Intangible Plant, General	73,152	73,152	0
5	303.30	Intangible Plant, Miscellaneous Software	7,471,170	7,471,170	0
6	303.99	Intangible Plant, Miscellaneous Cloud	105,935	105,935	0
7	000.55	Total Intangible Plant	7,650,257	7,650,257	0
•		Total intalligible Flant	7,000,207	1,000,201	· ·
8		Underground Storage Plant			
9	350.10	Land	0	0	0
10	350.20	Rights of Way	0	0	0
11	351.20	Compressor Station Structures	52,633	52,633	0
12	352.01	Wells Construction	0	0	0
13	352.02	Wells Equipment	0	0	0
14	352.10	Storage Leasehold and Rights	0	0	0
15	352.12	Other Leases	0	0	0
16	353.00	Lines	0	0	0
17	354.00	Compressor Station Equipment	0	0	0
18	355.00	Measuring & Regulating Equipment	0	0	0
19		Total Underground Storage Plant	52,633	52,633	0
20		Distribution Plant			
21	374.10	Land, City Gate/Main Line Industrial	0	0	0
22	374.20	Land, Other Distribution System	0	0	0
23	374.30	Land Rights, City Gate/Main Line	0	0	0
24	374.40	Land Rights, City Other Distribution System	2,727,035	2,727,035	0
25	374.41	Land Rights, City Other Distribution System, Loc	2,727,000	0	0
26	374.50	Rights of Way	0	0	0
27	375.20	Structures, City Gate Measurement & Regulating	0	0	0
28	375.31	Structures, General Meas & Reg Local Gas	0	0	0
29	375.40	Structures, Regulating	386,288	386,288	0
30	375.60	Structures, Distribution Industrial M&R	0	0	0
31	375.70	Structures, Other Distribution System	12,637,839	12,637,839	0
32	375.70	Structures, Other Distribution System, Leased	12,037,039	12,007,009	0
33	375.80	Structures, Communication	0	0	0
33 34			•	•	
	376.00	Mains	67,159,839	67,159,839	0
35	376.08	Mains - CSL Replacements	0	0	0
36	376.25	BS & CI Replaced Total	(1)	(1)	0
37	378.10	Measuring & Regulating Equipment General	0	0	0
38	378.20	Measuring & Regulating Equipment Regulating	6,411,067	6,411,067	0

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

			A	s of November 30, 2021	
			Construction	Construction	Construction
			Work	Work	Work
			In Progress	In Progress	In Progress
Line	Account		Account 107	Account 107	Account 107
<u>No.</u>	<u>No.</u>	<u>Description</u>	Per Books	Not In Rate Base	In Rate Base
			\$	\$	\$
1	378.30	Measuring & Regulating Equipment Local Gas	0	0	0
2	379.10	Measuring & Regulating Equipment City Gate	0	0	0
3	379.11	Measuring & Regulating Equipment Exchange Gas	0	0	0
4	380.00	Services	3,600,432	3,600,432	0
5	380.12	CSL Replacement	0	0	0
6	380.13	Customer Service	0	0	0
7	381.00	Meters	14,568	14,568	0
8	381.10	Auto Meter Reading Devices	29,410	29,410	0
9	382.00	Meter Installations	151,588	151,588	0
10	383.00	House Regulators	52,565	52,565	0
11	384.00	House Regulators Installations	0	0	0
12	385.00	Industrial M&R Equipment. Station Equipment	777,442	777,442	0
13	385.10	Industrial M&R Equipment. Large Volume	2,110	2,110	0
14 15	387.10 387.20	Other Equipment Oderization	0	0	0
16	387.42	Other Equipment, Odorization Other Equipment, Radio	0	0	0
17	387.44	Other Equipment, Nation Other Equipment, Other Communications	0	0	0
18	387.45	Other Equipment, Telephone	1,960,661	1,960,661	0
19	387.46	Other Equipment, Customer Information Service	1,900,001	0	0
20	398.00	Miscellaneous Equipment	0	0	0
21	000.00	Total Distribution Plant	95,910,843	95,910,843	0
22		General Plant			
23	389.20	Land Rights	0	0	0
24	390.10	Structures, Communications	0	0	0
25	391.10	Office Furniture & Equipment, Unspecified	0	0	0
26	391.11	Office Furniture & Equipment, Data handling Equip	0	0	0
27	391.12	Office Furniture & Equipment, Information Systems	0	0	0
28	391.20	Office Furniture & Equipment, Air Condition Equip	0	0	0
29	392.20	Transportation Equipment, Trailers > \$1,000	0	0	0
30	392.21	Transportation Equipment, Trailers \$1,000 or <	0	0	0
31	393.00	Stores Equipment	0	0	0
32	394.10	Tools, Garage & Service Equipment	0	0	0
33	394.11	Tools, CNG Equipment, Stationary	0	0	0
34	394.12	Tools, CNG Equipment, Portable	0	0	0
35 36	394.20 394.30	Tools, Shop Equipment	0	0	0
36 37	394.30 394.31	Tools, Tools and Other	14,223 0	14,223 0	0
38	395.00	Tools, High Pressure Stopping Laboratory Equipment Gas	0	0	0
39	396.00	Power Operated Equipment	0	0	0
40	397.00	Communication Equipment	0	0	0
41	397.10	Communication Equipment, Telephone	0	0	0
42	397.10	Communication Equipment, Radio	0	0	0
43	397.40	Communication Equipment, Natio	0	0	0
44	397.50	Communication Equipment, Telemetering	0	0	0
45	398.00	Miscellaneous Equipment	3,300	3,300	0
46		Total General Plant	17,524	17,524	0
47		Total Plant	103.631.256	103,631,256	<u>0</u>
				<del></del>	=

Exhibit No. 8 Schedule No. 3 Page 1 of 1

Witness: J. E. Covert

# Columbia Gas of Pennsylvania, Inc. Depreciation Reserve at November 30, 2021

Line <u>No.</u>	<u>Description</u>	Amount \$
1	Amortizable Plant	(21,054,064)
2	Underground Storage Plant	(4,788,615)
3	Distribution Plant	(541,461,831)
4	General Plant	(14,773,533)
5	Non Depreciable Plant	(234,693)
6	Total (Exhibit 5)	(582,312,736)

Exhibit No. 8 Schedule No. 4 Page 1 of 1 Witness: J. E. Covert

#### 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.

Exhibit No. 8
Schedule No. 5
Page 1 of 1

Witness: J. E. Covert

#### COLUMBIA GAS OF PENNSYLVANIA, INC PLANT MATERIALS AND SUPPLIES AVERAGE OF THIRTEEN MONTHLY BALANCES ENDED NOVEMBER 30, 2021

Line <u>No.</u>	<u>Month</u>	Amount \$
1	Nov-20	1,181,787
2	Dec-20	1,214,645
3	Jan-21	1,231,625
4	Feb-21	1,226,834
5	Mar-21	1,231,849
6	Apr-21	1,234,152
7	May-21	1,238,999
8	Jun-21	1,235,039
9	Jul-21	1,238,512
10	Aug-21	1,183,201
11	Sep-21	1,190,666
12	Oct-21	1,354,351
13	Nov-21	1,315,943
14	Total	16,077,602
15	13 Month Average Balance	1,236,739

Exhibit No. 8 Schedule No. 6 Page 1 of 1

Witness: J. E. Covert

#### COLUMBIA GAS OF PENNSYLVANIA, INC PREPAYMENTS AVERAGE OF THIRTEEN MONTHLY BALANCES ENDED NOVEMBER 30, 2021

#### Accounts

Line No.	<u>Month</u>	Prepaid Leases <u>16500000</u> (1) \$	Corp. Ins. <u>16521000</u> (2) \$	Prepaid Ins. I/C <u>16520000</u> (3) \$	PUC,OCA, OSBA Fees 16503600 (4) \$	Prepaid Permits <u>16503700</u> (5) \$	<u>Total</u> (6) \$
1	Nov-20	(175,699)	3,021,453	1,350,411	1,171,795	94,402	5,462,362
2	Dec-20	13,494	2,598,079	1,103,287	1,004,396	107,542	4,826,797
3	Jan-21	(77,498)	2,199,866	1,162,454	836,997	110,242	4,232,061
4	Feb-21	(188,882)	1,801,652	956,196	669,597	125,457	3,364,021
5	Mar-21	148,140	1,618,490	1,148,441	502,198	169,192	3,586,461
6	Apr-21	52,043	1,194,397	897,905	334,799	215,000	- 2,694,144
7	May-21	141,189	770,304	647,369	167,399	224,370	1,950,632
8	Jun-21	146,002	520,031	419,731	0	241,136	1,326,901
9	Jul-21	155,377	2,224,622	602,315	0	247,857	3,230,171
10	Aug-21	187,029	3,124,379	1,588,115	0	239,997	5,139,520
11	Sep-21	215,510	2,758,122	1,391,713	0	190,065	- 4,555,411
12	Oct-21	219,702	2,382,558	1,192,055	1,591,211	29,076	5,414,602
13	Nov-21	177,660	2,777,962	992,398	1,392,309		5,340,329
14	Total	1,014,068	26,991,915	13,452,391	7,670,701	1,994,337	51,123,412
15	13 M	lonth Average Bala	nce			=	3,932,570

Exhibit No. 8 Schedule No. 7 Page 1 of 1 Witness: J. E. Covert

#### COLUMBIA GAS OF PENNSYLVANIA, INC GAS STORED UNDERGROUND AVERAGE OF TWELVE MONTHLY BALANCES ENDED NOVEMBER 30, 2021

Line <u>No.</u>	<u>Month</u>	Injections DTH (A)	ACOG \$ (B)	Injection Activity \$ (C = A * B)	Monthly WACOG \$ (D)	<u>Withdrawals</u> DTH (E)	Withdrawal Activity \$ (F = D * E)	Ending Cumulative <u>Balance</u> \$ (G)	Ending Cumulative <u>Balance</u> DTH (H)	Monthly Average Rate \$ (I = G / H)
1	11/30/2020 Balance							42,207,427	24,800,803	
2	Dec-20	4,458	2.2524	10,041	1.7020	4,515,846	(7,685,970)	34,531,498	20,289,414	1.7019
3	Jan-21	(4,522)	2.3532	(10,641)	1.7018	5,373,919	(9,145,336)	25,376,711	14,910,973	1.7019
4	Feb-21	(2,020)	3.0246	(6,110)	1.7016	5,917,879	(10,069,863)	15,299,548	8,991,074	1.7016
5	Mar-21	201,145	2.4635	495,521	1.7183	2,881,842	(4,951,869)	10,843,199	6,310,377	1.7183
6	Apr-21	2,580,899	2.2361	5,771,148	1.8686	416,671	(778,592)	15,835,755	8,474,604	1.8686
7	May-21	4,308,866	2.4420	10,522,251	2.0619	(1,197)	2,468	26,360,474	12,784,667	2.0619
8	Jun-21	3,550,262	2.5007	8,878,140	2.1573	78	(169)	35,238,445	16,334,851	2.1573
9	Jul-21	4,140,150	3.0261	12,528,508	2.3329	67	(156)	47,766,797	20,474,934	2.3329
10	Aug-21	2,929,373	2.8832	8,445,968	2.4018	67	(160)	56,212,605	23,404,240	2.4018
11	Sep-21	3,223,018	3.6173	11,658,623	2.5489	67	(170)	67,871,058	26,627,191	2.5489
12	Oct-21	1,896,882	4.8868	9,269,683	2.7044	72,121	(195,043)	76,945,697	28,451,953	2.7044
13	Nov-21	244,484	4.8822	1,193,620	2.7230	1,898,213	(5,168,833)	72,970,484	26,798,224	2.7230

68,746,710.88

14 Twelve Month Average ((Lns. 3 thru 14)/12)

40,437,689

Exhibit No. 8 Schedule No. 8 Page 1 of 1 Witness: J. E. Covert

#### COLUMBIA GAS OF PENNSYLVANIA, INC DEFERRED INCOME TAXES BALANCE ENDED NOVEMBER 30, 2021

			Pro Forma	
Line			Balance	
No.	Acct		11/30/21	<u>Reference</u>
	<del></del>		(\$)	· · · · · · · · · · · · · · · · · · ·
1		Account 190 - Deferred Income Taxes		
2	19001000	LIFO Inventory Adj - Federal	6,973,737	
3	19002000	LIFO Inventory Adj - State	3,685,709	
4	19001000	Capitalized Inventory - Fed	1,015,878	
5	19002000	Capitalized Inventory - St	536,904	
6	19005000	Cust. Advances - Fed	576,188	
7	19006000	Cust. Advances - St	304,523	
8	19005000	Federal Net Operating Loss	33,775,318	
9	19005000	Deficient Deferred Taxes 190- NOL, Inventory & Customer Advances	26,700,995	
10		Total Account 190	73,569,252	
44		Account 000 Defermed Income Tours Democration		
11	00005000	Account 282 - Deferred Income Taxes-Depreciation	(404 440 440)	
12	28205000	Excess Accelerated Tax Depreciation - Fed	(481,410,449)	
13		Total Account 282	(481,410,449)	
14		Account 283 - Deferred Income Taxes - Other		
15	28305000	Legal Liability-Lease on G.O. Bldg Fed	0	
16	28306000	Legal Liability-Lease on G.O. Bldg St	0	
17		Total Account 283	0	
18		Total Accumulated Deferred Taxes	(407,841,197)	Exhibit 7, Pg. 8 & 9

Exhibit No. 8 Schedule No. 9 Page 1 of 1 Witness: J. E. Covert

#### COLUMBIA GAS OF PENNSYLVANIA, INC CUSTOMER DEPOSITS AVERAGE OF THIRTEEN MONTHLY BALANCES ENDED NOVEMBER 30, 2021

Line <u>No.</u>	<u>Month</u>	Acct-23500300 Other <u>Deposits</u> (1) \$	Acct-23500000 Security <u>Deposits</u> (2) \$	Total Account <u>235</u> (3) \$
1	Nov-20	(140,000)	(3,360,935)	(3,500,935)
2	Dec-20	(140,000)	(3,339,442)	(3,479,442)
3	Jan-21	(140,000)	(3,310,725)	(3,450,725)
4	Feb-21	(140,000)	(3,276,009)	(3,416,009)
5	Mar-21	(140,000)	(3,248,265)	(3,388,265)
6	Apr-21	(140,000)	(3,253,165)	(3,393,165)
7	May-21	(140,000)	(3,205,375)	(3,345,375)
8	Jun-21	(140,000)	(3,223,912)	(3,363,912)
9	Jul-21	(140,000)	(3,256,638)	(3,396,638)
10	Aug-21	(140,000)	(3,319,032)	(3,459,032)
11	Sep-21	(140,000)	(3,408,129)	(3,548,129)
12	Oct-21	(140,000)	(3,581,183)	(3,721,183)
13	Nov-21	(140,000)	(3,730,887)	(3,870,887)
14	Total	(1,820,000)	(43,513,698)	(45,333,698)
15	13 Month Average Balance	(140,000)	(3,347,208)	(3,487,208)

Exhibit No. 8 Schedule No. 10 Page 1 of 1 Witness: J. E. Covert

#### COLUMBIA GAS OF PENNSYLVANIA, INC CUSTOMER ADVANCES NOVEMBER 30, 2021

			Customer	
		Customer	Advances - Deposit	
		Advances - Deposit	(Post 12/31/99)	
		Account	Account	Net
Line		<u>25200000</u>	<u>18600400</u>	<u>252</u>
<u>No.</u>	<u>Month</u>	(1)	(2)	(3=1+2)
		\$	\$	
1	Nov-21	(3,048,275)	3,050,106	<u>1,832</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, 2021, by vintage by account and including applicable depreciation reserves and accruals begin on page II-8.

Exhibit No. 9 Schedule No. 1 Page 3 of 90 Witness J.J. Spanos



### 2021 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF NOVEMBER 30, 2021

Prepared by:



Exhibit No. 9 Schedule No. 1 Page 4 of 90 Witness J.J. Spanos

# COLUMBIA GAS OF PENNSYLVANIA, INC. Pittsburgh, Pennsylvania

#### 2021 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS
RELATED TO GAS PLANT
AS OF NOVEMBER 30, 2021



Corporate Headquarters 207 Senate Avenue Camp Hill, PA 17011 **P** 717.763.7211 | **F** 717.763.8150

gannettfleming.com

March 8, 2022

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, 2021. 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, "2022 Depreciation Study - Calculated Annual Depreciation Accruals Related to Gas Plant as of November 30, 2022".

Respectfully submitted,

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC

John J. Sparos

JOHN J. SPANOS President

JJS:mle

070578.000

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Exhibit No. 9 Schedule No. 1 Page 7 of 90 Witness J.J. Spanos

### 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,

2021. Table 2 presents the experienced gross salvage and cost of removal associated

with regular retirements during the five-year period, 2016-2020 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 2016

through 2020, beginning on beginning on pages III-2 through III-6.

**ANNETT FLEMING** 

Columbia Gas of Pennsylvania, Inc. - HTY November 30, 2021

Exhibit No. 9 Schedule No. 1 Page 9 of 90 Witness J.J. Spanos

# COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF NOVEMBER 30, 2021

	DEPRECIABLE GROUP (1)	SURVIVOR CURVE (2)	ORIGINAL COST AS OF NOVEMBER 30, 2021 (3)	BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	CALCULATED ANNUAL ACCRUAL AMOUNT RATI (6) (7)=(6)	CCRUAL RATE (7)=(6)/(3)	COMPOSITE REMAINING LIFE (8)=(5)/(6)
DEPRE	DEPRECIABLE PLANT							
UNDER	UNDERGROUND STORAGE PLANT							
350.2 351	RIGHTS OF WAY COMPRESSOR STATION STRUCTURES	SQUARE 65-R2.5	1,932.08	1,931 2,362,836	1 887,201	0 218,415	6.72	- 4.1
352.01 352.02	WELLS CONSTRUCTION EQUIPMENT TOTAL ACCOUNT 352	SQUARE 50-S2.5	1,126,771.93 1,072,969.88 2,199,741.81	738,926 168,032 906,958	387,846 904,938 1,292,784	95,059 224,384 319,443	8.44 20.91	4.1
352.1 353 354 355	STORAGE LEASEHOLDS AND RIGHTS LINES COMPRESSOR STATION EQUIPMENT MEASURING AND REGULATING EQUIPMENT	SQUARE 50-S1.5 55-R2.5 37-R1.5	206,940.78 389,345.13 948,176.70 104,476.92	206,932 388,491 816,990 104,477	9 854 131,187	2 225 32,451	0.00 0.06 3.42	4.5 3.8 4.0
	TOTAL UNDERGROUND STORAGE PLANT		7,100,650.38	4,788,615	2,312,036	570,536	8.03	
DISTRIE	DISTRIBUTION PLANT							
374.4 374.5	LAND AND LAND RIGHTS LAND RIGHTS RIGHTS OF WAY TOTAL ACCOUNT 374	70-R2.5 80-S4	3,812,368.37 3,233,171.42 7,045,539.79	866,132 1,791,949 2,658,081	2,946,236 1,441,222 4,387,458	63,812 34,957 98,769	1.67 1.08 1.40	46.2
375.34 375.6	STRUCTURES AND IMPROVEMENTS MEASURING AND REGULATING OTHER DISTRIBUTION SYSTEMS	60-R1 55-R1	6,014,289.33 86,227.87	1,418,913 75,321	4,595,376 10,907	132,567 532	2.20	34.7 20.5
3/3./	OTHER DISTRIBUTION SYSTEMS DISTRIBUTION SYSTEM STRUCTURES OTHER BUILDIINGS TOTAL ACCOUNT 375.70	90-R1.5 35-R2	, 14,905,070.84 3,018,674.28 17,923,745.12	3,302,678 1,054,096 4,356,774	11,602,391 1,964,578 13,566,969	422,405 87,548 509,953	2.83 2.90 2.85	27.5 22.4 26.6
375.8	COMMUNICATION	45-R3	16,515.17	8,256	8,259	358	2.17	23.1
	TOTAL ACCOUNT 375		24,040,777.49	5,859,264	18,181,511	643,410	2.68	:SS J.
376	MAINS CAST IRON BARE STEEL OTHER	71-R1 71-R1 71-R1	161,465.15 63,279,781.89 2,103,171,893.33	134,755 42,879,976 268,413,585	26,710 20,399,806 1,834,758,308	13,382 1,638,654 44,797,128	8.29 2.59 2.13	2. 1. 4 0. 4. 0. 1. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.
	TOTAL ACCOUNT 376		2,166,613,140.37	311,428,316	1,855,184,824	46,449,164	2.14	

Exhibit No. 9 Schedule No. 1 Page 10 of 90 Witness J.J. Spanos

# COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF NOVEMBER 30, 2021

	ĺ												mess	J.J	Spanos	
COMPOSITE REMAINING LIFE	(8)=(2)/(6)	22.3 9.0	8.3 26.6		24.2 5.5 34.4 28.8	12.7	13.7 15.8 3.1				•	13.3 7.6 1.5		1	16.7	
LATED CCCRUAL RATE	(7)=(6)/(3)	3.72	3.34	3.02	2.42 5.66 1.87 2.04	5.37	3.24 5.00 9.82	5.73	2.45		1	3.99 6.41 16.77	11.08	ı	3.59	3.20
CALCULATED ANNUAL ACCRUAL AMOUNT RATE	(9)	4,689,154 11,337	26,754 20,722,730	20,749,484	1,025,511 1,396,664 793,284 389,770	367,193	4,431 593,310 216,274	814,015	77,427,755		0	84,271 5,853 453,626	543,750	0	632,461	635,513
FUTURE BOOK ACCRUALS	(2)	104,731,353 102,327	220,784 551,257,633	551,478,417	24,830,193 7,692,113 27,255,247 11,234,869	4,678,302	60,691 9,346,521 673,949	10,081,161	2,619,837,775		0	1,122,096 44,197 668,994	1,835,287	(727)	10,550,503	10,553,555
BOOK RESERVE	(4)	21,223,803 33,640	580,077 135,905,920	136,485,997	17,559,361 16,965,002 15,071,634 7,894,716	2,163,531	76,007 2,515,056 1,527,423	4,118,486	541,461,831		49,821	990,474 47,107 2,036,706	3,074,287	26,344	7,091,300 2,232,424	9,323,724
ORIGINAL COST AS OF NOVEMBER 30, 2021	(3)	125,955,155.52 135,966.90	* 800,861.45 687,163,553.40	687,964,414.85	42,389,554.30 24,657,115.27 42,326,880.57 19,129,585.26	6,841,833.15	136,698.14 11,861,577.12 2,201,371.95	14,199,647.21	3,161,299,610.68		49,821.42	2,112,569.94 91,303.67 2,705,700.42	4,909,574.03	25,616.89	17,641,803.32 2,235,476.33	19,877,279.65
SURVIVOR	(2)	45-01 35-S2	50-R0.5 50-R0.5		44-S1 15-S2.5 55-R3 45-S2	30-R0.5	32-R0.5 25-R2 10-S3				45-R2	20-SQ 15-SQ 5-SQ		15-SQ	25-SQ 12-S1.5	
DEPRECIABLE GROUP	(1)	MEASURING AND REGULATING EQUIPMENT - GENERAL MEASURING AND REGULATING EQUIPMENT - CITY GATE	SERVICES BARE STEEL OTHER	TOTAL ACCOUNT 380	METERS METERS - AMR METER INSTALLATIONS HOUSE REGINATIONS OND DECEMBRISH	INDUSTRIAL MEASURING AND REGULATING EQUIPMENT - OTHER THAN METERS	OTHER EQUIPMENT GENERAL COMMUNICATION EQUIPMENT GPS EQUIPMENT	TOTAL ACCOUNT 387	TOTAL DISTRIBUTION PLANT	GENERAL PLANT	STRUCTURES AND IMPROVEMENTS - COMMUNICATION	OFFICE FURNITURE AND EQUIPMENT FURNITURE 1 EQUIPMENT 2 INFORMATION SYSTEMS	TOTAL ACCOUNT 391	TRANSPORTATION EQUIPMENT - TRAILERS	TOOLS, SHOP AND GARAGE EQUIPMENT EQUIPMENT CNG FACILITIES	TOTAL ACCOUNT 394
		378 379.1	380		381 381.1 382 383	200	387 387.4 387.5			GENE	390.1	391.1 391.11 391.12		392	394 394.12	

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF NOVEMBER 30, 2021

CALCULATED   COMPOSITE	182,940     13,881     5.22     13.2       (1,872)     0     -     -       1,189     105     0.01     11.3       473,104     57,726     6.06     8.2	13,043,476 1,250,975 4.50	2,635,193,287 79,249,266 2.48		23,340,180 5,491,032 ** 4,760,037 661,848 ** 3,433,695 253,469 **	31,533,912 6,406,349		2,666,727,199 85,655,615
BOOK RESERVE /	83,099 950,570 786,727 478,961	14,773,533	561,023,979 2,		17,729,680 1,006,579 (230,180) 2,547,985	21,054,064	234,693	582,312,736
ORIGINAL COST AS OF NOVEMBER 30, 2021 (3)	266,039.42 948,698.04 787,915.68 952,065.04	27,817,010.17	3,196,217,271.23		41,069,860.27 5,766,616.45 5,981,679.83	52,818,156.55	3,533,240.78	3,252,568,668.56
SURVIVOR CURVE (2)	20-SQ 13-L2 19-R2.5 15-SQ							
DEPRECIABLE GROUP (1)	395 LABORATORY EQUIPMENT 396 POWER OPERATED EQUIPMENT 397.5 COMMUNICATION EQUIPMENT - TELEMETERING 398 MISCELLANEOUS EQUIPMENT	TOTAL GENERAL PLANT	SUBTOTAL DEPRECIABLE PLANT	AMORTIZABLE PLANT	303 MISCELLANEOUS INTANGIBLE PLANT 303.6 MISCELLANEOUS INTANGIBLE PLANT - CLOUD 362.1 ENVIRONMENTAL REMEDIATION 375.71 STRUCTURES AND IMPROVEMENTS - LEASED	SUBTOTAL AMORTIZABLE PLANT	NONDEPRECIABLE PLANT	TOTAL GAS PLANT

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



COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 2. AMORTIZATION OF EXPERIENCED NET SALVAGE

	SALVAGE ACCRUAL	(13)=(12)/5	(4,287)	(171)	(67,200)	(38)	(9,223)	(33,022)	(104)	(E)	(1,259,452)	(203,267)	(15,264)	(3,118,893)	60,916	(2)	(185)	(114,611)	(2,240)	2,791	437	(648)	35,221	(51)	(4,729,294)
	NET SALVAGE	(12)	(21,434.00)	(854.11)	(336,000.60)	(192.38)	(46,113.79)	(165,109.16)	(518.68)	(6.91)	(6,297,257.70)	(1,016,334.54)	(76,321.00)	(15,594,466.61)	304,580.41	(10.01)	(925.21)	(573,056.82)	(11,199.23)	13,954.79	2,183.22	(3,239.63)	176,105.41	(257.12)	(23,646,473.67)
20	GROSS SALVAGE	(11)																							0.00
2020	COST OF REMOVAL	(10)			66,230.55		181.75	53,446.96		6.91	908,940.08	137,617.14		4,200,676.28			925.21	82,945.35	1,780.14			3,239.63			5,455,990.00
6	GROSS SALVAGE	(6)																		09.909					606.50
2019	COST OF REMOVAL	(8)		220.40	84,433.04		4,027.90	13,446.58	518.68		1,562,758.41	197,320.30		3,345,786.25	675.26			187,266.09	2,001.41						5,398,454.32
8	GROSS SALVAGE	(7)													60,956.85					13,348.29	6,262.88		123,650.81		204,218.83
2018	COST OF REMOVAL	(9)	21,434.00	633.71	101,148.90		3,646.96	35,116.51			1,441,406.34	370,922.18	76,321.00	3,052,049.09		10.01		124,888.37	5,150.01						5,232,727.08
7	GROSS SALVAGE	(2)									1,297.00				34,508.89										35,805.89
2017	COST OF REMOVAL	(4)			56,417.81		38,240.05	36,137.31			1,258,205.78	247,333.58		2,142,798.48	4,899.87			113,814.22	459.97		1,648.52			257.12	3,900,212.71
9	GROSS SALVAGE	(3)									3,855.00				215,365.51								52,454.60		271,675.11
2016	COST OF REMOVAL	(2)			27,770.30	192.38	17.13	26,961.80			1,131,099.09	63,141.34		2,853,156.51	675.71			64,142.79	1,807.70		2,431.14				4,171,395.89
	ACCOUNT	(1)	351.20	353.00	362.10	374.20	374.40	375.34	375.60	375.70	376.00	378.00	379.10	380.00	381.00	382.00	383.00	385.00	387.40	392.00	394.00	394.12	396.00	397.50	TOTAL



Exhibit No. 9 Schedule No. 1 Page 13 of 90 Witness J.J. Spanos

# PART II. DETAILED DEPRECIATION CALCULATIONS



Exhibit No. 9 Schedule No. 1 Page 14 of 90 Witness J.J. Spanos

**CUMULATIVE DEPRECIATED ORIGINAL COST** 



# CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2021

			DEPRE	CIATED ORIGINAL	
YEAR	ORIGINAL	ACCRUED	AMOUNT	CUMULATIVE	PCT OF COL 4
INST	COST	DEPRECIATION	(2) - (3)	AMOUNT	TOTAL
(1)	(2)	(3)	(2) $(3)$	(5)	(6)
	(2)	(3)	(4)	(3)	(0)
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	6,698	6,698			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 <b>,</b> 675		1-	0.0
1900	12,214	12,213	1		0.0
1901	433,661	342,446	91,215	91,215	0.0
1902	44,716	36,864	7,852	99,067	0.0
1903	43,186	37,284	5,902	104,969	0.0
1904	31,805	27,025	4,780	109,749	0.0
1905	40,301	34,420	5,881	115,630	0.0
1906	24,444	20,481	3,963	119,593	0.0
1907	46,091	36,765	9,326	128,919	0.0
1908	25,869	21,590	4,279	133,198	0.0
1909	23,297	19,569	3,728	136,926	0.0
1910	18,377	14,632	3,745	140,671	0.0
1911	19,672	15,664	4,008	144,679	0.0
1912	13,601	11,050	2,551	147,230	0.0
1913	28,613	23,162	5,451	152,681	0.0
1914	30,209	24,776	5,433	158,114	0.0
1915	28,302	24,107	4,195	162,309	0.0
1916	19,937	15,815	4,122	166,431	0.0
1917	23,398	18,618	4,780	171,211	0.0
1918	8,066	6 <b>,</b> 679	1,387	172,598	0.0
1919	12,113	9,690	2,423	175,021	0.0
1920	15,228	12,343	2,885	177,906	0.0
1921	34,945	28,522	6,423	184,329	0.0
1922	55,843	43,218	12,625	196,954	0.0
1923	36,186	29,107	7,079	204,033	0.0
1924	59,280	45,239	14,041	218,074	0.0
1925	81,028	63,117	17,911	235,985	0.0
1926	99,906	75,713	24,193	260,178	0.0
1927	73,826	56,630	17 <b>,</b> 196	277,374	0.0
1928	119,401	90,506	28,895	306,269	0.0
	,	50,000	=0,000	-00,-00	J. J

# CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2021

YEAR         ORIGINAL (OST)         ACCRED DEPRECIATION         AMOUNT (2) - (3)         AMOUNT TOTAL (TOTAL (1))         COL 4 (2)         AMOUNT TOTAL (7)         TOTAL (7)         COL 4 (4)         AMOUNT TOTAL (5)         TOTAL (6)         COL 4 (6)         AMOUNT TOTAL (7)         TOTAL (7)         COL 4 (6)         AMOUNT TOTAL (7)         TOTAL (7)         COL 4 (6)         COL 4 (6)         COL 4 (6)         AMOUNT TOTAL (7)         TOTAL (7)         COL 4 (6)         COL 4 (7)         COL 4 (7) <th></th> <th></th> <th></th> <th>DEPRE</th> <th>CIATED ORIGINA</th> <th></th>				DEPRE	CIATED ORIGINA	
TNST						PCT OF
(1) (2) (3) (4) (5) (6)  1929						
1929         158,239         121,638         36,601         342,870         0.0           1930         138,952         104,245         35,707         378,577         0.0           1931         143,978         107,306         36,672         415,249         0.0           1932         28,293         21,481         6,812         422,061         0.0           1933         30,599         23,613         6,986         422,047         0.0           1934         37,201         28,620         8,581         437,628         0.0           1935         31,932         23,402         8,530         446,158         0.0           1936         44,085         33,370         10,715         456,873         0.0           1937         71,718         54,344         17,374         474,247         0.0           1938         59,809         47,968         11,841         486,088         0.0           1940         145,409         109,825         35,584         548,878         0.0           1941         193,843         143,749         50,094         599,972         0.0           1942         110,073         83,563         26,510         626,482						
1930         139,952         104,245         35,707         378,577         0.0           1931         143,978         107,306         36,672         415,249         0.0           1932         28,293         21,481         6,812         422,061         0.0           1933         30,599         23,613         6,986         429,047         0.0           1935         31,932         23,402         8,530         446,158         0.0           1936         44,085         33,370         10,715         456,873         0.0           1937         71,718         54,344         17,374         474,247         0.0           1938         59,809         47,968         11,841         486,088         0.0           1939         145,428         117,222         28,206         514,294         0.0           1940         145,409         109,825         35,584         549,878         0.0           1941         193,843         143,749         50,094         599,972         0.0           1942         110,073         83,563         26,510         626,482         0.0           1943         56,647         43,579         13,068         639,550	(1)	(2)	(3)	(4)	(5)	(6)
1931         143,978         107,306         36,672         415,249         0.0           1932         28,293         21,481         6,812         422,061         0.0           1934         30,599         23,613         6,986         429,047         0.0           1935         31,932         22,402         8,530         446,158         0.0           1936         44,085         33,370         10,715         456,873         0.0           1937         71,718         54,344         17,374         474,247         0.0           1938         59,809         47,968         11,841         486,088         0.0           1940         145,428         117,222         28,206         514,294         0.0           1941         193,843         143,749         50,094         599,972         0.0           1941         193,843         143,749         50,094         599,972         0.0           1944         315,583         25,282         6,510         626,482         0.0           1944         31,583         25,282         6,301         645,851         0.0           1945         28,005         22,000         6,005         651,856	1929	158,239	121,638	36,601	342,870	0.0
1932         28,293         21,481         6,812         422,061         0.0           1933         30,599         23,613         6,986         429,047         0.0           1935         31,932         23,402         8,581         437,628         0.0           1936         44,085         33,370         10,715         456,873         0.0           1937         71,718         54,344         17,374         474,247         0.0           1938         59,809         47,968         11,841         486,088         0.0           1939         145,428         117,222         28,206         514,294         0.0           1940         145,409         109,825         35,584         549,878         0.0           1941         193,843         143,749         50,094         599,972         0.0           1942         110,073         83,563         26,510         626,482         0.0           1944         31,583         22,282         6,301         645,851         0.0           1944         31,583         22,282         6,301         645,851         0.0           1946         91,199         69,073         22,126         673,982	1930	139,952	104,245	35 <b>,</b> 707	378 <b>,</b> 577	0.0
1933         30,599         23,613         6,986         429,047         0.0           1934         37,201         28,620         8,581         437,628         0.0           1936         44,085         33,370         10,715         456,873         0.0           1937         71,718         54,344         17,374         474,247         0.0           1938         59,809         47,968         11,841         486,088         0.0           1939         145,428         117,222         28,206         514,294         0.0           1940         145,409         109,825         35,584         59,878         0.0           1941         193,843         143,749         50,094         599,972         0.0           1942         110,073         83,563         26,510         626,482         0.0           1943         56,647         43,579         13,068         639,550         0.0           1944         10,073         83,563         26,510         626,482         0.0           1944         31,583         25,282         6,301         645,851         0.0           1944         31,583         25,282         6,301         645,851	1931	143,978	107,306	36 <b>,</b> 672	415,249	0.0
1933         30,599         23,613         6,986         429,047         0.0           1934         37,201         28,620         8,581         437,628         0.0           1936         31,932         23,402         8,530         446,158         0.0           1937         71,718         54,344         17,374         474,247         0.0           1938         59,809         47,968         11,841         486,088         0.0           1939         145,428         117,222         28,206         514,294         0.0           1940         145,409         109,825         35,584         549,878         0.0           1941         193,843         143,749         50,094         599,972         0.0           1942         110,073         83,563         26,510         626,482         0.0           1943         56,647         43,579         13,068         639,550         0.0           1944         31,583         25,282         6,301         645,851         0.0           1944         31,583         25,282         6,301         645,851         0.0           1945         28,005         22,000         6,005         651,856	1932					0.0
1934       37,201       28,620       8,581       437,628       0.0         1935       31,932       23,402       8,530       446,158       0.0         1937       71,718       54,344       17,374       474,247       0.0         1938       59,809       47,968       11,841       486,088       0.0         1939       145,428       117,222       28,206       514,294       0.0         1940       145,409       109,825       35,584       549,878       0.0         1941       193,843       143,749       50,094       599,972       0.0         1942       110,073       83,563       26,510       626,482       0.0         1943       56,647       43,579       13,068       639,550       0.0         1944       31,583       25,282       6,301       645,851       0.0         1945       28,005       22,000       6,005       651,856       0.0         1947       104,742       79,637       25,105       699,087       0.0         1948       275,880       205,740       70,140       769,227       0.0         1949       617,637       446,490       171,147       940,374 </td <td>1933</td> <td></td> <td></td> <td></td> <td></td> <td>0.0</td>	1933					0.0
1935         31,932         23,402         8,530         446,158         0.0           1936         44,085         33,370         10,715         456,873         0.0           1938         59,809         47,968         11,841         486,088         0.0           1939         145,428         117,222         28,206         514,294         0.0           1940         145,409         109,825         35,584         549,878         0.0           1941         193,843         143,749         50,094         599,972         0.0           1942         110,073         83,563         26,510         626,482         0.0           1943         56,647         43,579         13,068         633,550         0.0           1944         31,583         25,282         6,301         645,851         0.0           1944         31,583         25,282         6,301         645,851         0.0           1944         31,583         25,280         6,005         651,856         0.0           1945         28,005         22,000         6,005         651,856         0.0           1946         91,999         69,73         25,105         699,087					437,628	0.0
1936         44,085         33,370         10,715         456,873         0.0           1937         71,718         54,344         17,374         474,247         0.0           1938         59,809         47,968         11,841         486,088         0.0           1939         145,428         117,222         28,206         514,294         0.0           1940         145,409         109,825         35,584         549,878         0.0           1941         193,843         143,749         50,094         599,972         0.0           1942         110,073         83,563         26,510         626,482         0.0           1943         56,647         43,579         13,068         639,550         0.0           1944         31,583         25,282         6,301         645,851         0.0           1945         28,005         22,000         6,005         651,856         0.0           1946         91,199         69,073         22,126         673,982         0.0           1947         104,742         79,637         25,105         699,087         0.0           1948         275,880         205,740         70,140         769,227	1935					
1937         71,718         54,344         17,374         474,247         0.0           1938         59,809         47,968         11,841         486,088         0.0           1940         145,428         117,222         28,206         514,294         0.0           1941         193,843         143,749         50,094         599,972         0.0           1942         110,073         83,563         26,510         626,482         0.0           1943         56,647         43,579         13,068         639,550         0.0           1944         31,583         25,282         6,301         645,851         0.0           1945         28,005         22,000         6,005         651,856         0.0           1946         91,199         69,073         22,126         673,982         0.0           1948         275,880         205,740         70,140         769,227         0.0           1949         617,637         446,490         171,147         940,374         0.0           1950         1,46,362         822,924         323,438         1,63,812         0.0           1951         957,643         690,824         266,819         1,530						
1938         59,809         47,968         11,841         486,088         0.0           1939         145,428         117,222         28,206         514,294         0.0           1940         145,409         109,825         35,584         549,878         0.0           1941         193,843         143,749         50,094         599,972         0.0           1942         110,073         83,563         26,510         626,482         0.0           1943         56,647         43,579         13,068         639,550         0.0           1944         31,583         25,282         6,301         645,851         0.0           1946         91,199         69,073         22,126         673,982         0.0           1947         104,742         79,637         25,105         699,087         0.0           1948         275,880         205,740         70,140         769,227         0.0           1949         617,637         446,490         171,147         940,374         0.0           1951         957,643         690,824         266,819         1,530,631         0.1           1952         2,042,362         1,429,501         612,861         <						
1939         145,428         117,222         28,206         514,294         0.0           1940         145,409         109,825         35,584         549,878         0.0           1941         193,843         143,749         50,094         599,972         0.0           1942         110,073         83,563         26,510         626,482         0.0           1943         56,647         43,579         13,068         639,550         0.0           1944         31,583         25,282         6,301         645,851         0.0           1946         91,199         69,073         22,126         673,982         0.0           1947         104,742         79,637         25,105         699,087         0.0           1948         275,880         205,740         70,140         769,227         0.0           1949         617,637         446,490         171,147         940,374         0.0           1950         1,146,362         822,924         323,438         1,263,812         0.0           1951         957,643         690,824         266,819         1,530,631         0.1           1952         2,042,362         1,429,501         612,861						0.0
1940         145,409         109,825         35,584         549,878         0.0           1941         193,843         143,749         50,094         599,972         0.0           1942         110,073         83,563         26,510         626,482         0.0           1943         56,647         43,579         13,068         639,550         0.0           1944         31,583         25,282         6,301         645,851         0.0           1945         28,005         22,000         6,005         651,856         0.0           1946         91,199         69,073         22,126         673,982         0.0           1947         104,742         79,637         25,105         699,087         0.0           1948         275,880         205,740         70,140         769,227         0.0           1949         617,637         446,490         171,147         940,374         0.0           1950         1,146,362         822,924         323,438         1,263,812         0.0           1951         957,643         690,824         266,819         1,530,631         0.1           1952         2,042,362         1,429,501         612,861						
1941         193,843         143,749         50,094         599,972         0.0           1942         110,073         83,563         26,510         626,482         0.0           1943         56,647         43,579         13,068         639,550         0.0           1944         31,583         25,282         6,301         645,851         0.0           1945         28,005         22,000         6,005         651,856         0.0           1946         91,199         69,073         22,126         673,982         0.0           1947         104,742         79,637         25,105         699,087         0.0           1948         275,880         205,740         70,140         769,227         0.0           1949         617,637         446,490         171,147         940,374         0.0           1950         1,146,362         822,924         323,438         1,263,812         0.0           1951         957,643         690,824         266,819         1,530,631         0.1           1952         2,042,362         1,429,501         612,861         2,143,492         0.1           1953         1,415,483         1,001,399         414,084 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
1942         110,073         83,563         26,510         626,482         0.0           1943         56,647         43,579         13,068         639,550         0.0           1944         31,583         25,282         6,301         645,851         0.0           1945         28,005         22,000         6,005         651,856         0.0           1946         91,199         69,073         22,126         673,982         0.0           1947         104,742         79,637         25,105         699,087         0.0           1948         275,880         205,740         70,140         769,227         0.0           1949         617,637         446,490         171,147         940,374         0.0           1950         1,146,362         822,924         323,438         1,263,812         0.0           1951         957,643         690,824         266,819         1,530,631         0.1           1952         2,042,362         1,429,501         612,861         2,143,492         0.1           1953         1,415,483         1,001,399         414,084         2,557,576         0.1           1954         1,80,4945         1,302,598         547,						
1943         56,647         43,579         13,068         639,550         0.0           1944         31,583         25,282         6,301         645,851         0.0           1945         28,005         22,000         6,005         651,856         0.0           1946         91,199         69,073         22,126         673,982         0.0           1947         104,742         79,637         25,105         699,087         0.0           1948         275,880         205,740         70,140         769,227         0.0           1949         617,637         446,490         171,147         940,374         0.0           1950         1,146,362         822,924         323,438         1,263,812         0.0           1951         957,643         690,824         266,819         1,530,631         0.1           1952         2,042,362         1,429,501         612,861         2,143,492         0.1           1953         1,415,483         1,001,399         414,084         2,557,576         0.1           1954         1,850,495         1,302,598         547,897         3,105,473         0.1           1956         2,830,053         1,947,472						
1944         31,583         25,282         6,301         645,851         0.0           1945         28,005         22,000         6,005         651,856         0.0           1946         91,199         69,073         22,126         673,982         0.0           1947         104,742         79,637         25,105         699,087         0.0           1948         275,880         205,740         70,140         769,227         0.0           1949         617,637         446,490         171,147         940,374         0.0           1950         1,146,362         822,924         323,438         1,263,812         0.0           1951         957,643         690,824         266,819         1,530,631         0.1           1952         2,042,362         1,429,501         612,861         2,143,492         0.1           1953         1,415,483         1,001,399         414,084         2,557,576         0.1           1954         1,850,495         1,302,598         547,897         3,105,473         0.1           1955         4,565,975         3,162,352         1,403,623         4,509,096         0.2           1957         3,697,593         2,550,533 <td>1943</td> <td></td> <td></td> <td></td> <td></td> <td></td>	1943					
1945         28,005         22,000         6,005         651,856         0.0           1946         91,199         69,073         22,126         673,982         0.0           1947         104,742         79,637         25,105         699,087         0.0           1948         275,880         205,740         70,140         769,227         0.0           1949         617,637         446,490         171,147         940,374         0.0           1950         1,146,362         822,924         323,438         1,263,812         0.0           1951         957,643         690,824         266,819         1,530,631         0.1           1952         2,042,362         1,429,501         612,861         2,143,492         0.1           1953         1,415,483         1,001,399         414,084         2,557,576         0.1           1954         1,850,495         1,302,598         547,897         3,105,473         0.1           1955         4,565,975         3,162,352         1,403,623         4,509,096         0.2           1957         3,697,593         2,550,533         1,147,060         6,538,737         0.2           1958         4,423,932						
1946         91,199         69,073         22,126         673,982         0.0           1947         104,742         79,637         25,105         699,087         0.0           1948         275,880         205,740         70,140         769,227         0.0           1949         617,637         446,490         171,147         940,374         0.0           1950         1,146,362         822,924         323,438         1,263,812         0.0           1951         957,643         690,824         266,819         1,530,631         0.1           1952         2,042,362         1,429,501         612,861         2,143,492         0.1           1953         1,415,483         1,001,399         414,084         2,557,576         0.1           1954         1,850,495         1,302,598         547,897         3,105,473         0.1           1955         4,565,975         3,162,352         1,403,623         4,509,096         0.2           1955         4,565,975         3,162,352         1,403,623         4,509,096         0.2           1957         3,697,593         2,550,533         1,147,060         6,538,737         0.2           1958         4,423,932	1945					
1947         104,742         79,637         25,105         699,087         0.0           1948         275,880         205,740         70,140         769,227         0.0           1949         617,637         446,490         171,147         940,374         0.0           1950         1,146,362         822,924         323,438         1,263,812         0.0           1951         957,643         690,824         266,819         1,530,631         0.1           1952         2,042,362         1,429,501         612,861         2,143,492         0.1           1953         1,415,483         1,001,399         414,084         2,557,576         0.1           1954         1,850,495         1,302,598         547,897         3,105,473         0.1           1955         4,565,975         3,162,352         1,403,623         4,509,096         0.2           1956         2,830,053         1,947,472         882,581         5,391,677         0.2           1957         3,697,593         2,550,533         1,147,060         6,538,737         0.2           1958         4,423,932         3,050,276         1,373,656         7,912,393         0.3           1959         3,700,						
1948       275,880       205,740       70,140       769,227       0.0         1949       617,637       446,490       171,147       940,374       0.0         1950       1,146,362       822,924       323,438       1,263,812       0.0         1951       957,643       690,824       266,819       1,530,631       0.1         1952       2,042,362       1,429,501       612,861       2,143,492       0.1         1953       1,415,483       1,001,399       414,084       2,557,576       0.1         1954       1,850,495       1,302,598       547,897       3,105,473       0.1         1955       4,565,975       3,162,352       1,403,623       4,509,096       0.2         1956       2,830,053       1,947,472       882,581       5,391,677       0.2         1957       3,697,593       2,550,533       1,147,060       6,538,737       0.2         1958       4,423,932       3,050,276       1,373,656       7,912,393       0.3         1959       3,700,358       2,524,605       1,175,753       9,088,146       0.3         1960       3,851,991       2,624,815       1,227,176       10,315,322       0.4						
1949       617,637       446,490       171,147       940,374       0.0         1950       1,146,362       822,924       323,438       1,263,812       0.0         1951       957,643       690,824       266,819       1,530,631       0.1         1952       2,042,362       1,429,501       612,861       2,143,492       0.1         1953       1,415,483       1,001,399       414,084       2,557,576       0.1         1954       1,850,495       1,302,598       547,897       3,105,473       0.1         1955       4,565,975       3,162,352       1,403,623       4,509,096       0.2         1956       2,830,053       1,947,472       882,581       5,391,677       0.2         1957       3,697,593       2,550,533       1,147,060       6,538,737       0.2         1958       4,423,932       3,050,276       1,373,656       7,912,393       0.3         1959       3,700,358       2,524,605       1,175,753       9,088,146       0.3         1960       3,851,991       2,624,815       1,227,176       10,315,322       0.4         1961       4,226,966       2,854,845       1,372,121       11,687,443       0.4						
1950       1,146,362       822,924       323,438       1,263,812       0.0         1951       957,643       690,824       266,819       1,530,631       0.1         1952       2,042,362       1,429,501       612,861       2,143,492       0.1         1953       1,415,483       1,001,399       414,084       2,557,576       0.1         1954       1,850,495       1,302,598       547,897       3,105,473       0.1         1955       4,565,975       3,162,352       1,403,623       4,509,096       0.2         1956       2,830,053       1,947,472       882,581       5,391,677       0.2         1957       3,697,593       2,550,533       1,147,060       6,538,737       0.2         1958       4,423,932       3,050,276       1,373,656       7,912,393       0.3         1959       3,700,358       2,524,605       1,175,753       9,088,146       0.3         1960       3,851,991       2,624,815       1,227,176       10,315,322       0.4         1961       4,226,966       2,854,845       1,377,121       11,687,443       0.4         1962       3,968,074       2,653,312       1,314,762       13,002,205       0.5     <						
1951       957,643       690,824       266,819       1,530,631       0.1         1952       2,042,362       1,429,501       612,861       2,143,492       0.1         1953       1,415,483       1,001,399       414,084       2,557,576       0.1         1954       1,850,495       1,302,598       547,897       3,105,473       0.1         1955       4,565,975       3,162,352       1,403,623       4,509,096       0.2         1956       2,830,053       1,947,472       882,581       5,391,677       0.2         1957       3,697,593       2,550,533       1,147,060       6,538,737       0.2         1958       4,423,932       3,050,276       1,373,656       7,912,393       0.3         1959       3,700,358       2,524,605       1,175,753       9,088,146       0.3         1960       3,851,991       2,624,815       1,227,176       10,315,322       0.4         1961       4,226,966       2,854,845       1,372,121       11,687,443       0.4         1962       3,968,074       2,653,312       1,514,762       13,002,205       0.5         1963       4,910,236       3,255,620       1,654,616       14,656,821       0.6						
1952       2,042,362       1,429,501       612,861       2,143,492       0.1         1953       1,415,483       1,001,399       414,084       2,557,576       0.1         1954       1,850,495       1,302,598       547,897       3,105,473       0.1         1955       4,565,975       3,162,352       1,403,623       4,509,096       0.2         1956       2,830,053       1,947,472       882,581       5,391,677       0.2         1957       3,697,593       2,550,533       1,147,060       6,538,737       0.2         1958       4,423,932       3,050,276       1,373,656       7,912,393       0.3         1959       3,700,358       2,524,605       1,175,753       9,088,146       0.3         1960       3,851,991       2,624,815       1,227,176       10,315,322       0.4         1961       4,226,966       2,854,845       1,372,121       11,687,443       0.4         1962       3,968,074       2,653,312       1,314,762       13,002,205       0.5         1963       4,910,236       3,255,620       1,654,616       14,656,821       0.6         1964       5,060,296       3,366,570       1,693,726       16,350,547       0.						
1953       1,415,483       1,001,399       414,084       2,557,576       0.1         1954       1,850,495       1,302,598       547,897       3,105,473       0.1         1955       4,565,975       3,162,352       1,403,623       4,509,096       0.2         1956       2,830,053       1,947,472       882,581       5,391,677       0.2         1957       3,697,593       2,550,533       1,147,060       6,538,737       0.2         1958       4,423,932       3,050,276       1,373,656       7,912,393       0.3         1959       3,700,358       2,524,605       1,175,753       9,088,146       0.3         1960       3,851,991       2,624,815       1,227,176       10,315,322       0.4         1961       4,226,966       2,854,845       1,372,121       11,687,443       0.4         1962       3,968,074       2,653,312       1,314,762       13,002,205       0.5         1963       4,910,236       3,255,620       1,654,616       14,656,821       0.6         1964       5,060,296       3,366,570       1,693,726       16,350,547       0.6         1965       4,156,757       2,752,410       1,404,347       17,754,894 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td></td<>						
1954       1,850,495       1,302,598       547,897       3,105,473       0.1         1955       4,565,975       3,162,352       1,403,623       4,509,096       0.2         1956       2,830,053       1,947,472       882,581       5,391,677       0.2         1957       3,697,593       2,550,533       1,147,060       6,538,737       0.2         1958       4,423,932       3,050,276       1,373,656       7,912,393       0.3         1959       3,700,358       2,524,605       1,175,753       9,088,146       0.3         1960       3,851,991       2,624,815       1,227,176       10,315,322       0.4         1961       4,226,966       2,854,845       1,372,121       11,687,443       0.4         1962       3,968,074       2,653,312       1,314,762       13,002,205       0.5         1963       4,910,236       3,255,620       1,654,616       14,656,821       0.6         1964       5,060,296       3,366,570       1,693,726       16,350,547       0.6         1965       4,156,757       2,752,410       1,404,347       17,754,894       0.7         1966       5,554,653       3,646,636       1,908,017       19,662,911						
1955       4,565,975       3,162,352       1,403,623       4,509,096       0.2         1956       2,830,053       1,947,472       882,581       5,391,677       0.2         1957       3,697,593       2,550,533       1,147,060       6,538,737       0.2         1958       4,423,932       3,050,276       1,373,656       7,912,393       0.3         1959       3,700,358       2,524,605       1,175,753       9,088,146       0.3         1960       3,851,991       2,624,815       1,227,176       10,315,322       0.4         1961       4,226,966       2,854,845       1,372,121       11,687,443       0.4         1962       3,968,074       2,653,312       1,314,762       13,002,205       0.5         1963       4,910,236       3,255,620       1,654,616       14,656,821       0.6         1964       5,060,296       3,366,570       1,693,726       16,350,547       0.6         1965       4,156,757       2,752,410       1,404,347       17,754,894       0.7         1966       5,554,653       3,646,636       1,908,017       19,662,911       0.7         1968       4,841,323       3,062,982       1,778,341       23,356,035						
1956       2,830,053       1,947,472       882,581       5,391,677       0.2         1957       3,697,593       2,550,533       1,147,060       6,538,737       0.2         1958       4,423,932       3,050,276       1,373,656       7,912,393       0.3         1959       3,700,358       2,524,605       1,175,753       9,088,146       0.3         1960       3,851,991       2,624,815       1,227,176       10,315,322       0.4         1961       4,226,966       2,854,845       1,372,121       11,687,443       0.4         1962       3,968,074       2,653,312       1,314,762       13,002,205       0.5         1963       4,910,236       3,255,620       1,654,616       14,656,821       0.6         1964       5,060,296       3,366,570       1,693,726       16,350,547       0.6         1965       4,156,757       2,752,410       1,404,347       17,754,894       0.7         1966       5,554,653       3,646,636       1,908,017       19,662,911       0.7         1967       5,474,993       3,560,210       1,914,783       21,577,694       0.8         1969       4,037,106       2,467,240       1,569,866       24,925,901						
1957       3,697,593       2,550,533       1,147,060       6,538,737       0.2         1958       4,423,932       3,050,276       1,373,656       7,912,393       0.3         1959       3,700,358       2,524,605       1,175,753       9,088,146       0.3         1960       3,851,991       2,624,815       1,227,176       10,315,322       0.4         1961       4,226,966       2,854,845       1,372,121       11,687,443       0.4         1962       3,968,074       2,653,312       1,314,762       13,002,205       0.5         1963       4,910,236       3,255,620       1,654,616       14,656,821       0.6         1964       5,060,296       3,366,570       1,693,726       16,350,547       0.6         1965       4,156,757       2,752,410       1,404,347       17,754,894       0.7         1966       5,554,653       3,646,636       1,908,017       19,662,911       0.7         1967       5,474,993       3,560,210       1,914,783       21,577,694       0.8         1968       4,841,323       3,062,982       1,778,341       23,356,035       0.9         1969       4,037,106       2,467,240       1,569,866       24,925,901						
1958       4,423,932       3,050,276       1,373,656       7,912,393       0.3         1959       3,700,358       2,524,605       1,175,753       9,088,146       0.3         1960       3,851,991       2,624,815       1,227,176       10,315,322       0.4         1961       4,226,966       2,854,845       1,372,121       11,687,443       0.4         1962       3,968,074       2,653,312       1,314,762       13,002,205       0.5         1963       4,910,236       3,255,620       1,654,616       14,656,821       0.6         1964       5,060,296       3,366,570       1,693,726       16,350,547       0.6         1965       4,156,757       2,752,410       1,404,347       17,754,894       0.7         1966       5,554,653       3,646,636       1,908,017       19,662,911       0.7         1967       5,474,993       3,560,210       1,914,783       21,577,694       0.8         1968       4,841,323       3,062,982       1,778,341       23,356,035       0.9         1969       4,037,106       2,467,240       1,569,866       24,925,901       0.9						
1959       3,700,358       2,524,605       1,175,753       9,088,146       0.3         1960       3,851,991       2,624,815       1,227,176       10,315,322       0.4         1961       4,226,966       2,854,845       1,372,121       11,687,443       0.4         1962       3,968,074       2,653,312       1,314,762       13,002,205       0.5         1963       4,910,236       3,255,620       1,654,616       14,656,821       0.6         1964       5,060,296       3,366,570       1,693,726       16,350,547       0.6         1965       4,156,757       2,752,410       1,404,347       17,754,894       0.7         1966       5,554,653       3,646,636       1,908,017       19,662,911       0.7         1967       5,474,993       3,560,210       1,914,783       21,577,694       0.8         1968       4,841,323       3,062,982       1,778,341       23,356,035       0.9         1969       4,037,106       2,467,240       1,569,866       24,925,901       0.9	1958					
1960       3,851,991       2,624,815       1,227,176       10,315,322       0.4         1961       4,226,966       2,854,845       1,372,121       11,687,443       0.4         1962       3,968,074       2,653,312       1,314,762       13,002,205       0.5         1963       4,910,236       3,255,620       1,654,616       14,656,821       0.6         1964       5,060,296       3,366,570       1,693,726       16,350,547       0.6         1965       4,156,757       2,752,410       1,404,347       17,754,894       0.7         1966       5,554,653       3,646,636       1,908,017       19,662,911       0.7         1967       5,474,993       3,560,210       1,914,783       21,577,694       0.8         1968       4,841,323       3,062,982       1,778,341       23,356,035       0.9         1969       4,037,106       2,467,240       1,569,866       24,925,901       0.9						
1961       4,226,966       2,854,845       1,372,121       11,687,443       0.4         1962       3,968,074       2,653,312       1,314,762       13,002,205       0.5         1963       4,910,236       3,255,620       1,654,616       14,656,821       0.6         1964       5,060,296       3,366,570       1,693,726       16,350,547       0.6         1965       4,156,757       2,752,410       1,404,347       17,754,894       0.7         1966       5,554,653       3,646,636       1,908,017       19,662,911       0.7         1967       5,474,993       3,560,210       1,914,783       21,577,694       0.8         1968       4,841,323       3,062,982       1,778,341       23,356,035       0.9         1969       4,037,106       2,467,240       1,569,866       24,925,901       0.9	1960					0.4
1962       3,968,074       2,653,312       1,314,762       13,002,205       0.5         1963       4,910,236       3,255,620       1,654,616       14,656,821       0.6         1964       5,060,296       3,366,570       1,693,726       16,350,547       0.6         1965       4,156,757       2,752,410       1,404,347       17,754,894       0.7         1966       5,554,653       3,646,636       1,908,017       19,662,911       0.7         1967       5,474,993       3,560,210       1,914,783       21,577,694       0.8         1968       4,841,323       3,062,982       1,778,341       23,356,035       0.9         1969       4,037,106       2,467,240       1,569,866       24,925,901       0.9						
1963       4,910,236       3,255,620       1,654,616       14,656,821       0.6         1964       5,060,296       3,366,570       1,693,726       16,350,547       0.6         1965       4,156,757       2,752,410       1,404,347       17,754,894       0.7         1966       5,554,653       3,646,636       1,908,017       19,662,911       0.7         1967       5,474,993       3,560,210       1,914,783       21,577,694       0.8         1968       4,841,323       3,062,982       1,778,341       23,356,035       0.9         1969       4,037,106       2,467,240       1,569,866       24,925,901       0.9						
1964       5,060,296       3,366,570       1,693,726       16,350,547       0.6         1965       4,156,757       2,752,410       1,404,347       17,754,894       0.7         1966       5,554,653       3,646,636       1,908,017       19,662,911       0.7         1967       5,474,993       3,560,210       1,914,783       21,577,694       0.8         1968       4,841,323       3,062,982       1,778,341       23,356,035       0.9         1969       4,037,106       2,467,240       1,569,866       24,925,901       0.9	1963			1,654,616		
1965       4,156,757       2,752,410       1,404,347       17,754,894       0.7         1966       5,554,653       3,646,636       1,908,017       19,662,911       0.7         1967       5,474,993       3,560,210       1,914,783       21,577,694       0.8         1968       4,841,323       3,062,982       1,778,341       23,356,035       0.9         1969       4,037,106       2,467,240       1,569,866       24,925,901       0.9						
1966       5,554,653       3,646,636       1,908,017       19,662,911       0.7         1967       5,474,993       3,560,210       1,914,783       21,577,694       0.8         1968       4,841,323       3,062,982       1,778,341       23,356,035       0.9         1969       4,037,106       2,467,240       1,569,866       24,925,901       0.9	1965					
1967       5,474,993       3,560,210       1,914,783       21,577,694       0.8         1968       4,841,323       3,062,982       1,778,341       23,356,035       0.9         1969       4,037,106       2,467,240       1,569,866       24,925,901       0.9						
1968       4,841,323       3,062,982       1,778,341       23,356,035       0.9         1969       4,037,106       2,467,240       1,569,866       24,925,901       0.9	1967					
1969 4,037,106 2,467,240 1,569,866 24,925,901 0.9						
19/0 4,031,2// 2,808,052 1,223,225 26,149,126 1.0	1970	4,031,277	2,808,052	1,223,225	26,149,126	1.0
1971 5,923,420 3,714,591 2,208,829 28,357,955 1.1						
1972 3,331,022 1,926,913 1,404,109 29,762,064 1.1						
1973 3,684,597 1,799,802 1,884,795 31,646,859 1.2						
1974 3,159,203 1,341,043 1,818,160 33,465,019 1.3	1974					

# CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2021

YEAR         ORIGINAL         ACCRUED         AMOUNT         CUMULATIVE         COL 4           INST         COST         DEPRECIATION         (2)         (3)         (4)         (5)         (6)           1975         3,163,132         1,345,617         1,817,515         35,282,534         1.3           1976         2,900,946         1,544,991         1,355,955         36,638,489         1.4           1977         6,491,289         3,427,335         3,063,954         39,702,443         1.5           1978         6,510,271         3,363,937         3,146,334         42,848,777         1.6           1979         8,062,060         4,184,145         3,877,915         46,726,692         1.8           1980         10,813,288         5,589,037         5,224,251         51,950,943         2.2           1981         12,566,718         6,507,450         6,059,268         58,010,211         2.2           1982         11,333,286         5,624,626         5,708,660         63,718,871         2.4           1983         3,920,501         4,862,806         5,057,695         68,776,566         2.6           1984         11,407,873         5,552,121         5,685,752         74,632,318 </th <th></th> <th></th> <th></th> <th>DEFK</th> <th>ECIALED ORIGINA</th> <th>PCT OF</th>				DEFK	ECIALED ORIGINA	PCT OF
TIST	V II N D	ODTCTNAT	7 CCDIIED	7 M⊜IIN⊞	CIIMIII A TIVE	
(1) (2) (3) (4) (5) (6)  1975 3,163,132 1,345,617 1,817,515 35,282,534 1.3  1976 2,900,946 1,544,991 1,355,955 36,638,489 1.4  1977 6,491,289 3,427,335 3,063,954 39,702,443 1.5  1978 6,510,271 3,363,937 3,146,334 42,848,777 1.6  1979 8,062,060 4,184,145 3,877,915 46,726,692 1.8  1980 10,813,288 5,589,037 5,224,251 51,950,943 2.0  1981 12,566,718 6,507,450 6,059,268 58,010,211 2.2  1982 11,333,286 5,624,626 5,708,660 63,718,871 2.4  1983 9,220,501 4,862,806 5,057,695 68,776,566 2.6  1984 11,407,873 5,552,121 5,855,752 74,632,318 2.8  1985 11,691,721 5,679,419 6,012,302 80,644,620 3.1  1986 13,098,433 6,245,673 6,852,760 87,497,380 3.3  1987 13,981,638 6,671,155 7,310,483 94,807,863 3.6  1988 16,245,677 7,504,149 8,741,528 103,549,391 3.9  1990 13,504,524 6,117,490 7,387,034 119,164,216 4.5  1991 13,393,227 5,949,649 7,443,578 126,607,94 4.8  1992 14,972,955 6,434,683 8,538,272 13,146,066 5.1  1994 19,037,532 7,709,016 11,328,516 155,706,762 5.9  1995 19,324,289 8,286,663 11,037,662 166,744,388 6.3  1996 20,296,052 8,433,041 11,863,011 178,607,399 6.8  1999 19,073,435 7,018,784 12,054,651 216,449,330 8.2  2000 20,712,255 7,950,488 12,761,767 229,211,097 8.7  2001 21,092,410 7,329,117 13,763,293 242,974,390 9.2  2002 17,144,979 5,535,313 11,191,846 254,166,236 9.6  2008 78,268,841 18,387,070 58,881,771 31,657,506 16.4  2009 53,178,505 11,823,729 41,354,765 526,659,037 20.0  2011 214,917,099 28,743,800 95,453,299 62,211,2336 23.6						
1975         3,163,132         1,345,617         1,817,515         35,282,534         1.3           1976         2,900,946         1,544,991         1,355,955         36,638,489         1.4           1977         6,491,289         3,427,335         3,063,954         39,702,443         1.5           1978         6,510,271         3,363,937         3,146,334         42,848,777         1.6           1979         8,062,060         4,184,145         3,877,915         46,726,692         1.8           1980         10,813,288         5,589,037         5,224,251         51,950,943         2.0           1981         12,566,718         6,507,450         6,059,268         58,010,211         2.2           1982         11,333,286         5,624,626         5,708,660         63,718,871         2.6           1984         11,407,873         5,552,121         5,855,752         74,632,318         2.8           1985         11,691,721         5,679,419         6,012,302         80,644,620         3.1           1986         13,984,433         6,245,673         7,804,149         8,741,528         103,549,391         3.9           1987         13,816,638         6,671,155         7,310,483         94,8						
1976         2,900,946         1,544,991         1,355,955         36,638,489         1.4           1977         6,491,289         3,427,335         3,063,954         39,702,443         1.5           1978         6,510,271         3,363,937         3,146,334         42,848,777         1.6           1979         8,062,060         4,184,145         3,877,915         46,726,692         1.8           1980         10,813,288         5,589,037         5,224,251         51,550,943         2.0           1981         12,566,718         6,059,7450         6,059,268         58,010,211         2.2           1982         11,333,286         5,624,626         5,708,660         63,718,871         2.4           1983         9,920,501         4,862,806         5,057,695         68,776,566         2.6           1984         11,407,873         5,552,121         5,855,752         74,632,318         2.8           1985         11,691,721         5,679,419         6,012,302         80,644,620         3.1           1986         13,098,433         6,245,673         6,852,760         87,497,380         3.3           1987         13,981,638         6,671,155         7,310,483         94,807,863         3.6						
1977         6,491,289         3,427,335         3,063,954         39,702,443         1.5           1978         6,510,271         3,363,937         3,146,334         42,848,777         1.6           1980         10,813,288         5,589,037         5,224,251         51,950,943         2.0           1981         12,566,718         6,507,450         6,059,268         58,010,211         2.2           1982         11,333,286         5,624,626         5,708,660         63,718,871         2.4           1983         9,920,501         4,862,806         5,057,695         68,776,566         2.6           1984         11,407,873         5,552,121         5,855,752         74,632,318         2.8           1985         11,691,721         5,679,419         6,012,302         80,644,620         3.1           1986         13,998,433         6,245,673         6,852,760         87,497,380         3.3           1987         13,981,638         6,671,155         7,310,483         94,807,863         3.6           1988         16,245,677         7,504,149         8,741,528         103,549,391         3.9           1989         15,166,000         6,938,209         8,227,791         111,777,182						
1978         6,510,271         3,363,937         3,146,334         42,848,777         1.6           1979         8,062,060         4,184,145         3,877,915         46,726,692         1.8           1980         10,813,288         5,589,037         5,224,251         51,950,943         2.0           1981         12,566,718         6,507,450         6,059,268         58,010,211         2.2           1982         11,333,286         5,624,626         5,708,660         63,718,871         2.4           1983         9,920,501         4,862,806         5,057,695         68,776,566         2.6           1984         11,407,873         5,552,121         5,855,752         74,632,318         2.8           1985         11,691,721         5,679,419         6,012,302         80,644,620         3.1           1986         13,098,433         6,245,673         6,852,760         87,497,380         3.3           1987         13,881,638         6,671,155         7,310,483         94,807,863         3.6           1988         16,245,677         7,504,149         8,741,528         103,549,391         3.9           1989         15,166,000         6,938,209         8,227,791         111,777,182						
1979         8,062,060         4,184,145         3,877,915         46,726,692         1.8           1980         10,813,288         5,589,037         5,224,251         51,950,943         2.0           1981         12,566,718         6,507,450         6,059,268         58,010,211         2.2           1982         11,333,286         5,624,626         5,708,660         63,718,871         2.4           1983         9,920,501         4,862,806         5,057,695         68,776,566         2.6           1984         11,407,873         5,552,121         5,855,752         74,632,318         2.8           1986         13,098,433         6,245,673         6,852,760         87,497,380         3.3           1987         13,881,638         6,671,155         7,310,483         94,807,863         3.6           1988         16,245,677         7,504,149         8,741,528         103,549,391         3.9           1989         15,166,000         6,938,209         8,227,791         111,777,182         4.2           1991         13,593,227         5,949,649         7,443,578         126,607,794         4.8           1993         15,916,592         6,684,412         9,232,180         144,378,246         <						
1980         10,813,288         5,589,037         5,224,251         51,950,943         2.0           1981         12,566,718         6,507,450         6,059,268         58,010,211         2.2           1982         11,333,286         5,624,626         5,708,660         63,718,871         2.4           1983         9,920,501         4,862,806         5,057,695         68,776,566         2.6           1984         11,407,873         5,552,121         5,855,752         74,632,318         2.8           1985         11,691,721         5,679,419         6,012,302         80,644,620         3.1           1986         13,098,433         6,245,673         6,852,760         87,497,380         3.3           1987         13,981,638         6,671,155         7,310,483         94,807,863         3.6           1988         16,245,677         7,504,149         8,741,528         103,549,391         3.9           1989         15,166,000         6,938,209         8,227,791         111,777,182         4.2           1991         13,393,227         5,949,649         7,443,578         126,607,794         4.8           1992         14,972,955         6,434,683         8,538,272         135,146,066						
1981         12,566,718         6,507,450         6,059,268         58,010,211         2.2           1982         11,333,286         5,624,626         5,708,660         63,718,871         2.4           1983         9,920,501         4,862,806         5,057,695         68,776,566         2.6           1984         11,407,873         5,552,121         5,855,752         74,632,318         2.8           1985         11,691,721         5,679,419         6,012,302         80,644,620         3.1           1986         13,098,433         6,245,673         6,852,760         87,497,380         3.3           1988         16,245,677         7,504,149         8,741,528         103,549,391         3.9           1989         15,166,000         6,938,209         8,227,791         111,777,182         4.2           1990         13,504,524         6,117,490         7,387,034         119,164,216         4.5           1991         13,393,227         5,949,649         7,443,578         126,607,794         4.8           1992         14,972,955         6,434,683         8,538,272         135,146,066         5.1           1993         15,916,592         6,684,412         9,232,180         144,378,246	1979					
1982       11,333,286       5,624,626       5,708,660       63,718,871       2.4         1983       9,920,501       4,862,806       5,057,695       68,776,566       2.6         1984       11,407,873       5,552,121       5,855,752       74,632,318       2.8         1985       11,691,721       5,679,419       6,012,302       80,644,620       3.1         1986       13,098,433       6,245,673       6,852,760       87,497,380       3.3         1987       13,981,638       6,671,155       7,310,483       94,807,863       3.6         1988       16,245,677       7,504,149       8,741,528       103,549,391       3.9         1989       15,166,000       6,938,209       8,227,791       111,777,182       4.2         1990       13,504,524       6,117,490       7,387,034       119,164,216       4.5         1991       13,393,227       5,949,649       7,443,578       126,607,794       4.8         1992       14,972,955       6,434,683       8,538,272       135,146,066       5.1         1994       19,037,532       7,709,016       11,328,516       155,706,762       5.9         1995       19,324,289       8,286,663       11,037,626						2.0
1983         9,920,501         4,862,806         5,057,695         68,776,566         2.6           1984         11,407,873         5,552,121         5,855,752         74,632,318         2.8           1985         11,691,721         5,679,419         6,012,302         80,644,620         3.1           1986         13,098,433         6,245,673         6,852,760         87,497,380         3.3           1987         13,981,638         6,671,155         7,310,483         94,807,863         3.6           1988         16,245,677         7,504,149         8,741,528         103,549,391         3.9           1989         15,166,000         6,938,209         8,227,791         111,777,182         4.2           1990         13,504,524         6,117,490         7,387,034         119,164,216         4.5           1991         13,393,227         5,949,649         7,443,578         126,607,794         4.8           1992         14,972,955         6,684,412         9,232,180         144,378,246         5.5           1994         19,037,532         7,709,016         11,328,516         155,706,762         5.9           1995         19,324,289         8,286,663         11,037,626         166,744,388						2.2
1984         11,407,873         5,552,121         5,855,752         74,632,318         2.8           1985         11,691,721         5,679,419         6,012,302         80,644,620         3.1           1986         13,098,433         6,245,673         6,852,760         87,497,380         3.3           1987         13,981,638         6,671,155         7,310,483         94,807,863         3.6           1988         16,245,677         7,504,149         8,741,528         103,549,391         3.9           1989         15,166,000         6,938,209         8,227,791         111,777,182         4.2           1990         13,504,524         6,117,490         7,387,034         119,164,216         4.5           1991         13,393,227         5,949,649         7,443,578         126,607,794         4.8           1992         14,972,955         6,434,683         8,538,272         135,146,066         5.1           1993         15,916,592         6,684,412         9,232,180         144,378,246         5.5           1994         19,037,532         7,709,016         11,328,516         155,706,762         5.9           1995         19,324,289         8,286,663         11,037,626         166,744,388	1982					2.4
1985         11,691,721         5,679,419         6,012,302         80,644,620         3.1           1986         13,098,433         6,245,673         6,852,760         87,497,380         3.3           1987         13,981,638         6,671,155         7,310,483         94,807,863         3.6           1988         16,245,677         7,504,149         8,741,528         103,549,391         3.9           1989         15,166,000         6,938,209         8,227,791         111,777,182         4.2           1990         13,504,524         6,117,490         7,387,034         119,164,216         4.5           1991         13,393,227         5,949,649         7,443,578         126,607,794         4.8           1992         14,972,955         6,684,412         9,232,180         144,378,246         5.5           1993         15,916,592         6,684,412         9,232,180         144,378,246         5.5           1994         19,037,532         7,709,016         11,328,516         155,706,762         5.9           1995         19,324,289         8,286,663         11,037,626         166,744,388         6.3           1997         21,971,796         8,733,213         13,238,583         191,845,982	1983				68,776,566	
1986       13,098,433       6,245,673       6,852,760       87,497,380       3.3         1987       13,981,638       6,671,155       7,310,483       94,807,863       3.6         1988       16,245,677       7,504,149       8,741,528       103,549,391       3.9         1989       15,166,000       6,938,209       8,227,791       111,777,182       4.2         1990       13,504,524       6,117,490       7,387,034       119,164,216       4.5         1991       13,393,227       5,949,649       7,443,578       126,607,794       4.8         1992       14,972,955       6,634,683       8,538,272       135,146,066       5.1         1993       15,916,592       6,684,412       9,232,180       144,378,246       5.5         1994       19,037,532       7,709,016       11,328,516       155,706,762       5.9         1995       19,324,289       8,286,663       11,037,626       166,744,388       6.3         1997       21,971,796       8,733,213       13,238,583       191,845,982       7.3         1998       20,289,943       7,741,246       12,548,697       204,394,679       7.8         1999       19,073,435       7,018,784       12,054,651						2.8
1987       13,981,638       6,671,155       7,310,483       94,807,863       3.6         1988       16,245,677       7,504,149       8,741,528       103,549,391       3.9         1889       15,166,000       6,938,209       8,227,791       111,777,182       4.2         1990       13,504,524       6,117,490       7,387,034       119,164,216       4.5         1991       13,393,227       5,949,649       7,443,578       126,607,794       4.8         1992       14,972,955       6,434,683       8,538,272       135,146,066       5.1         1993       15,916,592       6,684,412       9,232,180       144,378,246       5.5         1994       19,037,532       7,709,016       11,328,516       155,706,762       5.9         1995       19,324,289       8,286,663       11,037,626       166,744,388       6.3         1997       21,971,796       8,733,213       13,238,583       191,845,982       7.3         1998       20,296,052       8,433,041       11,863,011       178,607,399       6.8         1997       21,971,796       8,733,213       13,238,583       191,845,982       7.3         1998       20,289,943       7,741,246       12,548,6	1985				80,644,620	3.1
1988       16,245,677       7,504,149       8,741,528       103,549,391       3.9         1989       15,166,000       6,938,209       8,227,791       111,777,182       4.2         1990       13,504,524       6,117,490       7,387,034       119,164,216       4.5         1991       13,393,227       5,949,649       7,443,578       126,607,794       4.8         1992       14,972,955       6,434,683       8,538,272       135,146,066       5.1         1993       15,916,592       6,684,412       9,232,180       144,378,246       5.5         1994       19,037,532       7,709,016       11,328,516       155,706,762       5.9         1995       19,324,289       8,286,663       11,037,626       166,744,388       6.3         1996       20,296,052       8,433,041       11,863,011       178,607,399       6.8         1997       21,971,796       8,733,213       13,238,583       191,845,982       7.3         1998       20,289,943       7,741,246       12,548,697       204,394,679       7.8         1999       19,073,435       7,018,784       12,054,651       216,449,330       8.2         2000       20,712,255       7,950,488       12,761	1986				87,497,380	3.3
1989       15,166,000       6,938,209       8,227,791       111,777,182       4.2         1990       13,504,524       6,117,490       7,387,034       119,164,216       4.5         1991       13,393,227       5,949,649       7,443,578       126,607,794       4.8         1992       14,972,955       6,434,683       8,538,272       135,146,066       5.1         1993       15,916,592       6,684,412       9,232,180       144,378,246       5.5         1994       19,037,532       7,709,016       11,328,516       155,706,762       5.9         1995       19,324,289       8,286,663       11,037,626       166,744,388       6.3         1996       20,296,052       8,433,041       11,863,011       178,607,399       6.8         1997       21,971,796       8,733,213       13,238,583       191,845,982       7.3         1998       20,289,943       7,741,246       12,548,697       204,394,679       7.8         1999       19,073,435       7,018,784       12,054,651       216,449,330       8.2         2000       20,712,255       7,950,488       12,761,767       229,211,097       8.7         2001       21,092,410       7,329,117       13,76	1987			7,310,483	94,807,863	3.6
1990       13,504,524       6,117,490       7,387,034       119,164,216       4.5         1991       13,393,227       5,949,649       7,443,578       126,607,794       4.8         1992       14,972,955       6,434,683       8,538,272       135,146,066       5.1         1993       15,916,592       6,684,412       9,232,180       144,378,246       5.5         1994       19,037,532       7,709,016       11,328,516       155,706,762       5.9         1995       19,324,289       8,286,663       11,037,626       166,744,388       6.3         1996       20,296,052       8,433,041       11,863,011       178,607,399       6.8         1997       21,971,796       8,733,213       13,238,583       191,845,982       7.3         1998       20,289,943       7,741,246       12,548,697       204,394,679       7.8         1999       19,073,435       7,018,784       12,054,651       216,449,330       8.2         2000       20,712,255       7,950,488       12,761,767       229,211,097       8.7         2001       21,092,410       7,329,117       13,763,293       242,974,390       9.2         2002       17,144,979       5,953,133       11,1	1988	16,245,677			103,549,391	3.9
1991       13,393,227       5,949,649       7,443,578       126,607,794       4.8         1992       14,972,955       6,434,683       8,538,272       135,146,066       5.1         1993       15,916,592       6,684,412       9,232,180       144,378,246       5.5         1994       19,037,532       7,709,016       11,328,516       155,706,762       5.9         1995       19,324,289       8,286,663       11,037,626       166,744,388       6.3         1996       20,296,052       8,433,041       11,863,011       178,607,399       6.8         1997       21,971,796       8,733,213       13,238,583       191,845,982       7.3         1998       20,289,943       7,741,246       12,548,697       204,394,679       7.8         1999       19,073,435       7,018,784       12,054,651       216,449,330       8.2         2000       20,712,255       7,950,488       12,761,767       229,211,097       8.7         2001       21,092,410       7,329,117       13,763,293       242,974,390       9.2         2003       20,839,697       6,888,472       13,951,225       268,117,461       10.2         2004       29,118,060       8,789,623       20	1989	15,166,000	6,938,209	8,227,791	111,777,182	4.2
1992       14,972,955       6,434,683       8,538,272       135,146,066       5.1         1993       15,916,592       6,684,412       9,232,180       144,378,246       5.5         1994       19,037,532       7,709,016       11,328,516       155,706,762       5.9         1995       19,324,289       8,286,663       11,037,626       166,744,388       6.3         1996       20,296,052       8,433,041       11,863,011       178,607,399       6.8         1997       21,971,796       8,733,213       13,238,583       191,845,982       7.3         1998       20,289,943       7,741,246       12,548,697       204,394,679       7.8         1999       19,073,435       7,018,784       12,054,651       216,449,330       8.2         2000       20,712,255       7,950,488       12,761,767       229,211,097       8.7         2001       21,092,410       7,329,117       13,763,293       242,974,390       9.2         2002       17,144,979       5,953,133       11,191,846       254,166,236       9.6         2003       20,839,697       6,888,472       13,951,225       268,117,461       10.2         2004       29,118,060       8,789,623       2	1990	13,504,524	6,117,490	7,387,034	119,164,216	4.5
1993       15,916,592       6,684,412       9,232,180       144,378,246       5.5         1994       19,037,532       7,709,016       11,328,516       155,706,762       5.9         1995       19,324,289       8,286,663       11,037,626       166,744,388       6.3         1996       20,296,052       8,433,041       11,863,011       178,607,399       6.8         1997       21,971,796       8,733,213       13,238,583       191,845,982       7.3         1998       20,289,943       7,741,246       12,548,697       204,394,679       7.8         1999       19,073,435       7,018,784       12,054,651       216,449,330       8.2         2000       20,712,255       7,950,488       12,761,767       229,211,097       8.7         2001       21,092,410       7,329,117       13,763,293       242,974,390       9.2         2002       17,144,979       5,953,133       11,191,846       254,166,236       9.6         2003       20,839,697       6,888,472       13,951,225       268,117,461       10.2         2004       29,118,060       8,789,623       20,328,437       288,445,898       10.9         2005       34,400,810       9,356,387 <td< td=""><td>1991</td><td></td><td>5,949,649</td><td>7,443,578</td><td>126,607,794</td><td>4.8</td></td<>	1991		5,949,649	7,443,578	126,607,794	4.8
1994       19,037,532       7,709,016       11,328,516       155,706,762       5.9         1995       19,324,289       8,286,663       11,037,626       166,744,388       6.3         1996       20,296,052       8,433,041       11,863,011       178,607,399       6.8         1997       21,971,796       8,733,213       13,238,583       191,845,982       7.3         1998       20,289,943       7,741,246       12,548,697       204,394,679       7.8         1999       19,073,435       7,018,784       12,054,651       216,449,330       8.2         2000       20,712,255       7,950,488       12,761,767       229,211,097       8.7         2001       21,092,410       7,329,117       13,763,293       242,974,390       9.2         2002       17,144,979       5,953,133       11,191,846       254,166,236       9.6         2003       20,839,697       6,888,472       13,951,225       268,117,461       10.2         2004       29,118,060       8,789,623       20,328,437       288,445,898       10.9         2005       34,400,810       9,356,387       25,044,423       313,490,321       11.9         2007       55,449,370       13,709,653	1992	14,972,955	6,434,683	8,538,272	135,146,066	5.1
1995       19,324,289       8,286,663       11,037,626       166,744,388       6.3         1996       20,296,052       8,433,041       11,863,011       178,607,399       6.8         1997       21,971,796       8,733,213       13,238,583       191,845,982       7.3         1998       20,289,943       7,741,246       12,548,697       204,394,679       7.8         1999       19,073,435       7,018,784       12,054,651       216,449,330       8.2         2000       20,712,255       7,950,488       12,761,767       229,211,097       8.7         2001       21,092,410       7,329,117       13,763,293       242,974,390       9.2         2002       17,144,979       5,953,133       11,191,846       254,166,236       9.6         2003       20,839,697       6,888,472       13,951,225       268,117,461       10.2         2004       29,118,060       8,789,623       20,328,437       288,445,898       10.9         2005       34,400,810       9,356,387       25,044,423       313,490,321       11.9         2006       22,620,291       6,074,594       16,545,697       330,036,018       12.5         2007       55,449,370       13,709,653	1993	15,916,592	6,684,412	9,232,180	144,378,246	5.5
1996       20,296,052       8,433,041       11,863,011       178,607,399       6.8         1997       21,971,796       8,733,213       13,238,583       191,845,982       7.3         1998       20,289,943       7,741,246       12,548,697       204,394,679       7.8         1999       19,073,435       7,018,784       12,054,651       216,449,330       8.2         2000       20,712,255       7,950,488       12,761,767       229,211,097       8.7         2001       21,092,410       7,329,117       13,763,293       242,974,390       9.2         2002       17,144,979       5,953,133       11,191,846       254,166,236       9.6         2003       20,839,697       6,888,472       13,951,225       268,117,461       10.2         2004       29,118,060       8,789,623       20,328,437       288,445,898       10.9         2005       34,400,810       9,356,387       25,044,423       313,490,321       11.9         2006       22,620,291       6,074,594       16,545,697       330,036,018       12.5         2007       55,449,370       13,709,653       41,739,717       371,775,735       14.1         2008       78,268,841       18,387,070	1994	19,037,532	7,709,016	11,328,516	155,706,762	5.9
1997       21,971,796       8,733,213       13,238,583       191,845,982       7.3         1998       20,289,943       7,741,246       12,548,697       204,394,679       7.8         1999       19,073,435       7,018,784       12,054,651       216,449,330       8.2         2000       20,712,255       7,950,488       12,761,767       229,211,097       8.7         2001       21,092,410       7,329,117       13,763,293       242,974,390       9.2         2002       17,144,979       5,953,133       11,191,846       254,166,236       9.6         2003       20,839,697       6,888,472       13,951,225       268,117,461       10.2         2004       29,118,060       8,789,623       20,328,437       288,445,898       10.9         2005       34,400,810       9,356,387       25,044,423       313,490,321       11.9         2006       22,620,291       6,074,594       16,545,697       330,036,018       12.5         2007       55,449,370       13,709,653       41,739,717       371,775,735       14.1         2008       78,268,841       18,387,070       59,881,771       431,657,506       16.4         2009       53,178,505       11,823,729	1995	19,324,289	8,286,663	11,037,626	166,744,388	6.3
1998       20,289,943       7,741,246       12,548,697       204,394,679       7.8         1999       19,073,435       7,018,784       12,054,651       216,449,330       8.2         2000       20,712,255       7,950,488       12,761,767       229,211,097       8.7         2001       21,092,410       7,329,117       13,763,293       242,974,390       9.2         2002       17,144,979       5,953,133       11,191,846       254,166,236       9.6         2003       20,839,697       6,888,472       13,951,225       268,117,461       10.2         2004       29,118,060       8,789,623       20,328,437       288,445,898       10.9         2005       34,400,810       9,356,387       25,044,423       313,490,321       11.9         2006       22,620,291       6,074,594       16,545,697       330,036,018       12.5         2007       55,449,370       13,709,653       41,739,717       371,775,735       14.1         2008       78,268,841       18,387,070       59,881,771       431,657,506       16.4         2009       53,178,505       11,823,729       41,354,776       473,012,282       17.9         2010       67,968,473       14,321,718	1996	20,296,052	8,433,041		178,607,399	6.8
1999       19,073,435       7,018,784       12,054,651       216,449,330       8.2         2000       20,712,255       7,950,488       12,761,767       229,211,097       8.7         2001       21,092,410       7,329,117       13,763,293       242,974,390       9.2         2002       17,144,979       5,953,133       11,191,846       254,166,236       9.6         2003       20,839,697       6,888,472       13,951,225       268,117,461       10.2         2004       29,118,060       8,789,623       20,328,437       288,445,898       10.9         2005       34,400,810       9,356,387       25,044,423       313,490,321       11.9         2006       22,620,291       6,074,594       16,545,697       330,036,018       12.5         2007       55,449,370       13,709,653       41,739,717       371,775,735       14.1         2008       78,268,841       18,387,070       59,881,771       431,657,506       16.4         2009       53,178,505       11,823,729       41,354,776       473,012,282       17.9         2010       67,968,473       14,321,718       53,646,755       526,659,037       20.0         2011       124,197,099       28,743,800 </td <td>1997</td> <td>21,971,796</td> <td>8,733,213</td> <td>13,238,583</td> <td>191,845,982</td> <td>7.3</td>	1997	21,971,796	8,733,213	13,238,583	191,845,982	7.3
2000       20,712,255       7,950,488       12,761,767       229,211,097       8.7         2001       21,092,410       7,329,117       13,763,293       242,974,390       9.2         2002       17,144,979       5,953,133       11,191,846       254,166,236       9.6         2003       20,839,697       6,888,472       13,951,225       268,117,461       10.2         2004       29,118,060       8,789,623       20,328,437       288,445,898       10.9         2005       34,400,810       9,356,387       25,044,423       313,490,321       11.9         2006       22,620,291       6,074,594       16,545,697       330,036,018       12.5         2007       55,449,370       13,709,653       41,739,717       371,775,735       14.1         2008       78,268,841       18,387,070       59,881,771       431,657,506       16.4         2009       53,178,505       11,823,729       41,354,776       473,012,282       17.9         2010       67,968,473       14,321,718       53,646,755       526,659,037       20.0         2011       124,197,099       28,743,800       95,453,299       622,112,336       23.6	1998	20,289,943	7,741,246	12,548,697	204,394,679	7.8
2001       21,092,410       7,329,117       13,763,293       242,974,390       9.2         2002       17,144,979       5,953,133       11,191,846       254,166,236       9.6         2003       20,839,697       6,888,472       13,951,225       268,117,461       10.2         2004       29,118,060       8,789,623       20,328,437       288,445,898       10.9         2005       34,400,810       9,356,387       25,044,423       313,490,321       11.9         2006       22,620,291       6,074,594       16,545,697       330,036,018       12.5         2007       55,449,370       13,709,653       41,739,717       371,775,735       14.1         2008       78,268,841       18,387,070       59,881,771       431,657,506       16.4         2009       53,178,505       11,823,729       41,354,776       473,012,282       17.9         2010       67,968,473       14,321,718       53,646,755       526,659,037       20.0         2011       124,197,099       28,743,800       95,453,299       622,112,336       23.6	1999	19,073,435	7,018,784	12,054,651	216,449,330	8.2
2002       17,144,979       5,953,133       11,191,846       254,166,236       9.6         2003       20,839,697       6,888,472       13,951,225       268,117,461       10.2         2004       29,118,060       8,789,623       20,328,437       288,445,898       10.9         2005       34,400,810       9,356,387       25,044,423       313,490,321       11.9         2006       22,620,291       6,074,594       16,545,697       330,036,018       12.5         2007       55,449,370       13,709,653       41,739,717       371,775,735       14.1         2008       78,268,841       18,387,070       59,881,771       431,657,506       16.4         2009       53,178,505       11,823,729       41,354,776       473,012,282       17.9         2010       67,968,473       14,321,718       53,646,755       526,659,037       20.0         2011       124,197,099       28,743,800       95,453,299       622,112,336       23.6	2000	20,712,255	7,950,488	12,761,767	229,211,097	8.7
2003       20,839,697       6,888,472       13,951,225       268,117,461       10.2         2004       29,118,060       8,789,623       20,328,437       288,445,898       10.9         2005       34,400,810       9,356,387       25,044,423       313,490,321       11.9         2006       22,620,291       6,074,594       16,545,697       330,036,018       12.5         2007       55,449,370       13,709,653       41,739,717       371,775,735       14.1         2008       78,268,841       18,387,070       59,881,771       431,657,506       16.4         2009       53,178,505       11,823,729       41,354,776       473,012,282       17.9         2010       67,968,473       14,321,718       53,646,755       526,659,037       20.0         2011       124,197,099       28,743,800       95,453,299       622,112,336       23.6	2001	21,092,410	7,329,117	13,763,293	242,974,390	9.2
2004       29,118,060       8,789,623       20,328,437       288,445,898       10.9         2005       34,400,810       9,356,387       25,044,423       313,490,321       11.9         2006       22,620,291       6,074,594       16,545,697       330,036,018       12.5         2007       55,449,370       13,709,653       41,739,717       371,775,735       14.1         2008       78,268,841       18,387,070       59,881,771       431,657,506       16.4         2009       53,178,505       11,823,729       41,354,776       473,012,282       17.9         2010       67,968,473       14,321,718       53,646,755       526,659,037       20.0         2011       124,197,099       28,743,800       95,453,299       622,112,336       23.6	2002	17,144,979	5,953,133	11,191,846	254,166,236	9.6
2005       34,400,810       9,356,387       25,044,423       313,490,321       11.9         2006       22,620,291       6,074,594       16,545,697       330,036,018       12.5         2007       55,449,370       13,709,653       41,739,717       371,775,735       14.1         2008       78,268,841       18,387,070       59,881,771       431,657,506       16.4         2009       53,178,505       11,823,729       41,354,776       473,012,282       17.9         2010       67,968,473       14,321,718       53,646,755       526,659,037       20.0         2011       124,197,099       28,743,800       95,453,299       622,112,336       23.6	2003	20,839,697	6,888,472	13,951,225	268,117,461	10.2
2006       22,620,291       6,074,594       16,545,697       330,036,018       12.5         2007       55,449,370       13,709,653       41,739,717       371,775,735       14.1         2008       78,268,841       18,387,070       59,881,771       431,657,506       16.4         2009       53,178,505       11,823,729       41,354,776       473,012,282       17.9         2010       67,968,473       14,321,718       53,646,755       526,659,037       20.0         2011       124,197,099       28,743,800       95,453,299       622,112,336       23.6	2004	29,118,060	8,789,623	20,328,437	288,445,898	10.9
2007     55,449,370     13,709,653     41,739,717     371,775,735     14.1       2008     78,268,841     18,387,070     59,881,771     431,657,506     16.4       2009     53,178,505     11,823,729     41,354,776     473,012,282     17.9       2010     67,968,473     14,321,718     53,646,755     526,659,037     20.0       2011     124,197,099     28,743,800     95,453,299     622,112,336     23.6	2005	34,400,810	9,356,387	25,044,423	313,490,321	11.9
2008       78,268,841       18,387,070       59,881,771       431,657,506       16.4         2009       53,178,505       11,823,729       41,354,776       473,012,282       17.9         2010       67,968,473       14,321,718       53,646,755       526,659,037       20.0         2011       124,197,099       28,743,800       95,453,299       622,112,336       23.6	2006	22,620,291	6,074,594	16,545,697	330,036,018	12.5
2009       53,178,505       11,823,729       41,354,776       473,012,282       17.9         2010       67,968,473       14,321,718       53,646,755       526,659,037       20.0         2011       124,197,099       28,743,800       95,453,299       622,112,336       23.6	2007	55,449,370	13,709,653	41,739,717	371,775,735	14.1
2010       67,968,473       14,321,718       53,646,755       526,659,037       20.0         2011       124,197,099       28,743,800       95,453,299       622,112,336       23.6	2008	78,268,841	18,387,070	59,881,771	431,657,506	16.4
2011 124,197,099 28,743,800 95,453,299 622,112,336 23.6	2009	53,178,505	11,823,729	41,354,776	473,012,282	17.9
	2010	67,968,473	14,321,718	53,646,755	526,659,037	20.0
	2011	124,197,099	28,743,800	95,453,299	622,112,336	23.6
2012 134,326,505 27,217,068 107,109,437 729,221,773 27.7	2012			107,109,437	729,221,773	27.7
2013 164,164,274 26,167,665 137,996,609 867,218,382 32.9	2013	164,164,274	26,167,665		867,218,382	32.9
2014 182,437,194 28,249,524 154,187,670 1,021,406,052 38.8	2014		28,249,524		1,021,406,052	38.8
2015 185,920,905 25,033,008 160,887,897 1,182,293,949 44.9	2015	185,920,905	25,033,008	160,887,897	1,182,293,949	44.9
2016 219,268,759 24,448,349 194,820,410 1,377,114,359 52.3	2016					52.3
2017 262,416,818 26,314,491 236,102,327 1,613,216,686 61.2	2017	262,416,818	26,314,491	236,102,327	1,613,216,686	61.2
2018 231,989,160 18,466,029 213,523,131 1,826,739,817 69.3	2018	231,989,160	18,466,029	213,523,131	1,826,739,817	69.3

# CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2021

			יובע	CICITIED OLLEGIM	TH CODI
					PCT OF
YEAR	ORIGINAL	ACCRUED	AMOUNT	CUMULATIVE	COL 4
INST	COST	DEPRECIATION	(2) - (3)	AMOUNT	TOTAL
(1)	(2)	(3)	(4)	(5)	(6)
2019	330,426,041	19,362,210	311,063,831	2,137,803,648	81.1
2020	316,158,566	11,848,041	304,310,518	2,442,114,168	92.7
2021	196,021,919	2,942,798	193,079,121	2,635,193,289	100.0
SUBTOTAL	3,196,217,271	561,023,979	2,635,193,287		
AMORTIZABLE PLANT	52,818,157	21,054,064	31,764,093		
NONDEPRECIABLE					
PLANT	3,533,241	234,693	3,298,548		
TOTAL	3,252,568,669	582,312,736	2,670,255,928		

Exhibit No. 9 Schedule No. 1 Page 19 of 90 Witness J.J. Spanos

**UTILITY PLANT IN SERVICE** 



#### ACCOUNT 350.2 RIGHTS OF WAY

# CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
PROBABLI	SURVIVOR CURV E RETIREMENT Y JAGE PERCENT	TEAR 12-202	5			
1972 1973	1,896.43 35.65	1,752 33	1,895 36	1	4.08	
	1,932.08	1,785	1,931	1		

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 0.0 0.00



#### ACCOUNT 351 COMPRESSOR STATION STRUCTURES

# CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
INTERI	M SURVIVOR CURVI	E IOWA 65-R	2.5			
PROBABI	LE RETIREMENT Y	EAR 12-202	2.5			
NET SAI	LVAGE PERCENT	0				
1970	124,246.77	114,572	115,102	9,145	3.94	2,321
1971	44,955.88	41,397	41,589	3,367	3.95	852
1972	14,771.99	13,582	13,645	1,127	3.96	285
1973	1,046.90	961	965	82	3.96	21
1996	107,318.16	92,465	92,893	14,425	4.08	3,536
1997	932.86	799	803	130	4.07	32
1998	7,804.72	6 <b>,</b> 653	6,684	1,121	4.05	277
2001	87,639.68	73 <b>,</b> 179	73,518	14,122	4.03	3,504
2003	212,167.85	173 <b>,</b> 872	174,677	37,491	4.06	9,234
2004	195,419.81	158,603	159,337	36,083	4.04	8,931
2008	670,893.34	514,844	517 <b>,</b> 227	153,666	4.07	37 <b>,</b> 756
2009	11,299.51	8,516	8 <b>,</b> 555	2,745	4.06	676
2012	59,116.96	41,305	41,496	17,621	4.06	4,340
2013	744,499.18	501 <b>,</b> 941	504,265	240,234	4.07	59 <b>,</b> 026
2014	847,869.30	547 <b>,</b> 724	550,259	297,610	4.06	73,303
2015	51,937.15	31,796	31,943	19,994	4.06	4,925
2016	9,550.22	5 <b>,</b> 452	5 <b>,</b> 477	4,073	4.07	1,001
2018	29,388.01	13,416	13,478	15 <b>,</b> 910	4.07	3,909
2019	29,178.67	10,872	10,923	18,256	4.07	4,486
	3,250,036.96	2,351,949	2,362,836	887,201		218,415

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 4.1 6.72

#### ACCOUNT 352 WELLS - CONSTRUCTION

# CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	M SURVIVOR CURV	~	_			
	LE RETIREMENT Y		5			
NET SA	LVAGE PERCENT	0				
1970	326 <b>,</b> 259.85	302 <b>,</b> 276	298 <b>,</b> 453	27 <b>,</b> 807	4.08	6,815
1971	246,359.45	227,917	225,035	21,324	4.08	5,226
1972	166,322.06	153,638	151,695	14,627	4.08	3,585
2020	162,265.00	41,796	41,267	120,998	4.08	29,656
2021	225,565.57	22,764	22,476	203,090	4.08	49,777
	1,126,771.93	748,391	738,926	387,846		95,059

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 4.1 8.44



#### ACCOUNT 352 WELLS - EQUIPMENT

# CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
PROBABL	SURVIVOR CURVI E RETIREMENT YI VAGE PERCENT	EAR 12-202				
1970	62,707.48	57 <b>,</b> 873	31,826	30,881	3.60	8,578
1971	60,755.98	56,010	30,801	29 <b>,</b> 955	3.62	8 <b>,</b> 275
1972	42,286.87	38 <b>,</b> 936	21,412	20,875	3.64	5 <b>,</b> 735
1978	2,281.54	2,100	1,155	1,127	3.75	301
2020	378,618.34	97 <b>,</b> 532	53,634	324,984	4.08	79 <b>,</b> 653
2021	526,319.67	53,106	29,204	497,116	4.08	121,842
	1,072,969.88	305,557	168,032	904,938		224,384

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 4.0 20.91

#### ACCOUNT 352.1 STORAGE LEASEHOLDS AND RIGHTS

# CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
PROBABI	4 SURVIVOR CURV LE RETIREMENT Y LVAGE PERCENT	EAR 12-202	5			
1970	206,940.78	191,729	206,932	9	4.08	2
	206,940.78	191,729	206,932	9		2
C	OMPOSITE REMAIN	ING LIFE AND	ANNUAL ACCRUAI	L RATE, PERCENT	4.5	0.00



#### ACCOUNT 353 LINES

# CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
INTERIM	SURVIVOR CURV	E IOWA 50-S	1.5			
	E RETIREMENT Y		5			
NET SAL	VAGE PERCENT	0				
1971	260,327.01	238,681	260,069	258	3.73	69
1972	56,823.89	52,042	56 <b>,</b> 705	119	3.74	32
1973	54,831.76	50,146	54,640	192	3.76	51
1984	13,885.22	12,573	13,699	186	3.90	48
1989	3,477.25	3,100	3,378	99	3.95	25
	389,345.13	356,542	388,491	854		225

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 3.8 0.06

#### ACCOUNT 354 COMPRESSOR STATION EQUIPMENT

# CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
PROBABL:	SURVIVOR CURV E RETIREMENT Y VAGE PERCENT	EAR 12-202				
1950	5,342.87	5,016	5,324	19	3.32	6
1952	23,888.55	22,393	23,768	121	3.38	36
1957	363.93	340	361	3	3.51	1
1967	1,175.28	1,087	1,154	21	3.74	6
1969	2,168.00	2,000	2,123	45	3.78	12
1970	490,705.66	451 <b>,</b> 955	479,697	11,009	3.80	2,897
1971	21,258.89	19 <b>,</b> 552	20,752	507	3.82	133
1972	4,125.93	3 <b>,</b> 790	4,023	103	3.83	27
1979	1,860.35	1,704	1,809	51	3.88	13
1987	19,667.77	17 <b>,</b> 599	18 <b>,</b> 679	989	4.05	244
1991	11,137.86	9,858	10,463	675	3.95	171
1993	1,506.99	1,319	1,400	107	4.05	26
2013	280,679.09	189,234	200,850	79 <b>,</b> 829	4.07	19,614
2017	84,295.53	43,893	46,587	37,709	4.07	9,265
	948,176.70	769,740	816,990	131,187		32,451

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 4.0 3.42

#### ACCOUNT 355 MEASURING AND REGULATING EQUIPMENT

# CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
INTERIM	SURVIVOR CURVI	E IOWA 37-R	1.5			
PROBABLE	RETIREMENT Y	EAR 12-202	5			
NET SALV	AGE PERCENT	0				
1970	56 <b>,</b> 228.75	51 <b>,</b> 208	56 <b>,</b> 229			
1975	2,685.09	2,426	2 <b>,</b> 685			
1981	13,738.52	12,605	13,739			
1986	29,489.73	26,738	29,490			
1987	2,334.83	2,105	2,334			
	104,476.92	95,082	104,477			

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 0.0 0.00

#### ACCOUNT 374.4 LAND AND LAND RIGHTS - LAND RIGHTS

YEAR	ORIGINAL COST	CALCULATED ACCRUED	ALLOC. BOOK RESERVE	FUTURE BOOK ACCRUALS	REM. LIFE	ANNUAL ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)
	R CURVE IOWA VAGE PERCENT					
1920 1953	1,634.55 2.00	1,470 2	1,396 2	239	7.06	34
1957	3,252.89	2,348	2,230	1,023	19.48	53
1961	830.30	573	544	286	21.69	13
1962	323.98	221	210	114	22.27	5
1963	5,711.86	3,847	3 <b>,</b> 654	2,058	22.86	90
1964	3,704.51	2,463	2,339	1,366	23.46	58
1965	1,144.03	751	713	431	24.07	18
1966	2,376.11	1,538	1,461	915	24.69	37
1967	11,428.60	7,295	6,929	4,500	25.32	178
1968	1,995.68	1,256	1,193	803	25.96	31
1969	12,192.74	7,558	7,178	5,015	26.61	188
1970	8,052.25	4,915	4,668	3,384	27.27	124
1971	20,679.96	12,426	11,802	8,878	27.94	318
1972	11,643.50	6,883	6 <b>,</b> 537	5,106	28.62	178
1973	5,483.64	3,188	3,028	2,456	29.30	84
1974	16,686.28	9,537	9,058	7,628	29.99	254
1975 1976	25,272.60 24,345.48	14,189 15,148	13,476 14,387	11,797 9,958	30.70 27.58	384
1976	54,513.13	33,171	31,504	23,009	28.58	361 805
1978	21,191.48	12,698	12,060	9,131	29.04	314
1979	36,560.99	21,556	20,473	16,088	29.53	545
1980	22,985.03	13,327	12,657	10,328	30.01	344
1981	39,985.17	22,624	21,487	18,498	31.01	597
1982	62,650.36	34,821	33,072	29,578	31.50	939
1983	40,223.76	21,942	20,840	19,384	32.01	606
1984	44,787.52	23,966	22,762	22,026	32.51	678
1985	66,040.22	34,394	32,666	33,374	33.51	996
1986	39,814.42	20,305	19,285	20,529	34.03	603
1987	63,884.90	31,879	30,277	33,608	34.55	973
1988	98,844.45	48,226	45,803	53,041	35.08	1,512
1989	131,102.83	62,470	59,332	71,771	35.61	2,015
1990	83,991.22	38 <b>,</b> 787	36,838	47,153	36.61	1,288
1991	49,174.56	22,138	21,026	28,149	37.15	758
1992	13,465.78	5 <b>,</b> 902	5,605	7,861	37.70	209
1993	43,267.14	18,440	17,514	25 <b>,</b> 753	38.25	673
1994	35,296.72	14,514	13,785	21,512	39.25	548
1995	19,271.18	7,687	7,301	11,970	39.81	301
1996	46,023.19	17 <b>,</b> 779	16,886	29,137	40.38	722
1997	37,722.81	14,093	13,385	24,338	40.94	594
1998	9,183.56	3,312	3,146	6,038	41.52	145
1999	6,027.94	2,081	1,976	4,052	42.52	95
2000	14,218.67	4,721	4,484	9,735	43.10	226

#### ACCOUNT 374.4 LAND AND LAND RIGHTS - LAND RIGHTS

# CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	DR CURVE IOWALVAGE PERCENT					
2001	13,623.43	4,339	4,121	9,502	43.69	217
2002	3,026.59	923	877	2,150	44.28	49
2003	43,663.62	12,706	12,068	31,596	44.87	704
2004	45,205.64	12,517	11,888	33,318	45.48	733
2005	25,590.76	6,723	6,385	19,206	46.08	417
2006	34,886.10	8,606	8,174	26,712	47.08	567
2007	66,976.43	15,545	14,764	52,212	47.70	1,095
2008	28,129.15	6,115	5,808	22,321	48.31	462
2009	154,820.42	31,336	29,762	125,058	48.93	2,556
2010	80,507.25	15,071	14,314	66,193	49.56	1,336
2011	76,852.69	13,288	12,620	64,233	49.83	1,289
2012	208,077.90	32,731	31,086	176 <b>,</b> 992	50.46	3,508
2013	199,508.04	28,210	26,793	172,715	51.11	3,379
2014	95,872.29	12,013	11,409	84,463	51.76	1,632
2015	135,848.29	14,903	14,154	121,694	52.06	2,338
2016	172,118.26	16,041	15,235	156 <b>,</b> 883	52.72	2,976
2017	340,390.50	26,142	24,829	315,562	53.06	5,947
2018	193,139.81	11,685	11,098	182,042	53.08	3,430
2019	199,608.06	8,683	8,247	191,361	53.14	3,601
2020	224,281.44	5 <b>,</b> 854	5 <b>,</b> 559	218,722	52.93	4,132
2021	233,253.71	2,076	1,972	231,282	50.83	4,550
	3,812,368.37	911,948	866,132	2,946,236		63,812

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 46.2 1.67

#### ACCOUNT 374.5 LAND AND LAND RIGHTS - RIGHTS OF WAY

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	CURVE IOWA AGE PERCENT					
1883	866.25	862	866			
1884	2,319.40	2,293	2,319			
1885	952.00	938	952			
1886	9,401.15	9,248	9,401			
1887	4,690.00	4,609	4,690			
1888	6,579.75	6,457	6,580			
1889	6,551.18	6,423	6 <b>,</b> 551			
1890	1,679.50	1,644	1,680			
1891	8,350.23	8,163	8,350			
1892	1,354.95	1,323	1,355			
1893	650.85	635	651			
1894	1,616.78 1,133.20	1,575 1,102	1,617			
1895 1896	4,260.56	4,140	1,133 4,261			
1897	2,267.65	2,200	2,268			
1898	1,633.73	1,583	1,634			
1899	934.25	904	934			
1900	8,185.42	7,909	8,185			
1901	15,227.76	14,693	15,228			
1902	7,330.74	7,062	7,331			
1903	15,446.32	14,855	15,446			
1904	8,443.31	8,109	8,443			
1905	13,211.32	12,668	13,211			
1906	5,826.89	5,579	5,827			
1907	4,318.72	4,127	4,319			
1908	5,084.82	4,851	5 <b>,</b> 085			
1909	5,578.23	5,313	5 <b>,</b> 578			
1910	944.58	898	945			
1911	1,805.52	1,713	1,806			
1912	1,590.08	1,506	1,590			
1913	4,199.64	3 <b>,</b> 970	4,200			
1914	6,522.34	6,153	6,522			
1915	9,299.36	8,753	9,299			
1916	2,133.53	2,004	2,134			
1917	2,947.27	2,762	2,947			
1918	969.85	907	970	1	F 27	
1919 1920	713.16	665	712	1	5.37	1
	1,116.43	1,039	1,113	3	5.54 5.72	1 2
1921 1922	2,386.50 5,478.84	2,216 5,073	2,374 5,435	12 44	5.72	7
1922	5,748.64	5,073 5,309	5,435 5,688	61	6.12	10
1923	2,962.36	2,728	2,923	39	6.32	6
1925	8,085.67	7,427	7,957	129	6.52	20
1020	0,000.07	1,121	,, , , , ,	127	0.02	20

#### ACCOUNT 374.5 LAND AND LAND RIGHTS - RIGHTS OF WAY

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	R CURVE IOWA /AGE PERCENT					
1926	3,690.49	3,380	3,621	69	6.74	10
1927	3,441.21	3,141	3,365	76	6.97	11
1928	3,616.30	3,291	3,526	90	7.19	13
1929	9,736.71	8,832	9,462	275	7.43	37
1930	3,705.73	3,350	3,589	117	7.68	15
1931	4,695.61	4,230	4,532	164	7.93	21
1932	2,031.20	1,823	1,953	78	8.19	10
1933	2,540.95	2,272	2,434	107	8.47	13
1934 1935	4,020.82 866.62	3 <b>,</b> 581 769	3,836 824	185 43	8.75 9.04	21 5
1935	4,994.63	4,412	4,727	268	9.34	29
1937	3,607.79	3,172	3,398	210	9.66	22
1938	1,245.49	1,090	1,168	77	9.98	8
1939	956.06	833	892	64	10.32	6
1940	13,850.45	12,003	12,859	991	10.67	93
1941	4,887.61	4,214	4,515	373	11.03	34
1942	8,169.68	7,005	7,505	665	11.41	58
1943	1,693.42	1,444	1,547	146	11.80	12
1944	978.40	829	888	90	12.21	7
1945	1,004.81	846	906	99	12.63	8
1946	344.00	288	309	35	13.06	3
1947	142.29	118	126	16	13.52	1
1948	3,080.71	2,542	2,723	358	13.99	26
1949	16,198.32	13,266	14,212	1,986	14.48	137
1950	20,911.66	16,996	18,208	2,704	14.98	181
1951	11,956.42	9,640	10,328	1,628	15.50	105
1952	8,038.39	6,426	6,884	1,154	16.05	72
1953	5 <b>,</b> 949.87	4,715	5,051	899	16.61	54
1954	21,585.01	16,947	18,156	3,429	17.19	199
1955	32,149.56	25,000	26,783	5,367	17.79	302
1956	51,558.51	39,687	42,517	9,042	18.42	491
1957	19,916.61	15,171	16,253	3,664	19.06	192
1958	63,499.25	47,847	51,259	12,240	19.72	621
1959	28,371.09	21,133	22,640	5 <b>,</b> 731	20.41	281
1960	26,305.63	19,364	20,745	5,561	21.11	263
1961	15,768.03	11,463	12,281	3,487	21.84	160
1962	18,087.78	12,983	13,909	4,179 6,609	22.58	185
1963 1964	27,374.57 40,027.79	19,384 27,955	20,766 29,949	10,079	23.35 24.13	283 418
1965	17,574.04	12,098	12,961	4,613	24.13	185
1966	18,597.25	12,611	13,510	5,087	25.75	198
1967	96,910.77	64,700	69,314	27 <b>,</b> 597	26.59	1,038
1968	82,637.79	54,283	58,154	24,484	27.45	892
	,,	/	-0, -01	,		5,72

#### ACCOUNT 374.5 LAND AND LAND RIGHTS - RIGHTS OF WAY

# CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2021

	ORIGINAL	CALCULATED	ALLOC. BOOK	FUTURE BOOK	REM.	ANNUAL
YEAR	COST	ACCRUED	RESERVE	ACCRUALS	LIFE	ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)
SURVIVO	OR CURVE IOWA	80-S4				
NET SAI	LVAGE PERCENT	0				
1969	46,057.56	29,753	31,875	14,183	28.32	501
1970	45,097.36	28,637	30,679	14,418	29.20	494
1971	54,600.87	34,057	36,486	18,115	30.10	602
1972	80,822.88	49,484	53,013	27,810	31.02	897
1973	31,060.02	18,659	19,990	11,070	31.94	347
1974	42,716.26	25,165	26,960	15,756	32.87	479
1975	53,203.52	30,712	32,902	20,302	33.82	600
1976	46,796.87	27,418	29,373	17,424	32.10	543
1977	50,016.13	28,659	30,703	19,313	33.10	583
1978	27,600.77	15,459	16,562	11,039	34.10	324
1979	28,400.77	15,541	16,649	11,752	35.10	335
1980	24,054.08	12,852	13,769	10,285	36.10	285
1981	55,235.53	28,800	30 <b>,</b> 854	24,382	37.10	657
1982	47,534.94	24,172	25 <b>,</b> 896	21,639	38.10	568
1983	27,148.25	13,455	14,415	12,733	39.10	326
1984	30,306.87	14,629	15 <b>,</b> 672	14,635	40.10	365
1985	72 <b>,</b> 105.59	33 <b>,</b> 875	36 <b>,</b> 291	35 <b>,</b> 815	41.10	871
1986	17,533.91	8,011	8 <b>,</b> 582	8 <b>,</b> 952	42.10	213
1987	27,416.83	12,173	13,041	14,376	43.10	334
1988	11,339.22	4,888	5 <b>,</b> 237	6,102	44.10	138
1989	70,129.19	29 <b>,</b> 328	31,420	38 <b>,</b> 709	45.10	858
1990	44,760.66	18,141	19,435	25 <b>,</b> 326	46.10	549
1991	35,224.46	13,822	14,808	20,416	47.10	433
1992	54,141.31	20,547	22,012	32,129	48.10	668
1993	58,993.43	21,627	23,169	35 <b>,</b> 824	49.10	730
1994	184,531.84	65 <b>,</b> 269	69 <b>,</b> 924	114,608	50.10	2,288
1995	584,928.49	199,344	213,561	371 <b>,</b> 367	51.10	7,267
1996	126,940.88	41,624	44,593	82,348	52.10	1,581
1997	68,030.65	21,430	22 <b>,</b> 958	45 <b>,</b> 073	53.10	849
1998	40,132.45	12,124	12,989	27,143	54.10	502
2000	15,568.19	4,301	4,608	10,960	56.10	195
2001	39,714.12	10,461	11,207	28,507	57.10	499
2002	181,571.19	45,484	48,727	132,844	58.10	2,286
2003	1,938.28	461	494	1,444	59.10	24
	3,233,171.42	1,677,884	1,791,949	1,441,222		34,957

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 41.2 1.08

#### ACCOUNT 375.34 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	CURVE IOWA					
1913	430.94	402	416	15	4.00	4
1914	264.24	245	253	11	4.30	3
1925	211.96	185	191	21	7.63	3
1928	563.20	482	498	65	8.60	8
1929	4,189.96	3 <b>,</b> 566	3,687	503	8.93	56
1930	4,757.35	4,022	4,158	599	9.27	65
1931	1,147.03	964	997	150	9.60	16
1932	2,321.06	1,936	2,001	320	9.95	32
1933	2,564.07	2,124	2,196	368	10.29	36
1934	1,102.49	907	938	164	10.64	15
1935	15.51	13	13	3	11.00	
1936	1,998.78	1,621	1,676	323	11.35	28
1938	618.55	494	511	108	12.08	9
1939	4,678.94	3,707	3,832	847	12.46	68
1940	554.29	436	451	103	12.83	8
1941	897.54	700	724	174	13.21	13
1942	116.21	90	93	23	13.60	2
1943	695.22	533	551	144	13.99	10
1945	639.53	482	498	142	14.78	10
1946	1,024.41	765	791	233	15.18	15
1947 1948	2,307.10	1,708	1,766 5,091	541	15.59 16.00	35 102
1940	6,715.12 1,156.73	4,924 840	868	1,624 289	16.42	18
1949	5,042.16	3 <b>,</b> 627	3 <b>,</b> 750	1,292	16.84	77
1951	7,765.78	5,531	5,718	2,048	17.27	119
1952	15,602.82	11,000	11,372	4,231	17.70	239
1953	22,977.37	16,031	16,573	6,404	18.14	353
1954	14,248.42	9,836	10,169	4,079	18.58	220
1955	12,140.88	8,290	8,570	3,571	19.03	188
1956	22,115.23	14,935	15,440	6 <b>,</b> 675	19.48	343
1957	29,374.58	19,613	20,276	9,099	19.94	456
1958	37,539.43	24,770	25,608	11,931	20.41	585
1959	24,741.65	16,132	16,677	8,065	20.88	386
1960	26,480.82	17 <b>,</b> 058	17,635	8,846	21.35	414
1961	38,520.33	24,505	25,334	13,186	21.83	604
1962	41,962.68	26,353	27,244	14,719	22.32	659
1963	25,402.50	15,745	16,277	9,126	22.81	400
1964	41,732.87	25 <b>,</b> 520	26,383	15,350	23.31	659
1965	27,828.79	16,785	17,353	10,476	23.81	440
1966	27,208.84	16,180	16,727	10,482	24.32	431
1967	18,571.27	10,883	11,251	7,320	24.84	295
1968	8,481.65	4,897	5,063	3,419	25.36	135
1969	15,875.23	9,025	9,330	6,545	25.89	253

#### ACCOUNT 375.34 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	CURVE IOWA AGE PERCENT					
1970	5,033.19	2,817	2,912	2,121	26.42	80
1971	20,648.66	11,371	11,756	8,893	26.96	330
1972	10,177.69	5,513	5 <b>,</b> 699	4,479	27.50	163
1973	12,609.98	6 <b>,</b> 715	6,942	5,668	28.05	202
1974	12,610.14	6 <b>,</b> 597	6 <b>,</b> 820	5,790	28.61	202
1975	16,872.99	8,670	8,963	7,910	29.17	271
1976	22,562.45	14,449	14,938	7,624	25.50	299
1977	14,410.77	9,089	9,396	5 <b>,</b> 015	26.01	193
1978	21,032.60	13,059	13,501	7,532	26.51	284
1979	33,072.13	20,200	20,883	12,189	27.03	451
1980	12,380.66	7,435	7,686	4,695	27.55	170
1981	27,705.54	16,460	17,017	10,689	27.61	387
1982	37,398.35	21,818	22,556	14,842	28.15	527
1983	15,103.94	8,645	8,937	6,167	28.70	215
1984	14,547.02	8,219	8,497	6,050	28.81	210
1985	12,792.93	7,081	7,320	5,473	29.38	186
1986	26,393.61	14,303	14,787	11,607	29.94	388
1987	3,272.42	1,746	1,805	1,467	30.10	49
1988	16,513.79	8,609	8,900	7,614	30.69	248
1989	14,462.96	7,360	7,609	6,854	31.28	219
1990 1991	8,288.97 35,776.94	4,140 17,413	4,280 18,002	4,009 17,775	31.48 32.08	127 554
1991	129.79	62	64	66	32.31	2
1993	21,326.29	9,938	10,274	11,052	32.56	339
1995	13,604.01	6 <b>,</b> 002	6,205	7,399	33.46	221
1996	11,828.32	5,080	5 <b>,</b> 252	6 <b>,</b> 576	33.76	195
1997	16,887.61	7,010	7,247	9,641	34.41	280
1998	59,658.50	24,030	24,843	34,816	34.72	1,003
1999	2,550.99	995	1,029	1,522	35.06	43
2000	23,235.27	8 <b>,</b> 757	9,053	14,182	35.40	401
2001	26,614.83	9,672	9,999	16,616	35.76	465
2002	14,721.25	5 <b>,</b> 173	5,348	9,373	35.83	262
2003	62,637.02	21,109	21,823	40,814	36.23	1,127
2004	25,048.70	8,116	8,390	16,659	36.34	458
2005	48,475.82	14,960	15,466	33,010	36.78	897
2006	65,438.12	19,272	19,924	45,514	36.94	1,232
2007	109,457.61	30,615	31,650	77,808	37.13	2,096
2008	360,664.78	95 <b>,</b> 324	98 <b>,</b> 547	262,118	37.35	7,018
2009	100,851.22	25 <b>,</b> 172	26,023	74,828	37.33	2,005
2010	175,158.80	40,794	42,173	132,986	37.60	3 <b>,</b> 537
2011	199,439.56	43,219	44,680	154,760	37.66	4,109
2012	228,719.76	45,881	47,433	181,287	37.53	4,830
2013	228,047.63	41,847	43,262	184,786	37.45	4,934

#### ACCOUNT 375.34 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

# CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	OR CURVE IOWA JVAGE PERCENT					
2014	377,846.86	62,496	64,609	313,238	37.43	8,369
2015	890,971.25	130,884	135,310	755,661	37.25	20,286
2016	405,324.26	52,044	53,804	351 <b>,</b> 520	36.78	9 <b>,</b> 557
2017	390,173.26	42,373	43,806	346 <b>,</b> 367	36.24	9,558
2018	157,931.33	13,866	14,335	143,596	35.49	4,046
2019	661,834.33	43,483	44,953	616,881	34.35	17 <b>,</b> 959
2020	297,703.40	12,474	12,896	284,807	32.37	8 <b>,</b> 798
2021	141,757.50	2,282	2,359	139,398	28.03	4,973
	6,014,289.33	1,372,501	1,418,913	4,595,376		132,567

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 34.7 2.20

## ACCOUNT 375.6 STRUCTURES AND IMPROVEMENTS - INDUSTRIAL MEASURING AND REGULATING

# CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	CURVE IOWA AGE PERCENT					
1922 1928	114.31 87.15	107 79	114 87			
1920	127.57	114	128			
1931	263.40	233	263			
1934	783.68	680	784			
1935	147.25	127	147			
1936	21.46	18	21			
1937	618.76	525	619			
1938	1,463.03	1,234	1,463			
1940	440.04	366	440			
1942	1,018.37	833	1,018			
1944	2,850.41	2,294	2,850			
1946	377.07	298	377			
1947	568.77	446	569			
1948	482.71	375	481	2	12.22	
1950	1,857.60	1,419	1,820	38	13.00	3
1951	3,131.90	2,369	3,039	93	13.40	7
1952	3,969.07	2,973	3,813	156	13.80	11
1953	4,259.74	3,159	4,052	208	14.21	15
1955	4,904.63	3,563	4,570	335	15.04	22
1956	2,507.83	1,803	2,313	195	15.46	13
1957	14,375.38	10,222	13,111	1,264	15.89	80
1958	1,667.93	1,173	1,504	164	16.32	10
1959	5,902.55	4,104 924	5 <b>,</b> 264	639	16.76	38
1960 1961	1,345.00 1,954.81	1,327	1,185 1,702	160 253	17.20 17.65	9
1961	3,416.99	2,263	2,903	514	18.57	28
1967	1,614.49	1,013	1,299	315	20.48	15
1970	2,450.11	1,471	1,887	563	21.98	26
1971	7,721.50	4,564	5 <b>,</b> 854	1,868	22.49	83
1972	1.00	1	1	1,000	22.7	0.5
1980	3,885.67	2,478	3,178	708	23.52	30
1988	11,897.69	6,600	8,465	3,433	26.83	128
	86,227.87	59,155	75,321	10,907		532

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 20.5 0.62

## ACCOUNT 375.7 STRUCTURES AND IMPROVEMENTS - OTHER DISTRIBUTION SYSTEM STRUCTURES

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
FULLY A	URG GARAGE CCRUED VAGE 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 CURV	E IOWA 90-F	1.5			
PROBABL	E RETIREMENT Y	EAR 6-2033				
NET SAL	VAGE PERCENT	0				
1958	23,203.80	19,323	21,887	1,317	10.95	120
1959	530.28	441	500	31	10.96	3
1978	1,767.28	1,404	1,590	177	11.23	16
1985	19,951.17	15,259	17,283	2,668	11.20	238
1987	7,647.96	5,764	6,529	1,119	11.25	99
1995	8,147.09	5,703	6,460	1,687	11.32	149
1998	14,593.54	9,842	11,148	3,446	11.31	305
1999	5,204.23	3,465	3,925	1,280	11.25	114
2003	17,099.66	10,612	12,020	5,080	11.26	451
2007	4,558.44	2,556	2,895	1,663	11.29	147
2010	1,391.88	699	792	600	11.31	53
2012	15,971.90	7,264	8,228	7,744	11.29	686
2014	1,825.22	724	820	1,005	11.27	89
2015	221,738.88	80,380	91,044	130,695	11.28	11,586
2016	69,144.37	22,437	25,414	43,731	11.28	3,877
2019	16,304.76	2,896	3,280	13,025	11.19	1,164
	429,080.46	188,769	213,813	215,267		19,097
	TON SERVICE CE SURVIVOR CURV		1.5			
PROBABL	E RETIREMENT Y	EAR 6-2030				
1928	539.04	486	539			
1933	401.96	361	402			
1937	77.17	69	77			
1955	4,931.58	4,313	4,885	46	8.21	6
	,	,	,			-

## ACCOUNT 375.7 STRUCTURES AND IMPROVEMENTS - OTHER DISTRIBUTION SYSTEM STRUCTURES

YEAR	ORIGINAL COST	CALCULATED ACCRUED	ALLOC. BOOK RESERVE	FUTURE BOOK ACCRUALS	REM. LIFE	ANNUAL ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)
			( - /	(0)	( 0 )	( , ,
	GTON SERVICE CEN		1 -			
	M SURVIVOR CURVE					
	LE RETIREMENT YE LVAGE PERCENT					
NEI SAI	LVAGE PERCENI	O				
1957	17,943.97	15,641	17,716	228	8.23	28
1958	1,091.86	950	1,076	16	8.24	2
1962	275.80	238	270	6	8.28	1
1963	17,141.83	14,771	16,731	411	8.28	50
1964	81,035.39	69,674	78 <b>,</b> 919	2,116	8.29	255
1965	2,232.00	1,915	2,169	63	8.30	8
1968	462.64	394	446	16	8.32	2
1969	861.74	732	829	33	8.33	4
1973	1,166.63	980	1,110	57	8.35	7
1976	1,998.47	1,688	1,912	86	8.34	10
1978	1,705.03	1,429	1,619	86	8.40	10
1982	1,111.41	916	1,038	74	8.43	9
1984	4,760.67	3,883	4,398	362	8.45	43
1985	911.17	740	838	73	8.43	9
1987	180,447.17	145,332	164,616	15,831	8.32	1,903
1995	194,747.16	147,657	167,250	27,497	8.43	3,262
1996	41,750.41	31,409	35 <b>,</b> 577	6,174	8.37	738
1997	51,204.74	38,009	43,052	8,152	8.48	961
1998	27 <b>,</b> 872.99	20,495	23,214	4,658	8.43	553
2005	152,784.63	100,838	114,218	38 <b>,</b> 566	8.46	4,559
2006	8,853.44	5 <b>,</b> 719	6 <b>,</b> 478	2,376	8.45	281
2008	7,810.00	4,788	5,423	2,387	8.47	282
2010	86,191.80	49,595	56,176	30,016	8.42	3 <b>,</b> 565
2011	15,761.85	8,702	9 <b>,</b> 857	5 <b>,</b> 905	8.45	699
2013	102,652.64	51,234	58,032	44,620	8.45	5 <b>,</b> 280
2015	29,890.28	12,907	14,620	15,271	8.44	1,809
2016	11,433.54	4,472	5 <b>,</b> 065	6,368	8.43	755
2017	165,917.86	57 <b>,</b> 092	64,668	101,250	8.42	12,025
2018	119,361.36	34,460	39,033	80 <b>,</b> 329	8.42	9,540
2019	344,054.27	76 <b>,</b> 896	87 <b>,</b> 099	256 <b>,</b> 955	8.39	30,626
2020	72,348.61	10,498	11,891	60,458	8.35	7,240
	1,751,731.11	919,283	1,041,244	710,487		84,522

## ACCOUNT 375.7 STRUCTURES AND IMPROVEMENTS - OTHER DISTRIBUTION SYSTEM STRUCTURES

	ORIGINAL COST (2)		RESERVE	FUTURE BOOK ACCRUALS (5)	LIFE	ACCRUAL
FULLY A	RD OFFICE ACCRUED LVAGE PERCENT	0				
1959 1960 1964 1965 1993	720.61	136 721 301 4,024 27,303	27,303			
	55,219.05	55 <b>,</b> 220	55,219			
INTERIN PROBABI	RD OFFICE (NEW) M SURVIVOR CURV LE RETIREMENT Y LVAGE PERCENT	EAR 6-2069				
2019	1,853,669.43	112,888	128,173	1,725,496	37.27	46,297
	1,853,669.43	112,888	128,173	1,725,496		46,297
INTERIN PROBABI	OPERATIONS CEN M SURVIVOR CURV LE RETIREMENT Y LVAGE PERCENT	E IOWA 90-R EAR 6-2069				
	7,174,359.54 26,416.85		496 <b>,</b> 079 405	6,678,281 26,012		
	7,200,776.39	437,275	496,484	6,704,292		179,965
INTERIN PROBABI	R SERVICE CENTE M SURVIVOR CURV LE RETIREMENT Y LVAGE PERCENT	E IOWA 90-R EAR 6-2029				
1939 1949 1979 1983 1991 1992	1,201.91 338.10 85,249.40 5,480.40 1,625.41 3,087.69	1,087 302 72,684 4,590 1,305 2,462	1,202 338 82,533 5,212 1,482 2,796	2,716 268 144 292	7.33 7.45 7.46 7.48	371 36 19 39

## ACCOUNT 375.7 STRUCTURES AND IMPROVEMENTS - OTHER DISTRIBUTION SYSTEM STRUCTURES

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
INTERIN PROBABI	R SERVICE CENTE M SURVIVOR CURV LE RETIREMENT Y LVAGE PERCENT	E IOWA 90-F EAR 6-2029				
1998 2000 2007 2009 2013 2014 2015 2016 2017 2019 2020 2021	249,117.92 1,971.28 8,637.28 8,908.99 76,855.87 4,037.54 4,344.34 18,864.29 23,434.00 76,365.58 9,024.62 19,599.83	189,006 1,461 5,690 5,565 40,687 2,012 2,007 7,929 8,715 18,710 1,448 1,156	214,617 1,659 6,461 6,319 46,200 2,285 2,279 9,003 9,896 21,245 1,644 1,313	34,501 312 2,176 2,590 30,656 1,753 2,065 9,861 13,538 55,120 7,380 18,287	7.45 7.49 7.47 7.46 7.48 7.46 7.47 7.47 7.46 7.45 7.41 7.31	4,631 42 291 347 4,098 235 276 1,320 1,815 7,399 996 2,502
INTERIN PROBABI	598,144.45  ITE SERVICE CEN M SURVIVOR CURV LE RETIREMENT Y LVAGE PERCENT	E IOWA 90-F EAR 6-2056		181,660		24,417
1981 1986 1987 1988 1996 1997 1998 2000 2003 2006 2007 2009 2010 2013 2015 2016 2017	593,681.70 14,531.65 10,690.59 10,177.82 15,873.85 7,912.22 1,295.01 2,043.39 23,934.57 122,192.82 83,513.69 23,195.60 4,267.07 784,265.50 1,037,129.72 79,468.00 9,316.95	343,148 7,875 5,703 5,339 7,223 3,516 561 840 8,949 40,690 26,607 6,652 1,155 169,009 180,357 12,055 1,189	389,611 8,941 6,475 6,062 8,201 3,992 637 954 10,161 46,200 30,210 7,553 1,311 191,893 204,778 13,687 1,350	204,070 5,590 4,215 4,116 7,673 3,920 658 1,090 13,774 75,993 53,304 15,643 2,956 592,372 832,352 65,781 7,967	30.84 30.88	6,915 187 140 136 252 128 21 36 447 2,461 1,729 507 96 19,333 27,308 2,171 264

## ACCOUNT 375.7 STRUCTURES AND IMPROVEMENTS - OTHER DISTRIBUTION SYSTEM STRUCTURES

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
INTERI PROBAB	TTE SERVICE CEN' M SURVIVOR CURVI LE RETIREMENT YI LVAGE PERCENT	E IOWA 90-R EAR 6-2056				
2018	86,622.59	8,879	10,081	76,541	29.92	2,558
2019	60,812.45	4,597	5 <b>,</b> 219	55,593		1,883
2021	42,379.59	704	799	41,580	27.09	1,535
	3,013,304.78	835,048	948,116	2,065,189		68,107
OTHER	BUILDINGS					
	OR CURVE IOWA LVAGE PERCENT					
NEI SA	LVAGE PERCENI	U				
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	7,045	7,045			
1956	294.53	295	295			
1961	5,869.31	5 <b>,</b> 670	5 <b>,</b> 869			
1966	2,114.98	1,958	2,115			
1969	1,259.56	1,135	1,260			
1971	106,649.53	94,309	106,650			
1972	9,337.50	8,177	9,319	19	4.35	4
1975	5,803.33	4,931	5,619	184	5.26	35
1976	6,723.83	6,016	6,724			
1984	43,036.41	35 <b>,</b> 587	40,561	2,475	7.83	316
1985	3 <b>,</b> 259.62	2 <b>,</b> 659	3,031	229	8.23	28
1987	14,383.92	11,386	12 <b>,</b> 978	1,406		155
1988	14,889.44	11,593	13,213	1,676	9.50	176
1989	11,476.85	8 <b>,</b> 780	10,007	1,470	9.96	148
1990	32,260.00	24,324	27 <b>,</b> 724	4,536	10.25	443
1993	8,113.24	5 <b>,</b> 741	6 <b>,</b> 543	1,570	11.74	134
1994	15,147.02	10,465	11,928	3,219	12.27	262
1995	27,857.47	18,840	21,473	6,384	12.64	505
1996	2,392.16	1,575	1,795	597	13.19	45
1997	1,337.50	856	976	362	13.75	26
1998	56,879.39	35,430	40,382	16,497	14.18	1,163
1999	23,666.45	14,271	16,266	7,401	14.76	501

## ACCOUNT 375.7 STRUCTURES AND IMPROVEMENTS - OTHER DISTRIBUTION SYSTEM STRUCTURES

## CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIV	BUILDINGS OR CURVE IOWA LVAGE PERCENT					
2000	187,147.80	109,014	124,252	62,896	15.35	4,097
2001	9,051.12	5,100	5,813	3,238	15.82	205
2003	12,533.29	6 <b>,</b> 532	7,445	5 <b>,</b> 088	16.92	301
2006	1,753.31	795	906	847	18.60	46
2007	26,323.12	11,308	12,889	13,434	19.14	702
2008	132,433.81	53 <b>,</b> 662	61,163	71,271	19.70	3,618
2009	76,246.04	28 <b>,</b> 973	33,023	43,223	20.26	2,133
2010	11,740.04	4,155	4,736	7,004	20.84	336
2011	8,340.00	2,728	3,109	5,231	21.43	244
2012	10,145.94	3,048	3,474	6 <b>,</b> 672	21.93	304
2013	565,538.18	154,222	175,779	389 <b>,</b> 759	22.45	17,361
2014	196,019.90	47 <b>,</b> 829	54,515	141,505	22.98	6,158
2015	154,103.38	33,132	37,763	116,340	23.43	4,965
2016	416,198.18	76 <b>,</b> 872	87,617	328,581	23.91	13,742
2017	90,145.26	13,891	15,833	74,313	24.24	3,066
2018	75,032.14	9,154	10,434	64,599	24.59	2,627
2019	423,219.69	37,624	42,883	380,337	24.76	15,361
2020	164,137.78	8,946	10,196	153,941	24.56	6,268
2021	49,360.34	953	1,086	48,274	23.29	2,073
	3,018,674.28	928,389	1,054,096	1,964,578		87 <b>,</b> 548
	17,923,745.12	3,846,833	4,356,774	13,566,969		509,953

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 26.6 2.85

#### ACCOUNT 375.8 STRUCTURES AND IMPROVEMENTS - COMMUNICATION

# CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	R CURVE IOWA /AGE PERCENT					
2001	16,515.17	7,756	8,256	8,259	23.06	358
	16,515.17	7,756	8,256	8,259		358

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 23.1 2.17

**GANNETT FLEMING** 

#### ACCOUNT 376.1 MAINS - CAST IRON

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
PROBABL	SURVIVOR CURV E RETIREMENT Y VAGE PERCENT	EAR 12-202				
1901	18,909.31	18,407	15,851	3,058	1.88	1,627
1902	207.30	202	174	33	1.89	17
1903	383.48	373	321	62	1.89	33
1904	776.41	756	651	125	1.90	66
1905	397.36	387	333	64	1.91	34
1908	6.70	7	7			
1911	34.80	34	29	6	1.94	3
1912	62.67	61	53	10	1.95	5
1913	103.35	100	86	17	1.95	9
1914	111.28	108	93	18	1.96	9
1915	448.79	436	375	74	1.96	38
1917	1,022.70	994	856	167	1.97	85
1918	36.45	35	30	6	1.97	3
1919	36.74	36	31	6	1.98	3
1920	1,081.46	1,050	904	177	1.98	89
1921	16,652.38	16,171	13,925	2,727	1.98	1,377
1922	332.90	323	278	55	1.99	28
1923	479.46	465	400	79	1.99	40
1924	1,053.15	1,022	880	173	1.99	87
1925	1,397.01	1,356	1,168	229	1.99	115
1926	2,069.04	2,008	1,729	340	2.00	170
1927	253.59	246	212	42	2.00	21
1928	748.11	726	625	123	2.00	62
1929	10,255.33	9,948	8,566	1,689	2.00	844
1930	1,271.39	1,233	1,062	209	2.01	104
1931	900.09	873	752	148	2.01	74
1932 1933	1,320.55	1,280	1 100	210	2 01	100
1933	487.56	472	1,102 406	219 82	2.01 2.02	109 41
1934	78.18	76	65	13	2.02	6
1937	3,092.26	2,994	2 <b>,</b> 578	514	2.02	254
1939	76,508.59	74,069	63,783	12,726	2.02	6 <b>,</b> 300
1940	2,484.31	2,404	2,070	414	2.02	204
1941	2,162.12	2,092	1,801	361	2.03	178
1942	86.45	84	72	14	2.03	7
1942	1,846.89	1,786	1,538	309	2.03	152
1944	2,481.50	2,399	2,066	416	2.03	205
1945	1,778.83	1,720	1,481	298	2.03	147
1946	1,130.78	1,093	941	190	2.03	94
1947	252.20	244	210	42	2.04	21
1948	8,365.18	8,078	6 <b>,</b> 957	1,408	2.04	690
	0,000.10	0,010	0,301	1,100		0,50

#### ACCOUNT 376.1 MAINS - CAST IRON

# CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
PROBABLE	SURVIVOR CURV E RETIREMENT Y /AGE PERCENT	EAR 12-202	_			
1949	2.85	3	3			
1951	18.79	18	15	4	2.04	2
1982	336.63	320	276	61	2.08	29
	161,465.15	156,489	134,755	26,710		13,382

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 2.0 8.29

#### ACCOUNT 376.3 MAINS - BARE STEEL

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
PROBABI	1 SURVIVOR CURV LE RETIREMENT Y	EAR 12-203				
NET SAI	LVAGE PERCENT	0				
1901	399,524.33	361,585	311,367	88,157	6.74	13,080
1902	35,024.43	31,594	27,206	7,818	6.95	1,125
1903	25,875.05	23,268	20,036	5,839	7.15	817
1904	20,412.02	18,300	15 <b>,</b> 758	4,654	7.34	634
1905	25,251.88	22,571	19,436	5,816	7.53	772
1906	17,042.15	15,189	13,079	3,963	7.71	514
1907	39,740.05	35 <b>,</b> 318	30,413	9,327	7.89	1,182
1908	18,069.90	16,015	13,791	4,279	8.06	531
1909	15,610.12	13,799	11,883	3,727	8.22	453
1910	15,553.24	13,713	11,808	3 <b>,</b> 745	8.38	447
1911	16,488.19	14,499	12,485	4,003	8.54	469
1912	10,387.29	9,112	7,846	2,541	8.69	292
1913	21,991.03	19 <b>,</b> 245	16,572	5,419	8.83	614
1914	21,756.52	18,992	16,354	5,403	8.98	602
1915	16,484.75	14,358	12,364	4,121	9.11	452
1916	16,378.12	14,233	12,256	4,122	9.24	446
1917	18,209.53	15 <b>,</b> 789	13,596	4,614	9.37	492
1918	5,411.95	4,682	4,032	1,380	9.50	145
1919	9,414.76	8,127	6,998	2,417	9.62	251
1920	9,551.22	8,229	7,086	2,465	9.73	253
1921	14,177.32	12,188	10,495	3,682	9.85	374
1922	46,570.74	39 <b>,</b> 953	34,404	12,167	9.96	1,222
1923	23,892.94	20,459	17,618	6 <b>,</b> 275	10.06	624
1924	49,825.54	42 <b>,</b> 581	36 <b>,</b> 667	13,159	10.16	1,295
1925	61,409.15	52 <b>,</b> 377	45,103	16,306	10.26	1,589
1926	84,755.21	72,144	62,124	22,631	10.36	2,184
1927	59,060.34	50,172	43,204	15,856	10.46	1,516
1928	100,924.16	85 <b>,</b> 574	73 <b>,</b> 689	27 <b>,</b> 235	10.55	2,582
1929	119,411.34	101,053	87,018	32,393	10.64	3,044
1930	123,967.12	104,721	90,177	33,790	10.72	3,152
1931	129,949.39	109,555	94,340	35,609	10.81	3,294
1932	22,024.78	18,533	15,959	6,066	10.89	557
1933	20,911.40	17,563	15,124	5,787	10.97	528
1934	27,332.24	22,911	19,729	7,603	11.05	688
1935	28,646.32	23,969	20,640	8,006	11.12	720
1936	32,904.83	27,481	23,664	9,241	11.19	826
1937	56,691.27	47,248	40,686	16,005	11.27	1,420
1938	31,112.11	25,879	22,285	8,827	11.34	778
1939	39,223.68	32,568	28,045	11,179	11.40	981
1940	108,734.22	90,097	77,584	31,150	11.47	2,716
1941	156,975.73	129,820	111,790	45,186	11.53	3,919
1942	73,768.37	60 <b>,</b> 875	52,420	21,348	11.60	1,840

#### ACCOUNT 376.3 MAINS - BARE STEEL

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	M SURVIVOR CURVE LE RETIREMENT YE					
NET SA	LVAGE PERCENT	0				
1943	37,348.65	30 <b>,</b> 758	26,486	10,863	11.66	932
1944	14,373.22	11,812	10,171	4,202	11.72	359
1945	12,702.95	10,417	8 <b>,</b> 970	3,733	11.78	317
1946	58,398.42	47 <b>,</b> 794	41,156	17,242	11.83	1,457
1947	52,396.25	42,784	36,842	15,554	11.89	1,308
1948	180,871.41	147,374	126,906	53,965	11.94	4,520
1949	500,411.63	406,745	350,255	150,157	12.00	12,513
1950	967,110.52	784,307	675,379	291,732	12.05	24,210
1951 1952	747,993.17 1,656,452.78	605,171 1,336,890	521,122 1,151,217	226,871 505,236	12.10 12.15	18,750 41,583
1952	1,189,065.03	957,257	824,309	364,756	12.13	29,898
1954	1,527,839.01	1,227,038	1,056,622	471,217	12.24	38,498
1955	3,918,462.90	3,138,571	2,702,673	1,215,790	12.29	98,925
1956	2,259,780.17	1,805,022	1,554,333	705,447	12.34	57,168
1957	3,065,766.83	2,442,343	2,103,140	962,627	12.38	77,757
1958	3,581,219.67	2,845,064	2,449,930	1,131,290	12.42	91,086
1959	2,810,482.32	2,226,436	1,917,219	893,263	12.46	71,690
1960	3,089,821.19	2,439,970	2,101,097	988,724	12.51	79 <b>,</b> 035
1961	3,290,581.38	2,591,070	2,231,211	1,059,370	12.54	84,479
1962	2,901,747.52	2,277,756	1,961,412	940,336	12.58	74,748
1963	3,774,050.54	2,952,742	2,542,653	1,231,398	12.62	97 <b>,</b> 575
1964	3,651,557.24	2,847,156	2,451,731	1,199,826	12.66	94,773
1965	2,926,651.93	2,273,891	1,958,083	968,569	12.70	76,265
1966	4,129,143.44	3,197,154	2,753,120	1,376,023	12.73	108,093
1967	3,921,060.88	3,024,510	2,604,453	1,316,608	12.77	103,102
1968	3,013,215.48	2,315,626	1,994,022	1,019,193	12.80 12.83	79 <b>,</b> 624
1969 1970	2,174,272.46 1,061,226.56	1,664,471 809,153	1,433,302 696,775	740,970 364,452	12.86	57,753 28,340
1971	2,539,347.03	1,928,101	1,660,318	879 <b>,</b> 029	12.89	68,195
1972	925,600.93	699,754	602,569	323,032	12.92	25,002
1973	616,246.54	463,775	399,364	216,883	12.95	16,748
1974	1,343.82	1,007	867	477	12.98	37
1975	814.03	607	523	291	13.01	22
1976	259.38	203	175	84	12.72	7
1977	2,084.99	1,611	1,387	698	13.06	53
1978	175,486.56	135,616	116,781	58 <b>,</b> 706	12.76	4,601
1979	18,317.33	14,062	12,109	6,208	12.83	484
1980	211,560.34	161,230	138,838	72 <b>,</b> 722	12.93	5,624
1981	60.06	45	39	21	13.06	2
1983	7,789.49	5,806	5,000	2,789	13.13	212
1984	207.92	154	133	75	13.09	6
1985	36.16	27	23	13	13.09	1

#### ACCOUNT 376.3 MAINS - BARE STEEL

# CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
INTERIOR PROBABI		EAR 12-203				
1986	83.84	61	53	31	13.13	2
1988	0.10					
1989	911.06	647	557	354	13.25	27
1990	11,903.30	8 <b>,</b> 376	7,213	4,690	13.23	354
1992	45,851.46	31,697	27,294	18 <b>,</b> 557	13.14	1,412
1997	4,061.62	2,628	2,263	1,799	13.32	135
1998	670.88	429	369	302	13.21	23
2008	78.49	39	34	44	13.32	3
2011	32,618.28	14,339	12,347	20,271	13.28	1,526
	63,279,781.89	49,795,835	42,879,976	20,399,806		1,638,654

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 12.4 2.59

#### ACCOUNT 376.45 MAINS - OTHER

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	R CURVE IOWA VAGE PERCENT					
1952	122,055.51	75 <b>,</b> 898	65 <b>,</b> 357	56,699	26.85	2,112
1954	27,690.98	16,829	14,492	13,199	27.85	474
1955	102,488.01	61,565	53,015	49,473	28.35	1,745
1956	73,116.81	43,396	37 <b>,</b> 369	35,748	28.86	1,239
1957	88,594.96	51,934	44,721	43,874	29.38	1,493
1958	78,028.37	45,168	38 <b>,</b> 895	39,133	29.90	1,309
1959	80,976.48	46,282	39 <b>,</b> 854	41,122	30.42	1,352
1960	59,760.34	33,701	29,020	30,740	30.96	993
1961	18,714.21	10,414	8,968	9,746	31.49	309
1962	75,811.54	41,611	35,832	39,980	32.03	1,248
1963	101,852.33	55,115	47,460	54,392	32.58	1,669
1964	163,429.71	87,170	75,063	88,367	33.13	2,667
1965	59,603.99	31,330	26,979	32,625	33.68	969
1966	104,470.67	54,090	46,578	57,893	34.24	1,691
1967	59,188.85	30,178	25 <b>,</b> 987	33,202	34.80	954
1968	278,512.79	139,766	120,355	158,158	35.37	4,472
1969	606,376.13	299,344	257 <b>,</b> 770	348,606	35.95	9,697
1970 1971	620,038.79 1,308,367.20	301,023 624,510	259,216 537,775	360,823 770,592	36.53 37.11	9,877 20,765
1972	1,018,659.24	477,761	411,408	607,251	37.11	16,107
1973	2,225,684.00	1,025,373	882,965	1,342,719	38.29	35,067
1974	2,696,064.94	1,219,295	1,049,954	1,646,111	38.89	42,327
1975	2,602,410.30	1,154,950	994,546	1,607,864	39.49	40,716
1976	2,228,908.55	1,275,381	1,098,251	1,130,658	33.95	33,304
1977	4,436,332.69	2,502,535	2,154,972	2,281,361	34.32	66,473
1978	4,767,352.93	2,649,218	2,281,283	2,486,070	34.71	71,624
1979	5,771,879.66	3,158,373	2,719,725	3,052,155	35.10	86,956
1980	7,411,718.82	3,990,469	3,436,256	3,975,463	35.51	111,953
1981	8,060,665.82	4,268,123	3,675,348	4,385,318	35.92	122,086
1982	7,989,353.80	4,156,861	3,579,538	4,409,816	36.34	121,349
1983	6,754,422.50	3,450,834	2,971,567	3,782,856	36.77	102,879
1984	7,604,487.90	3,812,890	3,283,339	4,321,149	37.21	116,129
1985	7,064,971.44	3,473,140	2,990,775	4,074,196	37.66	108,184
1986	7,966,846.00	3,837,630	3,304,643	4,662,203	38.11	122,335
1987	7,966,258.79	3,756,091	3,234,429	4,731,830	38.58	122,650
1988	9,159,661.15	4,224,436	3,637,728	5,521,933	39.04	141,443
1989	8,165,299.71	3,705,413	3,190,789	4,974,511	39.01	127,519
1990	6,675,636.53	2,957,307	2,546,584	4,129,053	39.50	104,533
1991	6,779,176.30	2,927,926	2,521,283	4,257,893	40.01	106,421
1992	7,701,222.66	3,239,904	2,789,932	4,911,291	40.51	121,237
1993	8,150,547.33	3,358,025	2,891,648	5,258,899	40.55	129,689
1994	10,169,852.92	4,070,992	3,505,595	6,664,258	41.08	162,226
1995	10,081,679.36	3,914,716	3,371,023	6,710,656	41.61	161,275

#### ACCOUNT 376.45 MAINS - OTHER

# CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2021

YEAF (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	IVOR CURVE IOWA SALVAGE PERCENT					
1996	10,275,351.10	3,891,275	3,350,838	6,924,513	41.70	166,055
1997	12,745,905.80	4,667,551	4,019,302	8,726,604	42.25	206,547
1998	., ,	3,866,695	3,329,672	7,534,883	42.38	177,793
1999	9,388,511.19	3,240,914	2,790,802	6,597,709	42.52	155 <b>,</b> 167
2000	, ,	3,118,106	2,685,050	6,706,836	43.10	155,611
2001	, ,	3,573,924	3,077,562	8,073,527	43.28	186,542
2002	7,360,792.13	2,272,277	1,956,693	5,404,099	43.48	124,289
2003	10,806,969.85	3,204,267	2,759,245	8,047,725	43.70	184,158
2004	16,642,326.16	4,724,756	4,068,562	12,573,764	43.93	286,223
2005	22,840,215.81	6,187,414	5,328,079	17,512,137	44.19	396,292
2006	, ,	3,080,083	2,652,308	9,239,905	44.11	209,474
2007	, ,	8,980,065	7,732,875	28,905,497	44.41	650 <b>,</b> 878
2008	56,565,651.88	13,128,888	11,305,492	45,260,160	44.39	1,019,603
2009	34,419,949.06	7,520,759	6,476,244	27,943,705	44.40	629 <b>,</b> 363
2010	45,444,574.24	9,288,871	7,998,793	37,445,781	44.45	842,425
2011	83,572,585.70	15,845,362	13,644,690	69,927,896	44.53	1,570,355
2012	90,579,496.25	15,869,528	13,665,500	76,913,996	44.34	1,734,641
2013	119,185,906.70	19,057,826	16,410,993	102,774,914	44.22	2,324,173
2014	125,595,358.22	18,161,089	15,638,799	109,956,559	43.87	2,506,418
2015	, ,	15,814,246	13,617,896	109,642,013	43.58	2,515,879
2016	-, ,	18,982,649	16,346,257	153,749,166	43.13	3,564,785
2017	183,182,175.33	17,310,716	14,906,530	168,275,645	42.31	3,977,207
2018	157,546,526.55	12,005,045	10,337,733	147,208,794	41.43	3,553,193
2019	, ,	13,182,645	11,351,783	219,922,695	39.96	5,503,571
2020	229,392,073.92	8,326,932	7,170,452	222,221,622	37.64	5,903,869
2021	125,581,427.50	1,745,582	1,503,148	124,078,280	32.54	3,813,100
	2,103,171,893.33	311,704,432	268,413,585	1,834,758,308		44,797,128

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 41.0 2.13

#### ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	CURVE IOWA AGE PERCENT					
1894 1912 1914 1920 1928	756.79 38.19 12.38 86.01 88.16	757 38 12 86 88	757 38 12 86 88			
1929 1930 1931 1932 1933	428.62 205.41 188.76 357.90 427.81	429 205 189 356 420	429 205 189 358 423	5	0.79	5
1934	281.77	274	276	6	1.29	5
1935	187.38	180	181	6	1.79	3
1936	261.36	248	250	11	2.29	5
1938	483.00	448	451	32	3.29	10
1939	453.88	416	419	35	3.79	9
1940	695.86	630	635	61	4.29	14
1941	1,329.44	1,188	1,197	132	4.79	28
1942	265.90	235	237	29	5.29	5
1943	76.69	67	68	9	5.79	2
1944	1,145.13	985	993	152	6.29	24
1945	154.75	131	132	23	6.79	3
1946	222.75	187	188	35	7.29	5
1947	666.24	551	555	111	7.79	14
1948	318.16	260	262	56	8.29	7
1949	1,197.65	964	972	226	8.79	26
1950	11,285.11	8,955	9,025	2,260	9.29	243
1951	10,031.05	7,849	7,910	2,121	9.79	217
1952	47,004.72	36,256	36,538	10,467	10.29	1,017
1953	40,464.03	30,762	31,001	9,463	10.79	877
1954	21,225.88	15,901	16,025	5,201	11.29	461
1955	112,643.47	83,131	83,778	28,865	11.79	2,448
1956	48,449.10	35,217	35,491	12,958	12.29	1,054
1957	31,462.92	22,521	22,696	8,767	12.79	685
1958	35,010.11	24,671	24,863	10,147	13.29	764
1959	39,239.37	27,215	27,427	11,812	13.79	857
1960	66,950.25	45,690	46,046	20,904	14.29	1,463
1961	79,121.86	53,117	53,530	25,592	14.79	1,730
1962	75,314.95	49,724	50,111	25,204	15.29	1,648
1963	55,901.01	36,286	36,568	19,333	15.79	1,224
1964	56,406.86	35,988	36,268	20,139	16.29	1,236
1965	37,891.29	23,754	23,939	13,952	16.79	831
1966	44,138.04	27,179	27,391	16,747	17.29	969
1967	44,148.09	26,695	26,903	17,245	17.79	969

#### ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

YEAR	ORIGINAL COST	CALCULATED ACCRUED	ALLOC. BOOK RESERVE	FUTURE BOOK ACCRUALS	REM. LIFE	ANNUAL ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)
SURVIV	OR CURVE IOWA	45-01				
	LVAGE PERCENT					
1000	04.054.60	00.044	00 500	40 550	10.00	550
1968	34,274.62	20,344	20,502	13,773	18.29	753
1969	50,807.93	29,593	29,823	20,985	18.79	1,117
1970	31,869.09	18,208	18,350	13,519	19.29	701
1971	115,136.76	64,502	65,004	50,133	19.79	2,533
1972	74,055.81	40,665	40,982	33,074	20.29	1,630
1973	69,629.40	37,461	37 <b>,</b> 753	31,876	20.79	1,533
1974	78,778.20	41,507	41,830	36,948	21.29	1,735
1975	50,074.86	25,828	26,029	24,046	21.79	1,104
1976	40,826.59	28,370	28,591	12,236	19.94	614
1977	61,928.50	42,638	42,970	18,958	20.10	943
1978	34,638.36	23,461	23,644	10,994	20.69	531
1979	31,045.18	20,806	20,968	10,077	20.87	483
1980	42,475.53	28,149	28,368	14,108	21.08	669
1981	88,727.18	57,735	58,184	30,543	21.70	1,408
1982	212,775.33	136,708	137,772	75,003	21.93	3,420
1983	86,653.53	54,930	55,358	31,296	22.19	1,410
1984	123,069.76	76,906	77,505	45,565	22.46	2,029
1985	190,474.80	117,218	118,130	72,345	22.76	3,179
1986	151,936.22	92,013	92,729	59,207	23.06	2,568
1987	144,439.70	85,999	86,668	57 <b>,</b> 772	23.39	2,470
1988	301,052.14	176,055	177,425	123,627	23.73	5,210
1989	199,163.99	114,280	115,170	83,994	24.08	3,488
1990	204,318.94	115,542	116,441	87,878	24.14	3,640
1991	194,289.50	107,559	108,396	85,894	24.53	3,502
1992	83,058.21	45,200	45,552	37,506	24.64	1,522
1993	140,653.08	74,743	75 <b>,</b> 325	65,328	25.06	2,607
1994	247,851.45	129,106	130,111	117,740	25.22	4,669
1995	97,853.10	49,886	50,274	47,579	25.40	1,873
1996	375,593.07	187,120	188,577	187,016	25.60	7,305
1997	73,041.27	35,491	35 <b>,</b> 767	37,274	25.83	1,443
1998	23,889.79	11,300	11,388	12,502	26.09	479
1999	515,743.40	238,170	240,024	275,719	26.13	10,552
2000	932,963.25	417,594	420,845	512,118	26.43	19,376
2001	224,030.18	97,431	98,189	125,841	26.53	4,743
2002	240,580.51	101,357	102,146	138,435	26.67	5,191
2003	376,982.29	154,110	155,310	221,672	26.63	8,324
2004	289,205.99	113,831	114,717	174,489	26.83	6,504
2005	128,094.08	48,573	48,951	79,143	26.87	2,945
2006	547,371.23	200,009	201,566	345,805	26.78	12,913
2007	473,265.22	165,122	166,407	306,858	26.90	11,407
2008	1,294,094.32	432,357	435,722	858,372	26.74	32,101
2009	436,244.25	138,115	139,190	297,054	26.80	11,084
2010	1,480,925.72	444,722	448,184	1,032,742	26.60	38,825

#### ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

# CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	VOR CURVE IOWA ALVAGE PERCENT					
2011	2,062,127.89	582,139	586,670	1,475,458	26.48	55 <b>,</b> 720
2012	719,424.09	189,712	191,189	528,235	26.30	20,085
2013	3,119,513.10	763 <b>,</b> 969	769 <b>,</b> 916	2,349,597	25.95	90,543
2014	10,492,808.24	2,350,389	2,368,685	8,124,123	25.70	316,114
2015	9,406,110.22	1,907,559	1,922,408	7,483,702	25.23	296,619
2016	8,973,376.45	1,618,797	1,631,398	7,341,978	24.61	298,333
2017	16,904,557.72	2,635,421	2,655,935	14,248,623	23.91	595 <b>,</b> 927
2018	17,023,820.38	2,204,585	2,221,746	14,802,074	22.97	644,409
2019	22,044,028.88	2,211,016	2,228,226	19,815,803	21.68	914,013
2020	17,686,351.04	1,184,986	1,194,210	16,492,141	19.73	835 <b>,</b> 892
2021	6,062,137.08	170,346	171,672	5,890,465	15.83	372,108
	125,955,155.52	21,059,888	21,223,803	104,731,353		4,689,154

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 22.3 3.72

#### ACCOUNT 379.1 MEASURING AND REGULATING EQUIPMENT - CITY GATE

# CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	R CURVE IOWA VAGE PERCENT					
1976	591.42	532	172	419	5.09	82
1983	32,512.26	27,479	8,864	23,648	7.04	3 <b>,</b> 359
1984	1,528.08	1,281	413	1,115	7.23	154
1987	6,793.84	5 <b>,</b> 495	1,773	5,021	8.14	617
1988	15,907.49	12,651	4,081	11,826	8.60	1,375
1989	30,556.87	23 <b>,</b> 972	7,733	22,824	8.90	2,564
1996	48,076.94	32,870	10,604	37,473	11.76	3,186
	135,966.90	104,280	33,640	102,327		11,337

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 9.0 8.34

#### ACCOUNT 380.3 SERVICES - BARE STEEL

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
				( - /	( - )	, ,
	SURVIVOR CURVI					
	E RETIREMENT Y		5			
NET SAL	VAGE PERCENT	U				
1887	2,008.32	2,008	2,008			
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	2,129.38	2,129	2,129			
1903	1,481.11	1,481	1,481			
1904	2,172.98	2,173	2,173			
1905	1,439.99	1,440	1,440			
1906	1,575.15	1,575	1,575			
1907	2,032.63	2,033	2,033			
1908	2,707.17	2,707	2,707			
1909	2,108.17	2,108	2,108			
1910	1,879.09	1,879	1,879			
1911	1,343.93	1,344	1,344			
1912	1,523.08	1,523	1,523			
1913	1,836.85	1,837	1,837			
1914	1,525.11	1,525	1,525			
1915	2,046.99	2,047	2,047			
1916	1,365.70	1,366	1,366			
1917	1,038.80	1,039	1,039			
1918	814.20	814	814			
1919	1,317.54	1,318	1,318			
1920	1,470.66	1,471	1,471			
1921	1,099.28	1,099	1,099	0.5.0		0.5.0
1922	2,520.45	2,505	2,161	359	0.30	359
1923	4,398.73	4,329	3,735	664	0.79	664
1924	4,209.37	4,102	3,539	670	1.27	528
1925	7,322.18	7,066	6,096	1,226	1.75	701
1926	6,556.05	6,264	5,404	1,152	2.23	517
1927	6,644.50	6 <b>,</b> 286	5,423	1,222	2.70	453
1928	7,192.40	6 <b>,</b> 736	5,811	1,381	3.17	436
1929	8,709.97	8,078	6,969	1,741	3.63	480

#### ACCOUNT 380.3 SERVICES - BARE STEEL

# CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
PROBABL	SURVIVOR CURVE E RETIREMENT YE VAGE PERCENT	EAR 12-203				
1930	4,772.97	4,383	3,781	992	4.08	243
1931	2,785.04	2,533	2,185	600	4.53	132
1932	1,557.87	1,403	1,210	348	4.97	70
1933	2,175.45	1,941	1,675	500	5.40	93
1934	2,279.03	2,014	1,738	541	5.82	93
1935	1,923.77	1,684	1,453	471	6.24	75
1936	3,457.68	2,998	2,586	872	6.65	131
1937	4,434.02	3,812	3,289	1,145	7.01	163
1938	8,651.66	7,383	6,370	2,282	7.33	311
1939	12,474.01	10,574	9,122	3,352	7.61	440
1940	10,398.13	8,760	7 <b>,</b> 557	2,841	7.87	361
1941	13,445.08	11,263	9,717	3,728	8.10	460
1942	15,137.42	12,612	10,881	4,256	8.32	512
1943	5,126.65	4,251	3,667	1,460	8.51	172
1944	4,678.27	3,861	3,331	1,347	8.70	155
1945	5,266.46	4,327	3,733	1,533	8.87	173
1946	12,716.10	10,402	8 <b>,</b> 974	3,742	9.04	414
1947	26,940.84	21,950	18 <b>,</b> 937	8,004	9.19	871
1948	35,504.77	28,810	24,855	10,650	9.34	1,140
1949	52,413.02	42,365	36 <b>,</b> 550	15,863	9.48	1,673
1950	69,257.06	55 <b>,</b> 760	48,106	21,151	9.62	2,199
1951	88,828.75	71,243	61,463	27,366	9.75	2,807
1952	94,665.79	75 <b>,</b> 652	65 <b>,</b> 267	29,399	9.87	2,979
1953	88,722.37	70,642	60 <b>,</b> 945	27 <b>,</b> 777	9.99	2,780
1954	133,529.34	105,922	91,382	42,147	10.11	4,169
	800,861.45	664,076	580,077	220,784		26,754

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 8.3 3.34

#### ACCOUNT 380.45 SERVICES - OTHER

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	DR CURVE IOWA LVAGE PERCENT					
1955 1956 1957 1958 1959 1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977	237,122.99 273,181.66 259,047.48 354,131.63 451,441.94 340,705.67 544,652.99 566,519.97 655,638.56 660,022.60 657,006.69 791,232.61 911,071.40 992,575.92 721,269.20 621,186.56 554,449.56 507,456.60 389,208.26 80,309.56 131,729.91 374,675.58 1,651,040.60	169,353 192,866 180,712 244,068 307,251 228,954 361,323 370,844 423,411 420,434 412,600 489,615 555,571 595,943 426,414 361,406 317,256 285,495 215,232 43,624 70,238 256,953 1,122,047	147,931 168,470 157,854 213,196 268,387 199,994 315,619 323,936 369,854 367,253 360,410 427,683 485,297 520,562 372,477 315,692 277,126 249,383 188,007 38,106 61,354 224,451 980,119	89,192 104,712 101,193 140,936 183,055 140,712 229,034 242,584 285,785 292,770 296,597 363,550 425,774 472,014 348,792 305,495 277,324 258,074 201,201 42,204 70,376 150,225 670,922	14.29 14.70 15.12 15.54 15.97 16.40 16.83 17.27 17.71 18.15 18.60 19.06 19.51 19.98 20.44 20.91 21.39 21.87 22.35 22.84 23.34 20.81	6,242 7,123 6,693 9,069 11,462 8,580 13,609 14,047 16,137 16,131 15,946 19,074 21,823 23,624 17,064 14,610 12,965 11,800 9,002 1,848 3,015 7,219 32,040
1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1990 1991 1992 1993 1994 1995 1996 1997	1,229,821.18 1,553,213.74 2,105,678.47 2,504,516.74 2,049,389.89 2,086,308.64 2,532,299.20 3,047,284.37 3,463,730.47 4,102,928.23 4,985,137.98 4,756,142.60 4,901,251.60 4,647,500.63 5,247,854.12 5,648,600.07 6,722,065.09 5,961,889.37 5,734,837.41 6,056,363.49	822,258 1,027,762 1,369,112 1,609,402 1,292,550 1,298,518 1,553,819 1,831,113 2,048,797 2,386,263 2,848,508 2,667,245 2,694,708 2,502,214 2,763,520 2,905,075 3,372,460 2,929,672 2,740,105 2,824,688	718,250 897,760 1,195,932 1,405,828 1,129,055 1,134,268 1,357,276 1,599,495 1,789,644 2,084,424 2,488,199 2,329,864 2,353,853 2,185,708 2,413,961 2,537,611 2,945,876 2,559,096 2,393,508 2,467,392	511,571 655,454 909,746 1,098,689 920,335 952,041 1,175,023 1,447,789 1,674,086 2,018,504 2,496,939 2,426,279 2,547,399 2,461,793 2,833,893 3,110,989 3,776,189 3,402,793 3,341,329 3,588,971	21.52 21.69 22.28 22.48 23.08 23.31 23.56 24.19 24.46 25.06 25.39 25.73 26.08 26.45 26.83 27.23 27.34 27.78 27.94	23,772 30,219 40,832 48,874 39,876 40,843 49,874 59,851 68,442 81,523 99,638 95,560 99,005 94,394 107,142 115,952 138,678 124,462 120,278 128,453

#### ACCOUNT 380.45 SERVICES - OTHER

# CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	VOR CURVE IOWA ALVAGE PERCENT					
1998	6,551,478.40	2,960,613	2,586,124	3,965,354	28.40	139,625
1999	6,994,602.98	3,073,429	2,684,670	4,309,933	28.60	150,697
2000	7,195,678.10	3,066,798	2,678,877	4,516,801	28.83	156 <b>,</b> 670
2001	6,972,179.88	2,875,327	2,511,626	4,460,554	29.09	153,336
2002	5,980,603.96	2,380,280	2,079,197	3,901,407	29.37	132,836
2003	5,701,798.49	2,194,622	1,917,023	3,784,775	29.43	128,603
2004	8,292,471.09	3,061,580	2,674,319	5,618,152	29.75	188,845
2005	8,743,748.80	3,100,533	2,708,345	6,035,404	29.88	201,988
2006	8,484,373.06	2,877,899	2,513,872	5,970,501	30.04	198,752
2007	12,074,464.38	3,916,956	3,421,499	8,652,965	30.03	288,144
2008	14,287,588.74	4,389,147	3,833,962	10,453,627	30.25	345,574
2009	13,144,366.49	3,835,526	3,350,369	9,793,997	30.14	324,950
2010	15,484,362.55	4,242,715	3,706,052	11,778,311	30.25	389,366
2011	22,759,532.63	5,830,992	5,093,427	17,666,106	30.24	584,197
2012	28,740,729.77	6,846,042	5,980,083	22,760,647	30.11	755 <b>,</b> 917
2013	34,371,521.17	7,551,423	6,596,240	27,775,281	29.90	928,939
2014	35,996,502.89	7,206,500	6,294,947	29,701,556	29.62	1,002,753
2015	41,078,565.77	7,381,818	6,448,089	34,630,477	29.30	1,181,928
2016	32,059,104.09	5,052,515	4,413,420	27,645,684	28.95	954,946
2017	51,405,973.69	6,950,088	6,070,968	45,335,006	28.26	1,604,211
2018	48,883,634.36	5,411,418	4,726,925	44,156,709	27.45	1,608,623
2019	60,800,524.75	5,143,724	4,493,092	56,307,433	26.15	2,153,248
2020	61,483,165.30	3,406,167	2,975,320	58,507,845	24.16	2,421,682
2021	57,614,090.83	1,290,556	1,127,313	56,486,778	20.03	2,820,109
	687,163,553.40	155,586,067	135,905,920	551,257,633		20,722,730

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 26.6 3.02

#### ACCOUNT 381 METERS

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	CURVE IOWA AGE PERCENT					
1913 1914	50.76 16.80	51 17	51 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	2,835.37	2,835	2,835			
1927	4,426.27	4,426	4,426			
1928	5,533.51	5 <b>,</b> 534	5 <b>,</b> 534			
1929	4,753.22	4,753	4,753			
1930	367.68	368	368			
1931	23.47	23	23			
1934	122.80	122	123			
1935	25.42	25	25			
1936	446.25	439	446			
1937	73.25	72	73	1	1 00	1
1938 1939	221.34 405.31	215 392	220 401	1 4	1.22	1 3
1939	2,023.14	1 <b>,</b> 929	1,972	51	1.49 2.04	25
1941	2,023.14	1,909	1,952	63	2.31	27
1943	1,829.64	1,722	1,761	69	2.59	27
1944	113.98	107	109	5	2.87	2
1945	678.05	630	644	34	3.15	11
1946	4,096.95	3 <b>,</b> 777	3,862	235	3.44	68
1947	2,214.86	2,027	2,073	142	3.73	38
1948	15,259.78	13,869	14,181	1,079	4.01	269
1949	15,257.10	13,763	14,072	1,185	4.31	275
1950	28,319.21	25 <b>,</b> 358	25,928	2,391	4.60	520
1951	53,793.08	47,803	48,878	4,915	4.90	1,003
1952	34,451.07	30 <b>,</b> 380	31,063	3,388	5.20	652
1953	18,661.71	16,329	16,696	1,966	5.50	357
1954	53,145.64	46,128	47,165	5,981	5.81	1,029
1955	61,867.99	53,263	54,461	7,407	6.12	1,210
1956	29,529.30	25,214	25,781	3,748	6.43	583
1957	84,337.03	71,399	73,005	11,332	6.75	1,679
1958	149,685.30	125,634	128,459	21,226	7.07	3,002

#### ACCOUNT 381 METERS

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	OR CURVE IOWA LVAGE PERCENT					
1959	167,029.96	138,977	142,102	24,928	7.39	3,373
1960	165,883.07	136,779	139,855	26,028	7.72	3,372
1961	158,581.05	129,569	132,483	26,098	8.05	3,242
1962	200,160.21	162,040	165,684	34,476	8.38	4,114
1963	131,905.14	105,764	108,142	23,763	8.72	2,725
1964	204,980.47	162,773	166,433	38,547	9.06	4,255
1965	217,477.32	170,968	174,813	42,664	9.41	4,534
1966	212,827.45	165,618	169,342	43,485	9.76	4,455
1967	190,370.74	146,629	149,926	40,445	10.11	4,000
1968	155,748.01	118,688	121,357	34,391	10.47	3,285
1969	154,800.64	116,664	119,287	35,514	10.84	3,276
1970	127,094.45 272,973.16	94,715	96,845 205,655	30,249	11.21 11.58	2,698
1971 1972	228,659.79	201,132 166,505	170,249	67,318 58,411	11.96	5,813 4,884
1973	144,726.26	104,104	106,445	38,281	12.35	3,100
1974	181,981.49	129,289	132,196	49,785	12.74	3,908
1975	202,021.50	141,690	144,876	57,146	13.14	4,349
1976	86,836.14	68,618	70,161	16,675	12.06	1,383
1977	174,750.71	136,603	139,675	35,076	12.40	2,829
1978	165,459.97	127,867	130,742	34,718	12.76	2,721
1979	303,559.73	231,768	236,980	66,580	13.14	5 <b>,</b> 067
1980	571,999.38	431,173	440,869	131,130	13.53	9,692
1981	604,497.52	449,565	459,674	144,824	13.93	10,397
1982	398,651.50	293,846	300,454	98,198	14.06	6,984
1983	302,163.66	219,401	224,335	77,829	14.49	5,371
1984	398,932.00	285,117	291,528	107,404	14.94	7,189
1985	535,001.97	377 <b>,</b> 979	386 <b>,</b> 479	148,523	15.13	9,816
1986	555 <b>,</b> 255.65	385 <b>,</b> 458	394 <b>,</b> 126	161,130	15.60	10,329
1987	564,353.18	386,525	395,217	169,136	15.83	10,685
1988	644,533.20	432,933	442,668	201,865	16.33	12,362
1989	720,980.18	476,784	487,505	233,475	16.60	14,065
1990	433,003.91	280,240	286,542	146,462	17.13	8,550
1991	511,252.01	325,003	332,311	178,941	17.43	10,266
1992	745,476.17 887,086.88	464,879	475,333	270,143	17.75	15,219
1993 1994	354,612.37	539,438 210,959	551,568 215,703	335,519 138,909	18.31 18.67	18,324 7,440
1995	8,146.20	4,735	4,841	3,305	19.04	174
1996	1,720,150.89	974,982	996,906	723,245	19.43	37,223
1997	668,887.40	369,092	377 <b>,</b> 392	291,495	19.83	14,700
1998	977,174.09	523,961	535,743	441,431	20.25	21,799
1999	1,055,270.21	548,846	561,188	494,082	20.69	23,880
2000	6,964.79	3,505	3,584	3,381	21.14	160
2001	383,558.30	186,371	190,562	192,996	21.60	8,935

#### ACCOUNT 381 METERS

# CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIV	OR CURVE IOWA	44-S1				
NET SA	ALVAGE PERCENT	0				
2002	1,125,940.58	526 <b>,</b> 828	538,675	587,266	22.08	26,597
2003	831,914.55	373 <b>,</b> 862	382 <b>,</b> 269	449,646	22.57	19,922
2004	1,023,703.03	440,397	450,300	573 <b>,</b> 403	23.07	24,855
2005	455,396.19	186,895	191,098	264,298	23.58	11,209
2006	500,615.29	196,041	200,449	300,166	23.95	12,533
2007	1,028,849.81	381,189	389,761	639,089	24.49	26,096
2008	1,058,146.37	369 <b>,</b> 081	377 <b>,</b> 380	680 <b>,</b> 766	25.05	27,176
2009	1,383,285.86	451 <b>,</b> 781	461,940	921,346	25.60	35 <b>,</b> 990
2010	1,099,236.15	333,838	341,345	757 <b>,</b> 891	26.18	28,949
2011	1,039,236.12	291,194	297,742	741,494	26.76	27,709
2012	1,333,909.54	341,614	349,296	984,614	27.35	36,001
2013	1,298,052.07	300,499	307,256	990,796	27.95	35,449
2014	1,121,237.46	230,302	235,481	885 <b>,</b> 756	28.69	30,873
2015	2,503,315.29	449,846	459,962	2,043,353	29.30	69 <b>,</b> 739
2016	1,257,075.17	192,081	196,400	1,060,675	30.04	35,309
2017	1,229,852.27	154,223	157,691	1,072,161	30.80	34,810
2018	1,080,602.53	105 <b>,</b> 575	107,949	972 <b>,</b> 654	31.55	30,829
2019	1,471,592.04	102,423	104,726	1,366,866	32.31	42,305
2020	2,009,817.58	82,202	84,050	1,925,768	33.19	58,023
2021	2,056,717.56	27,149	27,760	2,028,958	34.15	59,413
	42,389,554.30	17,173,783	17,559,361	24,830,193		1,025,511

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 24.2 2.42

#### ACCOUNT 381.1 METERS - AMR

### CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	OR CURVE IOWA ALVAGE PERCENT					
2000	296,427.01	277,426	294,838	1,589	1.47	1,081
2001	278,746.25	257,812	273,993	4,753	1.66	2,863
2003	514.10	461	490	24	2.12	11
2004	107,825.28	95 <b>,</b> 026	100,990	6,835	2.35	2,909
2005	169,036.06	145,692	154,836	14,200	2.63	5 <b>,</b> 399
2007	107,411.45	87 <b>,</b> 648	93,149	14,262	3.25	4,388
2008	485,486.24	382 <b>,</b> 369	406,367	79 <b>,</b> 119	3.62	21,856
2009	420,783.25	317,649	337,585	83,198	4.03	20,645
2010	824,868.47	592 <b>,</b> 338	629,515	195,353	4.48	43,606
2011	11,263,089.05	7,613,848	8,091,713	3,171,376	4.99	635,546
2012	8,735,379.14	5,494,553	5,839,406	2,895,973	5.55	521 <b>,</b> 797
2014	306,936.92	159 <b>,</b> 362	169,364	137,573	6.87	20,025
2015	372,440.91	170,168	180,848	191,593	7.63	25,110
2016	392,723.42	153 <b>,</b> 358	162,983	229,740	8.45	27,188
2017	189,201.48	60 <b>,</b> 828	64,646	124,555	9.32	13,364
2018	497,031.94	124,457	132,269	364,763	10.23	35 <b>,</b> 656
2019	124,689.93	22,145	23,535	101,155	11.19	9,040
2020	72,604.57	7 <b>,</b> 573	8,048	64 <b>,</b> 557	12.17	5,305
2021	11,919.80	402	427	11,493	13.13	875
	24,657,115.27	15,963,115	16,965,002	7,692,113		1,396,664

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 5.5 5.66

#### ACCOUNT 382 METER INSTALLATIONS

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	R CURVE IOWA VAGE PERCENT					
1937	5,257.38	5 <b>,</b> 062	5 <b>,</b> 257			
1938	12,721.71	12,192	12,722			
1939	9,392.36	8,959	9,392			
1940	8,251.67	7,832	8,229	23	2.80	8
1941	11,712.89	11,063	11,624	89	3.05	29
1942	8,759.99	8,233	8,650	110	3.31	33
1943	3,963.87	3,707	3,895	69	3.57	19
1944	3,997.40	3,720	3,909	88	3.82	23
1945	5,300.88	4,908	5,157	144	4.08	35
1946	12,830.81	11,818	12,417	414	4.34	95
1947	18,676.09 23,712.95	17,114 21,618	17,981	695 999	4.60	151 206
1948	30,584.40		22,714		4.86 5.12	206
1949 1950	35,528.38	27,737 32,053	29,143 33,677	1,441 1,851	5.38	344
1951	30,962.56	27 <b>,</b> 782	29,190	1,773	5.65	314
1952	32,228.26	28 <b>,</b> 759	30,217	2,011	5.92	340
1953	38,526.30	34,183	35,915	2,611	6.20	421
1954	36,169.40	31,908	33,525	2,644	6.48	408
1955	45,374.68	39,781	41,797	3,578	6.78	528
1956	47,867.16	41,697	43,810	4,057	7.09	572
1957	43,972.72	38 <b>,</b> 056	39,985	3,988	7.40	539
1958	54,177.28	46,563	48,923	5,254	7.73	680
1959	68,439.89	58,398	61,358	7,082	8.07	878
1960	49,854.41	42,213	44,352	5 <b>,</b> 502	8.43	653
1961	43,164.15	36,258	38,096	5,068	8.80	576
1962	61,702.89	51,393	53,998	7,705	9.19	838
1963	65 <b>,</b> 682.02	54 <b>,</b> 230	56 <b>,</b> 978	8,704	9.59	908
1964	117,746.10	96,316	101,197	16,549	10.01	1,653
1965	156,218.11	126,537	132,950	23,268	10.45	2,227
1966	144,702.96	116,026	121,906	22 <b>,</b> 797	10.90	2,091
1967	132,122.14	104,809	110,121	22,001	11.37	1,935
1968	171,134.21	134,231	141,034	30,100	11.86	2,538
1969	161,914.98	125,499	131,860	30,055	12.37	2,430
1970	148,287.12	113,535	119,289	28,998	12.89	2,250
1971	129,449.80	97,841	102,800	26 <b>,</b> 650	13.43	1,984
1972 1973	81,360.67 75,626.18	60,666 55,606	63,741 58,424	17,620 17,202	13.99	1,259
1973	12,859.33	9,317	9,789	3,070	14.56 15.15	1,181 203
1974	23,060.52	16,453	17,287	5,774	15.15	366
1976	42,539.64	32,071	33,696	8,844	14.83	596
1977	41,972.64	31,135	32,713	9,260	15.46	599
1978	45,219.49	32,983	34,655	10,564	16.11	656
1979	113,124.56	81,088	85,198	27,927	16.76	1,666
	,	,	-,	,		,

#### ACCOUNT 382 METER INSTALLATIONS

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	OR CURVE IOWA LVAGE PERCENT					
1980	250,361.88	177,306	186,292	64,070	17.06	3 <b>,</b> 756
1981	343,530.95	238,823	250,927	92,604	17.72	5,226
1982	282,157.12	192,403	202,154	80,003	18.39	4,350
1983	334,375.80	223 <b>,</b> 497	234,824	99 <b>,</b> 552	19.06	5,223
1984	410,367.32	268 <b>,</b> 709	282,328	128,039	19.73	6,490
1985	429,566.26	275 <b>,</b> 309	289,262	140,304	20.40	6 <b>,</b> 878
1986	504,518.26	316,282	332,312	172,206	21.08	8,169
1987	573,111.56	353 <b>,</b> 094	370 <b>,</b> 989	202,123	21.45	9,423
1988	654,729.57	393 <b>,</b> 820	413,779	240,951	22.14	10,883
1989	751,890.36	441,134	463,491	288,399	22.83	12,632
1990	774,718.82	442,984	465,435	309,284	23.53	13,144
1991	700,815.49	390,074	409,844	290,971	24.23	12,009
1992	765,901.82	414,583	435,595	330,307	24.93	13,249
1993	650,472.54	341,953	359,284	291,189	25.64	11,357
1994	753,513.95	384,292	403,769	349,745	26.34	13,278
1995	663,453.09	327,746	344,357	319,096	27.06	11,792
1996	757,189.44	361,785	380,121	377,068	27.78	13,573
1997	722,253.24	333,320	350,213	372,040	28.49	13,059
1998	621,744.85	276,614	290,633	331,112	29.22	11,332
1999	522,279.59	223,640	234,974	287,306	29.94	9,596
2000	1,149,971.91	472,868	496,834	653,138	30.67	21,296
2001	1,032,367.13	406,753	427,368	604,999	31.40	19,267
2002 2003	1,005,237.51 1,103,155.63	378,673	397,865 416,220	607 <b>,</b> 373	32.13 32.87	18,904
2003	1,073,469.03	396,143 366,482	385,056	686,936 688,413	33.60	20,899 20,488
2004	754,174.15	242,693	254,993	499,181	34.60	14,427
2005	212,731.97	64,607	67,881	144,851	35.35	4,098
2007	2,950,186.78	841,983	884,656	2,065,531	36.09	57,233
2007	1,423,635.80	380,111	399,376	1,024,260	36.83	27,810
2009	1,772,569.14	440,129	462,436	1,310,133	37.58	34,863
2010	1,434,885.61	329,306	345,996	1,088,890	38.33	28,408
2011	1,563,484.57	328,957	345,629	1,217,856	39.09	31,155
2012	1,664,759.30	316,637	332,685	1,332,074	40.09	33,227
2013	1,021,707.23	174,610	183,459	838,248	40.84	20,525
2014	1,231,165.01	186,275	195,716	1,035,449	41.60	24,891
2015	1,326,768.28	174,470	183,312	1,143,456	42.37	26,987
2016	1,384,621.43	154,524	162,356	1,222,265	43.13	28,339
2017	1,957,775.86	178 <b>,</b> 941	188,010	1,769,766	43.89	40,323
2018	1,446,100.17	102,818	108,029	1,338,071	44.66	29,961

#### ACCOUNT 382 METER INSTALLATIONS

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	VOR CURVE IOWA ALVAGE PERCENT					
2019	1,086,825.13	54,885	57 <b>,</b> 667	1,029,158	45.43	22,654
2020	790,378.45	23,632	24,829	765 <b>,</b> 549	45.98	16,650
2021	1,067,807.62	10,571	11,107	1,056,701	46.05	22,947
	42,326,880.57	14,344,786	15,071,634	27,255,247		793 <b>,</b> 284
	COMPOSITE REMAIN	ING LIFE AND	ANNUAL ACCRUAL	RATE, PERCENT	34.4	1.87



#### ACCOUNT 383 HOUSE REGULATORS AND INSTALLATIONS

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	CURVE IOWA AGE PERCENT					
1918 1939 1949 1955 1957 1958 1960 1961	113.14 77.64 77.13 432.93 490.94 704.49 354.57 925.50	113 75 71 387 433 617 307 795	113 78 77 433 491 704 355 926			
1962 1963 1964	6,668.65 11,335.62 16,073.66	5,686 9,595 13,502	6,669 11,336 16,074			
1965	20,111.70	16,764	20,055	57	7.49	8
1966	50,989.08	42,162	50,439	550	7.79	71
1967	39,700.39	32,554	38,945	755	8.10	93
1968	52,162.89	42,403	50,727	1,436	8.42	171
1969	47,765.97	38,489	46,045	1,721	8.74	197
1970	51,769.23	41,335	49,449	2,320	9.07	256
1971	43,735.55	34,590	41,380	2,356	9.41	250
1972	25,258.06	19,780	23,663	1,595	9.76	163
1973	22,289.80	17,282	20,675	1,615	10.11	160
1974	2,311.62	1,773	2,121	191	10.48	18
1975	27,435.50	20,821	24,908	2,528	10.85	233
1976	16,834.97	13,763	16,465	370	10.14	36
1977	3,719.09	3,007	3,597	122	10.53	12
1978	6,634.99	5,301	6,342	293	10.93	27
1979	54,498.81	43,000	51,441	3,058	11.34	270
1980	99,727.14	78,066	93,391	6,336	11.49	551
1981	142,563.60	110,059	131,664	10,900	11.94	913
1982	151,600.45	115,322	137,960	13,640	12.40	1,100
1983	137,791.23	103,757	124,125	13,666	12.60	1,085
1984	148,068.07	109,689	131,222	16,846	13.09	1,287
1985	166,429.79	121,211	145,005	21,425	13.58	1,578
1986 1987 1988 1989	190,771.75 231,855.81 263,091.58 240,215.67	137,165 163,574 182,875 163,539	164,091 195,685 218,775 195,643	26,681 36,171 44,317 44,573	14.66 15.20	1,928 2,517 3,023 2,932
1990	234,804.04	156,379	187,077	47,727	15.75	3,030
1991	211,471.11	138,302	165,452	46,019	16.09	2,860
1992	216,474.43	138,176	165,301	51,173	16.67	3,070
1993	172,958.74	108,134	129,361	43,598	17.04	2,559
1994	257,332.83	156,613	187,357	69,976	17.63	3,969
1995	229,237.75	135,640	162,267	66,971	18.23	3,674
1996	208,671.49	119,861	143,390	65,281	18.83	3,467

#### ACCOUNT 383 HOUSE REGULATORS AND INSTALLATIONS

### CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	OR CURVE IOWA ALVAGE PERCENT					
1997	281,980.52	157,655	188,604	93,377	19.25	4,851
1998	217,853.17	117,837	140,969	76,884	19.87	3,869
1999	159,090.11	83 <b>,</b> 093	99,405	59 <b>,</b> 685	20.50	2,911
2000	374,840.66	188,657	225,692	149,149	21.14	7,055
2001	299,066.48	144,718	173,127	125,939	21.78	5,782
2002	534,141.89	247 <b>,</b> 895	296,558	237,584	22.42	10,597
2003	681,601.35	301,268	360,409	321,192	23.25	13,815
2004	902,660.60	380,471	455,160	447,501	23.90	18,724
2005	720,439.71	287 <b>,</b> 383	343,798	376,642	24.74	15,224
2006	426,887.69	161,235	192,886	234,002	25.40	9,213
2007	857,172.16	303 <b>,</b> 953	363,621	493,551	26.24	18,809
2008	554,465.50	183 <b>,</b> 750	219,821	334,644	27.07	12,362
2009	786,318.70	242,108	289,635	496,684	27.91	17,796
2010	623,867.35	177,365	212,183	411,684	28.74	14,324
2011	698,079.54	181,780	217,465	480,615	29.58	16,248
2012	686,844.51	162,370	194,244	492,601	30.42	16,193
2013	507,746.93	107,287	128,348	379 <b>,</b> 399	31.42	12,075
2014	642,318.63	119,600	143,078	499,241	32.42	15,399
2015	543,533.27	87 <b>,</b> 889	105,142	438,391	33.27	13,177
2016	545,660.13	74,483	89,105	456 <b>,</b> 555	34.27	13,322
2017	688,738.63	76 <b>,</b> 657	91,705	597 <b>,</b> 034	35.27	16,928
2018	760,768.16	65 <b>,</b> 502	78 <b>,</b> 361	682 <b>,</b> 407	36.27	18,815
2019	949,616.27	57 <b>,</b> 832	69 <b>,</b> 185	880,431	37.27	23,623
2020	1,000,581.34	35 <b>,</b> 721	42,733	957 <b>,</b> 848	38.27	25 <b>,</b> 029
2021	879,774.56	10,205	12,208	867,567	39.22	22,121
	19,129,585.26	6,599,681	7,894,716	11,234,869		389,770

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 28.8 2.04

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

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	CURVE IOWA AGE PERCENT					
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	880.24	880	880			
1938	199.96	200	200			
1939	55.79	56	56			
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	1,560.50	1,560	1,560			
1951	3,067.19	3,067	3,067			
1952	4,004.87	4,005	4,005			
1953	4,253.65	4,254	4,254			
1954	12,797.76	12,798	12,798			
1955	20,871.23	20,871	20,871			
1956	21,652.98	21,653	21,653			
1957	23,458.28	23,458	23,458			
1958	22,780.75	22,781	22,781			
1959	20,749.00	20,749	20,749			
1960	23,809.61	23,810	23,810			
1961	28,282.02	28,282	28 <b>,</b> 282	4 1 4 2	0 00	4 1 4 0
1962	11,871.24	11,756	7,728	4,143	0.29	4,143
1963	34,823.33	33,918	22,298	12,525	0.78	12,525
1964	23,277.93	22,300	14,660	8,618	1.26	6,840
1965	28,992.94	27,321	17,961	11,032	1.73	6,377
1966	26,851.34	24,891	16,364	10,487	2.19	4,789
1967	47,184.51	43,032	28 <b>,</b> 290	18,895	2.64	7,157
1968	50,121.10	44,975	29,567	20,554	3.08	6 <b>,</b> 673
1969	41,483.63	36,630	24,081	17,403	3.51	4,958
1970	42,083.29	36,584	24,051	18,032	3.92	4,600

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

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR	R CURVE IOWA	30-R0.5				
NET SALV	AGE PERCENT	0				
1971	96,604.97	82,662	54,342	42,263	4.33	9,761
1972	63,851.13	53 <b>,</b> 763	35,344	28 <b>,</b> 507	4.74	6,014
1973	34,035.02	28,204	18,541	15,494	5.14	3,014
1974	21,979.85	17 <b>,</b> 921	11,781	10,199	5.54	1,841
1975	18,558.43	14,890	9,789	8,769	5.93	1,479
1976	737.80	653	429	309	5.87	53
1977	519.78	455	299	221	6.35	35
1978	10,078.47	8 <b>,</b> 751	5 <b>,</b> 753	4,325	6.58	657
1979	31,277.35	26 <b>,</b> 798	17,617	13,660	7.09	1,927
1980	55,316.54	46,964	30,874	24,443	7.37	3,317
1981	78 <b>,</b> 260.60	65 <b>,</b> 794	43,253	35 <b>,</b> 008	7.66	4,570
1982	100,326.46	83,442	54 <b>,</b> 855	45 <b>,</b> 471	7.98	5,698
1983	71,959.83	58 <b>,</b> 885	38,711	33,249	8.53	3,898
1984	29,408.71	23 <b>,</b> 768	15,625	13,784	8.88	1,552
1985	40,985.34	32 <b>,</b> 686	21,488	19,497	9.25	2,108
1986	75 <b>,</b> 931.55	59 <b>,</b> 971	39,425	36 <b>,</b> 507	9.43	3,871
1987	15,358.13	11,946	7 <b>,</b> 853	7 <b>,</b> 505	9.83	763
1988	48,473.11	37 <b>,</b> 092	24,385	24,088	10.25	2,350
1989	66 <b>,</b> 764.60	50 <b>,</b> 427	33,151	33,614	10.50	3,201
1990	46,147.43	34,214	22,493	23,654	10.96	2,158
1991	89,280.62	65 <b>,</b> 175	42,847	46,434	11.25	4,127
1992	79,932.27	57 <b>,</b> 136	37 <b>,</b> 562	42,370	11.74	3,609
1993	96 <b>,</b> 281.50	67 <b>,</b> 580	44,428	51 <b>,</b> 854	12.07	4,296
1994	129,898.55	89 <b>,</b> 396	58 <b>,</b> 770	71,129	12.42	5 <b>,</b> 727
1995	109,338.85	73 <b>,</b> 651	48,419	60 <b>,</b> 920	12.80	4,759
1996	106,047.80	69 <b>,</b> 811	45 <b>,</b> 894	60,154	13.19	4,561
1997	61,445.03	39 <b>,</b> 607	26,038	35 <b>,</b> 407	13.46	2,631
1998	77,595.65	48,699	32,015	45 <b>,</b> 581	13.90	3,279
1999	3,364.29	2,059	1,354	2,010	14.21	141
2000	110,655.69	65 <b>,</b> 884	43,313	67 <b>,</b> 343	14.55	4,628
2001	7 <b>,</b> 573.61	4,376	2 <b>,</b> 877	4,697	14.92	315
2002	176,529.36	98 <b>,</b> 715	64 <b>,</b> 896	111,633	15.31	7,292
2003	362 <b>,</b> 805.96	196,423	129,129	233 <b>,</b> 677	15.60	14,979
2004	2 <b>,</b> 567.99	1,342	882	1,686	15.92	106
2005	51,666.77	25 <b>,</b> 957	17,064	34,603	16.26	2,128
2006	131,268.72	63 <b>,</b> 337	41,638	89 <b>,</b> 631	16.53	5,422
2007	170,092.61	78 <b>,</b> 464	51,583	118,510	16.83	7,042
2008	215,701.81	94,628	62,209	153,493	17.17	8,940
2009	144,080.11	59 <b>,</b> 937	39,403	104,677	17.43	6,006
2010	213,625.82	83,891	55 <b>,</b> 150	158,476	17.65	8,979
2011	170,013.88	62,701	41,220	128,794	17.83	7,223

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

### CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	R CURVE IOWA					
NET SALV	/AGE PERCENT	0				
2012	180,758.87	62,127	40,843	139,916	17.98	7,782
2013	281,245.20	89 <b>,</b> 492	58 <b>,</b> 833	222,412	18.04	12,329
2014	143,760.23	41,791	27,474	116,286	18.09	6,428
2015	308,291.28	80,711	53,060	255,231	18.09	14,109
2016	521,213.80	120,557	79,255	441,959	18.00	24,553
2017	493,745.28	98,157	64,529	429,216	17.80	24,113
2018	498,694.56	81,786	53,766	444,929	17.42	25,541
2019	124,228.60	15,678	10,307	113,922	16.74	6,805
2020	323,782.93	27,003	17,751	306,032	15.56	19,668
2021	44,065.45	1,516	997	43,068	12.87	3,346
	6,841,833.15	3,187,297	2,163,531	4,678,302		367,193

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 12.7 5.37

#### ACCOUNT 387 OTHER EQUIPMENT - GENERAL

### CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	CURVE IOWA AGE PERCENT					
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	14,375	14,375			
1959	188.29	184	163	25	0.78	25
1962	7,626.48	7,102	6,309	1,317	2.20	599
1967	445.13	384	341	104	4.36	24
1972	7,910.24	6 <b>,</b> 338	5,630	2,280	6.36	358
1981	13,548.93	11,061	9,825	3,724	9.09	410
1985	14,556.64	11,292	10,030	4,527	10.53	430
1992	2,228.63	1,541	1,369	860	13.14	65
2010	68,488.09	25,724	22,850	45,638	18.98	2,405
2015	2,847.08	711	632	2,215	19.29	115
	136,698.14	83,195	76,007	60,691		4,431

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 13.7 3.24

#### ACCOUNT 387.4 OTHER EQUIPMENT - COMMUNICATION EQUIPMENT

### CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	OR CURVE IOWA					
1973	917.13	917	917			
1974	11,561.27	11,561	11,561	500	0 0 1	500
1975	3,189.09	3,184	2,660	529	0.04	529
1976	6,308.81	6,304	5,266	1,043	0.04	1,043
1980	1,144.78	1,110	927	218	1.32	165
1983	10,695.21	10,149	8,478	2,217	2.07	1,071
1984	4,730.23	4,443	3,712	1,018	2.42	421
1985	27,353.09	25,501	21,303	6,050	2.64	2,292
1986	61,596.14	56 <b>,</b> 939	47,565	14,031	2.90	4,838
1987	40,005.58 3,425.59	36,625 3,065	30,596 2,560	9,410 866	3.18 3.82	2 <b>,</b> 959 227
1989 1990	37,952.71	33,626	28,090	9,863	4.04	2,441
1991	31,594.95	27,677	23,121	8,474	4.04	1,966
1992	6,510.50	5,611	4,687	1,824	4.71	387
1993	1,718.09	1,460	1,220	498	5.03	99
1994	4,082.11	3,413	2,851	1,231	5.37	229
2000	47,842.64	35,040	29,272	18,571	7.82	2,375
2001	142,467.12	101,223	84,559	57,908	8.32	6 <b>,</b> 960
2003	2,326.24	1,546	1,291	1,035	9.29	111
2004	119,576.43	76,433	63,850	55,726	9.83	5,669
2005	230,939.52	141,797	118,454	112,486	10.32	10,900
2006	17,269.88	10,117	8,451	8,819	10.90	809
2007	9,937.59	5,544	4,631	5,307	11.42	465
2008	0.11					
2009	5,832.45	2,904	2,426	3,406	12.52	272
2010	123,486.39	57,520	48,051	75,435	13.09	5,763
2011	49,875.40	21,611	18,053	31,822	13.62	2,336
2012	146,646.41	58 <b>,</b> 556	48,916	97 <b>,</b> 730	14.17	6 <b>,</b> 897
2013	595,156.78	216,399	180,774	414,383	14.73	28,132
2014	1,877,741.98	612 <b>,</b> 707	511,840	1,365,902	15.31	89,216
2015	746,843.16	215,166	179,744	567 <b>,</b> 099	15.86	35 <b>,</b> 757
2016	907,474.51	226,143	188,914	718,561	16.32	44,029
2017	2,176,758.56	452 <b>,</b> 766	378 <b>,</b> 230	1,798,529	16.82	106,928
2018	2,162,612.93	357 <b>,</b> 696	298,810	1,863,803	17.24	108,109
2019	766,834.29	92 <b>,</b> 864	77 <b>,</b> 577	689 <b>,</b> 257	17.54	39 <b>,</b> 296
2020	1,074,321.19	79 <b>,</b> 929	66,771	1,007,550	17.63	57 <b>,</b> 150
2021	404,848.26	10,688	8,928	395,920	16.87	23,469
	11,861,577.12	3,008,234	2,515,056	9,346,521		593,310

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 15.8 5.00

#### ACCOUNT 387.5 OTHER EQUIPMENT - GPS EQUIPMENT

### CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVO	OR CURVE IOWA	10-S3				
NET SAI	LVAGE PERCENT	0				
2014	1,942,103.70	1,394,236	1,391,191	550,913	2.91	189,317
2015	112,834.83	72,914	72,755	40,080	3.51	11,419
2016	33,669.32	18,929	18,888	14,781	4.22	3,503
2017	34,335.00	16,045	16,010	18,325	5.03	3,643
2018	78,429.10	28,642	28,579	49,850	5.94	8,392
	2,201,371.95	1,530,766	1,527,423	673 <b>,</b> 949		216,274

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 3.1 9.82

#### ACCOUNT 390.1 STRUCTURES AND IMPROVEMENTS - COMMUNICATION

### CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	CURVE IOWA AGE PERCENT					
1955	1,170.54	1,047	1,171			
1958	192.08	168	192			
1959	2,129.94	1,850	2,130			
1971	17,971.09	13,953	17 <b>,</b> 971			
1983	7,872.27	5 <b>,</b> 746	7 <b>,</b> 872			
1984	3,449.87	2,478	3,450			
1987	6 <b>,</b> 786.87	4,625	6 <b>,</b> 787			
1988	9,428.54	6,301	9,429			
1990	820.22	526	819			
	49,821.42	36,694	49,821			

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 0.0 0.00

#### ACCOUNT 391.1 OFFICE FURNITURE AND EQUIPMENT - FURNITURE

### CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	R CURVE 20-S VAGE PERCENT	~				
2002	89,422.35	86,814	89,422			
2003	96,741.60	89,083	96,742			
2004	31,580.89	27,502	31,581			
2005	522.52	429	522	1	3.58	
2007	4,181.56	3,014	3,664	518	5.58	93
2010	7,734.00	4,415	5,368	2,366	8.58	276
2011	12,031.56	6,266	7,618	4,414	9.58	461
2012	1,550.11	730	887	663	10.58	63
2014	565,919.21	209,860	255,136	310,783	12.58	24,705
2015	1,175,148.72	377 <b>,</b> 023	458,364	716,785	13.58	52 <b>,</b> 782
2016	113,113.73	30 <b>,</b> 635	37,244	75 <b>,</b> 870	14.58	5,204
2017	14,623.69	3,229	3,926	10,698	15.58	687
	2,112,569.94	839,000	990,474	1,122,096		84,271

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 13.3 3.99

### ACCOUNT 391.11 OFFICE FURNITURE AND EQUIPMENT - EQUIPMENT

### CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	R CURVE 15-S VAGE PERCENT	~				
2011 2015	24,427.00 66,876.67	16,963 28,609	17,534 29,573	6,893 37,304	4.58 8.58	1,505 4,348
	91,303.67	45,572	47,107	44,197		5,853

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 7.6 6.41

#### ACCOUNT 391.12 OFFICE FURNITURE AND EQUIPMENT - INFORMATION SYSTEMS

### CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVO	OR CURVE 5-SQ	UARE				
NET SAI	LVAGE PERCENT	0				
2016	597,122.28	597 <b>,</b> 122	597,122			
2017	1,577,540.60	1,393,489	1,241,661	335,880	0.58	335,880
2018	173,736.13	118,719	105,784	67,952	1.58	43,008
2019	10,859.79	5 <b>,</b> 249	4,677	6,183	2.58	2,397
2020	346,441.62	98,157	87,462	258,980	3.58	72,341
	2,705,700.42	2,212,736	2,036,706	668,994		453 <b>,</b> 626

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 1.5 16.77

#### ACCOUNT 392 TRANSPORTATION EQUIPMENT - TRAILERS

### CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	R CURVE 15-SQ VAGE PERCENT	-				
2011	3,781.00	2,626	3,781			
2012	14,849.79	9,322	14,850			
2013	2,789.00	1,565	2,789			
2015	4,197.10	1 <b>,</b> 795	4,924	727-		
	25,616.89	15,308	26,344	727-		

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 0.0 0.00

#### ACCOUNT 394 TOOLS, SHOP AND GARAGE EQUIPMENT - EQUIPMENT

### CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2021

YEAR	ORIGINAL COST	CALCULATED ACCRUED	ALLOC. BOOK RESERVE	FUTURE BOOK ACCRUALS	REM. LIFE	ANNUAL ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)
	OR CURVE 25-SO ALVAGE PERCENT	~				
1996	5,210.28	5,210	5,210			
1997	1,139,439.92	1,112,857	1,139,440			
1998	383,704.26	359,404	371,933	11,771	1.58	7,450
1999	191,341.50	171,570	177,551	13,790	2.58	5,345
2000	296,716.81	254,188	263,049	33,668	3.58	9,404
2001	186,888.81	152,626	157,946	28,943	4.58	6,319
2002	303,527.92	235,741	243,959	59 <b>,</b> 569	5.58	10,675
2003	291,419.99	214,680	222,164	69 <b>,</b> 256	6.58	10,525
2004	366,999.55	255 <b>,</b> 678	264,591	102,409	7.58	13,510
2005	79,725.36	52 <b>,</b> 353	54 <b>,</b> 178	25 <b>,</b> 547	8.58	2 <b>,</b> 978
2006	167,413.05	103,239	106,838	60 <b>,</b> 575	9.58	6,323
2007	835,832.86	482,000	498,802	337,031	10.58	31 <b>,</b> 855
2008	1,181,797.10	634,235	656 <b>,</b> 344	525 <b>,</b> 453	11.58	45 <b>,</b> 376
2009	278,442.30	138,294	143,115	135 <b>,</b> 327	12.58	10 <b>,</b> 757
2010	777,173.73	354 <b>,</b> 912	367,284	409,890	13.58	30,183
2011	595 <b>,</b> 579.35	248,160	256,811	338,768	14.58	23,235
2012	870,830.41	328,016	339,450	531,380	15.58	34,107
2013	784,168.63	264,006	273 <b>,</b> 209	510,960	16.58	30,818
2014	894,641.85	265,413	274 <b>,</b> 665	619 <b>,</b> 977	17.58	35 <b>,</b> 266
2015	1,788,936.70	459 <b>,</b> 166	475 <b>,</b> 172	1,313,765	18.58	70,709
2016	971,312.23	210,454	217 <b>,</b> 790	753 <b>,</b> 522	19.58	38,484
2017	1,449,495.87	256 <b>,</b> 082	265 <b>,</b> 009	1,184,487	20.58	57 <b>,</b> 555
2018	1,163,102.32	158 <b>,</b> 961	164,502	998,600	21.58	46,274
2019	932,956.06	90,189	93,333	839,623	22.58	37,184
2020	670,668.98	38 <b>,</b> 007	39,332	631 <b>,</b> 337	23.58	26 <b>,</b> 774
2021	1,034,477.48	18,962	19,623	1,014,854	24.54	41,355
	17,641,803.32	6,864,403	7,091,300	10,550,503		632,461

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 16.7 3.59

#### ACCOUNT 394.12 TOOLS, SHOP AND GARAGE EQUIPMENT - CNG FACILITIES

### CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	OR CURVE IOWA					
NET SA	LVAGE PERCENT	0				
1991	24,694.44	24,694	24,694			
1993	5,143.92	5,144	5,144			
1994	117,928.20	117,928	117,928			
1995	1,302,755.56	1,302,756	1,302,756			
1996	587,355.23	587,355	587 <b>,</b> 355			
1998	98,401.65	98,392	98,402			
1999	18,450.18	18,240	18,289	161	0.26	161
2001	80,747.15	77,646	77,856	2,891	0.82	2,891
	2,235,476.33	2,232,155	2,232,424	3,052		3,052

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 1.0 0.14

#### ACCOUNT 395 LABORATORY EQUIPMENT

### CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	CURVE 20-S AGE PERCENT	~				
2002	1,118.18	1,086	1,004	114	0.58	114
2011	19,084.33	9,940	9,188	9,896	9.58	1,033
2015	245,836.91	78 <b>,</b> 872	72,907	172,930	13.58	12,734
	266,039.42	89,898	83,099	182,940		13,881

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 13.2 5.22

#### ACCOUNT 396 POWER OPERATED EQUIPMENT

### CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	CURVE IOWA AGE PERCENT					
1990	14,666.07	14,283	14,666			
1991	70,212.28	67 <b>,</b> 909	70,212			
1992	7,619.70	7,307	7,620			
1993	2,619.06	2,493	2,619			
1994	45,419.28	42,962	45,419			
1995	9,638.80	9,014	9,639			
1997	945.49	868	945			
1999	89,292.15	80,265	89,292			
2000	424,416.34	376 <b>,</b> 288	424,416			
2001	23,340.60	20,395	23,341			
2002	21,599.55	18 <b>,</b> 580	21,600			
2003	209,492.31	177,482	209,492			
2011	25,036.41	17,318	25,036			
2014	4,400.00	2,548	6,273	1,873-		
	948,698.04	837,712	950 <b>,</b> 570	1,872-		

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 0.0 0.00

#### ACCOUNT 397.5 COMMUNICATION EQUIPMENT - TELEMETERING

### CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	CURVE IOWA					
1995	11,741.33	10,918	11,741			
1996	125,441.49	115,093	125,441			
1997	33,444.00	30 <b>,</b> 377	33,444			
1998	6,337.07	5 <b>,</b> 684	6 <b>,</b> 337			
1999	96,304.72	85 <b>,</b> 056	96,305			
2000	239,707.61	207,922	239,708			
2001	117,197.05	99 <b>,</b> 535	117,197			
2002	106,166.48	88,023	106,166			
2015	51,575.93	18,696	50,388	1,188	11.28	105
	787,915.68	661,304	786 <b>,</b> 727	1,189		105

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 11.3 0.01

#### ACCOUNT 398 MISCELLANEOUS EQUIPMENT

### CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2021

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	R CURVE 15-S VAGE PERCENT					
2006	7,023.47	7,023	7,023			
2007	136.82	131	137			
2008	2,264.03	2,025	2,195	69	1.58	44
2009	11,311.50	9,363	10,151	1,160	2.58	450
2010	25,988.40	19 <b>,</b> 780	21,445	4,543	3.58	1,269
2011	6,122.60	4,252	4,610	1,513	4.58	330
2012	129,294.07	81,168	88,002	41,292	5.58	7,400
2013	14,421.00	8,092	8,773	5,648	6.58	858
2014	98,828.36	48,865	52 <b>,</b> 979	45,849	7.58	6,049
2015	400,910.38	171,501	185,941	214,969	8.58	25,055
2016	234,767.97	84 <b>,</b> 777	91,914	142,854	9.58	14,912
2017	8,370.44	2,465	2,673	5 <b>,</b> 697	10.58	538
2018	12,626.00	2,876	3,118	9,508	11.58	821
	952,065.04	442,318	478,961	473,104		57 <b>,</b> 726

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 8.2 6.06

Exhibit No. 9 Schedule No. 1 Page 85 of 90 Witness J.J. Spanos

### PART III. EXPERIENCED NET SALVAGE



	REGULAR	COST OF	GROSS	NET
ACCT	RETIREMENTS	REMOVAL	SALVAGE	SALVAGE
2016 TR	ANSACTION YEAR			
303.00	740,840.66			
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			
383.00	17,403.11			
385.00	85,292.41	64,142.79		64,142.79-
387.40	36,279.86	1,807.70		1,807.70-
391.10	260,945.93			
391.12	1,898,783.69			
393.00	2,299.92			
394.00	161,691.96	2,431.14		2,431.14-
395.00	13,945.83			
396.00	218,570.62		52,454.60	52,454.60
397.10	168,830.82			
397.50	14,631.27			
398.00	47,919.70			
	20,869,682.50	4,171,395.89	271,675.11	3,899,720.78-

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2017 TR	ANSACTION YEAR			
303.00 353.00 355.00	2,263,869.67 5,745.26 18,533.09			
362.10 374.40 375.34	11,936.44 177,551.37	56,417.81 38,240.05 36,137.31		56,417.81- 38,240.05- 36,137.31-
376.00 378.00	12,225,336.78 649,171.93	1,258,205.78 247,333.58	1,297.00	1,256,908.78- 247,333.58-
379.10 380.00 381.00	889.56 7,406,277.97 394,736.32	2,142,798.48 4,899.87	34,508.89	2,142,798.48- 29,609.02
382.00 383.00 385.00	124,360.72 12,648.88 357,612.63	113,814.22		113,814.22-
387.40 391.10 392.00	37,733.38 475,324.47 42,274.76	459.97		459.97-
393.00 394.00 395.00	939.35 186,713.88 8,811.95	1,648.52		1,648.52-
396.00 397.50 398.00	180,818.08 43,079.36 9,171.96	257.12		257.12-
	24,633,537.81	3,900,212.71	35,805.89	3,864,406.82-

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2018 TR	ANSACTION YEAR			
303.00 351.20 353.00 362.10	1,796,364.46 9,061.96 55.42	21,434.00 633.71 101,148.90		21,434.00- 633.71- 101,148.90-
374.20 374.40 375.34 375.70	2.25 2,661.60 47,458.73 3,994.37	3,646.96 35,116.51		3,646.96- 35,116.51-
376.00 378.00 379.10 380.00 381.00 382.00	3,994.37 10,232,873.86 846,387.37 4,260.61 9,754,235.29 517,125.77 154,844.89	1,441,406.34 370,922.18 76,321.00 3,052,049.09	60,956.85	1,441,406.34- 370,922.18- 76,321.00- 3,052,049.09- 60,956.85 10.01-
383.00 385.00 387.40 391.10 391.12	7,723.55 198,750.03 79,635.11 480,955.49 299,109.66	124,888.37 5,150.01		124,888.37- 5,150.01-
392.00 393.00	3,312.39 13,435.25		13,348.29	13,348.29
394.00	432,858.80		6,262.88	6,262.88
395.00 396.00 398.00	4,710.24 87,406.00 10,374.96		123,650.81	123,650.81
	24,987,598.06	5,232,727.08	204,218.83	5,028,508.25-

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2019 TR	ANSACTION YEAR			
303.00 352.01 352.02	132,678.23 60,192.37 647.80			
353.00 354.00	10,141.97 774.99	220.40		220.40-
362.10 374.40	1,463.92	84,433.04 4,027.90		84,433.04- 4,027.90-
375.34 375.60	63,972.20 1,441.97	13,446.58 518.68		13,446.58- 518.68-
375.70 376.00	191,736.25 24,112,905.61	1,562,758.41		1,562,758.41-
378.00 380.00 381.00	787,329.71 10,932,664.80 577,587.04	197,320.30 3,345,786.25 675.26		197,320.30- 3,345,786.25- 675.26-
382.00	102,336.91 390,529.60			
385.00 387.40 391.10 391.12	261,484.70 167,920.32 80,599.29 380,331.60	187,266.09 2,001.41		187,266.09- 2,001.41-
392.00 394.00 394.12 397.50	30,525.57 566,669.51 461,286.70- 4,347.89		606.50	606.50
398.00	11,186.58 38,408,182.13	5,398,454.32	606.50	5,397,847.82-

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2020 TR	ANSACTION YEAR			
303.00 354.00	1,242,287.64 95.51			
362.10		66,230.55		66,230.55-
374.40	2,224.27	181.75		181.75-
375.34	82,598.36	53,446.96		53,446.96-
375.70		6.91		6.91-
376.00		908,940.08		908,940.08-
378.00	350,646.55	137,617.14		137,617.14-
380.00	, ,	4,200,676.28		4,200,676.28-
381.00	541,339.03			
382.00	81,972.15			
383.00	8,090.43	925.21		925.21-
385.00	693 <b>,</b> 837.68	82,945.35		82,945.35-
387.40	79,636.33	1,780.14		1,780.14-
391.10	96,147.00			
391.12	,			
394.00	173,810.23			
394.12		3,239.63		3,239.63-
395.00	2,990.39			
398.00	17,913.22			
	28,326,560.95	5,455,990.00		5,455,990.00-
TOTAL	137,225,561.45	24,158,780.00	512,306.33	23,646,473.67-

Exhibit No.9 Schedule No. 2 Page 1 of 4 Witness: J. J. Spanos

### COLUMBIA GAS OF PENNSYLVANIA. INC. 53.53 I. VALUATION

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

A. ALL UTILITIES

### Response:

A comparison of the calculated depreciation reserve vs. book reserve by account as of November 30, 2021, is listed on Pages 2 through 4 of this response.

Exhibit No. 9 Schedule No. 2 Page 2 of 4 Witness: J. J. Spanos

### COLUMBIA GAS OF PENNSYLVANIA, INC.

# COMPARISON OF CALCULATED ACCRUED DEPRECIATION AND BOOK RESERVE AS OF NOVEMBER 30, 2021

		CALCULATED	
	DEPRECIABLE GROUP	ACCRUED DEPRECIATION	BOOK RESERVE
	(1)	(2)	(3)
	(1)	\$	\$
DEPREC	IABLE PLANT	•	Ψ
UNDERG	ROUND STORAGE PLANT		
350.2	RIGHTS OF WAY	1,785	1,931
351	COMPRESSOR STATION STRUCTURES	2,351,949	2,362,836
	WELLS		
352.01	CONSTRUCTION	748,391	738,926
352.02	EQUIPMENT	305,557	168,032
	TOTAL ACCOUNT 352	1,053,948	906,958
352.1	STORAGE LEASEHOLDS AND RIGHTS	191,729	206,932
353	LINES	356,542	388,491
354	COMPRESSOR STATION EQUIPMENT	769,740	816,990
355	MEASURING AND REGULATING EQUIPMENT	95,082	104,477
	TOTAL UNDERGROUND STORAGE PLANT	4,820,775	4,788,615
DISTRIB	JTION PLANT		
	LAND AND LAND RIGHTS		
374.4	LAND RIGHTS	911,948	866,132
374.5	RIGHTS OF WAY	1,677,884	1,791,949
	TOTAL ACCOUNT 374	2,589,832	2,658,081
	STRUCTURES AND IMPROVEMENTS		
375.34	MEASURING AND REGULATING	1,372,501	1,418,913
375.6	INDUSTRIAL MEASURING AND REGULATING	59,155	75,321
375.7	OTHER DISTRIBUTION SYSTEMS		
	DISTRIBUTION SYSTEM STRUCTURES	0	3,302,678
	OTHER BUILDIINGS	928,389	1,054,096
	TOTAL ACCOUNT 375.70	928,389	4,356,774
375.8	COMMUNICATION	7,756	8,256
	TOTAL ACCOUNT 375	2,367,801	5,859,264
376	MAINS		
	CAST IRON	156,489	134,755
	BARE STEEL	49,795,835	42,879,976
	OTHER	311,704,432	268,413,585
	TOTAL ACCOUNT 376	361,656,756	311,428,316

# COMPARISON OF CALCULATED ACCRUED DEPRECIATION AND BOOK RESERVE AS OF NOVEMBER 30, 2021

	DEPRECIABLE GROUP (1)	CALCULATED ACCRUED DEPRECIATION (2)	BOOK RESERVE (3)
378 379.1	MEASURING AND REGULATING STATION EQUIPMENT - GENERAL MEASURING AND REGULATING STATION EQUIPMENT - CITY GATE	\$ 21,059,888 104,280	\$ 21,223,803 33,640
380	SERVICES BARE STEEL OTHER	664,076 155,586,067	580,077 135,905,920
	TOTAL ACCOUNT 380	156,250,143	136,485,997
381 381.1 382 383 385	METERS METERS - AMR METER INSTALLATIONS HOUSE REGULATORS AND INSTALLATIONS INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT - OTHER THAN METERS	17,173,783 15,963,115 14,344,786 6,599,681 3,187,297	17,559,361 16,965,002 15,071,634 7,894,716 2,163,531
387 387.4 387.5	OTHER EQUIPMENT GENERAL COMMUNICATION EQUIPMENT GPS EQUIPMENT	83,195 3,008,234 1,530,766	76,007 2,515,056 1,527,423
	TOTAL ACCOUNT 387	4,622,195	4,118,486
	TOTAL DISTRIBUTION PLANT	605,919,557	541,461,831
GENERAL	PLANT		
390.1	STRUCTURES AND IMPROVEMENTS - COMMUNICATION	36,694	49,821
391.1 391.11 391.12	OFFICE FURNITURE AND EQUIPMENT FURNITURE EQUIPMENT INFORMATION SYSTEMS	839,000 45,572 2,212,736	990,474 47,107 2,036,706
	TOTAL ACCOUNT 391	3,097,308	3,074,287
392	TRANSPORTATION EQUIPMENT - TRAILERS	15,308	26,344
394 394.12	TOOLS, SHOP AND GARAGE EQUIPMENT EQUIPMENT CNG FACILITIES	6,864,403 2,232,155	7,091,300 2,232,424
	TOTAL ACCOUNT 394	9,096,558	9,323,724
395 396	LABORATORY EQUIPMENT POWER OPERATED EQUIPMENT	89,898 837,712	83,099 950,570

Exhibit No. 9 Schedule No. 2 Page 4 of 4 Witness: J. J. Spanos

### COLUMBIA GAS OF PENNSYLVANIA, INC.

# COMPARISON OF CALCULATED ACCRUED DEPRECIATION AND BOOK RESERVE AS OF NOVEMBER 30, 2021

	TOTAL GAS PLANT	646,306,189	582,312,736
NONDEPREC	IABLE PLANT	234,693	234,693
	SUBTOTAL AMORTIZABLE PLANT	21,054,064	21,054,064
375.71	STRUCTURES AND IMPROVEMENTS - LEASED	2,547,985	2,547,985
362.1	ENVIRONMENTAL REMEDIATION	(230,180)	(230,180)
303.6	MISCELLANEOUS INTANGIBLE PLANT - CLOUD	1,006,579	1,006,579
303	MISCELLANEOUS INTANGIBLE PLANT	17,729,680	17,729,680
AMORTIZABL	E PLANT		
	SUBTOTAL DEPRECIABLE PLANT	625,017,432	561,023,979
	TOTAL GENERAL PLANT	14,277,100	14,773,533
398	MISCELLANEOUS EQUIPMENT	442,318_	478,961
397.5	COMMUNICATION EQUIPMENT - TELEMETERING	661,304	786,727
		\$	\$
	(1)	(2)	(3)
	DEPRECIABLE GROUP	_DEPRECIATION_	RESERVE
		CALCULATED ACCRUED	воок

Exhibit No.9 Schedule No.3 Page 1 of 4

Witness: J. J. Spanos

### 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.
- b. (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-2021-3024296.

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF NOVEMBER 30, 2020

	DEPRECIABLE GROUP	SURVIVOR CURVE		ORIGINAL COST AS OF NOVEMBER 30, 2020	BOOK RESERVE	FUTURE BOOK ACCRUALS	CALCULA ANNUAL AC AMOUNT		COMPOSITE REMAINING LIFE
	(1)	(2)		(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)=(5)/(6)
DEPRE	CIABLE PLANT								
UNDER	GROUND STORAGE PLANT								
350.2 351.2	RIGHTS OF WAY COMPRESSOR STATION STRUCTURES	SQUARE 65-R2.5	*	1,932.08 3,250,036.96	1,931 2,046,982	1 1,203,055	0 264,059	- 8.12	- 4.6
352.01 352.02	WELLS CONSTRUCTION EQUIPMENT TOTAL ACCOUNT 352	SQUARE 50-S2.5	* -	738,941.36 168,031.87 906,973.23	738,926 168,032 906,958	15 0 15	3 0 3	0.00	5.0 -
352.1 353 354 355	STORAGE LEASEHOLDS AND RIGHTS LINES COMPRESSOR STATION EQUIPMENT MEASURING AND REGULATING EQUIPMENT TOTAL UNDERGROUND STORAGE PLANT	SQUARE 50-S1.5 55-R2.5 37-R1.5	* * * *	206,940.78 389,345.13 948,176.70 104,476.92 5,807,881.80	206,932 388,491 783,946 104,477 <b>4,439,717</b>	9 854 164,231 0	2 199 36,345 0 300,608	0.00 0.05 3.83 - <b>5.18</b>	4.5 4.3 4.5
DISTRI	BUTION PLANT			0,007,001.00	4,400,717	1,500,100	300,000	0.10	
374.4 374.5	LAND AND LAND RIGHTS LAND RIGHTS RIGHTS OF WAY TOTAL ACCOUNT 374	70-R2.5 80-S4	_	3,448,401.85 3,233,171.42 6,681,573.27	803,165 1,756,977 2,560,142	2,645,237 1,476,194 4,121,431	57,691 35,018 92,709	1.67 1.08 1.39	45.9 42.2
375.34 375.6 375.7	STRUCTURES AND IMPROVEMENTS MEASURING AND REGULATING INDUSTRIAL MEASURING AND REGULATING OTHER DISTRIBUTION SYSTEMS DISTRIBUTION SYSTEM STRUCTURES OTHER BUILDIINGS TOTAL ACCOUNT 375.70	60-R1 55-R1 90-R1.5 35-R2	*	5,532,311.36 86,227.87 14,807,424.57 2,914,621.35 17,722,045.92	1,352,223 74,799 2,857,433 974,135 3,831,568	4,180,088 11,429 11,949,991 1,940,486 13,890,477	121,243 544 431,577 85,643 517,220	2.19 0.63 2.91 2.94 2.92	34.5 21.0 27.7 22.7 26.9
375.8	COMMUNICATION	45-R3	_	16,515.17	7,896	8,619	364	2.20	23.7
276	TOTAL ACCOUNT 375			23,357,100.32	5,266,486	18,090,613	639,371	2.74	
376	MAINS CAST IRON BARE STEEL OTHER	71-R1 71-R1 71-R1	* *	198,560.29 64,049,383.25 1,928,357,530.84	160,052 46,340,617 242,174,302	38,508 17,708,766 1,686,183,229	8,343 1,909,671 41,557,002	4.20 2.98 2.16	4.6 9.3 40.6
	TOTAL ACCOUNT 376			1,992,605,474.38	288,674,971	1,703,930,503	43,475,016	2.18	
378 379.1	MEASURING AND REGULATING STATION EQUIPMENT - GENER MEASURING AND REGULATING STATION EQUIPMENT - CITY GA			112,862,439.95 135,966.90	17,480,520 27,311	95,381,920 108,656	4,434,229 11,636	3.93 8.56	21.5 9.3
380	SERVICES BARE STEEL	50-R0.5	*	826,513.32	628,310	198,203	28,221	3.41	7.0

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF NOVEMBER 30, 2020

		SURVIVOR	ORIGINAL COST AS OF	воок	FUTURE BOOK	CALCULA ANNUAL AC		COMPOSITE REMAINING
	DEPRECIABLE GROUP	CURVE	<b>NOVEMBER 30, 2020</b>	RESERVE	ACCRUALS	AMOUNT	RATE	LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)=(5)/(6)
	OTHER	50-R0.5	629,633,742.93	127,334,407	502,299,336	18,933,806	3.01	26.5
	TOTAL ACCOUNT 380		630,460,256.25	127,962,717	502,497,539	18,962,027	3.01	
381	METERS	44-S1	40,743,003.61	17,078,832	23,664,172	982,342	2.41	24.1
381.1	METERS - AMR	15-S2.5	24,645,195.47	15,534,889	9,110,306	1,501,943	6.09	6.1
382	METER INSTALLATIONS	55-R3	41,270,604.91	14,413,488	26,857,117	774,804	1.88	34.7
383	HOUSE REGULATORS AND INSTALLATIONS	45-S2	18,139,751.01	7,565,856	10,573,895	364,463	2.01	29.0
385	INDUSTRIAL MEASURING AND REGULATING STATION EQUI	PMENT -	, ,	, ,	, ,	,		
	OTHER THAN METERS	30-R0.5	6,998,445.32	2,084,988	4,913,457	386,167	5.52	12.7
	OTHER EQUIPMENT							
387	GENERAL	32-R0.5	136,698.14	72,195	64,503	6,172	4.52	10.5
387.4	COMMUNICATION EQUIPMENT	25-R2	11,329,312.50	2,247,776	9,081,536	565,688	4.99	16.1
387.5	GPS EQUIPMENT	10-S3	2,201,371.95	1,313,395	887,977	238,060	10.81	3.7
	TOTAL ACCOUNT 387		13,667,382.59	3,633,366	10,034,016	809,920	5.93	
	TOTAL DISTRIBUTION PLANT		2,911,567,193.98	502,283,566	2,409,283,625	72,434,627	2.49	
GENER	AL 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	2,308,323.16	1,074,322	1,234,001	86,230	3.74	14.3
391.11	EQUIPMENT	15-SQ	91,303.67	41,394	49,910	5,835	6.39	8.6
391.12	INFORMATION SYSTEMS	5-SQ	3,270,693.60	2,297,010	973,684	686,165	20.98	1.4
	TOTAL ACCOUNT 391		5,670,320.43	3,412,726	2,257,595	778,230	13.72	
392	TRANSPORTATION EQUIPMENT - TRAILERS	15-SQ	25,616.89	26,344	(727)	0	-	-
	TOOLS, SHOP AND GARAGE EQUIPMENT							
394	EQUIPMENT	25-SQ	17,148,549.66	7,008,818	10,139,732	607,391	3.54	16.7
394.12	CNG FACILITIES	12-S1.5	2,414,784.54	2,411,138	3,647	3,397	0.14	1.1
	TOTAL ACCOUNT 394		19,563,334.20	9,419,956	10,143,379	610,788	3.12	
395	LABORATORY EQUIPMENT	20-SQ	266,039.42	69,334	196,705	13,881	5.22	14.2
396	POWER OPERATED EQUIPMENT	13-L2	948,698.04	927,581	21,117	5,387	0.57	3.9
397.5	COMMUNICATION EQUIPMENT - TELEMETERING	19-R2.5	787,915.68	786,130	1,786	150	0.02	11.9
398	MISCELLANEOUS EQUIPMENT	15-SQ	953,269.70	420,527	532,743	58,008	6.09	9.2
	TOTAL GENERAL PLANT		28,265,015.78	15,112,419	13,152,598	1,466,444	5.19	
	SUBTOTAL DEPRECIABLE PLANT		2,945,640,091.56	521,835,702	2,423,804,388	74,201,679	2.52	

**AMORTIZABLE PLANT** 

## COLUMBIA GAS OF PENNSYLVANIA, INC.

## TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF NOVEMBER 30, 2020

		SURVIVOR	ORIGINAL COST AS OF	воок	FUTURE BOOK	CALCULA ANNUAL AC		COMPOSITE REMAINING
	DEPRECIABLE GROUP	CURVE	<b>NOVEMBER 30, 2020</b>	RESERVE	ACCRUALS	AMOUNT	RATE	LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)=(6)/(3)	(8)=(5)/(6)
303	MISCELLANEOUS INTANGIBLE PLANT		32,541,327.60	16,663,271	15,878,057	4,137,597	**	
303.6 362.1	MISCELLANEOUS INTANGIBLE PLANT - CLOUD ENVIRONMENTAL REMEDIATION		1,719,212.36	313,594 (211,300)	1,405,618	313,594	**	
375.71	STRUCTURES AND IMPROVEMENTS - LEASED		5,819,324.53	2,261,363	3,557,962	301,798	**	
	SUBTOTAL AMORTIZABLE PLANT		40,079,864.49	19,026,928	20,841,637	4,752,989		
NOND	EPRECIABLE PLANT		3,533,240.78	234,693				
	TOTAL GAS PLANT		2,989,253,196.83	541,097,323	2,444,646,025	78,954,668		

<sup>\*</sup> Indicates the use of an interim survivor curve and retirement date.

<sup>\*\*</sup> Accrual rate based on individual asset amortization.

Exhibit No. 9 Schedule No. 4 Page 1 of 1

Witness: J. J. Spanos

## 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 II-3 through II-6 of Columbia's Depreciation Study for the historic test year included in Exhibit No.9, Schedule No.1.

Exhibit No. 9 Schedule No. 5 Page 1 of 1 Witness: J. J. Spanos

## 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-6 of Columbia's historic test year depreciation study is included in Exhibit No.9, Schedule No.1.

Exhibit No. 10 Schedule No. 1 Page 1 of 3 Witness: M. Bartos

## 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 <u>No.</u>	Description	December (1)	January (2)	February (3)	March (4)	<u>April</u> (5)	<u>May</u> (6)	June (7)	July (8)	August (9)	September (10)	October (11)	November (12)	<u>Total</u> (13)
1	Degree Days (BPT=65)	(1)	(2)	(0)	( )	(0)	(0)	(,,	(0)	(5)	(10)	(11)	(12)	(10)
2	January 2023 to December 2023 (1)	820	1,058	1,046	877	565	271	86	8	2	17	136	431	5,317
3	December 2021 to November 2022 (1)	820	1,058	1,046	877	565	271	86	8	2	17	136	431	5,317
4	December 2020 to November 2021 (2)	740	1,034	1,069	845	457	319	110	12	2	12	79	385	5,064
5	December 2019 to November 2020 (3)	904	941	874	746	511	426	102	5	-	23	171	375	5,078
6	December 2018 to November 2019 (3)	951	1,018	1,062	911	525	204	61	7	1	8	116	492	5,356
7	December 2017 to November 2018 (3)	856	1,313	946	787	748	259	28	5	1	15	133	566	5,657
8	Residential Heating Sales - Dth													
9	January 2023 to December 2023 (1)	3,909,296	5,377,111	5,597,032	4,613,948	2,696,840	1,130,352	346,204	-	-	-	278,451	1,607,107	25,556,341
10	December 2021 to November 2022 (1)	3,790,308	5,283,037	5,499,931	4,536,961	2,657,259	1,109,442	339,867	-	-	-	271,065	1,579,983	25,067,854
11	December 2020 to November 2021 (2)	3,233,503	5,037,479	5,349,757	4,232,030	2,026,447	1,232,832	396,870	-	-	-	112,013	1,297,578	22,918,509
12	December 2019 to November 2020 (3)	3,692,059	4,057,029	3,865,645	3,246,527	1,881,947	1,552,350	395,615	-	-	-	309,325	1,154,559	20,155,057
13	December 2018 to November 2019 (3)	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
14	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

<sup>(1)</sup> Rate test year and Future test year reflecting normal weather based upon the 20 Year (2002-2021) average.

<sup>(2)</sup> Historic test year.

<sup>(3)</sup> Actual heating sales, not weather normalized.

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

Line <u>No.</u>	Description	<u>December</u>	January (2)	February (3)	March (4)	<u>April</u> (5)	<u>May</u> (6)	June (7)	July (8)	August (9)	September (10)	October (11)	November (12)	<u>Total</u> (13)
1	Degree Days (BPT=65)	(1)	(2)	(3)	(4)	(5)	(0)	(7)	(6)	(9)	(10)	(11)	(12)	(13)
2	January 2023 to December 2023 (1)	820	1,058	1,046	877	565	271	86	8	2	17	136	431	5,317
3	December 2021 to November 2022 (1)	820	1,058	1,046	877	565	271	86	8	2	17	136	431	5,317
4	December 2020 to November 2021 (2)	740	1,034	1,069	845	457	319	110	12	2	12	79	385	5,064
5	December 2019 to November 2020 (3)	904	941	874	746	511	426	102	5	-	23	171	375	5,078
6	December 2018 to November 2019 (3)	951	1,018	1,062	911	525	204	61	7	1	8	116	492	5,356
7	December 2017 to November 2018 (3)	856	1,313	946	787	748	259	28	5	1	15	133	566	5,657
8	Commercial Heating Sales - Dth													
9	January 2023 to December 2023 (1)	866,962	1,304,733	1,385,142	1,116,282	600,326	222,735	47,707	-	-	9,456	68,532	344,955	5,966,831
10	December 2021 to November 2022 (1)	869,761	1,312,337	1,389,353	1,119,275	605,954	222,311	47,476	-	-	7,911	66,172	342,825	5,983,375
11	December 2020 to November 2021 (2)	756,789	1,280,127	1,431,295	1,103,530	479,474	240,773	50,216	-	-	6,724	39,703	308,374	5,697,004
12	December 2019 to November 2020 (3)	1,006,067	1,143,625	1,105,637	900,884	434,918	318,028	52,216	-	-	16,944	82,005	281,428	5,341,752
13	December 2018 to November 2019 (3)	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
14	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

<sup>(1)</sup> Rate test year and Future test year reflecting normal weather based upon the 20 Year (2002-2021) average.

<sup>(2)</sup> Historic test year.

<sup>(3)</sup> Actual heating sales, not weather normalized.

Exhibit No. 10 Schedule No. 2 Page 1 of 8 Witness: M. Bartos

## 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.

				R	esidential (	1)			С	ommercial	(1)				Industrial		
Line			Total	Sales	Trans	Through-		Total	Sales	Trans	Through-		Total	Sales	Trans	Through-	
No.	Period		Customers	Volume	Volume	Put	Average	Customers	Volume	Volume	Put	Average	Customers	Volume	Volume	Put	Average
				MDth	MDth	MDth	Dth/Cust		MDth	MDth	MDth	Dth/Cust		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 13	2017	389898	1825	432	2257	5.79	37076	590	1182	1772	48	268	20	1853	1873	6,989
	14 Total or Averag 15	je	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
	16 Heating Seaso 17 (November-Mar			18,534	4,633	23,167	59		5,958	9,043	15,001	403		93	10,054	10,147	37,862
	18 Non-Heating S 19 (April-October)	eason		6,168	1,510	7,678	20		2,266	5,046	7,312	197		53	13,333	13,386	49,976
	20 Daily Average		/365	68	17	85			23	39	61			0	64	64	

<sup>(1)</sup> Actual sales, not weather normalized.

Exhibit No. 10 Schedule 2 Witness: M. Bartos Page 3 of 8

				R	esidential (	1)			С	ommercial	(1)				Industrial		
Line			Total	Sales	Trans	Through-		Total	Sales	Trans	Through-		Total	Sales	Trans	Through-	
No.	Period		Customers	Volume	Volume	Put	Average	Customers	Volume	Volume	Put	Average	Customers	Volume	Volume	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 Averag	ge	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
	16 Heating Seaso	n		22,065	5,026	27,091	69		6,935	10,301	17,236	463		99	10,876	10,975	41,038
	17 (November-Ma																-
	18 Non-Heating S	eason		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	,	365	82	18	100			26	44	70			0	66	67	

<sup>(1)</sup> Actual sales, not weather normalized.

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

				R	esidential (	1)			С	ommercial	(1)				Industrial		
Line			Total	Sales	Trans	Through-		Total	Sales	Trans	Through-		Total	Sales	Trans	Through-	
No.	Period		Customers	Volume	Volume	Put	Average	Customers	Volume	Volume	Put	Average	Customers	Volume	Volume	Put	Average
				MDth	MDth	MDth	Dth/Cust		MDth	MDth	MDth	Dth/Cust		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
1	0 Sep		393051	437	84	521	1.33	36974	186	583	769	21	267	4	1824	1828	6,846
1	1 Oct		394141	623	120	743	1.89	37002	238	694	932	25	268	6	1878	1884	7,028
1	2 Nov	2019	396927	2121	409	2531	6.38	37111	624	1330	1954	53	266	9	2012	2021	7,598
1	3																
1	4 Total or Averag	je	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
1	5																
1	6 Heating Seaso	n		22,421	4,404	26,825	68		6,477	10,692	17,170	461		102	10,903	11,005	41,025
1	7 (November-Ma	rch)															
1	8 Non-Heating S	eason		6,448	1,266	7,714	20		2,164	5,304	7,467	201		45	12,994	13,039	48,575
1	9 (April-October)																
2	0 Daily Average	= Total	/365	79	16	95			24	44	67			0	65	66	

(1) Actual sales, not weather normalized.

Exhibit No. 10 Schedule 2 Witness: M. Bartos Page 5 of 8

				R	lesidential (	1)			C	ommercial	(1)				Industrial		
Line		_	Total	Sales	Trans	Through-		Total	Sales	Trans	Through-		Total	Sales	Trans	Through-	
No.	Period	(	Customers	Volume	Volume	Put	Average	Custome	s Volume	Volume	Put	Average	Custome	rs Volume	Volume	Put	Average
				MDth	MDth	MDth	Dth/Cust		MDth	MDth	MDth	Dth/Cust		MDth	MDth	MDth	Dth/Cust
	1 Dec	2019	399076	4123	1249	5372	13.46	3725	9 1278	2132	3410	92	26	9 21	2044	2065	7,677
	2 Jan	2020	399994	4497	1347	5845	14.61	3731	4 1431	2246	3677	99	26	9 23	2049	2072	7,702
	3 Feb		400464	4257	1261	5518	13.78	3735		2195	3551	95	26		2097	2119	7,879
	4 Mar		400735	3639	1092	4731	11.80	3736	1 1155	1830	2986	80	26	8 17	1957	1974	7,365
	5 Apr		400727	2271	696	2967	7.40	3729	2 662	1244	1906	51	26	8 11	1714	1725	6,436
	6 May		400673	1944	593	2536	6.33	3726	0 543	1041	1584	43	26	8 12	1674	1685	6,289
	7 Jun		400630	804	238	1042	2.60	3719	8 244	620	864	23	26	7 9	1522	1531	5,733
	8 Jul		400444	441	122	563	1.41	3717	4 160	509	669	18	26	9 10	1407	1417	5,269
	9 Aug		400410	381	105	486	1.21	3716	0 152	515	667	18	26	9 14	1554	1568	5,828
1	0 Sep		400686	431	118	549	1.37	3715	9 168	577	745	20	26	9 17	1563	1580	5,874
1	1 Oct		401227	709	213	922	2.30	3720	7 253	733	986	26	27	1 14	1726	1740	6,420
1	2 Nov	2020	402017	1547	460	2007	4.99	3728	6 480	1098	1578	42	27	1 15	1837	1852	6,834
1	3																
1	4 Total or Averag	je	400,590	25,044	7,493	32,537	81.27	37,25	2 7,882	14,740	22,622	606.69	26	9 184	21,144	21,328	79,304.72
1	5																
1	6 Heating Seaso	n		18,064	5,409	23,473	59		5,700	9,502	15,202	407		98	9,984	10,082	37,456
1	7 (November-Ma	rch)		_	_				_	_				_	_		
1	8 Non-Heating S	eason		6,980	2,085	9,065	23		2,183	5,238	7,420	199		86	11,160	11,246	41,849
1	9 (April-October)																
2	20 Daily Average	= Total/3	365	69	21	89			22	40	62			1	58	58	

<sup>(1)</sup> Actual sales, not weather normalized.

				F	esidential	(1)				С	ommercial	(1)				Industrial		
Line			Total	Sales	Trans	Through-		T	otal	Sales	Trans	Through-		Total	Sales	Trans	Through-	
No.	Period		Customers	Volume	Volume	Put	Average	Cus	tomers	Volume	Volume	Put	Average	Customers	Volume	Volume	Put	Average
				MDth	MDth	MDth	Dth/Cust		- 1	MDth	MDth	MDth	Dth/Cust		MDth	MDth	MDth	Dth/Cust
	1 Dec	2020	403008	3702	632	4334	10.76		37351	1036	1759	2795	75	273	18	1863	1881	6,891
	2 Jan	2021	403785	5520	922	6442	15.95		37417	1597	2304	3901	104	275	27	1963	1991	7,239
	3 Feb		404324	5779	950	6729	16.64		37454	1714	2446	4160	111	275	28	2065	2094	7,614
	4 Mar		404632	4663	753	5416	13.39		37437	1386	1977	3364	90	275	23	1918	1941	7,058
	5 Apr		404693	2475	397	2872	7.10		37412	739	1292	2030	54	276	14	1935	1949	7,063
	6 May		403650	1664	266	1930	4.78		37367	475	915	1390	37	275	9	1751	1759	6,398
	7 Jun		402137	844	134	978	2.43		37193	261	618	880	24	275	6	1695	1701	6,186
	8 Jul		401346	479	77	556	1.39		37098	189	514	704	19	275	4	1665	1669	6,069
	9 Aug		400913	427	67	494	1.23		37068	177	510	687	19	274	4	1803	1807	6,595
	10 Sep		401187	448	69	517	1.29		37026	187	539	726	20	274	5	1876	1881	6,867
	11 Oct		401619	549	84	632	1.57		37050	220	619	840	23	275	7	1938	1945	7,073
	12 Nov	2021	403314	1729	264	1993	4.94		37121	524	1124	1648	44	273	14	2110	2124	7,781
	13																	
	14 Total or Avera	age	402,884	28,281	4,614	32,895	81.47		37,250	8,506	14,618	23,124	619.31	275	160	22,584	22,744	82,833.87
	15																	
	16 Heating Seas	son		21,394	3,521	24,915	62			6,258	9,611	15,868	424		111	9,920	10,031	36,583
	17 (November-M	arch)																
	18 Non-Heating	Season		6,887	1,093	7,980	20			2,248	5,008	7,256	195		49	12,663	12,713	46,251
	19 (April-Octobe	r)																
	20 Daily Average	e = Total	/365	77	13	90				23	40	63			0	62	62	

<sup>(1)</sup> Actual sales, not weather normalized.

Exhibit No. 10 Schedule 2 Witness: M. Bartos Page 7 of 8

					Residentia	I				Commercia	al				Industria	l	
Line			Total	Sales	Trans	Through-		Total	Sales	Trans	Through-		Total	Sales	Trans	Through-	
No.	Period		Customers	Volume	Volume	Put	Average	Custome	s Volume	Volume	Put	Average	Custom	ers Volum	ie Volume	Put	Average
				MDth	MDth	MDth	Dth/Cust		MDth	MDth	MDth	Dth/Cust		MDth	MDth	MDth	Dth/Cust
	1 Dec	2021	405712					3729	0 1164		3114			78	35 199		
	2 Jan	2022	407136	5759	847	6606	16.23	3736	8 1634	2407	4041	108	2	79	29 205	9 2088	7,484
	3 Feb		407996	5928			16.62	3741	7 1679	2447				79	30 214		
	4 Mar		408585	4962	726	5688	13.92	3741	7 1412	2013	3425	92	2	79	25 210	2 2128	7,626
	5 Apr		407654	3084	504	3588	8.80	3736	4 876	1471	2347	63	2	80	18 202	2 2039	7,283
	6 May		406181	1549	203	1752	4.31	3726	2 467	916	1383	37	2	79	13 189	1 1904	6,825
	7 Jun		404652	787	106	892	2.21	3716	0 262	642	904	24	2	79	9 176	8 1777	6,371
	8 Jul		403684	462	64	526	1.30	3708	2 194	535	728	20	2	79	10 167	5 1685	6,039
	9 Aug		403123	433	61	494	1.22	3704	9 179	531	710	19	2	78	11 171	2 1723	6,197
1	0 Sep		403241	432	59	491	1.22	3705	4 193	568	761	21	2	78	10 176	8 1778	6,396
1	1 Oct		404213	692	109	801	1.98	3709	0 253	709	962	26	2	79	12 189	4 1906	6,833
1	2 Nov	2022	406330	2004	302	2306	5.67	3720	6 570	1212	1781	48	2	79	18 207	2 2089	7,488
1	3																
	4 Total or Average 5	!	405,709	30,346	4,515	34,860	85.65	37,23	0 8,882	15,399	24,282	650.84	2	79 2	23,10	6 23,326	83,650.27
	6 Heating Season 7 (November-Marc			22,907	3,410	26,317	65		6,459	10,029	16,488	441		1	37 10,37	6 10,513	37,706
1	8 Non-Heating Se			7,439	1,105	8,544	21		2,423	5,370	7,794	209			82 12,73	1 12,813	45,944
	9 (April-October)	Total	IDCE	83	12	96			24	42	67				1 6	3 64	
	0 Daily Average =	rotai/	300	03	12	96			24	42	67				1 6	3 64	

				Danidantial	ı			,						la diretti al		
Line		Tatal		Residential			T-+-I		Commercia			Takal	0-1	Industrial	Theresale	
Line		Total	Sales	Trans	Through-		Total	Sales	Trans	Through-		Total	Sales	Trans	Through-	
No. Period		Customers	Volume	Volume	Put	Average			Volume	Put	Average	Customers		Volume	Put	Average
			MDth	MDth	MDth	Dth/Cust			MDth	MDth	Dth/Cust		MDth		MDth	Dth/Cust
1 Jan	2023	409534	5862	774	6636		37441	1630	2400	4030		277	30			
2 Feb		410069	6032	777	6809	16.60	37485	1677	2444	4121	110	277	31	2215	2246	8,107
3 Mar		410345	5046	663	5709	13.91	37481	1411	2012	3422	91	277	26	2155	2181	7,874
4 Apr		409303	3136	463	3599	8.79	37424	876	1470	2346	63	278	18	2082	2100	7,553
5 May		407801	1573	183	1756	4.31	37318	467	916	1383	37	277	13	1936	1949	7,034
6 Jun		406247	798	95	893	2.20	37213	262	644	906	24	277	9	1793	1803	6,508
7 Jul		405238	468	58	526	1.30	37133	195	538	733	20	277	10	1701	1711	6,178
8 Aug		404666	439	55	495	1.22	37100	180	537	717	19	276	11	1739	1750	
9 Sep		404801	439	54	493	1.22	37103	196	575	770	21	276	10	1802	1811	
10 Oct		405708	705	101	806	1.99	37138	257	718	975	26	277	12		1952	
11 Nov		407710	2040	276			37253	575	1222	1797	48	277	18			7,680
12 Dec	2023		4385	568	4952		37415	1160	1944	3104	83	276	37	2104		
13	2020	400111	1000		1002	12.00	01410	1100	1011	0101	•	2.0		2101	2111	1,100
14 Total or Av	erage	407,600	30,924	4,066	34,990	85.51	37,292	8,885	15,419	24,304	650.25	277	225	23,695	23,921	86,403.50
15	olago	101,000	00,021	1,000	01,000	55.51	01,202	0,000	10,110	21,001	300.20	2		20,000	20,021	55,155.55
16 Heating Se	eason		23,365	3,057	26,423	64		6,453	10,023	16,475	440		142	10,703	10,845	39,178
17 (November				-,		-		-,	,	,				,	,	
18 Non-Heatin			7,559	1,009	8,568	21		2,433	5,397	7,829	210		84	12,992	13,076	47,225
19 (April-Octo	•		1,555	1,003	0,500	21		2,433	3,331	1,023	210		04	12,332	13,010	77,223
20 Daily Avera	,	ISCE	85	11	96			24	42	67				65	66	

Exhibit No. 10 Schedule No. 3 Page 1 of 1 Witness: J. Siegler

## 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, 2021 (Historic Test Year), the twelve months ended November 30, 2022 (Future Test Year) or the twelve months ending December 31, 2023 (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.

Exhibit No. 10 Schedule No. 4 Page 1 of 1 Witness: J. Siegler

## 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's New Business field team is currently staffed with five Development Managers whose focus is on commercial and industrial projects, as well as residential new construction projects where main is needed. Columbia's New Business team collaborates with internal stakeholders to implement the process of connecting the customers to Columbia's system. Residential customers who wish to convert to natural gas from alternate fuel sources where main is already available are assisted by the New Business team located in Columbus, Ohio. 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.

Exhibit No. 10 Schedule No. 4 Page 1 of 1 Witness: R. Danhires

## 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. 40-41c) of the Company's tariff currently on file with the Commission.

Exhibit No. 10 Schedule No. 5 Page 1 of 2

Witness: M. Bartos

## 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.

Exhibit No. 10 Schedule No. 5 Page 2 of 2 Witness: M. Bartos

## 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>	11/30/2021	11/30/2020	11/30/2019	11/30/2018	11/30/2017
	539,160	552,599	748,896	746,405	641,074
Maximum Coincide	ent Three-Day Pe	ak Day Deman	d (Dth)		
Twelve Months Ending	11/30/2021	11/30/2020	11/30/2019	11/30/2018	11/30/2017
Day 1	539,160	532,968	748,896	687,330	551,205
Day 2	527,836	540,483	681,801	746,412	578,140
Day 3	424,721	474,223	622,606	734,759	607,435

Exhibit No. 10 Schedule No. 6 Page 1 of 4 Witness: M. Bartos

## 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.

Exhibit No. 10 Schedule No. 6 Page 2 of 4 Witness: M. Bartos

					Residentia	al				Commercial					Indus	trial	
				Sales	Trans	Through-		Total	Sales	Trans	Through-		Total	Sales	Trans	Through-	
Perio	od	Cust	omers'	Volume	Volume	Put	Average	Custome	rs Volume	Volume	Put	Average	Custon	ers Volume	Volume	Put	Average
				MDth	MDth	MDth	Dth/Cust		MDth	MDth	MDth	Dth/Cust		MDth	MDth	MDth	Dth/Cust
1 Jan	202	24 41	0,880	5,960	70	3 6,663	16.2	37,486	1,639	2,413	4,052	108.1	2	78 3	0 2,14	5 2,179	5 7,8
2 Feb		41	1,478	6,133	3 70	5 6,838	16.6	37,529	1,686	2,457	4,144	110.4	2	78 3	1 2,23	7 2,268	3 8,1
3 Mar		41	1,855	5,133	60	2 5,735	13.9	37,523	1,420	2,024	3,444	91.8	2	78 2	6 2,17	0 2,196	5 7,8
4 Apr		41	0,917	3,195	42	4 3,619	8.8	37,466	883	1,483	2,366	63.2	2	79 1	8 2,09	4 2,112	2 7,5
5 May		40	9,508	1,605	16	4 1,769	4.3	37,360	474	929	1,402	37.5	2	78 1	3 1,95	1,964	4 7,0
6 Jun		40	8,037	817	7 8	6 904	2.2	37,254	268	657	925	24.8	2	78 1	0 1,81	8 1,827	7 6,5
7 Jul		40	7,088	482	2 5	3 535	1.3	37,174	200	552	752	20.2	2	78 1	0 1,69	6 1,706	6,1
8 Aug		40	6,560	452	2 5	1 504	1.2	37,139	185	551	736	19.8	2	.77 1	1 1,74	9 1,760	) 6,3
9 Sep		40	6,720	453	3 5	0 502	1.2	37,142	201	589	790	21.3	2	277 1	0 1,80	9 1,819	9 6,5
10 Oct		40	7,651	725	5 9	3 818	2.0	37,176	262	732	994	26.7	2	.78 1	3 1,95	3 1,966	5 7,0
11 Nov		40	9,682	2,084	25	1 2,336	5.7	37,291	582	1,237	1,818	48.8	2	78 1	8 2,12	5 2,143	3 7,7
12 Dec	202	24 41	1,772	4,470	51	5 4,985	12.1	37,453	1,169	1,958	3,127	83.5	2	277 3	8 2,13	0 2,168	3 7,8
13																	
14 Total	or Average	40	9,346	31,510	3,69	8 35,208	85.70	37,33	3 8,967	15,583	3 24,550	656.11	2	78 22	7 23,87	5 24,102	2 86,745
15																	
16 Heati	ing Season			23,781	2,77	5 26,556	65		6,495	10,090	16,585	443		14	3 10,80	6 10,949	9 39,4
17 (Nove	ember-March)																
	Heating Seaso I-October)	n		7,729	92	2 8,651	21		2,473	5,493	7,966	5 214		8	4 13,06	9 13,153	3 47,3
20 Daily	Average = Tot	al/365		86.33	3 10.1	3 96.46	;		24.57	42.69	67.26	6		0.6	2 65.4	1 66.03	3

Exhibit No. 10 Schedule No. 6 Page 3 of 4 Witness: M. Bartos

	Residential							Commercial						Industrial						
Line				Sales	Trans	Through-		Tota		Sales	Trans	Through-			Total	Sales	Trans		Through-	
No.	Period		Customers	Volume	Volume	Put	Average	Cust	omer	Volume	Volume	Put	Average		Custome	rs Volume	Volu	ne	Put	Average
				MDth	MDth	MDth	Dth/Cust			MDth	MDth	MDth	Dth/Cust			MDth	MDth		MDth	Dth/Cust
	1 Jan	2025	412,884	6,072	632	6,704	16.2	3	7,524	1,648	2,427	4,076	108.6		27	8 3	0 :	2,132	2,162	7,776
	2 Feb		413,473	6,246	632	6,878	16.6	3	7,566	1,695	2,470	4,166	110.9		27	8 3	1 :	2,237	2,268	8,159
	3 Mar		413,819	5,228	541	5,768	13.9	3	7,561	1,428	2,036	3,464	92.2		27	8 2	6	2,170	2,196	7,898
	4 Apr		412,832	3,255	385	3,640	8.8	3	7,503	890	1,494	2,384	63.6		27	9 1	8 :	2,094	2,112	7,569
	5 May		411,361	1,635	145	1,780	4.3	3	7,396	479	939	1,418	37.9		27	8 1	3	1,951	1,964	7,064
	6 Jun		409,819	831	77	908	2.2	3	7,290	272	666	938	25.1		27	8 1	0	1,818	1,827	6,573
	7 Jul		408,813	488	47	535	1.3	3	7,209	203	560	763	20.5		27	8 1	0	1,721	1,731	6,226
	8 Aug		408,226	455	45	501	1.2	3	7,175	188	558	745	20.1		27	7 1	1	1,758	1,769	6,388
	9 Sep		408,329	453	43	496	1.2	3	7,178	203	595	797	21.4		27	7 1	0	1,785	1,794	6,478
	10 Oct		409,203	727	82	809	2.0	3	7,211	264	737	1,000	26.9		27	8 1	2	1,943	1,955	7,034
	11 Nov		411,178	2,107	223	2,330	5.7	3	7,326	583	1,240	1,823	48.8		27	8 1	8	2,125	2,143	7,707
	12 Dec	2025	413,213	4,528	458	4,986	12.1	3	7,487	1,170	1,961	3,131	83.5		27	7 3	8	2,130	2,168	7,825
	13																			
	14 Total or Avera	age	411,096	32,024	3,310	35,334	85.63	3	7,369	9,022	15,683	3 24,704	4 659.59		27	8 22	7 2	3,862	24,088	86,696.40
	15																			
	16 Heating Seas	on		24,181	2,486	26,666	65			6,525	10,13	5 16,660	0 444			14	3 1	0,793	10,936	39,365
	17 (November-M	arch)																		
	18 Non-Heating	Season		7,844	824	8,668	21			2,497	5,54	8,04	5 215			8	4 1	3,069	13,153	47,331
	19 (April-Octobe																			
	20 Daily Average	= Total	365	87.74	9.07	96.81				24.72	42.9	7 67.6	3			0.6	2	65.37	66.00	

Exhibit No. 10 Schedule No. 6 Page 4 of 4 Witness: M. Bartos

		Residential					Commercial							Industrial				
Line				Sales	Trans	Through-		Total	Sales	Trans	Through-			Total	Sales	Trans	Through-	
No.	Period		Customer	Volume	Volume	Put	Average	Customers	Volume	Volume	Put	Average		Customers	Volume	Volume	Put	Average
				MDth	MDth	MDth	Dth/Cust		MDth	MDth	MDth	Dth/Cust			MDth	MDth	MDth	Dth/Cust
	1 Jan	2026	414,273	6,152	557	6,709	16.2	37,558	1,650	2,430	4,080	108.6		278	30	2,145	2,175	7,824
	2 Feb		414,814	6,327	556	6,883	16.6	37,601	1,697	2,473	4,170	110.9		278	31	2,237	2,268	8,159
	3 Mar		415,121	5,293	476	5,769	13.9	37,595	1,429	2,038	3,467	92.2		278	26	2,159	2,184	7,858
	4 Apr		414,104	3,292	342	3,634	8.8	37,536	891	1,495	2,386	63.6		279	18	2,094	2,112	7,569
	5 May		412,611	1,645	122	1,767	4.3	37,430	479	940	1,419	37.9		278	13	1,951	1,964	7,064
	6 Jun		411,057	829	64	893	2.2	37,323	272	667	939	25.1		278	10	1,818	1,827	6,573
	7 Jul		410,082	480	39	519	1.3	37,245	203	560	763	20.5		278	10	1,721	1,731	6,226
	8 Aug		409,532	447	38	485	1.2	37,213	188	558	746	20.0		277	11	1,758	1,769	6,388
	9 Sep		409,679	444	36	480	1.2	37,218	203	595	798	21.4		277	10	1,809	1,819	6,566
	10 Oct		410,601	724	71	794	1.9	37,255	264	737	1,001	26.9		278	13	1,953	1,966	7,072
	11 Nov		412,628	2,127	194	2,320	5.6	37,372	584	1,241	1,825	48.8		278	18	2,125	2,143	7,707
	12 Dec	2026	414,717	4,586	401	4,987	12.0	37,536	1,172	1,964	3,135	83.5		277	37	2,119	2,157	7,785
	13																	
	14 Total or Averag	ge	412,435	32,344	2,895	35,239	85.12	37,407	9,031	15,698	3 24,729	659.59		278	227	7 23,888	3 24,115	86,790.48
	16 Heating Seaso 17 (November-Ma			24,484	2,184	26,667	64		6,532	10,146	16,677	444			143	3 10,784	10,927	7 39,334
	18 Non-Heating S 19 (April-October)	eason		7,861	711	8,572	21		2,499	5,553	8,052	215			84	13,103	3 13,188	3 47,457
	20 Daily Average	•	365	88.62	7.93	96.55	;		24.74	43.01	67.75				0.62	2 65.45	5 66.07	7

Exhibit No. 10 Schedule No. 7 Page 1 of 3 Witness: J. Siegler

## 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, 2021 Dth

<u>Description</u>	<u>Dec-20</u>	<u>Jan-21</u>	<u>Feb-21</u>	<u>Mar-21</u>	<u>Apr-21</u>	<u>May-21</u>	<u>Jun-21</u>	<u>Jul-21</u>	<u>Aug-21</u>	<u>Sep-21</u>	Oct-21	<u>Nov-21</u>	<u>Total</u>
Requirements													
Residential	3,702,110	5,520,364	5,779,512	4,663,157	2,474,742	1,664,261	844,400	479,350	427,015	448,160	548,705	1,729,132	28,280,907
Commercial	1,034,664	1,575,201	1,693,781	1,383,630	752,410	458,722	268,854	192,947	171,923	185,666	226,851	514,653	8,459,303
Industrial	21,001	20,914	32,724	34,283	17,715	9,316	5,997	6,083	6,961	3,383	8,638	17,389	184,404
Public Authority	0	0	0	0	0	0	0	0	0	0	0	0	0
Unbilled Revenue - Dth	1,304,049	(26,959)	(448,054)	(1,425,974)	(646,045)	(431,931)	(434,091)	3,199	29,816	103,019	516,028	2,169,004	712,060
Other	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Retail	6,061,824	7,089,520	7,057,963	4,655,095	2,598,822	1,700,367	685,160	681,578	635,716	740,228	1,300,222	4,430,178	37,636,673
Other Company Use	10,650	10,995	12,219	11,923	8,278	7,111	5,763	4,840	3,918	3,961	3,835	5,950	89,441
Gas Left On For Reconnect/Gas Lost - Line Breaks	7,507	15,208	4,294	5,453	2,727	2,969	833	975	1,306	1,117	1,163	3,225	46,777
Gas Lost from Storage - Current	67	67	69	67	67	67	65	67	67	67	67	67	802.65
Non-Traditional Sales - Dth	30,666	386,600	136,559	56,300	31,500	198,200	62,500	35,900	100,500	205,880	106,400	50,000	1,401,005
Total Miscellaneous Deliveries	48,889	412,870	153,142	73,743	42,572	208,346	69,161	41,781	105,791	211,025	111,465	59,242	1,538,027
Unaccounted for - Losses in Black	2,432,737	1,501,878	208,524	(1,404,742)	596,618	(2,486,765)	(216,334)	(252,873)	1,059,639	(226,320)	(99,016)	586,965	1,700,312
Total Requirements	8,543,451	9,004,268	7,419,629	3,324,096	3,238,012	(578,051)	537,987	470,486	1,801,146	724,933	1,312,670	5,076,385	40,875,011
Supply													
Field Line Purchases	7,294	13,439	21,116	8,036	(40,407)	61,002	7,262	6,520	6,830	7,435	9,214	9,173	116,914
Transmission Line Purchases	2,375,481	2,795,340	1,440,596	948,099	4,819,307	4,043,709	3,582,455	3,934,077	4,098,532	2,998,090	2,493,858	3,044,131	36,573,676
City Gate Purchases	922,343	933,720	828,244	766,113	1,236,753	(284,257)	381,234	375,231	401,958	386,640	186,375	26,025	6,160,379
Other Purchased Gas Expenses	0	0	0	0	0	0	0	0	0	0	0	0	0
Exchange Activity	726,877	(116,740)	(790,295)	(1,078,916)	(613,481)	(88,509)	117,155	294,675	223,065	555,653	447,918	343,260	20,661
Total Purchases	4,031,996	3,625,759	1,499,661	643,332	5,402,172	3,731,945	4,088,105	4,610,503	4,730,385	3,947,818	3,137,365	3,422,589	42,871,630
Storage	4,511,388	5,378,441	5,919,899	2,680,697	(2,164,228)	(4,310,063)	(3,550,184)	(4,140,083)	(2,929,306)	(3,222,951)	(1,824,761)	1,653,729	(1,997,421)
Shrinkage	67	67	69	67	67	67	65	67	67	67	67	67	803
Gas Volumes Available - Steamed	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Supply	8,543,451	9,004,268	7,419,629	3,324,096	3,238,012	(578,051)	537,987	470,486	1,801,146	724,933	1,312,670	5,076,385	40,875,011

## Columbia Gas of Pennsylvania, Inc. Twelve Months Ended November 30, 2020

Description	<u>Dec-19</u>	<u>Jan-20</u>	<u>Feb-20</u>	<u>Mar-20</u>	<u>Apr-20</u>	<u>May-20</u>	<u>Jun-20</u>	<u>Jul-20</u>	Aug-20	Sep-20	Oct-20	Nov-20	<u>Total</u>
Requirements													
Residential	4,514,696	4,920,618	4,655,408	3,992,494	2,502,541	2,142,274	880,924	476,870	411,635	466,342	783,451	1,710,351	27,457,604
Commercial	1,317,122	1,475,471	1,369,351	1,155,799	652,753	541,755	242,404	159,296	151,211	168,137	264,333	473,645	7,971,276
Industrial	45,366	48,872	20,013	16,113	11,091	6,422	4,419	8,178	8,291	9,597	11,700	22,115	212,177
Public Authority	0	0	0	0	0	0	0	0	0	0	0	0	0
Unbilled Revenue - Dth	378,991	(759,018)	267,020	(1,099,023)	(250,992)	(845,085)	(387,958)	10,978	33,111	204,965	711,995	1,154,943	(580,073)
Other	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Retail	6,256,175	5,685,944	6,311,792	4,065,382	2,915,394	1,845,367	739,788	655,323	604,247	849,040	1,771,479	3,361,053	35,060,984
Other Company Use	11,626	10,951	9,402	8,915	7,430	7,310	6,130	4,743	4,428	4,843	5,819	8,077	89,674
Gas Left On For Reconnect/Gas Lost - Line Breaks	2,848	1,454	1,055	1,247	1,039	1,535	892	1,011	1,532	1,220	2,225	4,858	20,915
Gas Lost from Storage - Current	67	67	67	67	67	67	67	67	67	67	67	67	802.96
Non-Traditional Sales - Dth	731,965	522,377	348,498	125,000	0	600	8,000	4,000	11,700	2,600	0	15,000	1,769,740
Total Miscellaneous Deliveries	746,506	534,850	359,023	135,229	8,536	9,511	15,089	9,821	17,727	8,729	8,111	28,001	1,881,132
Unaccounted for - Losses in Black	(90,527)	740,386	(240,195)	(976,137)	(1,359,052)	(58,250)	(1,349,248)	(212,965)	666,072	70,622	(31,739)	120,521	(2,720,512)
Total Requirements	6,912,154	6,961,179	6,430,619	3,224,474	1,564,878	1,796,628	(594,371)	452,179	1,288,046	928,391	1,747,851	3,509,576	34,221,604
Supply													
Field Line Purchases	12	9,528	8,692	10,760	10,519	10,691	8,324	7,093	6,825	6,817	8,998	8,614	96,873
Transmission Line Purchases	2,169,962	1,271,166	886,009	499,986	3,867,975	3,079,174	1,626,491	3,810,378	4,931,281	3,342,811	2,663,564	729,494	28,878,292
City Gate Purchases	455,700	617,400	501,315	502,185	480,426	517,803	254,655	225,043	232,500	229,376	514,399	556,665	5,087,467
Other Purchased Gas Expenses	0	0	0	0	0	0	0	0	0	0	0	0	0
Exchange Activity	(670,743)	(777,234)	(496,414)	(699,774)	(547,896)	112,996	(568,856)	546,616	677,735	333,782	291,044	418,564	(1,380,179)
Total Purchases	1,954,932	1,120,860	899,601	313,157	3,811,025	3,720,664	1,320,614	4,589,130	5,848,341	3,912,786	3,478,005	1,713,337	32,682,453
Storage	4,957,155	5,840,252	5,530,952	2,911,250	(2,246,213)	(1,924,103)	(1,915,052)	(4,137,018)	(4,560,362)	(2,984,461)	(1,730,221)	1,796,172	1,538,350
Shrinkage	67	67	67	67	67	67	67	67	67	67	67	67	803
Gas Volumes Available - Steamed	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Supply	6,912,154	6,961,179	6,430,620	3,224,474	1,564,878	1,796,628	(594,371)	452,179	1,288,046	928,392	1,747,851	3,509,576	34,221,606

Exhibit No. 10 Schedule No. 8 Page 1 of 1 Witness: M. Bartos

## COLUMBIA GAS OF PENNSYLVANIA, INC.

## WEATHER NORMALIZATION ADJUSTMENT

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

	Resid	ential Norma	alization Rou	ıtine							
			Normal =	2002	2021		20	year aver	age		
			Actual	Dth/Cus					HDD	HDD	Normal
		Customers	Dth	Actual	NTS	TS Actual	TS Normal	Normal	Actual	Normal	Dth
2021	Jan	403,785	6,441,954	15.95	1.40	14.56	14.90	16.29	1034	1058	6,578,400
2021	Feb	404,324	6,729,028	16.64	1.24	15.41	15.07	16.31	1069	1046	6,595,014
2021	Mar	404,632	5,416,371	13.39	1.24	12.15	12.61	13.85	845	877	5,602,526
2021	Apr	404,693	2,871,771	7.10	1.29	5.81	7.18	8.47	457	565	3,427,508
2021	May	403,650	1,929,961	4.78	1.24	3.54	3.01	4.25	319	271	1,714,837
2021	Jun	402,137	978,327	2.43	1.29	1.14	0.89	2.18	110	86	878,002
2021	Jul	401,346	556,383	1.39	1.39	0.00	0.00	1.39	12	8	556,383
2021	Aug	400,913	494,072	1.23	1.23	0.00	0.00	1.23	2	2	494,072
2021	Sep	401,187	517,016	1.29	1.29	0.00	0.00	1.29	12	17	517,016
2021	Oct	401,619	632,444	1.57	1.25	0.32	0.55	1.81	79	136	725,562
2021	Nov	403,314	1,993,232	4.94	1.23	3.71	4.15	5.39	385	431	2,171,949
2020	Dec	403,008	4,334,457	10.76	1.36	9.39	10.41	11.77	740	820	4,743,736
			32,895,016	81.47	15.44	66.03	68.78	84.22	5064	5317	34,005,006
	Comm	ercial Normal	ization Routin	e							
	Normal = 2002				2021		20	year ave	erage		
			Actual	Dth/Cus				•	HDD	HDD	Normal
		Customers	Dth	Actual	NTS	TS Actual	TS Normal	Normal	Actual	Normal	Dth
2021	Jan	37,417	3,890,816	103.99	20.68	83.31	85.24	105.92	1034	1058	3,963,168
2021	Feb	37,454	4,170,825	111.36	18.34	93.02	91.02	109.36	1069	1046	4,095,864
2021	Mar	37,437	3,349,703	89.48	18.34	71.14	73.83	92.17	845	877	3,450,560
2021	Apr	37,412	1,992,858	53.27	19.05	34.22	42.31	61.36	457	565	2,295,419
2021	May	37,367	1,402,315	37.53	18.37	19.16	16.28	34.64	319	271	1,294,570
2021	Jun	37,193	883,408	23.75	19.11	4.65	3.63	22.74	110	86	845,707
2021	Jul	37,098	703,627	18.97	18.97	0.00	0.00	18.97	12	8	703,627
2021	Aug	37.068	686,938	18.53	18.53	0.00	0.00	18.53	2	2	686,938
2021	Sep	37,026	725,083	19.58	18.90	0.68	0.97	19.87	12	17	735,642
2021	Oct	37,050	830,945	22.43	18.57	3.85	6.64	25.21	79	136	933,994
2021	Nov	37,121	1,636,261	44.08	18.28	25.80	28.89	47.16	385	431	1,750,701
2020	Dec	37,351	2,766,240	74.06	20.17	53.89	59.71	79.89	740	820	2,983,838
			23,039,018	617.02	227.28	389.73	408.52	635.81	5064	5317	23,740,029

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

# COLUMBIA GAS OF PENNSYLVANIA, INC. VOLUMETRIC PORTION OF THE LOAD GROWTH ADJUSTMENT TWELVE MONTHS ENDED NOVEMBER 30, 2021 53.62

Response:

Please see Exhibit 3, Schedule 5.

Exhibit No. 11 Page 1 of 3

Witness: K. L. Johnson

## 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. 6

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

Response: See Statement No. 6 and related attachments.

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

Response: See Exhibit No. 111, Schedule No. 2, 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.

Exhibit No. 11 Page 2 of 3

Witness: K. L. Johnson

## 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.

Exhibit No. 11 Page 3 of 3

Witness: K. L. Johnson

## $\frac{\text{COLUMBIA GAS OF PENNSYLVANIA, INC.}}{53.53~\text{III. BALANCE SHEET AND OPERATING STATEMENT}}{\text{A. ALL UTILITIES}}$

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.

Exhibit No. 12 Schedule No. 1 Page 1 of 1

Witness: J. Siegler

## $\frac{\text{COLUMBIA GAS OF PENNSYLVANIA, INC}}{53.53~\text{III. BALANCE SHEET AND OPERATING STATEMENT}}{\text{E. GAS UTILITIES}}$

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, 2021 (Historic Test Year).

	(MDth)
Interstate Pipeline Purchases	41,428
City Gate Purchases	1,650
Local Production	117
Storage Withdrawal Injection Net	21,076 (23,396) (2,321)
All Sources	40,874

Exhibit No. 12 Schedule No. 2 Page 1 of 2 Witness: J. Siegler

## 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].

Exhibit No. 12 Schedule No. 2 Page 2 of 2 Witness: J. Siegler

## 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 2020, January 2021, April 2021, and October 2021.
- 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, 2020, the revenues exceeded the cost of purchased gas collected in tariff rates by \$5,884,704.
  - (ii) During the twelve month period ended November 30, 2021, the cost of purchased gas exceeded revenues collected in tariff rates by \$32,468,900.
- d. All purchased gas costs are included in Base Tariff Rates for the twelve months ending November 30, 2021.
- e. The purchased gas cost charged to the operating expense account during the twelve month period ended November 30, 2021 totaled \$174,273,980.
- 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.

Exhibit No. 12 Schedule No. 3 Page 1 of 1 Witness: J. Siegler

## 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-20	(4,052,866)
Nov-20	(2,680,478)
Dec-20	(831,741)
Jan-21	7,569,229
Feb-21	7,059,678
Mar-21	7,438,328
Apr-21	1,667,945
May-21	(1,498,973)
Jun-21	(4,239,149)
Jul-21	(6,155,733)
Aug-21	(7,454,801)
Sep-21	(8,220,742)
Oct-21	(13,130,714)
Nov-21	(14,672,316)

<sup>1</sup>\_/ 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, 2022 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 55.

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 55.
These pages are Exhibit 1-D from Columbia's 2021 1307(f) filing at Docket No. R-2021-3024349.

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).

Exhibit No. 12 Schedule No. 4 Page 2 of 55 Witness: J. Siegler

# COLUMBIA GAS OF PENNSYLVANIA, INC. PURCHASED GAS ANALYSIS TWELVE MONTHS ENDED NOVEMBER 30, 2020

Line <u>No.</u>	Account <u>No.</u>	<u>Description</u>	<u>Volumes</u> (1) Dth	<u>Costs</u> (2) \$
1	801	Natural Gas Field Line Purchases	96,873	185,158
2 3 4 5 6 7 8 9	803	Natural Gas Transmission line Purchases Non-Appalachian Sources Transportation. Affiliates Transportation· Non-Affiliates Storage - Affiliates Storage - Non-Affiliates Off System Sales - Purchases Off System Sales - Transportation Total Transmission line Purchases	29,811,891 0 (554,878) 0 (378,721) 0 0 28,878,292	46,856,982 0 42,673,787 0 18,253,735 24,790 0 107,809,294
11	804	Natural Gas City Gate Purchases	5,227,262	8,903,774
12	805	Propane Purchases	0	0
13	806	Exchange Gas (Net)	(509,853)	(1,687,094)
14	807	Broker Fees	0	0
15 16 17 18	808	Storage Activity Gas Withdrawn from Underground Storage Gas Delivered to Underground Storage Total Gas Stored (Net)	21,396,506 (19,857,353) 1,539,153	46,963,438 (29,951,456) 17,011,982
19 20 21 22	813	Exchange Fees Fees - Nonaffiliated Fees - Affiliated Total Exchange Fees	0 0 0	0 0 0
23		Gas Lost From Storage	0	0
24		TOTAL GAS PURCHASED	35,231,726	132,223,113

<sup>( )</sup> In Acct. No. 803 negative volumes denotes transportation fuel.

<sup>()</sup> In Acct. No. 808 denotes injection volumes & credit.

Exhibit No. 12 Schedule No. 4 Page 3 of 55 Witness: J. Siegler

# COLUMBIA GAS OF PENNSYLVANIA, INC. PURCHASED GAS ANALYSIS TWELVE MONTHS ENDED NOVEMBER 30, 2021

Line <u>No.</u>	Account <u>No.</u>	<u>Description</u>	<u>Volumes</u> (1) Dth	<u>Costs</u> (2) \$
1	801	Natural Gas Field Line Purchases	116,914	328,887
2 3 4 5 6 7 8 9	803	Natural Gas Transmission line Purchases Non-Appalachian Sources Transportation. Affiliates Transportation· Non-Affiliates Storage - Affiliates Storage - Non-Affiliates Off System Sales - Purchases Off System Sales - Transportation Total Transmission line Purchases	37,539,218 0 (642,431) 0 (323,111) 0 0 36,573,676	111,243,953 0 64,171,526 0 37,433,505 10,071 0 212,859,056
11	804	Natural Gas City Gate Purchases	6,160,379	14,595,043
12	805	Propane Purchases	0	0
13	806	Exchange Gas (Net)	(860,854)	3,130,111
14	807	Broker Fees	0	0
15 16 17 18	808	Storage Activity Gas Withdrawn from Underground Storage Gas Delivered to Underground Storage Total Gas Stored (Net)	21,075,574 (23,072,995) (1,997,421)	37,991,983 (68,756,752) (30,764,769)
19 20 21 22	813	Exchange Fees Fees - Nonaffiliated Fees - Affiliated Total Exchange Fees	0 0 0	0 0 0
23		Gas Lost From Storage	0	0
24		TOTAL GAS PURCHASED	39,992,693	200,148,328

<sup>( )</sup> In Acct. No. 803 negative volumes denotes transportation fuel.

<sup>()</sup> In Acct. No. 808 denotes injection volumes & credit.

Exhibit No. 12 Schedule No. 4 Page 4 of 55 Witness: J Siegler

> 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) (1) \$	NON-LOCAL PURCHASES (SCHEDULE 3) (2) \$	LOCAL PURCHASES (SCHEDULE 4) (3) \$	GAS STORED UNDERGROUND (SCHEDULE 5) (4) \$	TRANSPORTATION & GATHERING (SCHEDULE 6)  (5) \$	TOTAL SCHEDULES (6=1+2+3+4+5) \$
1	FEBRUARY, 2020	769,903	1,547,617	16,919	14,031,122	4,599,958	20,965,519
2	MARCH	763,883	902,575	18,356	8,057,581	4,557,689	14,300,084
3	APRIL	621,752	5,735,159	17,984	(1,846,788)	2,786,983	7,315,090
4	MAY	787,582	4,912,818	15,829	(1,515,845)	2,646,437	6,846,820
5	JUNE	333,347	2,238,596	13,745	(1,142,021)	2,621,228	4,064,894
6	JULY	299,972	5,610,796	10,966	(4,600,555)	2,663,847	3,985,027
7	AUGUST	416,303	7,643,199	10,494	(5,643,564)	2,660,094	5,086,525
8	SEPTEMBER	288,751	4,891,411	10,057	(2,900,485)	2,662,659	4,952,393
9	OCTOBER	307,612	4,324,358	15,878	(1,128,420)	4,212,785	7,732,212
10	NOVEMBER	633,237	1,605,109	10,889	4,534,002	4,383,925	11,167,162
11	DECEMBER	1,304,663	5,162,645	14,287	9,196,996	4,495,249	20,173,840
12	JANUARY, 2021	1,615,278	5,936,480	51,545	10,692,123	4,536,656	22,832,082
13	TOTAL	8,142,283	50,510,763	206,948	27,734,145	42,827,511	129,421,649

Exhibit No. 12 Schedule No. 4 Page 5 of 55 Witness: J Siegler

> 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) COMMODITY (1) \$	NON-LOCAL PURCHASES (SCHEDULE 3) COMMODITY (2) \$	LOCAL PURCHASES (SCHEDULE 4) COMMODITY (3) \$	GAS STORED UNDERGROUND (SCHEDULE 5) DEMAND (4) \$	GAS STORED UNDERGROUND (SCHEDULE 5) COMMODITY (5) \$	TRANSPORTATION & GATHERING (SCHEDULE 6) DEMAND (6) \$	TRANSPORTATION & GATHERING (SCHEDULE 6) COMMODITY (7) \$	TOTAL DEMAND (8=4+6) \$	TOTAL COMMODITY (9=1+2+3+5+7) \$	TOTAL SCHEDULES (10=8+9) \$
1	FEBRUARY, 2020	769,903	1,547,617	16,919	1,487,603	12,543,519	4,501,596	98,362	5,989,198	14,976,321	20,965,519
2	MARCH	763,883	902,575	18,356	1,487,603	6,569,978	4,503,139	54,550	5,990,741	8,309,343	14,300,084
3	APRIL	621,752	5,735,159	17,984	1,460,370	(3,307,158)	2,710,672	76,310	4,171,042	3,144,048	7,315,090
4	MAY	787,582	4,912,818	15,829	1,460,370	(2,976,215)	2,593,063	53,375	4,053,432	2,793,388	6,846,820
5	JUNE	333,347	2,238,596	13,745	1,460,370	(2,602,391)	2,594,129	27,099	4,054,499	10,395	4,064,894
6	JULY	299,972	5,610,796	10,966	1,460,370	(6,060,924)	2,596,446	67,401	4,056,816	(71,790)	3,985,027
7	AUGUST	416,303	7,643,199	10,494	1,460,370	(7,103,934)	2,579,894	80,200	4,040,264	1,046,261	5,086,525
8	SEPTEMBER	288,751	4,891,411	10,057	1,460,370	(4,360,854)	2,609,657	53,002	4,070,027	882,367	4,952,393
9	OCTOBER	307,612	4,324,358	15,878	1,460,369	(2,588,790)	4,165,344	47,441	5,625,713	2,106,499	7,732,212
10	NOVEMBER	633,237	1,605,109	10,889	1,460,413	3,073,589	4,338,469	45,456	5,798,882	5,368,280	11,167,162
11	DECEMBER	1,304,663	5,162,645	14,287	1,460,413	7,736,584	4,371,767	123,482	5,832,180	14,341,660	20,173,840
12	JANUARY, 2021	1,615,278	5,936,480	51,545	1,460,413	9,231,710	4,394,999	141,657	5,855,412	16,976,670	22,832,082
13	TOTAL	8,142,283	50,510,763	206,948	17,579,031	10,155,114	41,959,176	868,335	59,538,207	69,883,442	129,421,649

Exhibit No. 12 Schedule No. 4 Page 6 of 55 Witness: J Siegler

> 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) (1) Dth	NON-LOCAL PURCHASES (SCHEDULE 3) (2) Dth	LOCAL PURCHASES (SCHEDULE 4) (3) Dth	GAS STORED UNDERGROUND (SCHEDULE 5) (4) Dth	TRANSPORTATION & GATHERING (SCHEDULE 6) (5) Dth	TOTAL (6=1+2+3+4+5) Dth
1	FEBRUARY, 2020	501,315	979,775	8,692	5,465,458	(16,150)	6,939,090
2	MARCH	502,185	586,841	10,760	2,835,918	(12,247)	3,923,457
3	APRIL	480,426	3,989,721	10,519	(2,302,112)	(79,878)	2,098,676
4	MAY	517,803	3,146,913	10,691	(1,934,602)	(58,525)	1,682,280
5	JUNE	254,655	1,668,314	8,324	(1,925,602)	(31,945)	(26,254)
6	JULY	225,043	3,886,494	7,093	(4,146,179)	(69,189)	(96,738)
7	AUGUST	232,500	4,791,219	6,825	(4,571,834)	(83,859)	374,851
8	SEPTEMBER	229,376	3,412,247	6,817	(2,995,190)	(60,929)	592,321
9	OCTOBER	281,434	3,111,669	8,998	(1,736,381)	(51,102)	1,614,618
10	NOVEMBER	331,215	801,435	8,614	1,792,611	(10,356)	2,923,519
11	DECEMBER	692,385	2,322,673	7,294	4,503,547	(46,013)	7,479,886
12	JANUARY, 2021	692,385	2,663,525	13,439	5,317,724	(55,678)	8,631,395
13	TOTAL	4,940,722	31,360,827	108,066	303,358	(575,871)	36,137,102

Exhibit No. 12 Schedule No. 4 Page 7 of 55 Witness: J Siegler

EXHIBIT 1-D SCHEDULE 2 SHEET 1 OF 5

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

LINE NO.	MONTH	VOLUME	RATE	TOTAL GAS COST
		(1) DTH	(2) \$/DTH	(3=1x2) \$
1	FEBRUARY, 2020	501,315	1.5123	758,157
2	ADJUSTMENT	0	0.0000	11,747
3	MARCH	502,185	1.5031	754,814
4	ADJUSTMENT	0	0.0000	9,069
5	APRIL	480,426	1.2746	612,362
6	ADJUSTMENT	0	0.0000	9,390
7	MAY	517,803	1.5086	781,178
8	ADJUSTMENT	0	0.0000	6,404
9	JUNE	254,655	1.2954	329,891
10	ADJUSTMENT	0	0.0000	3,456
11	JULY	225,043	1.3275	298,746
12	ADJUSTMENT	0	0.0000	1,226
13	AUGUST	232,500	1.7900	416,175
14	ADJUSTMENT	0	0.0000	128
15	SEPTEMBER	229,376	1.2589	288,751
16	OCTOBER	281,434	1.0930	307,612
17	NOVEMBER	331,215	1.9087	632,182
18	ADJUSTMENT	0	0.0000	1,055
19	DECEMBER	692,385	1.8818	1,302,911
20	ADJUSTMENT	0	0.0000	1,751
21	JANUARY, 2021	692,385	2.3147	1,602,641
22	ADJUSTMENT	0	0.0000	12,638
23	TOTAL	4,940,722		8,142,283

Exhibit No. 12 Schedule No. 4 Page 8 of 55 Witness: J Siegler

EXHIBIT 1-D SCHEDULE 2 SHEET 2 OF 5

# COLUMBIA GAS OF PENNSYLVANIA, INC. DETAIL OF HISTORIC COST OF CITY GATE PURCHASES FROM COLONIAL ENERGY INC

LINE NO.	MONTH	VOLUME (1) DTH	RATE(2) \$/DTH	TOTAL GAS COST (3=1x2) \$
1 2	FEBRUARY, 2020 ADJUSTMENT	501,315 0	1.5123 0.0000	758,157 11,747
3 4	MARCH ADJUSTMENT	502,185 0	1.5031 0.0000	754,814 9,069
5 6	APRIL ADJUSTMENT	0 0	0.0000 0.0000	0 9,390
7	MAY	0	0.0000	0
8	JUNE	0	0.0000	0
9	JULY	0	0.0000	0
10	AUGUST	0	0.0000	0
11	SEPTEMBER	0	0.0000	0
12	OCTOBER	0	0.0000	0
13	NOVEMBER	331,215	1.9087	632,182
14 15	DECEMBER ADJUSTMENT	692,385 0	1.8818 0.0000	1,302,911 1,751
16 17	JANUARY, 2021 ADJUSTMENT	692,385 0	2.3147 0.0000	1,602,641 12,638
18	TOTAL	2,719,485		5,095,299

Exhibit No. 12 Schedule No. 4 Page 9 of 55 Witness: J Siegler

EXHIBIT 1-D SCHEDULE 2 SHEET 3 OF 5

# COLUMBIA GAS OF PENNSYLVANIA, INC. DETAIL OF HISTORIC COST OF CITY GATE PURCHASES FROM NJR ENERGY SERVICES

LINE				TOTAL GAS
NO.	MONTH	VOLUME (1)	RATE (2)	COST (3=1x2)
		DTH	\$/DTH	\$
1	FEBRUARY, 2020	0	0.0000	0
2	MARCH	0	0.0000	0
3	APRIL	104,376	1.4737	153,820
4	MAY	145,742	1.5406	224,536
5	JUNE	4,761	1.3700	6,523
6	JULY	0	0.0000	0
7	AUGUST	0	0.0000	0
8	SEPTEMBER	0	0.0000	0
9	OCTOBER	0	0.0000	0
10	NOVEMBER	0	0.0000	0
11	DECEMBER	0	0.0000	0
12	JANUARY, 2021	0	0.0000	0
13	TOTAL	254,879		384,878

Exhibit No. 12 Schedule No. 4 Page 10 of 55 Witness: J Siegler

EXHIBIT 1-D SCHEDULE 2 SHEET 4 OF 5

# COLUMBIA GAS OF PENNSYLVANIA, INC. DETAIL OF HISTORIC COST OF CITY GATE PURCHASES FROM REPSOL ENERGY

LINE NO.	MONTH	VOLUME	RATE	TOTAL GAS COST
		(1) DTH	(2) \$/DTH	(3=1x2) \$
1	FEBRUARY, 2020	0	0.0000	0
2	MARCH	0	0.0000	0
3	APRIL	376,050	1.2194	458,543
4 5	MAY ADJUSTMENT	302,685 0	1.4815 0.0000	448,413 6,404
6 7	JUNE ADJUSTMENT	249,894 0	1.2940 0.0000	323,369 3,456
8 9	JULY ADJUSTMENT	225,043 0	1.3275 0.0000	298,746 1,226
10 11	AUGUST ADJUSTMENT	232,500 0	1.7900 0.0000	416,175 128
12	SEPTEMBER	225,000	1.2600	283,500
13	OCTOBER	255,434	1.0668	272,492
14 15	NOVEMBER ADJUSTMENT	0 0	0.0000 0.0000	0 1,055
16	DECEMBER	0	0.0000	0
17	JANUARY, 2021	0	0.0000	0
18	TOTAL	1,866,606		2,513,505

Exhibit No. 12 Schedule No. 4 Page 11 of 55 Witness: J Siegler

EXHIBIT 1-D SCHEDULE 2 SHEET 5 OF 5

# COLUMBIA GAS OF PENNSYLVANIA, INC. DETAIL OF HISTORIC COST OF CITY GATE PURCHASES FROM MERCURIA

LINE NO.	MONTH	VOLUME	RATE	TOTAL GAS COST
		(1) DTH	(2) \$/DTH	(3=1x2) \$
1	FEBRUARY, 2020	0	0.0000	0
2	MARCH	0	0.0000	0
3	APRIL	0	0.0000	0
4	MAY	69,376	1.5600	108,230
5	JUNE	0	0.0000	0
6	JULY	0	0.0000	0
7	AUGUST	0	0.0000	0
8	SEPTEMBER	4,376	1.2000	5,251
9	OCTOBER	26,000	1.3508	35,120
10	NOVEMBER	0	0.0000	0
11	DECEMBER	0	0.0000	0
12	JANUARY, 2021	0	0.0000	0
13	TOTAL	99,752		148,601

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, 2020	979,775	1,547,617
2	MARCH	586,841	902,575
3	APRIL	3,989,721	5,735,159
4	MAY	3,146,913	4,912,818
5	JUNE	1,668,314	2,238,596
6	JULY	3,886,494	5,610,796
7	AUGUST	4,791,219	7,643,199
8	SEPTEMBER	3,412,247	4,891,411
9	OCTOBER	3,111,669	4,324,358
10	NOVEMBER	801,435	1,605,109
11	DECEMBER	2,322,673	5,162,645
12	JANUARY, 2021	2,663,525	5,936,480
13	TOTAL	31,360,827	50,510,763

Exhibit No. 12 Schedule No. 4 Page 13 of 55 Witness: J Siegler

> 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 2020

LINE			TOTAL COMMODITY
NO.	SUPPLIER	VOLUMES	DOLLARS
		(1)	(2)
1	<u>ESTIMATE</u>	Dth	\$
2	CITADEL ENERGY MARKETING LLC	15,000	23,813
3	CITIGROUP ENERGY INC.	295,800	452,574
4	COLONIAL ENERGY, INC	146,400	219,088
5	DIRECT ENERGY BUSINESS MARKETING, LLC	30,000	47,550
6	DTE ENERGY TRADING, INC.	220,400	370,272
7	EQT ENERGY, LLC.	8,000	12,960
8	MACQUARIE ENERGY LLC	36,000	58,320
9	VITOL INC.	205,500	352,526
10	TOTAL ESTIMATE	957,100	1,537,102
4.4	AD IIIOT TO A OTHAI		
11	ADJUST TO ACTUAL	0	050
12	COLONIAL ENERGY, INC	0	958
13	GAS LOST DUE TO LINE HITS	(29)	(104)
14	ICE CHARGES	(4.4.245)	119
15 16	GAS SOLD TO SHIPPER (RADS 3.11)	(14,245)	(34,530)
16	GAS PURCHASED FROM SHIPPER (RADS 3.12)	31,683	35,656
17	OMO/OFO CHARGES (RADS 3.7, 3.8, 4.11)	0	(6,499)
18	CHOICE NON-COMPLIANCE CHARGES (RADS 4.12)	0	(47)
19	CHOICE INTERIM CASH OUT	6,276	18,366
20	GAS LEFT ON FOR RECONNECT	(1,011)	(3,404)
21	TOTAL ADJUST TO ACTUAL	22,675	10,515
22	TOTAL SCHEDULE 3, SHEET 2	979,775	1,547,617

Exhibit No. 12 Schedule No. 4 Page 14 of 55 Witness: J Siegler

> 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 2020

LINE NO.	SUPPLIER	VOLUMES	TOTAL COMMODITY DOLLARS
4		(1)	(2)
1	<u>ESTIMATE</u>	Dth	\$
2	CITADEL ENERGY MARKETING LLC	32,000	48,160
3	CITIGROUP ENERGY INC.	500	790
4	COLONIAL ENERGY, INC	190,200	282,694
5	GREYLOCK ENERGY, LLC (ENERGY CORPORATION OF AMERICA)	15,000	23,700
6	NJR ENERGY SERVICES COMPANY	6,500	10,416
7	VITOL INC.	342,500	548,024
8	TOTAL ESTIMATE	586,700	913,784
9	ADJUST TO ACTUAL		
10	COLONIAL ENERGY, INC	0	1,660
11	VITOL INC.	0	1,500
12	GAS LOST DUE TO LINE HITS	(47)	(160)
13	ICE CHARGES	0	20
14	GAS SOLD TO SHIPPER (RADS 3.11)	(9,241)	(21,402)
15	GAS PURCHASED FROM SHIPPER (RADS 3.12)	10,220	13,514
16	OMO/OFO CHARGES (RADS 3.7, 3.8, 4.11)	0	(3,626)
17	CHOICE NON-COMPLIANCE CHARGES (RADS 4.12)	0	(47)
18	GAS LEFT ON FOR RECONNECT	(791)	(2,668)
19	TOTAL ADJUST TO ACTUAL	141	(11,209)
-			(**,=**)
20	TOTAL SCHEDULE 3, SHEET 3	586,841	902,575
	•		

Exhibit No. 12 Schedule No. 4 Page 15 of 55 Witness: J Siegler

> 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 2020

LINE         COMMODITY           NO.         SUPPLIER         OCLMARS           NO.         SUPPLIER         (1)           1         ESTIMATE         (1)           2         ARM ENERGY MANAGEMENT LLC         10,299         14,676           3         CASTLETON COMMODITIES MERCHANT TRADING L.P.         1175,200         239,011           4         CITADEL ENERGY MARKETING LLC         20,000         28,800           5         CNX GAS COMPANY LLC         5,000         8,450           6         COLONIAL ENERGY INC         10,000         14,700           7         CONOCOPHILLIPS COMPANY         630,000         849,150           8         DIRECT ENERGY BUSINESS MARKETING, LLC         30,000         43,900           9         DOMINION ENERGY FIELD SERVICES, INC         7,500         12,356           10         DTE ENERGY TRADING, INC.         1,326,800         1,952,955           11         ELEVATION ENERGY GROUP         1,500         2,434           12         EQT ENERGY, LLC         85,000         127,713           14         INTERSTATE GAS SUPPLY, INC.         7,800         13,280           15         J. ARON & COMPANY         32,900         48,105				TOTAL
Testimate				
SILMATE	NO.	SUPPLIER		
ARM ENERGY MANAGEMENT LLC		FOTIMATE		
3         CASTLETON COMMODITIES MERCHANT TRADING L.P.         175,200         239,011           4         CITADEL ENERGY MARKETING LLC         20,000         28,800           5         CNX GAS COMPANY LLC         5,000         8,450           6         COLONIAL ENERGY, INC         10,000         14,700           7         CONOCOPHILLIPS COMPANY         630,000         43,900           9         DOMINION ENERGY BUSINESS MARKETING, LLC         30,000         43,900           9         DOMINION ENERGY FIELD SERVICES, INC         7,500         12,356           10         DTE ENERGY TRADING, INC.         1,326,800         1,952,955           11         ELEVATION ENERGY GROUP         1,500         2,434           12         EQT ENERGY, LLC         240,000         349,915           13         GREYLOCK ENERGY, LLC         85,000         127,713           14         INTERSTATE GAS SUPPLY, INC.         7,800         13,280           15         J. ARON & COMPANY         32,900         48,105           16         KAISER MARKETING APPALACHIA, LLC         102,500         162,463           17         MACQUARIE ENERGY LT         15,000         39,325           18         MERCURIA ENERGY MORTH AMERICA CORPORATION <td></td> <td></td> <td></td> <td>·</td>				·
4         CITADEL ENERGY MARKETING LLC         20,000         28,800           5         CNX GAS COMPANY LLC         5,000         8,450           6         COLONIAL ENERGY, INC         10,000         14,700           7         CONOCOPHILLIPS COMPANY         630,000         849,150           8         DIRECT ENERGY BUSINESS MARKETING, LLC         30,000         43,900           9         DOMINION ENERGY FIELD SERVICES, INC         7,500         12,356           10         DTE ENERGY TRADING, INC.         1,500         2,434           12         EQT ENERGY GROUP         1,500         2,434           12         EQT ENERGY, LLC         240,000         348,915           13         GREYLOCK ENERGY, LLC         85,000         127,713           14         INTERSTATE GAS SUPPLY, INC.         7,800         13,280           15         J. ARON & COMPANY         32,900         49,105           16         KAISER MARKETING APPALACHIAN, LLC         102,500         399,325           18         MERCURIA ENERGY GAS TRADING LLC         66,500         95,748           19         RANGE RESOURCES - APPALACHIA, LLC         135,663         209,141           20         REPSOL ENERGY NORTH AMERICA CORPORATION <td< td=""><td></td><td></td><td></td><td></td></td<>				
5         CNX GAS COMPANY LLC         5,000         8,450           6         COLONIAL ENERGY, INC         10,000         14,700           7         CONOCOPHILLIPS COMPANY         630,000         849,150           8         DIRECT ENERGY BUSINESS MARKETING, LLC         30,000         43,900           9         DOMINION ENERGY FIELD SERVICES, INC         7,500         12,356           10         DTE ENERGY TRADING, INC.         1,326,800         1,952,955           11         ELEVATION ENERGY GROUP         1,500         2,434           12         EQT ENERGY, LLC.         240,000         348,915           13         GREYLOCK ENERGY, LLC         85,000         127,713           14         INTERSTATE GAS SUPPLY, INC.         7,800         13,280           15         J. ARON & COMPANY         32,900         48,105           16         KAISER MARKETING APPALACHIAN, LLC         102,500         162,463           17         MACQUARIE ENERGY GAS TRADING LLC         66,500         39,325           18         MERCURIA ENERGY GAS TRADING LLC         135,663         209,141           20         REPSOL ENERGY MANAGEMENT, LP         15,000         37,750           21         SEQUENT ENERGY MEACES GROUP, LLC				
6         COLONIAL ENERGY, INC         10,000         14,700           7         CONOCOPHILLIPS COMPANY         630,000         849,150           8         DIRECT ENERGY BUSINESS MARKETING, LLC         30,000         43,900           9         DOMINION ENERGY FIELD SERVICES, INC         7,500         12,368           10         DTE ENERGY TRADING, INC.         13,26,800         1,952,955           11         ELEVATION ENERGY GROUP         1,500         2,434           12         EQT ENERGY, LLC.         240,000         348,915           13         GREYLOCK ENERGY, LLC         85,000         127,713           14         INTERSTATE GAS SUPPLY, INC.         7,800         13,280           15         J. ARON & COMPANY         32,900         48,105           16         KAISER MARKETING APPALACHIAN, LLC         102,500         162,463           17         MACQUARIE ENERGY LLC         265,000         399,325           18         MERCURIA ENERGY SA TRADING LLC         135,663         209,141           20         REPSOL ENERGY NORTH AMERICA CORPORATION         294,000         343,980           21         SEQUENT ENERGY LLC         5,000         7,750           23         SPOTLIGHT ENERGY LLC         5				
7         CONOCOPHILLIPS COMPANY         630,000         849,150           8         DIRECT ENERGY BUSINESS MARKETING, LLC         30,000         43,900           9         DOMINION ENERGY FIELD SERVICES, INC         7,500         12,356           10         DTE ENERGY TRADING, INC.         1,326,800         1,952,955           11         ELEVATION ENERGY GROUP         1,500         2,434           12         EQT ENERGY, LLC.         240,000         348,915           13         GREYLOCK ENERGY, LLC         85,000         127,713           14         INTERSTATE GAS SUPPLY, INC.         7,800         13,280           15         J. ARON & COMPANY         32,900         48,105           16         KAISER MARKETING APPALACHIAN, LLC         102,500         192,463           17         MACQUARIE ENERGY LLC         265,000         399,325           18         MERCURIA ENERGY GAS TRADING LLC         66,500         95,748           19         RANGE RESOURCES - APPALACHIA, LLC         135,663         209,141           20         REPSOL ENERGY NORTH AMERICA CORPORATION         294,000         343,980           21         SEQUENT ENERGY MANAGEMENT, LP         15,000         7,750           22         SOUTH JERSEY				
B   DIRECT ENERGY BUSINESS MARKETING, LLC   30,000   43,900   9   DOMINION ENERGY FIELD SERVICES, INC   7,500   12,356   10   DTE ENERGY TRADING, INC.   1,326,800   1,952,955   11   ELEVATION ENERGY GROUP   1,500   2,434   12   EQT ENERGY, LLC.   240,000   348,915   36,600   127,713   13   GREYLOCK ENERGY, LLC   88,000   127,713   14   INTERSTATE GAS SUPPLY, INC.   7,800   13,280   15   J. ARON & COMPANY   32,900   48,105   16   KAISER MARKETING APPALACHIAN, LLC   102,500   162,463   17   MACQUARIE ENERGY LLC   265,000   399,325   18   MERCURIA ENERGY GAS TRADING LLC   265,000   399,325   18   MERCURIA ENERGY GAS TRADING LLC   135,663   209,141   200   REPSOL ENERGY NORTH AMERICA CORPORATION   294,000   343,980   21   SEQUENT ENERGY MANAGEMENT, LP   15,000   22,625   25   2011 JERSEY RESOURCES GROUP, LLC   5,700   8,180   24   SWIN ENERGY LLC   5,700   8,180   24   SWIN ENERGY LLC   10,000   14,750   25   25   25   25   25   25   25				
9         DOMINION ENERGY FIELD SERVICES, INC         7,500         12,356           10         DTE ENERGY TRADING, INC.         1,326,800         1,952,955           11         ELEVATION ENERGY GROUP         1,500         2,434           12         EGT ENERGY, LLC.         240,000         348,915           13         GREYLOCK ENERGY, LLC         85,000         127,713           14         INTERSTATE GAS SUPPLY, INC.         7,800         13,280           15         J. ARON & COMPANY         32,900         48,105           16         KAISER MARKETING APPALACHIAN, LLC         102,500         162,463           17         MACQUARIE ENERGY LLC         265,000         399,325           18         MERCURIA ENERGY GAS TRADING LLC         165,600         95,748           19         RANGE RESOURCES - APPALACHIA, LLC         135,663         209,141           20         REPSOL ENERGY NORTH AMERICA CORPORATION         294,000         343,980           21         SEQUENT ENERGY MANAGEMENT, LP         15,000         7,750           23         SPOTLIGHT ENERGY MANAGEMENT, LP         5,000         7,750           23         SPOTLIGHT ENERGY LLC         5,700         8,180           24         SWN ENERGY				
10         DTE ENERGY TRADING, INC.         1,326,800         1,952,955           11         ELEVATION ENERGY GROUP         1,500         2,434           12         EQT ENERGY, LLC         240,000         348,915           13         GREYLOCK ENERGY, LLC         85,000         127,713           14         INTERSTATE GAS SUPPLY, INC.         7,800         13,280           15         J. ARON & COMPANY         32,900         48,105           16         KAISER MARKETING APPALACHIAN, LLC         102,500         162,463           17         MACQUARIE ENERGY BAS TRADING LLC         265,000         399,325           18         MERCURIA ENERGY GAS TRADING LLC         135,663         209,141           20         REPSOL ENERGY NORTH AMERICA CORPORATION         229,4000         343,980           21         SEQUENT ENERGY MANAGEMENT, LP         15,000         22,625           22         SOUTH JERSEY RESOURCES GROUP, LLC         5,000         7,750           23         SPOTLIGHT ENERGY LLC         5,700         8,180           24         SWN ENERGY         11,200         17,964           25         TENASKA GAS STORAGE, LLC         10,000         14,750           26         TWIN EAGLE RESOURCE MANAGEMENT, LLC		· · · · · · · · · · · · · · · · · · ·	•	
11         ELEVATION ENERGY GROUP         1,500         2,434           12         EQT ENERGY, LLC.         240,000         348,915           13         GREYLOCK ENERGY, LLC         85,000         127,713           14         INTERSTATE GAS SUPPLY, INC.         7,800         13,280           15         J. ARON & COMPANY         32,900         48,105           16         KAISER MARKETING APPALACHIAN, LLC         102,500         162,463           17         MACQUARIE ENERGY LLC         265,000         399,325           18         MERCURIA ENERGY GAS TRADING LLC         66,500         95,748           19         RANGE RESOURCES - APPALACHIA, LLC         135,663         209,141           20         REPSOL ENERGY NORTH AMERICA CORPORATION         294,000         343,980           21         SEQUENT ENERGY MANAGEMENT, LP         15,000         7,750           22         SOUTH JERSEY RESOURCES GROUP, LLC         5,000         7,750           23         SPOTLIGHT ENERGY LLC         5,000         7,750           24         SWM ENERGY         11,200         17,964           25         TENASKA GAS STORAGE, LLC         10,000         14,750           26         TWIN EAGLE RESOURCE MANAGEMENT, LLC <t< td=""><td></td><td></td><td></td><td></td></t<>				
12         EQT ENERGY, LLC.         240,000         348,915           13         GREYLOCK ENERGY, LLC         85,000         127,713           14         INTERSTATE GAS SUPPLY, INC.         7,800         13,280           15         J. ARON & COMPANY         32,900         48,105           16         KAISER MARKETING APPALACHIAN, LLC         102,500         162,463           17         MACQUARIE ENERGY LC         265,000         399,325           18         MERCURIA ENERGY GAS TRADING LLC         66,500         95,748           19         RANGE RESOURCES - APPALACHIA, LLC         135,663         209,141           20         REPSOL ENERGY NORTH AMERICA CORPORATION         294,000         343,980           21         SEQUENT ENERGY MANAGEMENT, LP         15,000         22,625           22         SOUTH JERSEY RESOURCES GROUP, LLC         5,000         7,750           23         SPOTLIGHT ENERGY LLC         5,700         8,180           24         SWN ENERGY         11,200         17,964           25         TENASKA GAS STORAGE, LLC         10,000         14,750           26         TWIN EAGLE RESOURCE MANAGEMENT, LLC         1,700         2,758           27         VITOL INC.         414,500 <td></td> <td></td> <td></td> <td></td>				
13         GREYLOCK ENERGY, LLC         85,000         127,713           14         INTERSTATE GAS SUPPLY, INC.         7,800         13,280           15         J. ARON & COMPANY         32,900         48,105           16         KAISER MARKETING APPALACHIAN, LLC         102,500         162,463           17         MACQUARIE ENERGY LLC         265,000         399,325           18         MERCURIA ENERGY GAS TRADING LLC         135,663         209,141           20         REPSOL ENERGY NORTH AMERICA CORPORATION         294,000         343,980           21         SEQUENT ENERGY MANAGEMENT, LP         15,000         22,625           22         SOUTH JERSEY RESOURCES GROUP, LLC         5,000         7,750           23         SPOTLIGHT ENERGY LLC         5,700         8,180           24         SWN ENERGY         11,200         17,964           25         TENASKA GAS STORAGE, LLC         10,000         14,750           26         TWIN EAGLE RESOURCE MANAGEMENT, LLC         1,700         2,758           27         VITOL INC.         414,500         619,744           28         WASHINGTON GAS LIGHT COMPANY         81,100         132,732           29         TOTAL ESTIMATE         0				
14         INTERSTATE GAS SUPPLY, INC.         7,800         13,280           15         J. ARON & COMPANY         32,900         48,105           16         KAISER MARKETING APPALACHIAN, LLC         102,500         162,463           17         MACQUARIE ENERGY LLC         265,000         399,325           18         MERCURIA ENERGY GAS TRADING LLC         66,500         95,748           19         RANGE RESOURCES - APPALACHIA, LLC         135,663         209,141           20         REPSOL ENERGY NORTH AMERICA CORPORATION         294,000         343,980           21         SEQUENT ENERGY MANAGEMENT, LP         15,000         22,625           22         SOUTH JERSEY RESOURCES GROUP, LLC         5,700         7,750           23         SPOTLIGHT ENERGY LLC         5,700         8,180           24         SWN ENERGY         11,200         17,964           25         TENASKA GAS STORAGE, LLC         10,000         14,750           26         TWIN EAGLE RESOURCE MANAGEMENT, LLC         1,700         2,758           27         VITOL INC.         414,500         619,744           28         WASHINGTON GAS LIGHT COMPANY         81,100         132,732           29         TOTAL ESTIMATE         0 </td <td></td> <td></td> <td></td> <td></td>				
15         J. ARON & COMPANY         32,900         48,105           16         KAISER MARKETING APPALACHIAN, LLC         102,500         162,463           17         MACQUARIE ENERGY LLC         265,000         399,325           18         MERCURIA ENERGY GAS TRADING LLC         66,500         95,748           19         RANGE RESOURCES - APPALACHIA, LLC         135,663         209,141           20         REPSOL ENERGY NORTH AMERICA CORPORATION         294,000         343,980           21         SEQUENT ENERGY MANAGEMENT, LP         15,000         22,625           22         SOUTH JERSEY RESOURCES GROUP, LLC         5,000         7,750           23         SPOTLIGHT ENERGY LLC         5,700         8,180           24         SWN ENERGY         11,000         14,750           25         TENASKA GAS STORAGE, LLC         1,700         2,758           26         TWIN EAGLE RESOURCE MANAGEMENT, LLC         1,700         2,758           27         VITOL INC.         414,500         619,744           28         WASHINGTON GAS LIGHT COMPANY         81,100         132,732           29         TOTAL ESTIMATE         0         2,170           31         COLONIAL ENERGY, INC         0 <t< td=""><td></td><td>·</td><td></td><td></td></t<>		·		
16         KAISER MARKETING APPALACHIAN, LLC         102,500         162,463           17         MACQUARIE ENERGY LLC         265,000         399,325           18         MERCURIA ENERGY GAS TRADING LLC         66,500         95,748           19         RANGE RESOURCES - APPALACHIA, LLC         135,663         209,141           20         REPSOL ENERGY NORTH AMERICA CORPORATION         294,000         343,980           21         SEQUENT ENERGY MANAGEMENT, LP         15,000         22,625           22         SOUTH JERSEY RESOURCES GROUP, LLC         5,700         7,750           23         SPOTLIGHT ENERGY LLC         5,700         8,180           24         SWN ENERGY         11,200         17,964           25         TENASKA GAS STORAGE, LLC         10,000         14,750           26         TWIN EAGLE RESOURCE MANAGEMENT, LLC         1,700         2,758           27         VITOL INC.         414,500         619,744           28         WASHINGTON GAS LIGHT COMPANY         81,100         132,732           29         TOTAL ESTIMATE         0         2,170           31         COLONIAL ENERGY, INC         0         2,770           32         GAS LOST DUE TO LINE HITS         (102)		•		
17       MACQUARIE ENERGY LLC       265,000       399,325         18       MERCURIA ENERGY GAS TRADING LLC       66,500       95,748         19       RANGE RESOURCES - APPALACHIA, LLC       135,663       209,141         20       REPSOL ENERGY NORTH AMERICA CORPORATION       294,000       343,980         21       SEQUENT ENERGY MANAGEMENT, LP       15,000       22,625         22       SOUTH JERSEY RESOURCES GROUP, LLC       5,000       7,750         23       SPOTLIGHT ENERGY LLC       5,700       8,180         24       SWN ENERGY       11,200       17,964         25       TENASKA GAS STORAGE, LLC       10,000       14,750         26       TWIN EAGLE RESOURCE MANAGEMENT, LLC       1,700       2,758         27       VITOL INC.       414,500       619,744         28       WASHINGTON GAS LIGHT COMPANY       81,100       132,732         29       TOTAL ESTIMATE       3,989,862       5,741,602         30       ADJUST TO ACTUAL       0       2,170         31       COLONIAL ENERGY, INC       0       2,170         32       GAS LOST DUE TO LINE HITS       (102)       (343)         33       ICE CHARGES       0       7			· · · · · · · · · · · · · · · · · · ·	
18         MERCURIA ENERGY GAS TRADING LLC         66,500         95,748           19         RANGE RESOURCES - APPALACHIA, LLC         135,663         209,141           20         REPSOL ENERGY NORTH AMERICA CORPORATION         294,000         343,980           21         SEQUENT ENERGY MANAGEMENT, LP         15,000         7,750           22         SOUTH JERSEY RESOURCES GROUP, LLC         5,000         7,750           23         SPOTLIGHT ENERGY LLC         5,700         8,180           24         SWN ENERGY         11,200         17,964           25         TENASKA GAS STORAGE, LLC         10,000         14,750           26         TWIN EAGLE RESOURCE MANAGEMENT, LLC         1,700         2,758           27         VITOL INC.         414,500         619,744           28         WASHINGTON GAS LIGHT COMPANY         81,100         132,732           29         TOTAL ESTIMATE         0         2,170           30         ADJUST TO ACTUAL         0         2,170           31         COLONIAL ENERGY, INC         0         2,170           32         GAS LOST DUE TO LINE HITS         (102)         (343)           31         ICE CHARGES         0         70				•
19       RANGE RESOURCES - APPALACHIA, LLC       135,663       209,141         20       REPSOL ENERGY NORTH AMERICA CORPORATION       294,000       343,980         21       SEQUENT ENERGY MANAGEMENT, LP       15,000       22,625         22       SOUTH JERSEY RESOURCES GROUP, LLC       5,000       7,750         23       SPOTLIGHT ENERGY LLC       5,700       8,180         24       SWN ENERGY       11,200       17,964         25       TENASKA GAS STORAGE, LLC       10,000       14,750         26       TWIN EAGLE RESOURCE MANAGEMENT, LLC       1,700       2,758         27       VITOL INC.       414,500       619,744         28       WASHINGTON GAS LIGHT COMPANY       81,100       132,732         29       TOTAL ESTIMATE       3,989,862       5,741,602         30       ADJUST TO ACTUAL       0       2,170         31       COLONIAL ENERGY, INC       0       2,170         32       GAS LOST DUE TO LINE HITS       (102)       (343)         33       ICE CHARGES       0       7         34       GAS SOLD TO SHIPPER (RADS 3.11)       (5,640)       (11,811)         35       GAS PURCHASED FROM SHIPPER (RADS 3.12)       6,633       7,804<				
20       REPSOL ENERGY NORTH AMERICA CORPORATION       294,000       343,980         21       SEQUENT ENERGY MANAGEMENT, LP       15,000       22,625         22       SOUTH JERSEY RESOURCES GROUP, LLC       5,000       7,750         23       SPOTLIGHT ENERGY LLC       5,700       8,180         24       SWN ENERGY       11,200       17,964         25       TENASKA GAS STORAGE, LLC       10,000       14,750         26       TWIN EAGLE RESOURCE MANAGEMENT, LLC       1,700       2,758         27       VITOL INC.       414,500       619,744         28       WASHINGTON GAS LIGHT COMPANY       81,100       132,732         29       TOTAL ESTIMATE       3,989,862       5,741,602         30       ADJUST TO ACTUAL       0       2,170         31       COLONIAL ENERGY, INC       0       2,170         32       GAS LOST DUE TO LINE HITS       (102)       (343)         33       ICE CHARGES       0       70         34       GAS SOLD TO SHIPPER (RADS 3.11)       (5,640)       (11,811)         35       GAS PURCHASED FROM SHIPPER (RADS 3.12)       6,633       7,804         36       OMO/OFO CHARGES (RADS 3.7, 3.8, 4.11)       0       (998) <td></td> <td></td> <td></td> <td></td>				
21       SEQUENT ENERGY MANAGEMENT, LP       15,000       22,625         22       SOUTH JERSEY RESOURCES GROUP, LLC       5,000       7,750         23       SPOTLIGHT ENERGY LLC       5,700       8,180         24       SWN ENERGY       11,200       17,964         25       TENASKA GAS STORAGE, LLC       10,000       14,750         26       TWIN EAGLE RESOURCE MANAGEMENT, LLC       1,700       2,758         27       VITOL INC.       414,500       619,744         28       WASHINGTON GAS LIGHT COMPANY       81,100       132,732         29       TOTAL ESTIMATE       3,989,862       5,741,602         30       ADJUST TO ACTUAL       0       2,170         31       COLONIAL ENERGY, INC       0       2,170         32       GAS LOST DUE TO LINE HITS       (102)       (343)         33       ICE CHARGES       0       70         34       GAS SOLD TO SHIPPER (RADS 3.11)       (5,640)       (11,811)         35       GAS PURCHASED FROM SHIPPER (RADS 3.12)       6,633       7,804         36       OMO/OFO CHARGES (RADS 3.7, 3, 8, 4.11)       0       (998)         37       CHOICE NON-COMPLIANCE CHARGES (RADS 4.12)       0       (75)				•
22       SOUTH JERSEY RESOURCES GROUP, LLC       5,000       7,750         23       SPOTLIGHT ENERGY LLC       5,700       8,180         24       SWN ENERGY       11,200       17,964         25       TENASKA GAS STORAGE, LLC       10,000       14,750         26       TWIN EAGLE RESOURCE MANAGEMENT, LLC       1,700       2,758         27       VITOL INC.       414,500       619,744         28       WASHINGTON GAS LIGHT COMPANY       81,100       132,732         29       TOTAL ESTIMATE       3,989,862       5,741,602         30       ADJUST TO ACTUAL       0       2,170         31       COLONIAL ENERGY, INC       0       2,170         32       GAS LOST DUE TO LINE HITS       (102)       (343)         33       ICE CHARGES       0       70         34       GAS SOLD TO SHIPPER (RADS 3.11)       (5,640)       (11,811)         35       GAS PURCHASED FROM SHIPPER (RADS 3.12)       6,633       7,804         36       OMO/OFO CHARGES (RADS 3.7, 3.8, 4.11)       0       (998)         37       CHOICE NON-COMPLIANCE CHARGES (RADS 4.12)       0       (75)         38       GAS LEFT ON FOR RECONNECT       (1,032)       (3,260) <td></td> <td></td> <td></td> <td></td>				
23       SPOTLIGHT ENERGY LLC       5,700       8,180         24       SWN ENERGY       11,200       17,964         25       TENASKA GAS STORAGE, LLC       10,000       14,750         26       TWIN EAGLE RESOURCE MANAGEMENT, LLC       1,700       2,758         27       VITOL INC.       414,500       619,744         28       WASHINGTON GAS LIGHT COMPANY       81,100       132,732         29       TOTAL ESTIMATE       3,989,862       5,741,602         30       ADJUST TO ACTUAL       0       2,170         31       COLONIAL ENERGY, INC       0       2,170         32       GAS LOST DUE TO LINE HITS       (102)       (343)         33       ICE CHARGES       0       70         34       GAS SOLD TO SHIPPER (RADS 3.11)       (5,640)       (11,811)         35       GAS PURCHASED FROM SHIPPER (RADS 3.12)       6,633       7,804         36       OMO/OFO CHARGES (RADS 3.7, 3.8, 4.11)       0       (998)         37       CHOICE NON-COMPLIANCE CHARGES (RADS 4.12)       0       (75)         38       GAS LEFT ON FOR RECONNECT       (1,032)       (3,260)         39       TOTAL ADJUST TO ACTUAL       (141)       (6,442) <td></td> <td></td> <td></td> <td></td>				
24       SWN ENERGY       11,200       17,964         25       TENASKA GAS STORAGE, LLC       10,000       14,750         26       TWIN EAGLE RESOURCE MANAGEMENT, LLC       1,700       2,758         27       VITOL INC.       414,500       619,744         28       WASHINGTON GAS LIGHT COMPANY       81,100       132,732         29       TOTAL ESTIMATE       3,989,862       5,741,602         30       ADJUST TO ACTUAL       0       2,170         31       COLONIAL ENERGY, INC       0       2,170         32       GAS LOST DUE TO LINE HITS       (102)       (343)         33       ICE CHARGES       0       70         34       GAS SOLD TO SHIPPER (RADS 3.11)       (5,640)       (11,811)         35       GAS PURCHASED FROM SHIPPER (RADS 3.12)       6,633       7,804         36       OMO/OFO CHARGES (RADS 3.7, 3.8, 4.11)       0       (998)         37       CHOICE NON-COMPLIANCE CHARGES (RADS 4.12)       0       (75)         38       GAS LEFT ON FOR RECONNECT       (1,032)       (3,260)         39       TOTAL ADJUST TO ACTUAL       (141)       (6,442)				
25       TENASKA GAS STORAGE, LLC       10,000       14,750         26       TWIN EAGLE RESOURCE MANAGEMENT, LLC       1,700       2,758         27       VITOL INC.       414,500       619,744         28       WASHINGTON GAS LIGHT COMPANY       81,100       132,732         29       TOTAL ESTIMATE       3,989,862       5,741,602         30       ADJUST TO ACTUAL       0       2,170         31       COLONIAL ENERGY, INC       0       2,170         32       GAS LOST DUE TO LINE HITS       (102)       (343)         33       ICE CHARGES       0       70         34       GAS SOLD TO SHIPPER (RADS 3.11)       (5,640)       (11,811)         35       GAS PURCHASED FROM SHIPPER (RADS 3.12)       6,633       7,804         36       OMO/OFO CHARGES (RADS 3.7, 3.8, 4.11)       0       (998)         37       CHOICE NON-COMPLIANCE CHARGES (RADS 4.12)       0       (75)         38       GAS LEFT ON FOR RECONNECT       (1,032)       (3,260)         39       TOTAL ADJUST TO ACTUAL       (141)       (6,442)				
26       TWIN EAGLE RESOURCE MANAGEMENT, LLC       1,700       2,758         27       VITOL INC.       414,500       619,744         28       WASHINGTON GAS LIGHT COMPANY       81,100       132,732         29       TOTAL ESTIMATE       3,989,862       5,741,602         30       ADJUST TO ACTUAL       0       2,170         31       COLONIAL ENERGY, INC       0       2,170         32       GAS LOST DUE TO LINE HITS       (102)       (343)         33       ICE CHARGES       0       70         34       GAS SOLD TO SHIPPER (RADS 3.11)       (5,640)       (11,811)         35       GAS PURCHASED FROM SHIPPER (RADS 3.12)       6,633       7,804         36       OMO/OFO CHARGES (RADS 3.7, 3.8, 4.11)       0       (998)         37       CHOICE NON-COMPLIANCE CHARGES (RADS 4.12)       0       (75)         38       GAS LEFT ON FOR RECONNECT       (1,032)       (3,260)         39       TOTAL ADJUST TO ACTUAL       (141)       (6,442)				
27       VITOL INC.       414,500       619,744         28       WASHINGTON GAS LIGHT COMPANY       81,100       132,732         29       TOTAL ESTIMATE       3,989,862       5,741,602         30       ADJUST TO ACTUAL       3,989,862       5,741,602         31       COLONIAL ENERGY, INC       0       2,170         32       GAS LOST DUE TO LINE HITS       (102)       (343)         33       ICE CHARGES       0       70         34       GAS SOLD TO SHIPPER (RADS 3.11)       (5,640)       (11,811)         35       GAS PURCHASED FROM SHIPPER (RADS 3.12)       6,633       7,804         36       OMO/OFO CHARGES (RADS 3.7, 3.8, 4.11)       0       (998)         37       CHOICE NON-COMPLIANCE CHARGES (RADS 4.12)       0       (75)         38       GAS LEFT ON FOR RECONNECT       (1,032)       (3,260)         39       TOTAL ADJUST TO ACTUAL       (141)       (6,442)				
28       WASHINGTON GAS LIGHT COMPANY       81,100       132,732         29       TOTAL ESTIMATE       3,989,862       5,741,602         30       ADJUST TO ACTUAL       3,989,862       5,741,602         31       COLONIAL ENERGY, INC       0       2,170         32       GAS LOST DUE TO LINE HITS       (102)       (343)         33       ICE CHARGES       0       70         34       GAS SOLD TO SHIPPER (RADS 3.11)       (5,640)       (11,811)         35       GAS PURCHASED FROM SHIPPER (RADS 3.12)       6,633       7,804         36       OMO/OFO CHARGES (RADS 3.7, 3.8, 4.11)       0       (998)         37       CHOICE NON-COMPLIANCE CHARGES (RADS 4.12)       0       (75)         38       GAS LEFT ON FOR RECONNECT       (1,032)       (3,260)         39       TOTAL ADJUST TO ACTUAL       (141)       (6,442)				
29       TOTAL ESTIMATE       3,989,862       5,741,602         30       ADJUST TO ACTUAL       31       COLONIAL ENERGY, INC       0       2,170         32       GAS LOST DUE TO LINE HITS       (102)       (343)         33       ICE CHARGES       0       70         34       GAS SOLD TO SHIPPER (RADS 3.11)       (5,640)       (11,811)         35       GAS PURCHASED FROM SHIPPER (RADS 3.12)       6,633       7,804         36       OMO/OFO CHARGES (RADS 3.7, 3.8, 4.11)       0       (998)         37       CHOICE NON-COMPLIANCE CHARGES (RADS 4.12)       0       (75)         38       GAS LEFT ON FOR RECONNECT       (1,032)       (3,260)         39       TOTAL ADJUST TO ACTUAL       (141)       (6,442)				
30       ADJUST TO ACTUAL         31       COLONIAL ENERGY, INC       0       2,170         32       GAS LOST DUE TO LINE HITS       (102)       (343)         33       ICE CHARGES       0       70         34       GAS SOLD TO SHIPPER (RADS 3.11)       (5,640)       (11,811)         35       GAS PURCHASED FROM SHIPPER (RADS 3.12)       6,633       7,804         36       OMO/OFO CHARGES (RADS 3.7, 3.8, 4.11)       0       (998)         37       CHOICE NON-COMPLIANCE CHARGES (RADS 4.12)       0       (75)         38       GAS LEFT ON FOR RECONNECT       (1,032)       (3,260)         39       TOTAL ADJUST TO ACTUAL       (141)       (6,442)				
31         COLONIAL ENERGY, INC         0         2,170           32         GAS LOST DUE TO LINE HITS         (102)         (343)           33         ICE CHARGES         0         70           34         GAS SOLD TO SHIPPER (RADS 3.11)         (5,640)         (11,811)           35         GAS PURCHASED FROM SHIPPER (RADS 3.12)         6,633         7,804           36         OMO/OFO CHARGES (RADS 3.7, 3.8, 4.11)         0         (998)           37         CHOICE NON-COMPLIANCE CHARGES (RADS 4.12)         0         (75)           38         GAS LEFT ON FOR RECONNECT         (1,032)         (3,260)           39         TOTAL ADJUST TO ACTUAL         (141)         (6,442)	20	TOTAL LOTIMATE	3,303,002	3,7 41,002
31         COLONIAL ENERGY, INC         0         2,170           32         GAS LOST DUE TO LINE HITS         (102)         (343)           33         ICE CHARGES         0         70           34         GAS SOLD TO SHIPPER (RADS 3.11)         (5,640)         (11,811)           35         GAS PURCHASED FROM SHIPPER (RADS 3.12)         6,633         7,804           36         OMO/OFO CHARGES (RADS 3.7, 3.8, 4.11)         0         (998)           37         CHOICE NON-COMPLIANCE CHARGES (RADS 4.12)         0         (75)           38         GAS LEFT ON FOR RECONNECT         (1,032)         (3,260)           39         TOTAL ADJUST TO ACTUAL         (141)         (6,442)	30	ADJUST TO ACTUAL		
32       GAS LOST DUE TO LINE HITS       (102)       (343)         33       ICE CHARGES       0       70         34       GAS SOLD TO SHIPPER (RADS 3.11)       (5,640)       (11,811)         35       GAS PURCHASED FROM SHIPPER (RADS 3.12)       6,633       7,804         36       OMO/OFO CHARGES (RADS 3.7, 3.8, 4.11)       0       (998)         37       CHOICE NON-COMPLIANCE CHARGES (RADS 4.12)       0       (75)         38       GAS LEFT ON FOR RECONNECT       (1,032)       (3,260)         39       TOTAL ADJUST TO ACTUAL       (141)       (6,442)			0	2.170
33       ICE CHARGES       0       70         34       GAS SOLD TO SHIPPER (RADS 3.11)       (5,640)       (11,811)         35       GAS PURCHASED FROM SHIPPER (RADS 3.12)       6,633       7,804         36       OMO/OFO CHARGES (RADS 3.7, 3.8, 4.11)       0       (998)         37       CHOICE NON-COMPLIANCE CHARGES (RADS 4.12)       0       (75)         38       GAS LEFT ON FOR RECONNECT       (1,032)       (3,260)         39       TOTAL ADJUST TO ACTUAL       (141)       (6,442)				
34       GAS SOLD TO SHIPPER (RADS 3.11)       (5,640)       (11,811)         35       GAS PURCHASED FROM SHIPPER (RADS 3.12)       6,633       7,804         36       OMO/OFO CHARGES (RADS 3.7, 3.8, 4.11)       0       (998)         37       CHOICE NON-COMPLIANCE CHARGES (RADS 4.12)       0       (75)         38       GAS LEFT ON FOR RECONNECT       (1,032)       (3,260)         39       TOTAL ADJUST TO ACTUAL       (141)       (6,442)				
35       GAS PURCHASED FROM SHIPPER (RADS 3.12)       6,633       7,804         36       OMO/OFO CHARGES (RADS 3.7, 3.8, 4.11)       0       (998)         37       CHOICE NON-COMPLIANCE CHARGES (RADS 4.12)       0       (75)         38       GAS LEFT ON FOR RECONNECT       (1,032)       (3,260)         39       TOTAL ADJUST TO ACTUAL       (141)       (6,442)		GAS SOLD TO SHIPPER (RADS 3.11)	(5,640)	(11,811)
36       OMO/OFO CHARGES (RADS 3.7, 3.8, 4.11)       0       (998)         37       CHOICE NON-COMPLIANCE CHARGES (RADS 4.12)       0       (75)         38       GAS LEFT ON FOR RECONNECT       (1,032)       (3,260)         39       TOTAL ADJUST TO ACTUAL       (141)       (6,442)	35		, ,	
37       CHOICE NON-COMPLIANCE CHARGES (RADS 4.12)       0       (75)         38       GAS LEFT ON FOR RECONNECT       (1,032)       (3,260)         39       TOTAL ADJUST TO ACTUAL       (141)       (6,442)		OMO/OFO CHARGES (RADS 3.7, 3.8, 4.11)		(998)
38       GAS LEFT ON FOR RECONNECT       (1,032)       (3,260)         39       TOTAL ADJUST TO ACTUAL       (141)       (6,442)	37	CHOICE NON-COMPLIANCE CHARGES (RADS 4.12)	0	
39 TOTAL ADJUST TO ACTUAL (141) (6,442)	38	GAS LEFT ON FOR RECONNECT	(1,032)	
40 TOTAL SCHEDULE 3, SHEET 4 3,989,721 5,735,159		TOTAL ADJUST TO ACTUAL		
	40	TOTAL SCHEDULE 3, SHEET 4	3,989,721	5,735,159

Exhibit No. 12 Schedule No. 4 Page 16 of 55 Witness: J Siegler

> 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 2020

			TOTAL
LINE			COMMODITY
NO.	SUPPLIER	VOLUMES	DOLLARS
		(1)	(2)
1	<u>ESTIMATE</u>	Dth	\$
2	ARM ENERGY MANAGEMENT LLC	25,000	44,625
3	ASCENT RESOURCES - UTICA, LLC	19,000	30,685
4	BP ENERGY COMPANY	4,900	7,840
5	CASTLETON COMMODITIES MERCHANT TRADING L.P.	5,000	8,175
6	CHEVRON NATURAL GAS	10,000	15,100
7	CITADEL ENERGY MARKETING LLC	4,000	5,920
8	CONOCOPHILLIPS COMPANY	310,000	492,900
9	DTE ENERGY TRADING, INC.	1,854,500	2,957,943
10	ELEVATION ENERGY GROUP	1,200	1,932
11	EQT ENERGY, LLC.	279,000	401,760
12	GREYLOCK ENERGY, LLC	16,100	26,100
13	INTERSTATE GAS SUPPLY, INC.	9,300	15,601
14	J. ARON & COMPANY	10,000	14,800
15	KAISER MARKETING APPALACHIAN, LLC	44,900	73,687
16	MERCURIA ENERGY GAS TRADING LLC	10,000	15,450
17	NEXTERA ENERGY POWER MARKETING, LLC	4,000	6,520
18	RANGE RESOURCES	15,000	24,100
19	REPSOL ENERGY NORTH AMERICA CORPORATION	389,700	553,374
20	SOUTHWESTERN ENERGY SERVICES COMPANY	3,000	4,523
21	TENASKA GAS STORAGE, LLC	150	203
22	UNITED ENERGY TRADING, LLC	10,000	16,700
23	VITOL INC.	107,500	166,613
24	WASHINGTON GAS LIGHT COMPANY	10,000	16,775
25	WASHINGTON GAS ENERGY SERVICES, INC.	1,400	2,352
26	TOTAL ESTIMATE	3,143,650	4,903,676
27	ADJUST TO ACTUAL		
28	CASTLETON COMMODITIES MERCHANT TRADING L.P.	0	(2,090)
29	RANGE RESOURCES - APPALACHIA, LLC	0	(390)
30	REPSOL ENERGY NORTH AMERICA CORPORATION	0	13,562
31	GAS LOST DUE TO LINE HITS	(98)	(339)
32	ICE CHARGES	° 0	`119 <sup>´</sup>
33	GAS SOLD TO SHIPPER (RADS 3.11)	(3,209)	(7,051)
34	GAS PURCHASED FROM SHIPPER (RADS 3.12)	7,922	9,601
35	GAS LEFT ON FOR RECONNECT	(1,352)	(4,270)
36	TOTAL ADJUST TO ACTUAL	3,263	9,142
- •			
37	TOTAL SCHEDULE 3, SHEET 5	3,146,913	4,912,818
•		2,,010	.,,

Exhibit No. 12 Schedule No. 4 Page 17 of 55 Witness: J Siegler

> 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 2020

LINE NO.	SUPPLIER	VOLUMES	TOTAL COMMODITY DOLLARS
		(1)	(2)
1	<u>ESTIMATE</u>	Dth	\$
2	ASCENT RESOURCES - UTICA, LLC	16,600	26,311
3	CASTLETON COMMODITIES MERCHANT TRADING L.P. (LOUIS DREYFUS)	10,000	14,400
4	CITADEL ENERGY MARKETING LLC	61,000	81,263
5	CONOCOPHILLIPS COMPANY	8,900	12,187
6	DTE ENERGY TRADING, INC.	255,000	362,900
7	EMERA ENERGY SERVICES, INC.	51,000	75,682
8	EQT ENERGY, LLC.	280,000	355,250
9	EQUINOR NATURAL GAS LLC (STATOIL)	14,100	19,365
10	GREYLOCK ENERGY, LLC	155,600	208,232
11	J. ARON & COMPANY	96,200	130,733
12	KAISER MARKETING APPALACHIAN, LLC	32,500	44,738
13	REPSOL ENERGY NORTH AMERICA CORPORATION	420,156	520,993
14	SEQUENT ENERGY MANAGEMENT, LP	90,000	125,138
15	SHELL ENERGY NORTH AMERICA (US), L.P. (CORAL)	1,800	2,484
16	SOUTH JERSEY RESOURCES GROUP, LLC	600	848
17	SPIRE MARKETING INC. (LACLEDE ENERGY)	5,000	7,600
18	SOUTHWESTERN ENERGY SERVICES COMPANY	4,800	6,720
19	UNITED ENERGY TRADING, LLC	16,700	25,135
20	VITOL INC.	150,000	214,500
21	TOTAL ESTIMATE	1,669,956	2,234,477
22	ADJUST TO ACTUAL		
23	REPSOL ENERGY NORTH AMERICA CORPORATION	0	19,189
24	GAS LOST DUE TO LINE HITS	(25)	(84)
25	ICE CHARGES	(29)	107
26	GAS SOLD TO SHIPPER (RADS 3.11)	(4,222)	(9,045)
27	GAS PURCHASED FROM SHIPPER (RADS 3.12)	3,344	3,818
28	OMO/OFO CHARGES (RADS 3.7, 3.8, 4.11)	0,544	(7,536)
29	GAS LEFT ON FOR RECONNECT	(739)	(2,330)
30	TOTAL ADJUST TO ACTUAL	(1,642)	4,118
50	TOTAL ADUDOT TO ACTUAL	(1,042)	4,110
31	TOTAL SCHEDULE 3, SHEET 6	1,668,314	2,238,596

Exhibit No. 12 Schedule No. 4 Page 18 of 55 Witness: J Siegler

> 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 2020

			TOTAL
LINE			COMMODITY
NO.	SUPPLIER	VOLUMES	DOLLARS
		(1)	(2)
1	<u>ESTIMATE</u>	Dth	\$
2	ARM ENERGY MANAGEMENT LLC	17,400	21,620
3	BP ENERGY COMPANY	8,800	12,548
4	CASTLETON COMMODITIES MERCHANT TRADING L.P. (LOUIS DREYFUS)	26,300	41,620
5	CITADEL ENERGY MARKETING LLC	41,500	69,258
6	CONOCOPHILLIPS COMPANY	4,800	6,492
7	DIRECT ENERGY BUSINESS MARKETING, LLC	5,000	8,700
8	DOMINION ENERGY FIELD SERVICES, INC	6,600	8,357
9	DTE ENERGY TRADING, INC.	2,432,800	3,740,852
10	EQT ENERGY, LLC.	279,100	363,479
11	GREYLOCK ENERGY, LLC	310,000	391,375
12	KAISER MARKETING APPALACHIAN, LLC	24,300	39,315
13	MIECO, INC.	5,800	8,004
14	NEXTERA ENERGY POWER MARKETING, LLC	20,000	34,050
15	NJR ENERGY SERVICES COMPANY	36,700	57,397
16	REPSOL ENERGY NORTH AMERICA CORPORATION	326,167	365,328
17	SEQUENT ENERGY MANAGEMENT, LP	44,400	69,790
18	SPIRE MARKETING INC.	77,500	97,650
19	SPOTLIGHT ENERGY LLC	11,000	18,358
20	SOUTHWESTERN ENERGY SERVICES COMPANY	26,500	38,069
21	TENASKA GAS STORAGE, LLC	12,800	20,837
22	TWIN EAGLE RESOURCE MANAGEMENT, LLC	10,000	14,750
23	UNIPER GLOBAL COMMODITIES NORTH AMERICA LLC	5,000	7,725
24	VITOL INC.	155,000	196,850
25	TOTAL ESTIMATE	3,887,467	5,632,422
26	ADJUST TO ACTUAL		
27	REPSOL ENERGY NORTH AMERICA CORPORATION	0	20,693
28	GAS LOST DUE TO LINE HITS	(37)	(121)
29	ICE CHARGES	0	162
30	GAS SOLD TO SHIPPER (RADS 3.11)	(1,729)	(3,475)
31	GAS PURCHASED FROM SHIPPER (RADS 3.12)	3,094	3,460
32	OMO/OFO CHARGES (RADS 3.7, 3.8, 4.11)	0	(40,017)
33	GAS LEFT ON FOR RECONNECT	(2,301)	(2,327)
34	TOTAL ADJUST TO ACTUAL	(973)	(21,626)
35	TOTAL SCHEDULE 3, SHEET 7	3,886,494	5,610,796
33	TOTAL GOTTLEGGLE 3, STILLT I	3,000,434	3,010,790

Exhibit No. 12 Schedule No. 4 Page 19 of 55 Witness: J Siegler

> EXHIBIT 1-D SCHEDULE 3 SHEET 8 OF 13

### COLUMBIA GAS OF PENNSYLVANIA, INC. SUMMARY OF HISTORIC COST OF GAS PURCHASES NON-LOCAL, SHORT & LONG TERM AUGUST 2020

LINE NO.	SUPPLIER	VOLUMES	TOTAL COMMODITY DOLLARS
		(1)	(2)
1	<u>ESTIMATE</u>	Dth	\$
2	ASCENT RESOURCES - UTICA, LLC	60,000	88,650
3	BP ENERGY COMPANY	5,000	5,975
4	CASTLETON COMMODITIES MERCHANT TRADING L.P. (LOUIS DREYFUS)	18,200	31,642
5	CITADEL ENERGY MARKETING LLC	20,200	26,635
6	CITIGROUP ENERGY INC.	8,500	12,708
7	COKINOS ENERGY CORPORATION	10,500	12,968
8	CONOCOPHILLIPS COMPANY	501,000	808,328
9	DOMINION ENERGY FIELD SERVICES, INC	3,700	4,829
10	DTE ENERGY TRADING, INC.	2,471,400	4,128,786
11	EDF TRADING NORTH AMERICA, LLC (EAGLE ENERGY)	58,980	90,126
12	ELEVATION ENERGY GROUP	2,100	2,520
13	EMERA ENERGY SERVICES, INC.	14,000	21,095
14	EQT ENERGY, LLC.	278,500	340,275
15	EQUINOR NATURAL GAS LLC (STATOIL)	70,000	108,150
16	EXELON GENERATION COMPANY, LLC	15,000	24,075
17	GREYLOCK ENERGY, LLC	327,000	545,913
18	J. ARON & COMPANY	5,000	6,025
19	KAISER MARKETING APPALACHIAN, LLC	25,000	38,600
20	MACQUARIE ENERGY LLC	10,000	20,000
21	MERCURIA ENERGY GAS TRADING LLC	16,400	28,850
22 23	NEXTERA ENERGY POWER MARKETING, LLC REPSOL ENERGY NORTH AMERICA CORPORATION	23,000 304,700	40,930 359,546
23 24	SEQUENT ENERGY MANAGEMENT, LP	45,200	73,809
2 <del>4</del> 25	SHELL ENERGY NORTH AMERICA (US), L.P. (CORAL)	43,900	70,983
26	SPIRE MARKETING INC. (LACLEDE ENERGY)	232,300	377,719
27	UNITED ENERGY TRADING, LLC	5,000	6,000
28	VITOL INC.	150,900	238,526
29	WASHINGTON GAS ENERGY SERVICES, INC.	6,300	12,569
30	TOTAL ESTIMATE	4,731,780	7,526,229
00	TOTAL LOTIWATE	4,701,700	7,020,220
31	ADJUST TO ACTUAL		
32	REPSOL ENERGY NORTH AMERICA CORPORATION	0	15,537
33	GAS LOST DUE TO LINE HITS	(116)	(326)
34	ICE CHARGES	O O	160
35	GAS SOLD TO SHIPPER (RADS 3.11)	(4,656)	(10,220)
36	GAS PURCHASED FROM SHIPPER (RADS 3.12)	1,179 <sup>°</sup>	1,377 <sup>°</sup>
37	CHOICE ANNUAL CASH OUT	63,914	113,587
38	CHOICE NON-COMPLIANCE CHARGES (RADS 4.12)	0	(351)
39	GAS LEFT ON FOR RECONNECT	(882)	(2,793)
40	TOTAL ADJUST TO ACTUAL	59,439	116,970
41	TOTAL SCHEDULE 3, SHEET 8	4,791,219	7,643,199

Exhibit No. 12 Schedule No. 4 Page 20 of 55 Witness: J Siegler

> EXHIBIT 1-D SCHEDULE 3 SHEET 9 OF 13

# COLUMBIA GAS OF PENNSYLVANIA, INC. SUMMARY OF HISTORIC COST OF GAS PURCHASES NON-LOCAL, SHORT & LONG TERM SEPTEMBER 2020

LINE NO.	SUPPLIER	VOLUMES	TOTAL COMMODITY DOLLARS
1	ESTIMATE	(1) Dth	(2) \$
2	ARM ENERGY MANAGEMENT LLC	10,000	τ 12,875
3	ASCENT RESOURCES - UTICA, LLC	70,600	109,885
4	CITADEL ENERGY MARKETING LLC	256,300	281,215
5	CNX GAS COMPANY LLC	60,500	92,859
6	COLONIAL ENERGY, INC	1,700	2,031
7	CONOCOPHILLIPS COMPANY	11,100	14,624
8	DIRECT ENERGY BUSINESS MARKETING, LLC	25,000	42,550
9	DTE ENERGY TRADING, INC.	502,400	787,907
10	EMERA ENERGY SERVICES, INC.	5,000	6,588
11	EQT ENERGY, LLC.	255,000	303,493
12	EXELON GENERATION COMPANY, LLC	4,700	5,299
13	GREYLOCK ENERGY, LLC	1,026,000	1,683,560
14	INTERSTATE GAS SUPPLY, INC.	8,300	10,935
15	KAISER MARKETING APPALACHIAN, LLC	8,000	12,960
16	MACQUARIE ENERGY LLC	41,500	56,533
17	NEXTERA ENERGY POWER MARKETING, LLC	33,500	49,846
18	REPSOL ENERGY NORTH AMERICA CORPORATION	423,474	423,474
19	SEQUENT ENERGY MANAGEMENT, LP	79,600	94,229
20	SHELL ENERGY NORTH AMERICA, L.P.	15,000	16,275
21	SNYDER BROTHERS INC.	6,300	10,716
22	SPIRE MARKETING INC. (LACLEDE ENERGY)	195,000	330,038
23	SPOTLIGHT ENERGY LLC	52,700	68,650
23 24	SYMMETRY	13,000	22,075
2 <del>4</del> 25	TENASKA GAS STORAGE, LLC	3,000	2,850
26	TWIN EAGLE RESOURCE MANAGEMENT, LLC	35,100	40,984
20 27		10,000	
2 <i>1</i> 28	UNITED ENERGY TRADING, LLC VITOL INC.		17,500
	WASHINGTON GAS LIGHT COMPANY	200,000	316,355
29		3,900 57,700	6,708 65,544
30 31	WASHINGTON GAS ENERGY SERVICES, INC. TOTAL ESTIMATE	3,414,374	4,888,556
31	TOTAL ESTIMATE	3,414,374	4,000,000
32	ADJUST TO ACTUAL		
33	REPSOL ENERGY NORTH AMERICA CORPORATION	0	15,534
34	GAS LOST DUE TO LINE HITS		
35	ICE CHARGES	(152) 0	(495) 137
		_	
36 37	GAS SOLD TO SHIPPER (RADS 3.11)	(5,678)	(13,306) 6,292
	GAS PURCHASED FROM SHIPPER (RADS 3.12)	5,992	
38	CHOICE NON-COMPLIANCE CHARGES (RADS 4.12)	(2.280)	(397)
39 40	GAS LEFT ON FOR RECONNECT	(2,289)	(4,910)
40	TOTAL ADJUST TO ACTUAL	(2,127)	2,855
41	TOTAL SCHEDULE 3, SHEET 9	3,412,247	4,891,411

Exhibit No. 12 Schedule No. 4 Page 21 of 55 Witness: J Siegler

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 2020

LINE			TOTAL COMMODITY
NO.	SUPPLIER	VOLUMES	DOLLARS
	COLLECT	(1)	(2)
1	<u>ESTIMATE</u>	Òth	`\$ <sup>´</sup>
2	ARM ENERGY MANAGEMENT LLC	157,800	304,379
3	ASCENT RESOURCES - UTICA, LLC	78,900	133,825
4	BP ENERGY COMPANY	9,000	14,850
5	CASTLETON COMMODITIES MERCHANT TRADING L.P. (LOUIS DREYFUS)	105,000	161,600
6	CHEVRON NATURAL GAS	4,200	6,410
7	COKINOS ENERGY CORPORATION	18,000	22,780
8	CONOCOPHILLIPS COMPANY	15,700	35,416
9	DIRECT ENERGY BUSINESS MARKETING, LLC	15,500	21,890
10	DTE ENERGY TRADING, INC.	773,500	930,338
11	ELEVATION ENERGY GROUP	600	426
12	EMERA ENERGY SERVICES, INC.	7,498	11,779
13	EQT ENERGY, LLC.	228,600	235,977
14	EQUINOR ASA	90,300	156,980
15	EXELON GENERATION COMPANY, LLC	4,600	9,062
16	GREYLOCK ENERGY, LLC	15,000	26,475
17	J. ARON & COMPANY	46,100	83,669
18	KAISER MARKETING APPALACHIAN, LLC	34,500	53,679
19	MACQUARIE ENERGY LLC	65,400	150,258
20	MERCURIA ENERGY GAS TRADING LLC	1,100	1,686
21	MORGAN STANLEY CAPITAL GROUP INC.	102,400	195,015
22	NEXTERA ENERGY POWER MARKETING, LLC	11,600	22,835
23	NJR ENERGY SERVICES COMPANY	11,000	11,120
24	REPSOL ENERGY NORTH AMERICA CORPORATION	408,302	265,396
25	SEQUENT ENERGY MANAGEMENT, LP	13,200	29,387
26	SHELL ENERGY NORTH AMERICA, L.P.	28,500	59,431
27	SNYDER BROTHERS INC.	1,400	3,115
28	SOUTHWESTERN ENERGY SERVICES COMPANY	17,500	48,055
29	SPARK ENERGY	200	307
30	SPIRE MARKETING INC. (LACLEDE ENERGY)	339,000	432,335
31	SPOTLIGHT ENERGY LLC	8,100	11,826
32	SPRAGUE OPERATING RESOURCES LLC (SPRAGUE ENER)	2,100	4,946
33	SWN	5,000	11,350
34	TWIN EAGLE RESOURCE MANAGEMENT, LLC	34,900	62,154
35	UNITED ENERGY TRADING, LLC	7,000	6,440
36	VITOL INC.	255,297	384,893
37	WASHINGTON GAS LIGHT COMPANY	30,000	41,200
38	WASHINGTON GAS ENERGY SERVICES, INC.	14,400	26,000
39	TOTAL ESTIMATE	2,961,197	3,977,280
40	AD ILICT TO ACTUAL		
40	ADJUST TO ACTUAL  PERSON ENERGY NORTH AMERICA CORROBATION	0	20.040
41	REPSOL ENERGY NORTH AMERICA CORPORATION	0	20,610
42	GAS COLD TO CHARREN (PARC 2.44)	(56)	(185)
43	GAS SOLD TO SHIPPER (RADS 3.11)	(6,192)	(12,107)
44 45	GAS PURCHASED FROM SHIPPER (RADS 3.12)	522	547
45 46	CAP CHOICE CUSTOMER PURCHASES	158,051	378,816
46 47	OMO/OFO CHARGES (RADS 3.7, 3.8, 4.11)	0	(34,030)
47 48	CHOICE NON-COMPLIANCE CHARGES (RADS 4.12) GAS LEFT ON FOR RECONNECT		(61)
48 49	TOTAL ADJUST TO ACTUAL	(1,852) 150,472	(6,511) 347,078
49	TOTAL ADJUST TO ACTUAL	130,472	341,010
50	TOTAL SCHEDULE 3, SHEET 10	3,111,669	4,324,358
50	:	5,111,000	1,327,000

Exhibit No. 12 Schedule No. 4 Page 22 of 55 Witness: J Siegler

> 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 2020

			TOTAL
LINE			COMMODITY
NO.	SUPPLIER	VOLUMES	DOLLARS
		(1)	(2)
1	<u>ESTIMATE</u>	Dth	\$
2	ASCENT RESOURCES - UTICA, LLC	12,100	27,539
3	BP ENERGY COMPANY	10,000	20,850
4	COLONIAL ENERGY, INC	338,835	545,287
5	CONOCOPHILLIPS COMPANY	6,500	16,126
6	DOMINION ENERGY FIELD SERVICES, INC	4,700	9,776
7	EMERA ENERGY SERVICES, INC.	500	870
8	EXELON GENERATION COMPANY, LLC	5,000	10,050
9	INTERSTATE GAS SUPPLY, INC.	900	1,881
10	J. ARON & COMPANY	20,000	46,600
11	MACQUARIE ENERGY LLC	30,000	63,225
12	MORGAN STANLEY CAPITAL GROUP INC.	20,500	53,291
13	SEQUENT ENERGY MANAGEMENT, LP	27,000	60,953
14	SHELL ENERGY NORTH AMERICA, L.P.	1,500	2,978
15	SPARK ENERGY	200	416
16	TENASKA GAS STORAGE, LLC	30,000	69,975
17	VITOL INC.	240,000	592,800
18	WGL MIDSTREAM, INC (CAPITOL)	700	1,454
19	TOTAL ESTIMATE	748,435	1,524,070
20	ADJUST TO ACTUAL		
21	CHEVRON NATURAL GAS	(3,520)	(5,456)
22	REPSOL ENERGY NORTH AMERICA CORPORATION	0	17,949
23	GAS LOST DUE TO LINE HITS	(28)	(91)
24	GAS SOLD TO SHIPPER (RADS 3.11)	(5,663)	(16,594)
25	GAS PURCHASED FROM SHIPPER (RADS 3.12)	3,692	1,926
26	CAP CHOICE CUSTOMER PURCHASES	62,582	149,997
27	CHOICE ANNUAL CASH OUT	562	1,431
28	OMO/OFO CHARGES (RADS 3.7, 3.8, 4.11)	0	(51,343)
29	CHOICE NON-COMPLIANCE CHARGES (RADS 4.12)	0	(614)
30	GAS LEFT ON FOR RECONNECT	(4,626)	(16,166)
31	TOTAL ADJUST TO ACTUAL	53,000	81,039
32	TOTAL SCHEDULE 3, SHEET 11	801,435	1,605,109

Exhibit No. 12 Schedule No. 4 Page 23 of 55 Witness: J Siegler

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 2020

			TOTAL
LINE			COMMODITY
NO.	SUPPLIER	VOLUMES	DOLLARS
		(1)	(2)
1	<u>ESTIMATE</u>	Dth	\$
2	ARM ENERGY MANAGEMENT LLC	40,100	86,387
3	ASCENT RESOURCES - UTICA, LLC	256,500	568,445
4	BP ENERGY COMPANY	65,300	137,459
5	CASTLETON COMMODITIES MERCHANT TRADING L.P.	55,000	114,333
6	CHEVRON NATURAL GAS	98,500	230,552
7	CITADEL ENERGY MARKETING LLC	555,000	1,355,055
8	CNX GAS COMPANY LLC	139,500	298,530
9	COLONIAL ENERGY, INC	5,000	9,925
10	CONOCOPHILLIPS COMPANY	2,900	6,643
11	DIRECT ENERGY BUSINESS MARKETING, LLC	40,000	86,475
12	DOMINION ENERGY FIELD SERVICES, INC	2,500	5,125
13	DTE ENERGY TRADING, INC.	5,600	12,880
14	ELEVATION ENERGY GROUP	38,800	86,011
15	EMERA ENERGY SERVICES, INC.	31,700	67,865
16	EQT ENERGY, LLC.	18,000	43,470
17	EXELON GENERATION COMPANY, LLC	7,600	15,494
18	FREEPOINT COMMODITIES LLC	200	463
19	GREYLOCK ENERGY, LLC	13,000	25,188
20	INTERSTATE GAS SUPPLY, INC.	8,300	18,080
21	J. ARON & COMPANY	30,200	69,856
22	KAISER MARKETING APPALACHIAN, LLC	105,900	236,954
23	MACQUARIE ENERGY LLC	129,700	277,599
24	MERCURIA ENERGY GAS TRADING LLC	22,800	49,832
25	MORGAN STANLEY CAPITAL GROUP INC.	15,300	33,382
26	NEXTERA ENERGY POWER MARKETING, LLC	96,000	223,163
27	SEQUENT ENERGY MANAGEMENT, LP	390,200	824,054
28	SNYDER BROTHERS INC.	13,500	28,403
29	SOUTHWESTERN ENERGY SERVICES COMPANY	11,000	26,810
30	SPOTLIGHT ENERGY LLC	180,600	403,379
31	TENASKA GAS STORAGE, LLC	10,000	20,325
32	TEXLA ENERGY MANAGEMENT, INC	5,000	12,463
33	TWIN EAGLE RESOURCE MANAGEMENT, LLC	13,300	31,416
34	UNITED ENERGY TRADING, LLC	10,000	21,500
35	VITOL INC.	12,000	27,875
36	TOTAL ESTIMATE	2,429,000	5,455,385
0=	AD IIIOT TO A OTHAI		
37	ADJUST TO ACTUAL	•	
38	COLONIAL ENERGY, INC	0	5,587
39	GAS LOST DUE TO LINE HITS	(745)	(2,392)
40	ICE CHARGES	0	447
41	GAS SOLD TO SHIPPER (RADS 3.11)	(10,427)	(29,956)
42	GAS PURCHASED FROM SHIPPER (RADS 3.12)	11,507	15,523
43	CAP CHOICE CUSTOMER SALES	(98,641)	(236,423)
44	OMO/OFO CHARGES (RADS 3.7, 3.8, 4.11)	0	(16,304)
45	CHOICE NON-COMPLIANCE CHARGES (RADS 4.12)	0	(1,188)
46	GAS LEFT ON FOR RECONNECT	(8,021)	(28,034)
47	TOTAL ADJUST TO ACTUAL	(106,327)	(292,740)
48	TOTAL SCHEDULE 3, SHEET 12	2,322,673	5,162,645

Exhibit No. 12 Schedule No. 4 Page 24 of 55 Witness: J Siegler

> EXHIBIT 1-D SCHEDULE 3 SHEET 13 OF 13

# COLUMBIA GAS OF PENNSYLVANIA, INC. SUMMARY OF HISTORIC COST OF GAS PURCHASES NON-LOCAL, SHORT & LONG TERM JANUARY 2021

			TOTAL
LINE			COMMODITY
NO.	SUPPLIER	VOLUMES	DOLLARS
		(1)	(2)
1	<u>ESTIMATE</u>	Dth	\$
2	ARM ENERGY MANAGEMENT LLC	19,916	51,184
3	CASTLETON COMMODITIES MERCHANT TRADING L.P.	68,500	153,274
4	CITADEL ENERGY MARKETING LLC	938,100	1,973,526
5	CITIGROUP ENERGY INC.	41,100	91,448
6	CNX GAS COMPANY LLC	15,000	38,288
7	COKINOS ENERGY CORPORATION	310,000	629,300
8	DIRECT ENERGY BUSINESS MARKETING, LLC	40,000	103,000
9	DTE ENERGY TRADING, INC.	19,500	47,544
10	EQT ENERGY, LLC.	41,300	106,450
11	EXELON GENERATION COMPANY, LLC	65,300	169,183
12	INTERSTATE GAS SUPPLY, INC.	11,600	27,448
13	J. ARON & COMPANY	35,600	90,780
14	KAISER MARKETING APPALACHIAN, LLC	712,400	1,722,399
15	MACQUARIE ENERGY LLC	4,000	10,000
16	MORGAN STANLEY CAPITAL GROUP INC.	17,500	43,375
17	NEXTERA ENERGY POWER MARKETING, LLC	1,500	3,443
18	REPSOL ENERGY NORTH AMERICA CORPORATION	60,400	147,542
19	SEQUENT ENERGY MANAGEMENT, LP	334,200	693,024
20	SHELL ENERGY NORTH AMERICA, L.P.	9,100	23,067
21	SIX ONE COMMODITIES	20,600	50,419
22	SNYDER BROTHERS INC.	12,400	29,633
23	SPIRE MARKETING INC. (LACLEDE ENERGY)	4,400	10,516
24	SOUTHWESTERN ENERGY SERVICES COMPANY	20,000	48,350
25	TWIN EAGLE RESOURCE MANAGEMENT, LLC	2,800	6,244
26	UNITED ENERGY TRADING, LLC	52,500	132,444
27	TOTAL ESTIMATE	2,857,716	6,401,877
28	ADJUST TO ACTUAL		
29	GAS LOST DUE TO LINE HITS	(44)	(212)
30	ICE CHARGES	) O	` 79 <sup>°</sup>
31	GAS SOLD TO SHIPPER (RADS 3.11)	(2,820)	(8,536)
32	GAS PURCHASED FROM SHIPPER (RADS 3.12)	49,889	71,255
33	CAP CHOICE CUSTOMER SALES	(239,558)	(493,495)
34	CHOICE INTERIM CASH OUT	6,995	16,614
35	OMO/OFO CHARGES (RADS 3.7, 3.8, 4.11)	0	(54)
36	CHOICE NON-COMPLIANCE CHARGES (RADS 4.12)	0	(17,123)
37	GAS LEFT ON FOR RECONNECT	(8,653)	(33,925)
38	TOTAL ADJUST TO ACTUAL	(194,191)	(465,397)
			, , ,
39	TOTAL SCHEDULE 3, SHEET 13	2,663,525	5,936,480
		<u> </u>	

Exhibit No. 12 Schedule No. 4 Page 25 of 55 Witness: J Siegler

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 (1)	TOTAL DOLLARS (2)
		DTH	\$
1	FEBRUARY, 2020	8,692	16,919
2	MARCH	10,760	18,356
3	APRIL	10,519	17,984
4	MAY	10,691	15,829
5	JUNE	8,324	13,745
6	JULY	7,093	10,966
7	AUGUST	6,825	10,494
8	SEPTEMBER	6,817	10,057
9	OCTOBER	8,998	15,878
10	NOVEMBER	8,614	10,889
11	DECEMBER	7,294	14,287
12	JANUARY, 2021 ADJUSTMENT	13,439	31,423 20,122
14	TOTAL	108,066	206,948

Exhibit No. 12 Schedule No. 4 Page 26 of 55 Witness: J Siegler

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) DTH	(2) \$	(3)	(4=2+3) \$
1	FEBRUARY, 2020	5,465,458	1,487,603	12,543,519	14,031,122
2	MARCH	2,835,918	1,487,603	6,569,978	8,057,581
3	APRIL	(2,302,112)	1,460,370	(3,307,158)	(1,846,788)
4	MAY	(1,934,602)	1,460,370	(2,976,215)	(1,515,845)
5	JUNE	(1,925,602)	1,460,370	(2,602,391)	(1,142,021)
6	JULY	(4,146,179)	1,460,370	(6,060,924)	(4,600,555)
7	AUGUST	(4,571,834)	1,460,370	(7,103,934)	(5,643,564)
8	SEPTEMBER	(2,995,190)	1,460,370	(4,360,854)	(2,900,485)
9	OCTOBER	(1,736,381)	1,460,369	(2,588,790)	(1,128,420)
10	NOVEMBER	1,792,611	1,460,413	3,073,589	4,534,002
11	DECEMBER	4,503,547	1,460,413	7,736,584	9,196,996
12	JANUARY, 2021	5,317,724	1,460,413	9,231,710	10,692,123
13	TOTAL	303,358	17,579,031	10,155,114	27,734,145

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 (1)	RATE (2)	AMOUNT (3=1x2)	VOLUME WITHDRAWN (4)	RATE (5)	AMOUNT (6=4x5)
		DTH	\$/DTH	\$	DTH	\$/DTH	\$
1	FEBRUARY, 2020	0	1.7508	0	4,186	2.2484	9,412
2	ADJUSTMENT	0	1.7508	0	67	2.2484	151
3	ADJUSTMENT	0	1.7508	0	0	2.2484	(151)
-		-		•	•		(101)
4	MARCH	0	1.7281	0	4,157	2.2508	9,357
5	<b>ADJUSTMENT</b>	0	1.7281	0	67	2.2508	151
6	ADJUSTMENT	0	1.7281	0	0	2.2508	(151)
7	APRIL	0	1.4971	0	3,367	2.0647	6,952
8	ADJUSTMENT	0	1.4971	0	67	2.0647	138
9	ADJUSTMENT	0	1.4971	0	0	2.0647	(138)
10	MAY	0	1.5803	0	1,628	1.9789	3,222
11	ADJUSTMENT	0	1.5803	0	67	1.9789	133
12	ADJUSTMENT	0	1.5803	0	0	1.9789	(133)
12	ADJUSTIVILINI	U	1.5005	O	U	1.9709	(133)
13	JUNE	0	1.3756	0	0	1.8911	0
14	ADJUSTMENT	0	1.3756	0	67	1.8911	127
15	ADJUSTMENT	0	1.3756	0	0	1.8911	(127)
							,
16	JULY	0	1.4818	0	0	1.7929	0
17	ADJUSTMENT	0	1.4818	0	67	1.7929	120
18	ADJUSTMENT	0	1.4818	0	0	1.7929	(120)
40	ALIQUOT	0	4 5704	0	0	4 7474	0
19	AUGUST	0	1.5731	0	0	1.7471	0
20	ADJUSTMENT	0	1.5731	0	67	1.7471	117
21	ADJUSTMENT	U	1.5731	0	0	1.7471	(117)
22	SEPTEMBER	(2,502)	1.4736	(3,687) 1/	0	1.7139	0
23	ADJUSTMENT	0	1.4736	0	67	1.7139	115
24	ADJUSTMENT	0	1.4736	0	0	1.7139	(115)
							( - )
25	OCTOBER	0	1.5369	0	603	1.7015	1,026
26	ADJUSTMENT	0	1.5369	0	67	1.7015	114
27	ADJUSTMENT	0	1.5369	0	0	1.7015	(114)
	1101/51/555	•			••	4 =0.40	4.0=
28	NOVEMBER	0	2.0934	0	98	1.7019	167
29	ADJUSTMENT	0	2.0934	0	67	1.7019	114
30	ADJUSTMENT	0	2.0934	0	0	1.7019	(114)
31	DECEMBER	0	2.2524	0	98	1.7020	167
32	ADJUSTMENT	0	2.2524	0	67	1.7020	114
33	ADJUSTMENT	0	2.2524	0	0	1.7020	(114)
55	ADOODINENT	U	2.2027	U	O	1.7020	(114)
34	JANUARY, 2021	0	2.0900	0	8,490	1.7018	14,448
35	ADJUSTMENT	0	2.0900	0	67	1.7018	114
36	ADJUSTMENT	0	2.0900	0	(98)	1.7018	(282)
37	TOTAL	(2,502)		(3,687)	23,333		44,583
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> 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 (1) DTH	RATE (2) \$/DTH	AMOUNT (3=1x2) \$	VOLUME WITHDRAWN (4) DTH	RATE(5) \$/DTH	AMOUNT (6=4x5)
1	FEBRUARY, 2020	0	1.7508	0	4,818,166	2.2484	10,833,164
2	ADJUSTMENT	6,533	1.7508	11,438	29,493	2.2484	66,312
3	MARCH	(6,521)	1.7281	(11,269)	2,279,699	2.2508	5,131,147
4	ADJUSTMENT	52,344	1.7281	90,456	41,475	2.2508	93,352
5	APRIL	(1,840,070)	1.4971	(2,754,769)	37,883	2.0647	78,217
6	ADJUSTMENT	1,041	1.4971	1,558	25,163	2.0647	51,954
7	MAY	(1,432,345)	1.5803	(2,263,535)	91,975	1.9789	182,009
8	ADJUSTMENT	(57,468)	1.5803	(90,817)	(5,958)	1.9789	(11,790)
9	JUNE	(1,467,862)	1.3756	(2,019,191)	0	1.8911	0
10	ADJUSTMENT	29,523	1.3756	40,612	4,007	1.8911	7,578
11	JULY	(3,662,640)	1.4818	(5,427,300)	0	1.7929	0
12	ADJUSTMENT	(19,237)	1.4818	(28,505)	24,931	1.7929	44,699
13	AUGUST	(3,944,391)	1.5731	(6,204,921)	0	1.7471	0
14	ADJUSTMENT	(28,508)	1.5731	(44,846)	4,069	1.7471	7,109
15	SEPTEMBER	(2,455,882)	1.4736	(3,618,988)	0	1.7139	0
16	ADJUSTMENT	(12,670)	1.4736	(18,671)	31,849	1.7139	54,586
17	OCTOBER	(1,562,615)	1.5369	(2,401,583)	116,832	1.7015	198,790
18	ADJUSTMENT	704	1.5369	1,082	38,108	1.7015	64,841
19	NOVEMBER	(83,460)	2.0934	(174,715)	1,470,201	1.7019	2,502,135
20	ADJUSTMENT	56,333	2.0934	117,928	166,924	1.7019	284,088
21	DECEMBER	(36,312)	2.2524	(81,789)	3,599,223	1.7020	6,125,878
22	ADJUSTMENT	31,854	2.2524	71,748	131,566	1.7020	223,925
23	JANUARY, 2021	0	2.0900	0	4,489,578	1.7018	7,640,364
24	ADJUSTMENT	4,522	2.0900	9,451	63,294	1.7018	107,714
25	TOTAL	(16,427,127)		(24,796,626)	17,458,478		33,686,070

Exhibit No. 12 Schedule No. 4 Page 29 of 55 Witness: J Siegler

> 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

NO.	MONTH	VOLUME INJECTED (1) DTH	RATE (2) \$/DTH	AMOUNT (3=1x2)	VOLUME WITHDRAWN (4) DTH	(5) \$/DTH	AMOUNT (6=4x5)
1	FEBRUARY, 2020	0	1.7508	0	279,640	2.2484	628,743
2	MARCH	0	1.7281	0	243,096	2.2508	547,160
3	APRIL	(236,567)	1.4971	(354,164)	(1,719)	2.0647	(3,549)
4	MAY	(252,892)	1.5803	(399,645)	0	1.9789	0
5	ADJUSTMENT	68	1.5803	107	0	1.9789	0
6	JUNE	(220,135)	1.3756	(302,818)	0	1.8911	0
7	ADJUSTMENT	(155)	1.3756	(213)	0	1.8911	0
8	JULY	(225,016)	1.4818	(333,429)	0	1.7929	0
9	ADJUSTMENT	(4,847)	1.4818	(7,182)	0	1.7929	0
10	AUGUST	(336,346)	1.5731	(529,106)	0	1.7471	0
11	ADJUSTMENT	(1,017)	1.5731	(1,600)	0	1.7471	0
12	SEPTEMBER	(301,012)	1.4736	(443,571)	0	1.7139	0
13	ADJUSTMENT	1,726	1.4736	2,543	0	1.7139	0
14	OCTOBER	(109,965)	1.5369	(169,005)	0	1.7015	0
15	ADJUSTMENT	(1,569)	1.5369	(2,411)	0	1.7015	0
16	NOVEMBER	0	2.0934	0	186,076	1.7019	316,683
17	DECEMBER	0	2.2524	0	402,078	1.7020	684,337
18	ADJUSTMENT	0	2.2524	0	4,304	1.7020	7,325
19	JANUARY, 2021	0	2.0900	0	434,079	1.7018	738,716
20	TOTAL	(1,687,727)		(2,540,494)	1,547,554		2,919,414

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> 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 (1) DTH	RATE(2) \$/DTH	AMOUNT (3=1x2) \$	VOLUME WITHDRAWN (4) DTH	RATE (5) \$/DTH	AMOUNT (6=4x5) \$
1	FEBRUARY, 2020	0	1.7508	0	406,000	2.2484	912,850
2	MARCH	0	1.7281	0	297,000	2.2508	668,488
3	APRIL	(248,377)	1.4971	(371,845)	0	2.0647	0
4	MAY	(269,111)	1.5803	(425,276)	0	1.9789	0
5	JUNE	(260,430)	1.3756	(358,248)	0	1.8911	0
6	JULY	(250,209)	1.4818	(370,760)	0	1.7929	0
7	AUGUST	(254,169)	1.5731	(399,833)	0	1.7471	0
8	SEPTEMBER	(245,970)	1.4736	(362,461)	0	1.7139	0
9	OCTOBER	(212,319)	1.5369	(326,313)	0	1.7015	0
10	NOVEMBER	0	2.0934	0	0	1.7019	0
11	DECEMBER	0	2.2524	0	378,510	1.7020	644,224
12	JANUARY, 2021	0	2.0900	0	378,510	1.7018	644,148
13	TOTAL	(1,740,585)		(2,614,736)	1,460,020		2,869,710

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

LINE NO.	MONTH	TCO - FSS TOTAL
		(1) DTH
1	FEBRUARY, 2020	(78,627)
2	MARCH	(75,399)
3	APRIL	(42,900)
4	MAY	(10,566)
5	JUNE	(10,617)
6	JULY	(9,228)
7	AUGUST	(11,539)
8	SEPTEMBER	(10,796)
9	OCTOBER	(6,227)
10	NOVEMBER	(3,628)
11	DECEMBER	(7,841)
12	JANUARY, 2021	(60,718)
13	TOTAL	(328,086)

NOTE: THESE VOLUMES REPRESENT RETAINAGE BY THE PIPELINE.

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> 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			MDSE			SCQ	
NO.	MONTH	VOLUME	RATE	AMOUNT	VOLUME	RATE	AMOUNT
		(1)	(2)	(3=1x2)	(4)	(5)	(6=4x5)
		DTH	\$/DTH	\$	DTH	\$/DTH	\$
1	FEBRUARY, 2020	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	441,576	1.5010	662,806	24,492,495	0.0288	705,384
4	MAY	441,576	1.5010	662,806	24,492,495	0.0288	705,384
5	JUNE	441,576	1.5010	662,806	24,492,495	0.0288	705,384
6	JULY	441,576	1.5010	662,806	24,492,495	0.0288	705,384
7	AUGUST	441,576	1.5010	662,806	24,492,495	0.0288	705,384
8	SEPTEMBER	441,576	1.5010	662,806	24,492,495	0.0288	705,384
9	OCTOBER	441,576	1.5010	662,806	24,492,495	0.0288	705,384
10	NOVEMBER	441,576	1.5010	662,806	24,492,495	0.0288	705,384
11	DECEMBER	441,576	1.5010	662,806	24,492,495	0.0288	705,384
12	JANUARY, 2021	441,576	1.5010	662,806	24,492,495	0.0288	705,384
13	TOTAL	5,329,512		7,999,598	295,607,202		8,513,487

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> EXHIBIT 1-D SCHEDULE 5 SHEET 8 OF 12

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

LINE			STORAGE DEM	AND		STORAGE CAPA	CITY
NO.	MONTH	VOLUME	RATE	AMOUNT	VOLUME	RATE	AMOUNT
		(1)	(2)	(3=1x2)	(4)	(5)	(6=4x5)
		DTH	\$/DTH	\$	DTH	\$/DTH	\$
1	FEBRUARY, 2020	28,800	1.8698	53,850	2,111,176	0.0145	30,612
2	ADJUSTMENT	(4,800)	1.8698	(8,975)	(240,000)	0.0145	(3,480)
3	MARCH	28,800	1.8698	53,850	2,111,176	0.0145	30,612
4	ADJUSTMENT	(4,800)	1.8698	(8,975)	(240,000)	0.0145	(3,480)
5	APRIL	28,800	1.8698	53,850	2,111,176	0.0145	30,612
6	ADJUSTMENT	(4,800)	1.8698	(8,975)	(240,000)	0.0145	(3,480)
7	MAY	28,800	1.8698	53,850	2,111,176	0.0145	30,612
8	ADJUSTMENT	(4,800)	1.8698	(8,975)	(240,000)	0.0145	(3,480)
9	JUNE	28,800	1.8698	53,850	2,111,176	0.0145	30,612
10	ADJUSTMENT	(4,800)	1.8698	(8,975)	(240,000)	0.0145	(3,480)
11	JULY	28,800	1.8698	53,850	2,111,176	0.0145	30,612
12	ADJUSTMENT	(4,800)	1.8698	(8,975)	(240,000)	0.0145	(3,480)
13	AUGUST	28,800	1.8698	53,850	2,111,176	0.0145	30,612
14	ADJUSTMENT	(4,800)	1.8698	(8,975)	(240,000)	0.0145	(3,480)
15	SEPTEMBER	28,800	1.8698	53,850	2,111,176	0.0145	30,612
16	ADJUSTMENT	(4,800)	1.8698	(8,975)	(240,000)	0.0145	(3,480)
17	OCTOBER	28,800	1.8698	53,850	2,111,176	0.0145	30,612
18	ADJUSTMENT	(4,800)	1.8698	(8,975)	(240,000)	0.0145	(3,480)
19	NOVEMBER	28,800	1.8716	53,902	2,111,176	0.0145	30,612
20	ADJUSTMENT	(4,800)	1.8716	(8,984)	(240,000)	0.0145	(3,480)
21	DECEMBER	28,800	1.8716	53,902	2,111,176	0.0145	30,612
22	ADJUSTMENT	(4,800)	1.8716	(8,984)	(240,000)	0.0145	(3,480)
23	JANUARY, 2021	28,800	1.8716	53,902	2,111,176	0.0145	30,612
24	ADJUSTMENT	(4,800)	1.8716	(8,984)	(240,000)	0.0145	(3,480)
25	TOTAL	288,000		538,632	22,454,112		325,585

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> EXHIBIT 1-D SCHEDULE 5 SHEET 9 OF 12

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

		STORAGE DEMA	AND	STORAGE CAPACITY			
MONTH	VOLUME	RATE	AMOUNT	VOLUME	RATE	AMOUNT	
	(1)	(2)	(3=1x2)	(4)	(5)	(6=4x5)	
	DTH	\$/DTH	\$	DTH	\$/DTH	\$	
FEBRUARY, 2020	14,348	1.4949	21,449	1,500,000	0.0262	39,300	
ADJUSTMENT	(14,348)	1.4949	(21,449)	(1,500,000)	0.0262	(39,300)	
MARCH	14,348	1.4949	21,449	1,500,000	0.0262	39,300	
ADJUSTMENT	(14,348)	1.4949	(21,449)	(1,500,000)	0.0262	(39,300)	
APRIL	19,130	1.5000	28,695	2,000,000	0.0260	52,000	
ADJUSTMENT	(14,348)	1.5000	(21,522)	(1,500,000)	0.0260	(39,000)	
MAY	19,130	1.5000	28,695	2,000,000	0.0260	52,000	
ADJUSTMENT	(14,348)	1.5000	(21,522)	(1,500,000)	0.0260	(39,000)	
JUNE	19,130	1.5000	28,695	2,000,000	0.0260	52,000	
ADJUSTMENT	(14,348)	1.5000	(21,522)	(1,500,000)	0.0260	(39,000)	
JULY	19,130	1.5000	28,695	2,000,000	0.0260	52,000	
ADJUSTMENT	(14,348)	1.5000	(21,522)	(1,500,000)	0.0260	(39,000)	
AUGUST	19,130	1.5000	28,695	2,000,000	0.0260	52,000	
ADJUSTMENT	(14,348)	1.5000	(21,522)	(1,500,000)	0.0260	(39,000)	
SEPTEMBER	19,130	1.5000	28,695	2,000,000	0.0260	52,000	
ADJUSTMENT	(14,348)	1.5000	(21,522)	(1,500,000)	0.0260	(39,000)	
OCTOBER	19,130	1.5000	28,695	2,000,000	0.0260	52,000	
ADJUSTMENT	(14,348)	1.5000	(21,522)	(1,500,000)	0.0260	(39,000)	
NOVEMBER	19,130	1.5000	28,695	2,000,000	0.0260	52,000	
ADJUSTMENT	(14,348)	1.5000	(21,522)	(1,500,000)	0.0260	(39,000)	
DECEMBER	19,130	1.5000	28,695	2,000,000	0.0260	52,000	
ADJUSTMENT	(14,348)	1.5000	(21,522)	(1,500,000)	0.0260	(39,000)	
JANUARY, 2021	19,130	1.5000	28,695	2,000,000	0.0260	52,000	
ADJUSTMENT	(14,348)	1.5000	(21,522)	(1,500,000)	0.0260	(39,000)	
TOTAL	47,820		71,730	5,000,000		130,000	
	FEBRUARY, 2020 ADJUSTMENT  MARCH ADJUSTMENT  APRIL ADJUSTMENT  MAY ADJUSTMENT  JUNE ADJUSTMENT  JULY ADJUSTMENT  AUGUST ADJUSTMENT  SEPTEMBER ADJUSTMENT  OCTOBER ADJUSTMENT  NOVEMBER ADJUSTMENT  DECEMBER ADJUSTMENT  DECEMBER ADJUSTMENT  JANUARY, 2021 ADJUSTMENT	(1) DTH  FEBRUARY, 2020 ADJUSTMENT (14,348)  MARCH ADJUSTMENT (14,348)  APRIL ADJUSTMENT (14,348)  MAY ADJUSTMENT (14,348)  JUNE ADJUSTMENT (14,348)  JULY ADJUSTMENT (14,348)  AUGUST ADJUSTMENT (14,348)  SEPTEMBER ADJUSTMENT (14,348)  SEPTEMBER ADJUSTMENT (14,348)  OCTOBER ADJUSTMENT (14,348)  NOVEMBER ADJUSTMENT (14,348)  DECEMBER ADJUSTMENT (14,348)  DECEMBER ADJUSTMENT (14,348)  JANUARY, 2021 ADJUSTMENT (14,348)	MONTH         VOLUME         RATE           (1)         (2)           DTH         \$/DTH           FEBRUARY, 2020         14,348         1.4949           ADJUSTMENT         (14,348)         1.4949           MARCH         14,348         1.4949           ADJUSTMENT         (14,348)         1.5000           APRIL         19,130         1.5000           ADJUSTMENT         (14,348)         1.5000           MAY         19,130         1.5000           ADJUSTMENT         (14,348)         1.5000           JULY         19,130         1.5000           ADJUSTMENT         (14,348)         1.5000           AUGUST         19,130         1.5000           ADJUSTMENT         (14,348)         1.5000           SEPTEMBER         19,130         1.5000           ADJUSTMENT         (14,348)         1.5000           OCTOBER         19,130         1.5000           ADJUSTMENT         (14,348)         1.5000           NOVEMBER         19,130         1.5000           ADJUSTMENT         (14,348)         1.5000           DECEMBER         19,130         1.5000           ADJUSTMENT	(1) DTH         (2) \$/DTH         (3=1x2) \$           FEBRUARY, 2020 ADJUSTMENT         14,348 1.4949 (21,449)           MARCH ADJUSTMENT         (14,348) 1.4949 (21,449)           MARCH ADJUSTMENT         14,348 1.4949 (21,449)           APRIL ADJUSTMENT         19,130 1.5000 28,695           ADJUSTMENT         (14,348) 1.5000 (21,522)           MAY 19,130 1.5000 28,695 ADJUSTMENT         19,130 1.5000 28,695           ADJUSTMENT         (14,348) 1.5000 (21,522)           JUNE 19,130 1.5000 28,695 ADJUSTMENT         19,130 1.5000 28,695           ADJUSTMENT         (14,348) 1.5000 (21,522)           JULY 19,130 1.5000 28,695 ADJUSTMENT         19,130 1.5000 28,695           ADJUSTMENT         (14,348) 1.5000 (21,522)           SEPTEMBER 19,130 1.5000 28,695 ADJUSTMENT         14,348) 1.5000 (21,522)           OCTOBER 19,130 1.5000 28,695 ADJUSTMENT         19,130 1.5000 28,695           ADJUSTMENT (14,348) 1.5000 (21,522)           NOVEMBER 19,130 1.5000 28,695 ADJUSTMENT (14,348) 1.5000 (21,522)           DECEMBER 19,130 1.5000 28,695 ADJUSTMENT (14,348) 1.5000 (21,522)           JANUARY, 2021 19,130 1.5000 28,695 ADJUSTMENT (14,348) 1.5000 (21,522)           JANUARY, 2021 19,130 1.5000 (21,522)           JANUARY, 2021 19,130 1.5000 (21,522)	NONTH   VOLUME	MONTH         VOLUME         RATE         AMOUNT (3=1x2)         VOLUME (4) (5)         RATE (4) (5)           DTH         \$/DTH         \$         DTH         \$/DTH         \$/DTH         \$/DTH           FEBRUARY, 2020         14,348         1.4949         21,449         1,500,000         0.0262           ADJUSTMENT         (14,348)         1.4949         (21,449)         (1,500,000)         0.0262           MARCH         14,348         1.4949         (21,449)         (1,500,000)         0.0262           APRIL         19,130         1.5000         28,695         2,000,000         0.0260           APRIL         19,130         1.5000         (21,522)         (1,500,000)         0.0260           MAY         19,130         1.5000         28,695         2,000,000         0.0260           MAY         19,130         1.5000         28,695         2,000,000         0.0260           JUNE         19,130         1.5000         28,695         2,000,000         0.0260           JULY         19,130         1.5000         28,695         2,000,000         0.0260           ADJUSTMENT         (14,348)         1.5000         28,695         2,000,000         0.0260	

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> 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		WITHI	DRAWAL CHAR	GES	INJ	INJECTION CHARGES		
NO.	MONTH	VOLUME	RATE	AMOUNT	VOLUME	RATE	AMOUNT	
		(1)	(2)	(3=1x2)	(4)	(5)	(6=4x5)	
		DTH	\$/DTH	\$	DTH	\$/DTH	<b>`</b> \$	
1	FEBRUARY, 2020	5,032,521	0.0153	77,137	18,607	0.0153	285	
2	ADJUSTMENT	(184,862)	0.0153	(2,828)	0	0.0000	(22)	
3	MARCH	2,279,699	0.0153	34,879	0	0.0000	0	
4	ADJUSTMENT	41,475	0.0153	1,718	0	0.0000	(44)	
5	APRIL	0	0.0000	0	1,841,396	0.0153	28,173	
6	ADJUSTMENT	25,163	0.0153	232	860	0.0153	13	
7	ADJUSTMENT	0	0.0000	0	0	0.0000	(1)	
8	MAY	610	0.0153	9	1,432,345	0.0153	21,915	
9	ADJUSTMENT	31,925	0.0153	490	30,751	0.0153	467	
10	ADJUSTMENT	0	0.0000	26	0	0.0000	0	
11	JUNE	8,137	0.0153	125	1,467,862	0.0153	22,458	
12	ADJUSTMENT	90,541	0.0153	1,385	20,051	0.0153	307	
13	ADJUSTMENT	0	0.0000	429	0	0.0000	140	
14	JULY	4,069	0.0153	62	3,662,640	0.0153	56,038	
15	ADJUSTMENT	(8,137)	0.0153	(125)	21,408	0.0153	327	
16	ADJUSTMENT	0	0.0000	(38)	0	0.0000	71	
17	AUGUST	0	0.0000	0	3,944,391	0.0153	60,349	
18	ADJUSTMENT	0	0.0000	0	19,798	0.0153	303	
19	ADJUSTMENT	0	0.0000	0	0	0.0000	202	
20	SEPTEMBER	2,645	0.0153	40	1,355,882	0.0153	20,745	
21	ADJUSTMENT	(11,901)	0.0153	(182)	19,452	0.0153	297	
22	ADJUSTMENT	0	0.0000	(18)		0.0000	(89)	
23	OCTOBER	0	0.0000	0	1,551,934	0.0153	23,745	
24	ADJUSTMENT	(2,645)	0.0153	(41)	1,107,422	0.0153	16,952	
25	NOVEMBER	1,587,033	0.0153	24,282	83,460	0.0153	1,277	
26	ADJUSTMENT	135,493	0.0153	2,073	(422)	0.0153	(6)	
27	ADJUSTMENT	0	0.0000	0	0	0.0000	(436)	
28	DECEMBER	3,599,223	0.0153	55,068	36,312	0.0153	556	
29	ADJUSTMENT	131,566	0.0153	2,015	(32,162)	0.0153	(492)	
30	ADJUSTMENT	0	0.0000	(167)	0	0.0000	(287)	
31	JANUARY, 2021	4,489,578	0.0153	68,691	0	0.0000	0	
32	ADJUSTMENT	63,294	0.0153	970	(2,558)	0.0153	(39)	
33	ADJUSTMENT	0	0.0000	34_	0	0.0000	(74)	
34	TOTAL	17,315,427		266,267	16,579,429		253,130	

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> 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		WITH	DRAWAL CHARG	ES	INJECTION CHARGES		
NO.	MONTH	VOLUME	RATE	AMOUNT	VOLUME	RATE	AMOUNT
		(1)	(2)	(3=1x2)	(4)	(5)	(6=4x5)
		DTH	\$/DTH	\$	DTH	\$/DTH	\$
1	FEBRUARY, 2020	462,965	0.0173	7,996	0	0.0000	0
2	ADJUSTMENT	0	0.0000	(968)	0	0.0000	0
3	MARCH	279,640	0.0180	5,039	0	0.0000	0
4	ADJUSTMENT	0	0.0000	(304)	0	0.0000	0
5	APRIL	241,377	0.0176	4,249	244,170	0.0268	6,544
6	ADJUSTMENT	0	0.0000	(422)	0	0.0000	(728)
7	MAY	8,432	0.0201	169	246,202	0.0268	6,598
8	<b>ADJUSTMENT</b>	0	0.0000	0	9,576	0.0268	257
9	ADJUSTMENT	0	0.0000	0	0	0.0000	(886)
10	JUNE	0	0.0000	0	182,666	0.0268	4,895
11	ADJUSTMENT	0	0.0000	0	6,845	0.0268	183
12	ADJUSTMENT	0	0.0000	0	0	0.0000	(483)
13	JULY	0	0.0000	0	145,063	0.0268	3,888
14	<b>ADJUSTMENT</b>	0	0.0000	0	42,316	0.0268	1,134
15	ADJUSTMENT	0	0.0000	0	0	0.0000	(237)
16	AUGUST	0	0.0000	0	251,262	0.0268	6,734
17	<b>ADJUSTMENT</b>	0	0.0000	0	17,362	0.0268	465
18	ADJUSTMENT	0	0.0000	0	0	0.0000	772
19	SEPTEMBER	0	0.0000	0	252,007	0.0268	6,754
20	ADJUSTMENT	0	0.0000	0	84,358	0.0268	2,261
21	ADJUSTMENT	0	0.0000	0	0	0.0000	(839)
22	OCTOBER	0		0	115,506	0.0268	3,096
23	ADJUSTMENT	0	0.0000	0	50,574	0.0268	1,355
24	ADJUSTMENT	0	0.0000	0	0	0.0000	(689)
25	NOVEMBER	0	0.0000	0	0	0.0000	0
26	ADJUSTMENT	0	0.0000	112	0	0.0000	3
27	DECEMBER	190,380	0.0180	3,424	0	0.0000	0
28	JANUARY, 2021	402,078	0.0180	7,250	0	0.0000	0
29	ADJUSTMENT	0	0.0000	(448)	0	0.0000	0
30	TOTAL	1,584,872		26,097	1,647,907		41,076

Exhibit No. 12 Schedule No. 4 Page 37 of 55 Witness: J Siegler

> 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		WITHI	DRAWAL CHARG	ES	INJECTION CHARGES		
NO.	MONTH	VOLUME	RATE	AMOUNT	VOLUME	RATE	AMOUNT
		(1)	(2)	(3=1x2)	(4)	(5)	(6=4x5)
		DTH	\$/DTH	\$	DTH	\$/DTH	\$
1	FEBRUARY, 2020	360,000	0.0069	2,484	0	0.0000	0
2	ADJUSTMENT	(360,000)	0.0069	(2,484)	0	0.0000	0
3	MARCH	406,000	0.0069	2,801	0	0.0000	0
4	ADJUSTMENT	(406,000)	0.0069	(2,801)	0	0.0000	0
5	APRIL	0	0.0000	0	248,377	0.0069	1,714
6	ADJUSTMENT	0	0.0000	0	(186,283)	0.0069	(1,285)
7	MAY	0	0.0000	0	269,111	0.0069	1,857
8	ADJUSTMENT	0	0.0000	0	(201,833)	0.0069	(1,393)
9	JUNE	0	0.0000	0	260,430	0.0069	1,797
10	ADJUSTMENT	0	0.0000	0	(195,323)	0.0069	(1,348)
11	JULY	0	0.0000	0	250,209	0.0069	1,726
12	ADJUSTMENT	0	0.0000	0	(187,657)	0.0069	(1,295)
13	AUGUST	0	0.0000	0	254,169	0.0069	1,754
14	ADJUSTMENT	0	0.0000	0	(190,627)	0.0069	(1,315)
15	SEPTEMBER	0	0.0000	0	245,970	0.0069	1,697
16	ADJUSTMENT	0	0.0000	0	(184,478)	0.0069	(1,273)
17	OCTOBER	0	0.0000	0	212,319	0.0069	1,465
18	ADJUSTMENT	0	0.0000	0	(159,239)	0.0069	(1,099)
19	NOVEMBER	0	0.0000	0	0	0.0000	0
20	DECEMBER	378,510	0.0069	2,612	0	0.0000	0
21	ADJUSTMENT	(283,883)	0.0069	(1,959)	0	0.0000	0
22	JANUARY, 2021	378,510	0.0069	2,612	0	0.0000	0
23	ADJUSTMENT	(283,883)	0.0069	(1,959)	0	0.0000	0
24	TOTAL	189,255		1,306	435,146		3,003

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> 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/ (1) Dth	TOTAL DEMAND COSTS (2) \$	TOTAL COMMODITY COSTS (3) \$	TOTAL TRANSPORTATION COSTS (4=2+3) \$
1	FEBRUARY, 2020	(16,150)	4,501,596	98,362	4,599,958
2	MARCH	(12,247)	4,503,139	54,550	4,557,689
3	APRIL	(79,878)	2,710,672	76,310	2,786,983
4	MAY	(58,525)	2,593,063	53,375	2,646,437
5	JUNE	(31,945)	2,594,129	27,099	2,621,228
6	JULY	(69,189)	2,596,446	67,401	2,663,847
7	AUGUST	(83,859)	2,579,894	80,200	2,660,094
8	SEPTEMBER	(60,929)	2,609,657	53,002	2,662,659
9	OCTOBER	(51,102)	4,165,344	47,441	4,212,785
10	NOVEMBER	(10,356)	4,338,469	45,456	4,383,925
11	DECEMBER	(46,013)	4,371,767	123,482	4,495,249
12	JANUARY, 2021	(55,678)	4,394,999	141,657	4,536,656
13	TOTAL	(575,871)	41,959,176	868,335	42,827,511

<sup>1/</sup> 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 (1) Dth	BILLING RATE (2) \$/Dth	AMOUNT (3=1x2)	CAPACITY RELEASE 1/ (4) \$	TOTAL FTS AMOUNT (5=3+4) \$
1 2 3 4	FEBRUARY, 2020 ADJUSTMENT ADJUSTMENT ADJUSTMENT	125,788	7.1300	896,868	(172,296) (74,908) (37,183) 2/ 74,908	724,572 (74,908) (37,183) 74,908
5 6 7 8	MARCH ADJUSTMENT ADJUSTMENT ADJUSTMENT	125,788	7.1300	896,868	(172,532) (74,908) (37,183) 2/ 74,908	724,337 (74,908) (37,183) 74,908
9 10	APRIL ADJUSTMENT	95,551	7.1610	684,241	(173,332) (37,345) 2/	510,909 (37,345)
11 12	MAY ADJUSTMENT	95,551	7.1110	679,463	(172,086) (37,084) 2/	507,377 (37,084)
13 14	JUNE ADJUSTMENT	95,551	7.1110	679,463	(171,041) (37,084) 2/	508,422 (37,084)
15 16	JULY ADJUSTMENT	95,551	7.1110	679,463	(168,837) (37,084) 2/	510,627 (37,084)
17 18	AUGUST ADJUSTMENT	95,551	7.0510	673,730	(167,363) (33,516) 2/	506,367 (33,516)
19 20	SEPTEMBER ADJUSTMENT	95,551	7.0510	673,730	(166,961) (36,696) 2/	506,769 (36,696)
21 22	OCTOBER ADJUSTMENT	95,551	7.0510	673,730	(217,700) (36,703) 2/	456,030 (36,703)
23 24	NOVEMBER ADJUSTMENT	95,551	7.0510	673,730	(214,209) (36,736) 2/	459,521 (36,736)
25 26	DECEMBER ADJUSTMENT	95,551	7.0600	674,590	(211,772) (36,818) 2/	462,818 (36,818)
27 28	JANUARY, 2021 ADJUSTMENT	95,551	7.0600	674,590	(211,108) (36,818) 2/	463,482 (36,818)
29	TOTAL	1,207,086		8,560,468	(2,659,485)	5,900,983

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

<sup>2/</sup> 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 No. 12 Schedule No. 4 Page 40 of 55 Witness: J Siegler

> 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		DEMAND	BILLING		CAPACITY	TOTAL SST
NO.	MONTH	VOLUME	RATE	AMOUNT	RELEASE	AMOUNT
		(1)	(2)	(3=1x2)	(4)	(5=3+4)
		Dth	\$/Dth	\$	\$	\$
1	FEBRUARY, 2020	456,876	6.9700	3,184,426	(20)	3,184,405
2	ADJUSTMENT	,		, ,	20	20
3	MARCH	456,876	6.9700	3,184,426	(22)	3,184,404
4	ADJUSTMENT				22	22
5	APRIL	220,788	7.0010	1,545,737	0	1,545,737
0	B4637	000 700	0.0510	4 504 007	0	4 504 007
6	MAY	220,788	6.9510	1,534,697	0	1,534,697
7	JUNE	220,788	6.9510	1,534,697	0	1,534,697
8	JULY	220,788	6.9510	1,534,697	(12,870)	1,521,827
9	ADJUSTMENT				12,870	12,870
10	AUGUST	220,788	6.8910	1,521,450	(39,060)	1,482,390
11	ADJUSTMENT				39,060	39,060
12	SEPTEMBER	220,788	6.8910	1,521,450	(30,075)	1,491,375
13	ADJUSTMENT				30,075	30,075
14	OCTOBER	441,576	6.8910	3,042,900	(33,823)	3,009,077
15	ADJUSTMENT				33,823	33,823
16	NOVEMBER	441,576	6.8910	3,042,900	(5,250)	3,037,650
17	ADJUSTMENT				5,250	5,250
18	DECEMBER	441,576	6.9000	3,046,874	(7,750)	3,039,124
19	ADJUSTMENT				7,750	7,750
20	JANUARY, 2021	441,576	6.9000	3,046,874	(8,463)	3,038,411
21	ADJUSTMENT				8,463	8,463
22	TOTAL	4,004,784		27,741,130	0	27,741,130

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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

			FTS	
LINE		COMMODITY	BILLING	FTS
NO.	MONTH	VOLUME	RATE	AMOUNT
		(1)	(2)	(3=1x2)
		Dth	\$/Dth	\$
1	FEBRUARY, 2020	237,592	0.0177	4,205
2	MARCH	199,621	0.0177	3,533
3	APRIL	281,269	0.0194	5,457
4	MAY	129,353	0.0194	2,509
5	JUNE	184,682	0.0194	3,583
6	JULY	300,739	0.0194	5,834
7	AUGUST	620,528	0.0195	12,100
8	SEPTEMBER	100,755	0.0195	1,965
9	OCTOBER	246,084	0.0193	4,749
10 11	NOVEMBER ADJUSTMENT	335,563	0.0193	6,476
11	ADJUSTNIENT	0	0.0000	(67)
12	DECEMBER	1,051,782	0.0193	20,299
13	JANUARY, 2021	841,687	0.0193	16,245
14	TOTAL	4,529,655		86,890

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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

			SST	
LINE		COMMODITY	BILLING	SST
NO.	MONTH	VOLUME	RATE	AMOUNT
		(1)	(2)	(3=1x2)
		Dth	\$/Dth	\$
1	FEBRUARY, 2020	4,812,017	0.0163	78,483
2	ADJUSTMENT	4,012,017	0.0103	(1,245)
2	ADOUGHNEIT			(1,240)
3	MARCH	2,310,051	0.0163	37,607
4	ADJUSTMENT	, ,		123
5	APRIL	3,429,880	0.0192	65,854
6	ADJUSTMENT			(625)
_			0.0400	40.000
7	MAY	2,290,574	0.0192	43,979
8	ADJUSTMENT			(1,875)
9	JUNE	822,825	0.0192	15,798
10	ADJUSTMENT	022,023	0.0192	527
10	ADOOGTWENT			021
11	JULY	2,922,352	0.0192	56,109
12	ADJUSTMENT	, ,		(292)
				, ,
13	AUGUST	3,326,750	0.0193	64,206
14	ADJUSTMENT			(262)
4.5	OFFICE	0.500.704	0.0400	10.700
15	SEPTEMBER	2,523,764	0.0193	48,709
16	ADJUSTMENT			(374)
17	OCTOBER	2,015,434	0.0191	38,495
18	ADJUSTMENT	2,010,404	0.0101	(615)
.0	7.0000 TMLTT			(3.3)
19	NOVEMBER	1,666,017	0.0164	27,263
20	ADJUSTMENT			1,371
21	DECEMBER	4,180,321	0.0182	76,006
22	ADJUSTMENT			4,280
00	IANILIADV. 0004	E E20 00E	0.0400	404.000
23	JANUARY, 2021	5,536,965	0.0183	101,226
24	ADJUSTMENT			(120)
25	TOTAL	35,836,950		654,630
_0		33,330,000		304,000

EXHIBIT 1-D SCHEDULE 6 SHEET 6 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 2	FEBRUARY, 2020 ADJUSTMENT	33,800	4.1677	140,868 (14,566)	(2,517)	138,351 (14,566)
3 4	MARCH ADJUSTMENT	33,800	4.1677	140,868 (14,566)	(2,517)	138,351 (14,566)
5 6	APRIL ADJUSTMENT	26,800	4.1677	111,694 (11,432)	(2,493)	109,201 (11,432)
7 8	MAY ADJUSTMENT	26,800	4.1677	111,694 (11,432)	(2,488)	109,206 (11,432)
9 10	JUNE ADJUSTMENT	26,800	4.1677	111,694 (11,432)	(2,467)	109,227 (11,432)
11 12	JULY ADJUSTMENT	26,800	4.1677	111,694 (11,432)	(2,380)	109,314 (11,432)
13 14	AUGUST ADJUSTMENT	26,800	4.1677	111,694 (11,432)	(2,396)	109,298 (11,432)
15 16 17	SEPTEMBER ADJUSTMENT ADJUSTMENT	26,800	4.1704	111,767 4,808 (11,432)	(2,396)	109,371 4,808 (11,432)
18 19 20	OCTOBER ADJUSTMENT ADJUSTMENT	26,800	4.1704	111,767 1,129 (11,432)	(2,788)	108,979 1,129 (11,432)
21 22 23	NOVEMBER ADJUSTMENT ADJUSTMENT	33,800	4.1763	141,159 1,129 (11,450)	(2,788)	138,371 1,129 (11,450)
24 25 26	DECEMBER ADJUSTMENT ADJUSTMENT	34,055	4.1782	142,288 1,129 (11,450)	(2,797)	139,492 1,129 (11,450)
27 28	JANUARY, 2021 ADJUSTMENT	34,055	4.1782	142,288 (11,450)	(2,834)	139,454 (11,450)
29	TOTAL	357,110		1,354,170	(30,864)	1,323,307

<sup>1/</sup> 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 COMMODITY CHARGES

LINE NO.	MONTH	COMMODITY VOLUME (1)	BILLING RATE (2)	TOTAL FTNN AMOUNT (3=1x2)
1 2 3	FEBRUARY, 2020 ADJUSTMENT ADJUSTMENT	Dth 202,490	\$/Dth 0.0175	\$ 3,544 552 (547)
4 5 6	MARCH ADJUSTMENT ADJUSTMENT	258,000	0.0175	4,515 1,254 (921)
7 8 9	APRIL ADJUSTMENT ADJUSTMENT	174,420	0.0175	3,052 (384) (335)
10 11 12	MAY ADJUSTMENT ADJUSTMENT	197,253	0.0175	3,452 (2,407) 66
13 14 15	JUNE ADJUSTMENT ADJUSTMENT	146,349	0.0175	2,561 (2,510) 262
16 17 18	JULY ADJUSTMENT ADJUSTMENT	184,665	0.0175	3,232 (2,513) 837
19 20 21	AUGUST ADJUSTMENT ADJUSTMENT	281,438	0.0175	4,925 (3,610) 797
22 23 24	SEPTEMBER ADJUSTMENT ADJUSTMENT	197,952	0.0175	3,464 (5,317) 1,369
25 26 27	OCTOBER ADJUSTMENT ADJUSTMENT	83,731	0.0173	1,449 (3,252) 1,321
28 29 30	NOVEMBER ADJUSTMENT ADJUSTMENT	80,000	0.0153	1,224 (312) 11
31 32 33	DECEMBER ADJUSTMENT ADJUSTMENT	380,998	0.0153	5,829 1,628 (1,679)
34 35 36	JANUARY, 2021 ADJUSTMENT ADJUSTMENT	408,000	0.0153	6,242 187 (1,017)
37	TOTAL	2,595,296		26,968

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EXHIBIT 1-D SCHEDULE 6 SHEET 8 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 2	FEBRUARY, 2020 ADJUSTMENT	14,348	6.1206	87,818 (63,942)
3 4	MARCH ADJUSTMENT	14,348	6.1206	87,818 (63,942)
5 6	APRIL ADJUSTMENT	32,000	8.0000	256,000 (34,280)
7 8	MAY ADJUSTMENT	20,000	8.0000	160,000 (34,280)
9 10	JUNE ADJUSTMENT	20,000	8.0000	160,000 (34,280)
11 12	JULY ADJUSTMENT	20,000	8.0000	160,000 (34,280)
13 14	AUGUST ADJUSTMENT	20,000	8.0000	160,000 (34,280)
15 16	SEPTEMBER ADJUSTMENT	20,000	8.0000	160,000 (34,280)
17 18	OCTOBER ADJUSTMENT	32,000	8.0000	256,000 (34,280)
19 20	NOVEMBER ADJUSTMENT	55,000	7.6569	421,130 (65,584)
21 22	DECEMBER ADJUSTMENT	55,000	7.6569	421,130 (65,584)
23 24	JANUARY, 2021 ADJUSTMENT	55,000	7.6569	421,130 (65,584)
25	TOTAL	357,696		2,186,431

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EXHIBIT 1-D SCHEDULE 6 SHEET 9 OF 18

### COLUMBIA GAS OF PENNSYLVANIA, INC DETAIL OF HISTORIC COST OF GAS EQUITRANS TRANSPORTATION COMMODITY CHARGES

LINE NO.	MONTH	COMMODITY VOLUME (1)	BILLING RATE (2)	AMOUNT (3=1x2)
		Òth	\$/Dth	\$
1	FEBRUARY, 2020	0	0.0000	0
2	MARCH	0	0.0000	0
3	APRIL	253,065	0.0113	2,860
4	ADJUSTMENT	0	0.0000	(2,145)
5	MAY	274,195	0.0113	3,098
6	ADJUSTMENT	0	0.0000	(2,324)
7	JUNE	265,350	0.0113	2,998
8	ADJUSTMENT	0	0.0000	(2,249)
9	JULY	258,973	0.0113	2,926
10	ADJUSTMENT	0	0.0000	(2,195)
11	AUGUST	258,974	0.0113	2,926
12	ADJUSTMENT	0	0.0000	(2,195)
13	SEPTEMBER	250,620	0.0113	2,832
14	ADJUSTMENT	0	0.0000	(2,124)
15	OCTOBER	216,318	0.0113	2,444
16	ADJUSTMENT	0	0.0000	(1,833)
17	NOVEMBER	0	0.0000	0
18	DECEMBER	372,000	0.0113	4,204
19	ADJUSTMENT	0	0.0000	(3,153)
20	JANUARY, 2021	372,000	0.0113	4,204
21	ADJUSTMENT	0	0.0000	(3,272)
22	TOTAL	2,521,495		7,004

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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 (1) Dth	BILLING RATE (2) \$/Dth	TOTAL FTA AMOUNT (3=1x2) \$
1	FEBRUARY, 2020	23,600	4.7665	112,490
2	MARCH	23,600	4.7665	112,490
3	APRIL	23,600	4.7665	112,490
4	MAY	23,600	4.7665	112,490
5	JUNE	23,600	4.7665	112,490
6	JULY	23,600	4.7665	112,490
7 8	AUGUST ADJUSTMENT	23,600 0	4.7665 0.0000	112,490 (3,255)
9 10	SEPTEMBER ADJUSTMENT	23,600 0	4.7665 0.0000	112,490 (75)
11 12	OCTOBER ADJUSTMENT	23,600 0	4.7665 0.0000	112,490 (33)
13	NOVEMBER	23,600	4.7408	111,883
14 15	DECEMBER ADJUSTMENT	23,600 0	4.7565 0.0000	112,254 371
16	JANUARY, 2021	23,600	4.7565	112,254
17	TOTAL	283,200		1,345,808

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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 2	FEBRUARY, 2020 ADJUSTMENT	424,278	0.0232	9,828 427
3 4	MARCH ADJUSTMENT	347,650	0.0233	8,093 76
5 6	APRIL ADJUSTMENT	368,804	0.0056	2,074 76
7 8	MAY ADJUSTMENT	251,698	0.0053	1,331 5,216
9 10	JUNE ADJUSTMENT	150,495 0	0.0238 0.0000	3,585 4,132
11 12	JULY ADJUSTMENT	154,474 0	0.0228 0.0000	3,515 (102)
13 14	AUGUST ADJUSTMENT	145,208 0	0.0088 0.0000	1,276 (110)
15	SEPTEMBER	170,947	0.0223	3,819
16	OCTOBER	260,166	0.0207	5,386
17 18	NOVEMBER ADJUSTMENT	327,989 0	0.0223 0.0000	7,319 (33)
19 20	DECEMBER ADJUSTMENT	469,558 0	0.0223 0.0000	10,451 172
21	JANUARY, 2021	498,163	0.0235	11,710
22	TOTAL	3,569,430		78,239

### 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, 2020	350,254
2	MARCH	350,254
3	APRIL	240,016
4	MAY	240,016
5	ADJUSTMENT	(7,304)
6	JUNE	240,016
7	ADJUSTMENT	(7,304)
8	JULY	240,016
9	ADJUSTMENT	(7,304)
10	AUGUST	240,639
11	ADJUSTMENT	(7,304)
12	SEPTEMBER	240,639
13	ADJUSTMENT	(6,586)
14	OCTOBER	240,639
15	ADJUSTMENT	(6,586)
16	NOVEMBER	264,404
17	ADJUSTMENT	(6,586)
18	DECEMBER	312,414
19	ADJUSTMENT	(30,351)
20	JANUARY, 2021	312,414
21	ADJUSTMENT	(6,244)
22	TOTAL	3,186,153

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

Exhibit No. 12 Schedule No. 4 Page 50 of 55 Witness: J Siegler

> EXHIBIT 1-D SCHEDULE 6 SHEET 13 OF 18

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

LINE NO.	MONTH	DEMAND VOLUME (1) Dth	CDS CONTRACT # 800387 RATE (2) \$/Dth	AMOUNT (3=1x2)	DEMAND VOLUME (4) Dth	CDS CONTRACT # 910463 RATE (5) \$/Dth	AMOUNT (6=4x5)	DEMAND VOLUME (7) Dth	CDS CONTRACT # 910464 RATE (8) \$/Dth	AMOUNT (9=7x8)	TOTAL AMOUNT CDS (10=3+6+9)
1	FEBRUARY, 2020	5,390	9.3287	50,281	364	9.3237	3,394	9,951	9.3266	92,809	146,484
2	MARCH	5,390	9.3287	50,281	364	9.3237	3,394	9,951	9.3266	92,809	146,484
3	APRIL	5,390	7.7987	42,035	364	7.7948	2,837	9,951	7.7605	77,225	122,097
5	MAY	5,390	7.7987	42,035	364	7.7948	2,837	9,951	7.7605	77,225	122,097
5	JUNE	5,390	7.7987	42,035	364	7.7948	2,837	9,951	7.7605	77,225	122,097
6	JULY	5,390	7.7987	42,035	364	7.7948	2,837	9,951	7.7605	77,225	122,097
7	AUGUST	5,390	7.8356	42,234	364	7.8316	2,851	9,951	7.8017	77,635	122,719
8	SEPTEMBER	5,390	7.8356	42,234	364	7.8316	2,851	9,951	7.8017	77,635	122,719
9	OCTOBER	5,390	7.8356	42,234	364	7.8316	2,851	9,951	7.8017	77,635	122,719
10	NOVEMBER	5,390	9.3287	50,281	364	9.3237	3,394	9,951	9.3266	92,809	146,484
11 12	DECEMBER ADJUSTMENT	5,390 0	7.8504 0.0000	42,314 (8,047)	364 0	7.8464 0.0000	2,856 (543)	9,951 0	7.8188 0.0000	77,805 (15,174)	122,974 (23,765)
13	JANUARY, 2021	5,390	7.8504	42,314	364	7.8464	2,856	9,951	7.8188	77,805	122,974
14	TOTAL	64,680		522,265	4,368		35,252	119,412		960,664	1,518,181

Exhibit No. 12 Schedule No. 4 Page 51 of 55 Witness: J Siegler

> EXHIBIT 1-D SCHEDULE 6 SHEET 14 OF 18

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

LINE NO.	MONTH	DEMAND VOLUME (11) Dth	FT-1 CONTRACT # 830049 RATE (12) \$/Dth	AMOUNT (13=11x12)	DEMAND VOLUME (14) Dth	FT-1 CONTRACT # 910951 RATE (15) \$/Dth	AMOUNT (16=14x15)	DEMAND VOLUME (17) Dth	FT-1 CONTRACT # 911660 RATE (18) \$/Dth	AMOUNT (19=17x18)	TOTAL AMOUNT FT-1 (20=13+16+19)	TOTAL CDS AND FT-1 DEMAND (21=10+20) \$
1	FEBRUARY, 2020	10,000	8.5850	85,850	14,835	7.9350	117,716	100	2.0380	204	203,770	350,254
2	MARCH	10,000	8.5850	85,850	14,835	7.9350	117,716	100	2.0380	204	203,770	350,254
3	APRIL	0	0.0000	0	14,835	7.9350	117,716	100	2.0380	204	117,920	240,016
4	MAY	0	0.0000	0	14,835	7.9350	117,716	100	2.0380	204	117,920	240,016
5	ADJUSTMENT	0	0.0000	0	0	0.0000	(7,257)	0	0.0000	(47)	(7,304)	(7,304)
6	JUNE	0	0.0000	0	14,835	7.9350	117,716	100	2.0380	204	117,920	240,016
7	ADJUSTMENT	0	0.0000	0	0	0.0000	(7,257)	0	0.0000	(47)	(7,304)	(7,304)
8	JULY	0	0.0000	0	14,835	7.9350	117,716	100	2.0380	204	117,920	240,016
9	ADJUSTMENT	0	0.0000	0	0	0.0000	(7,257)	0	0.0000	(47)	(7,304)	(7,304)
10	AUGUST	0	0.0000	0	14,835	7.9350	117,716	100	2.0380	204	117.920	240,639
11	ADJUSTMENT	0	0.0000	0	0	0.0000	(7,257)	0	0.0000	(47)	(7,304)	(7,304)
12	SEPTEMBER	0	0.0000	0	14,835	7.9350	117,716	100	2.0380	204	117,920	240,639
13	ADJUSTMENT	0	0.0000	0	0	0.0000	(6,539)	0	0.0000	(47)	(6,586)	(6,586)
14	OCTOBER	0	0.0000	0	14,835	7.9350	117,716	100	2.0380	204	117,920	240,639
15	ADJUSTMENT	0	0.0000	0	0	0.0000	(6,539)	0	0.0000	(47)	(6,586)	(6,586)
16	NOVEMBER	0	0.0000	0	14,835	7.9350	117,716	100	2.0380	204	117.920	264,404
17	ADJUSTMENT	0	0.0000	0	0	0.0000	(6,539)	0	0.0000	(47)	(6,586)	(6,586)
18	DECEMBER	10,000	7.1520	71,520	14,835	7.9350	117,716	100	2.0380	204	189,440	312,414
19	ADJUSTMENT	0	0.0000	0	0	0.0000	(6,539)	0	0.0000	(47)	(6,586)	(30,351)
20	JANUARY, 2021	10,000	7.1520	71,520	14,835	7.9350	117,716	100	2.0380	204	189,440	312,414
21	ADJUSTMENT	0	0.0000	0	0	0.0000	(6,198)	0	0.0000	(47)	(6,244)	(6,244)
22	TOTAL	40,000		314,740	178,020		1,351,206	1,200		2,025	1,667,971	3,186,153

Exhibit No. 12 Schedule No. 4 Page 52 of 55 Witness: J Siegler

> 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 (1) Dth	BILLING RATE (2) \$/Dth	TOTAL FT1 COMMODITY (3=1x2) \$	COMMODITY VOLUME (4) Dth	BILLING RATE (5) \$/Dth	TOTAL CDS COMMODITY (6=4x5)	TOTAL FT1 CDS (7=3+6) \$
1	FEBRUARY, 2020	58,000	0.0390	2,262	0	0.0000	0	2,262
2	ADJUSTMENT	0	0.0000	(322)	0	0.0000	0	(322)
3	MARCH	0	0.0000	0	0	0.0000	0	0
4	ADJUSTMENT	0	0.0000	(377)	0	0.0000	0	(377)
5	APRIL	0	0.0000	0	0	0.0000	0	0
6	MAY	0	0.0000	0	0	0.0000	0	0
7	JUNE	0	0.0000	0	0	0.0000	0	0
8	JULY	0	0.0000	0	0	0.0000	0	0
9	AUGUST	0	0.0000	0	0	0.0000	0	0
10	SEPTEMBER	0	0.0000	0	0	0.0000	0	0
11	OCTOBER	0	0.0000	0	0	0.0000	0	0
12	NOVEMBER	0	0.0000	0	0	0.0000	0	0
13	DECEMBER	77,500	0.0388	3,007	0	0.0000	0	3,007
14	JANUARY, 2021	131,200	0.0388	5,091	0	0.0000	0	5,091
4	ADJUSTMENT	0	0.0000	178	0	0.0000	0	178
16	TOTAL	266,700		9,839	0		0	9,839

Exhibit No. 12 Schedule No. 4 Page 53 of 55 Witness: J Siegler

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 (1) Dth	BILLING RATE (2) \$/Dth	TOTAL FT AMOUNT (3=1x2) \$
1	FEBRUARY, 2020	4,304	4.5019	19,376
2 3	MARCH ADJUSTMENT	4,304	4.5019	19,376 1,778
4	APRIL	4,304	4.5019	19,376
5	MAY	4,304	4.5019	19,376
6	JUNE	4,304	4.5019	19,376
7	JULY	4,304	4.5019	19,376
8	AUGUST	4,304	4.5019	19,376
9	SEPTEMBER	4,304	4.5019	19,376
10	OCTOBER	4,304	4.5019	19,376
11	NOVEMBER	4,304	4.5274	19,486
12	DECEMBER	4,304	4.5274	19,486
13	JANUARY, 2021	4,304	4.5274	19,486
14	TOTAL	51,648		234,622

Exhibit No. 12 Schedule No. 4 Page 54 of 55 Witness: J Siegler

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 (1) Dth	BILLING RATE (2) \$/Dth	TOTAL FT COMMODITY (3=1x2) \$
1 2	FEBRUARY, 2020 ADJUSTMENT	50,779	0.0153	777 12
3 4	MARCH ADJUSTMENT	39,933	0.0153	611 37
5 6	APRIL ADJUSTMENT	30,690	0.0153	470 (43)
7	MAY	21,483	0.0153	329
8 9	JUNE ADJUSTMENT	5,247	0.0153	80 (2)
10 11	JULY ADJUSTMENT	1,507	0.0153	23 (4)
12 13	AUGUST ADJUSTMENT	7,855	0.0153	120 26
14 15	SEPTEMBER ADJUSTMENT	10,435	0.0153	160 2
16 17	OCTOBER ADJUSTMENT	20,295	0.0151	306 (1)
18 19	NOVEMBER ADJUSTMENT	36,234	0.0151	547 (11)
20 21	DECEMBER ADJUSTMENT	57,603	0.0151	870 5
22 23	JANUARY, 2021 ADJUSTMENT	65,111	0.0151	983 (1)
24	TOTAL	347,172		5,294

Exhibit No. 12 Schedule No. 4 Page 55 of 55 Witness: J Siegler

> 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

			DEMAND	COMMODITY	COMMODITY	
LINE NO.	MONTH	TRANSPORTATION SHRINKAGE VOLUMES (1) Dth	OPERATIONAL BALANCING CHARGES (2) \$	CASH IN/ CASH OUT EXCHANGE FEES (3) \$	OTHER COMPLIANCE (4) \$	TOTAL COMMODITY (5=3+4) \$
1	FEBRUARY, 2020	(16,150)	0	0	387	387
2	MARCH	(12,247)	0	0	0	0
3	APRIL	(79,878)	0	0	0	0
4	MAY	(58,525)	0	0	0	0
5	JUNE	(31,945)	0	0	(1,667)	(1,667)
6	JULY	(69,189)	26	0	30	30
7	AUGUST	(83,859)	61	0	0	0
8	SEPTEMBER	(60,929)	23,822	0	(1,501)	(1,501)
9	OCTOBER	(51,102)	16,833	0	(1,009)	(1,009)
10	NOVEMBER	(10,356)	0	0	1,667	1,667
11	DECEMBER	(46,013)	0	0	1,563	1,563
12	JANUARY, 2021	(55,678)	0	0	0	0
13	TOTAL	(575,871)	40,743	0	(529)	(529)

Exhibit No. 12 Schedule No. 4 Page 52 of 52 Witness: J. Siegler

### 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.

Exhibit No. 12 Schedule No. 5 Page 1 of 4 Witness: J. Siegler

### 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, 2020 through December 31, 2020 is detailed on Page 2. During this period, the PGC Rate was \$3.4455 per Dth with an E-Factor of (\$0.0451), which equals a combined Total Rate of \$3.4004 per Dth.

The cost of gas included in the base cost of fuel from January 1, 2021 through September 30, 2021 is detailed on Page 3. During this period, the PGC Rate was \$3.8714 per Dth with an E-Factor of (\$0.0202), which equals a combined Total Rate of \$3.8512 per Dth.

The cost of gas included in the base cost of fuel from October 1, 2021 through December 31, 2021 is detailed on Page 4. During this period, the PGC Rate was \$5.4813 per Dth with an E-Factor of \$0.2467, which equals a combined Total Rate of \$5.7280 per Dth.

Columbia has used its purchased gas cost rates effective January 1, 2022 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.

Exhibit No. 12
Schedule No. 5
Page 2 of 4
Witness: J. Siegler
Exhibit 1-A

Exhibit 1-A Schedule 1 Sheet 1 of 2

### COLUMBIA GAS OF PENNSYLVANIA, INC. COMPUTATION OF CHANGE IN RATE PURSUANT TO SECTION 1307(f) APPLICATION PERIOD: OCTOBER, 2020 THROUGH SEPTEMBER, 2021

Line No.	Description	Amount
		(1)
1	Purchased Gas Commodity Cost	\$
2	Commodity Cost of Gas (Exhibit 1-B, Schedule 1)	74,902,323
3	Projected tariff sales for the twelve billing periods of	
4	October, 2020 through September, 2021	336,852,856 Therms
5	PGCC (Line 2/Line 4)	0.22236
6	Commodity (Over)/Under Collection	
7	Commodity E-Factor	(5.400.440)
8	(Exhibit No. 1-E)	(5,498,440)
9 10	Projected sales for the twelve billing periods of October, 2020 through September, 2021	226 952 956 Thorms
11	Commodity E-Factor (Line 8/ Line 10)	336,852,856 Therms (0.01632)
11	Commodity E-Factor (Line & Line 10)	(0.01032)
12	Purchased Gas Demand Cost	
13	Demand cost of gas (Exhibit 1-B, Schedule 1)	60,885,476
14	Less: Purchased Gas Demand recovered under Rate SS	
15	(Exhibit 1-A, Schedule 2, Sheet 2)	477,544
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)	60,407,932
19	Projected sales for the twelve billing periods of	475 222 740 Thorms
20 21	October, 2020 through September, 2021 1_/ PGDC Rate prior to Capacity Release Credit (Line 18 / Line 20)	475,223,749 Therms 0.12711
22	Off System Sales and Capacity Release Credit	
23	PGDC Rate	<u>(0.00492)</u> 0.12219
23	1 ODC Nate	0.12219
24	Demand (Over)/Under Collection	
25	Demand E- Factor	
26	(Exhibit No. 1-E)	5,610,854
27	Projected sales for the twelve billing periods of	
28	October, 2020 through September, 2021 1_/	475,223,749 Therms
29	Demand E-Factor (Line 26 / Line 28)	0.01181
30	Total Purchased Gas Cost	
31	PGCC Rate (Line 5)	0.22236
32	PGDC Rate (Line 23)	0.12219
33	PGC Rate	0.34455
34	Currently effective PGC	0.32179
35	Increase (Decrease) in PGC	0.02276
36	Net (Over) Under Collection	
37	Commodity E-Factor (Line 11)	(0.01632)
38	Demand E-Factor (Line 29)	0.01181
39	E-Factor	(0.00451)
40	Currently effective E-Factor	0.00383
41	Increase (Decrease) in E-Factor	(0.00834)
42	PGC Rate	0.34455
43	E-Factor	(0.00451)
44	Total Rate	0.34004
45	Currently effective Rate	0.32562
46	Increase (Decrease) in Rate	0.01442

<sup>1</sup>\_/ Includes 138,370,893 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, 2020 THROUGH SEPTEMBER, 2021

Line					
No.	Description	Amount	_	Change in Rate	Effective 1-1-20
		(1)		(2=3-1)	(3)
1	Purchased Gas Commodity Cost	\$			
2	Commodity Cost of Gas (Exhibit 1-B, Schedule 1)	74,902,323			
3	Projected tariff sales for the twelve billing periods of				
4	October, 2020 through September, 2021	336,852,856	Therms		
5	PGCC (Line 2/Line 4)	0.22236		(0.04557)	0.17679
6	Commodity (Over)/Under Collection				
7	Commodity E-Factor				
8	(Exhibit No. 1-E)	(5,498,440)		695,972	(4,802,468)
9	Projected sales for the twelve billing periods of		_		
10	October, 2020 through September, 2021	336,852,856	Therms		336,852,856
11	Commodity E-Factor (Line 8/ Line 10)	(0.01632)		0.00206	(0.01426)
40	Durch and One Demand One				
12	Purchased Gas Demand Cost  Porceard cost of rea (Fishibit 4 B. Sahadula 1)	CO 00E 47C			
13	Demand cost of gas (Exhibit 1-B, Schedule 1)	60,885,476			
14	Less: Purchased Gas Demand recovered under Rate SS	477 544			
15	(Exhibit 1-A, Schedule 2, Sheet 2)	477,544			
16	Less: Purchased Gas Demand Cost allocated to Rates LTS, STS	ο,			
17	SGS-TS and MLS (Exh 1-A, Sch 2, Page 3)	00 407 000			
18	Subtotal (Line 13 - Line 15 - Line 17)	60,407,932			
19	Projected sales for the twelve billing periods of	475 000 740	The same of		
20	October, 2020 through September, 2021 1_/	475,223,749	THEITIS		0.21527
21	PGDC Rate prior to Capacity Release Credit (Line 18 / Line 20)	0.12711		0.08816	
22 23	Off System Sales and Capacity Release Credit PGDC Rate	(0.00492) 0.12219	-	0.00000	(0.00492)
23	FODC Nate	0.12219		0.00010	0.21035
24	Demand (Over)/Under Collection				
25	Demand E- Factor				
26	(Exhibit No. 1-E)	5,610,854		207,667	5,818,521
27	Projected sales for the twelve billing periods of	3,010,034		201,001	3,010,321
28	October, 2020 through September, 2021 1 /	475,223,749	Therms		475,223,749
29	Demand E-Factor (Line 26 / Line 28)	0.01181	111011110	0.00043	0.01224
20	Bornana E Factor (Ellie 20 / Ellie 20)	0.01101		0.00040	0.01224
30	Total Purchased Gas Cost				
31	PGCC Rate (Line 5)	0.22236		(0.04557)	0.17679
32	PGDC Rate (Line 23)	0.12219		0.08816	0.21035
33	PGC Rate	0.34455	-	0.04259	0.38714
34	Currently effective PGC	0.32179			0.34455
35	Increase (Decrease) in PGC	0.02276	•		0.04259
36	Net (Over) Under Collection				
37	Commodity E-Factor (Line 11)	(0.01632)		0.00206	(0.01426)
38	Demand E-Factor (Line 29)	0.01181	_	0.00043	0.01224
39	E-Factor	(0.00451)		0.00249	(0.00202)
40	Currently effective E-Factor	0.00383	-		(0.00451)
41	Increase (Decrease) in E-Factor	(0.00834)			0.00249
42	PGC Rate	0.34455		0.04259	0 20744
42	E-Factor			0.04259	0.38714
		(0.00451)	-		(0.00202)
44 45	Total Rate Currently effective Rate	0.34004		0.04508	0.38512
45 46	Increase (Decrease) in Rate	0.32562			0.34004 0.04508
40	morease (Decrease) in Nate	0.01442			0.04008

<sup>1</sup>\_/ Includes 138,370,893 Therm Transportation Quantities for the Company's Choice Program

Exhibit No. 12
Schedule No. 5
Page 4 of 4
Witness: J. Siegler Exhibit 1-A

Exhibit 1-A Schedule 1 Sheet 1 of 2

### COLUMBIA GAS OF PENNSYLVANIA, INC. COMPUTATION OF CHANGE IN RATE PURSUANT TO SECTION 1307(f) APPLICATION PERIOD: OCTOBER, 2021 THROUGH SEPTEMBER, 2022

Line No.	Description	Amount
		(1)
1	Purchased Gas Commodity Cost	\$
2	Commodity Cost of Gas (Exhibit 1-B, Schedule 1)	119,851,657
3	Projected tariff sales for the twelve billing periods of	000 050 000 TI
4	October, 2021 through September, 2022	383,059,309 Therms
5	PGCC (Line 2/Line 4)	0.31288
6	Commodity (Over)/Under Collection	
7	Commodity E-Factor	
8	(Exhibit No. 1-E)	2,834,398
9	Projected sales for the twelve billing periods of	202 050 200 Thamas
10	October, 2021 through September, 2022	383,059,309 Therms
11	Commodity E-Factor (Line 8/ Line 10)	0.00740
12	Purchased Gas Demand Cost	
13	Demand cost of gas (Exhibit 1-B, Schedule 1)	113,300,251
14	Less: Purchased Gas Demand recovered under Rate SS	
15	(Exhibit 1-A, Schedule 2, Sheet 2)	1,036,584
16	Less: Purchased Gas Demand Cost allocated to Rates LTS, STS,	
17	SGS-TS and MLS (Exh 1-A, Sch 2, Page 3)	110,000,007
18	Subtotal (Line 13 - Line 15 - Line 17)	112,263,667
19	Projected sales for the twelve billing periods of	470 657 442 Thorms
20	October, 2021 through September, 2022 1_/	470,657,143 Therms
21 22	PGDC Rate prior to Capacity Release Credit (Line 18 / Line 20) Off System Sales and Capacity Release Credit	0.23853 (0.00328)
23	PGDC Rate	0.23525
23	FODE Nate	0.23323
24	Demand (Over)/Under Collection	
25	Demand E- Factor	
26	(Exhibit No. 1-E)	8,127,735
27	Projected sales for the twelve billing periods of	
28	October, 2021 through September, 2022 1_/	470,657,143 Therms
29	Demand E-Factor (Line 26 / Line 28)	0.01727
30	Total Purchased Gas Cost	
31	PGCC Rate (Line 5)	0.31288
32	PGDC Rate (Line 23)	0.23525
33	PGC Rate	0.54813
34	Currently effective PGC	0.38714
35	Increase (Decrease) in PGC	0.16099
36	Net (Over) Under Collection	
37	Commodity E-Factor (Line 11)	0.00740
38	Demand E-Factor (Line 29)	0.00740
39	E-Factor	0.02467
40	Currently effective E-Factor	(0.00202)
41	Increase (Decrease) in E-Factor	0.02669
42	PGC Rate	0.54813
43	E-Factor	0.02467
44	Total Rate	0.57280
45 46	Currently effective Rate	0.38512
46	Increase (Decrease) in Rate	0.18768

<sup>1</sup>\_/ Includes 87,597,834 Therm Transportation Quantities for the Company's Choice Program

Exhibit No. 12 Schedule No. 6 Page 1 of 1

Witness: J. Siegler

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

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

Response:

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

Exhibit No. 12 Schedule No. 8 Page 1 of 85 Witness: J. Siegler

### <u>COLUMBIA GAS OF PENNSYLVANIA, INC</u> <u>SECTION 53.62 RECOVERIES OF FUEL COSTS BY GAS UTILITIES</u>

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-2021-3024349 consisting of 15 exhibits filed on March 1, 2021. On April 1, 2021, 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, 2021 Quarterly PGC comprises Pages 2-43 with rates effective for October 1, 2021 through December 31, 2021. The January 1, 2022 Quarterly PGC comprises Pages 44-85 with rates effective for January 1, 2022 through March 31, 2022.

Exhibit 1-A Schedule 1 Sheet 1 of 2

### COLUMBIA GAS OF PENNSYLVANIA, INC. COMPUTATION OF CHANGE IN RATE PURSUANT TO SECTION 1307(f) APPLICATION PERIOD: OCTOBER, 2021 THROUGH SEPTEMBER, 2022

Line			
No.	Description	Amount	-
4	Durch and Can Common dity Cont	(1)	
1 2	Purchased Gas Commodity Cost Commodity Cost of Gas (Exhibit 1-B, Schedule 1)	\$ 119,851,657	
3	Projected tariff sales for the twelve billing periods of	119,051,057	
4	October, 2021 through September, 2022	383,059,309	Thorme
5	PGCC (Line 2/Line 4)	0.31288	THEITIS
0	1 GGG (Line 2/Line 4)	0.51200	
6	Commodity (Over)/Under Collection		
7	Commodity E-Factor		
8	(Exhibit No. 1-E)	2,834,398	
9	Projected sales for the twelve billing periods of		
10	October, 2021 through September, 2022	383,059,309	Therms
11	Commodity E-Factor (Line 8/ Line 10)	0.00740	
12	Purchased Gas Demand Cost		
13	Demand cost of gas (Exhibit 1-B, Schedule 1)	113,300,251	
14	Less: Purchased Gas Demand recovered under Rate SS	110,000,201	
15	(Exhibit 1-A, Schedule 2, Sheet 2)	1,036,584	
16	Less: Purchased Gas Demand Cost allocated to Rates LTS, STS,	1,000,000	
17	SGS-TS and MLS (Exh 1-A, Sch 2, Page 3)	0	
18	Subtotal (Line 13 - Line 15 - Line 17)	112,263,667	-
19	Projected sales for the twelve billing periods of		
20	October, 2021 through September, 2022 1_/	470,657,143	Therms
21	PGDC Rate prior to Capacity Release Credit (Line 18 / Line 20)	0.23853	-
22	Off System Sales and Capacity Release Credit	(0.00328)	_
23	PGDC Rate	0.23525	-
24	Demand (Over)/Under Collection		
25	Demand E- Factor		
26	(Exhibit No. 1-E)	8,127,735	
27	Projected sales for the twelve billing periods of	0,121,100	
28	October, 2021 through September, 2022	470,657,143	Therms
29	Demand E-Factor (Line 26 / Line 28)	0.01727	-
	,		
30	Total Purchased Gas Cost		
31	PGCC Rate (Line 5)	0.31288	
32	PGDC Rate (Line 23)	0.23525	-
33	PGC Rate	0.54813	
34	Currently effective PGC	0.38714	
35	Increase (Decrease) in PGC	0.16099	
36	Net (Over) Under Collection		
37	Commodity E-Factor (Line 11)	0.00740	
38	Demand E-Factor (Line 29)	0.01727	
39	E-Factor ,	0.02467	-
40	Currently effective E-Factor	(0.00202)	
41	Increase (Decrease) in E-Factor	0.02669	-
40	DCC Boto	0.54040	
42 43	PGC Rate E-Factor	0.54813	
43 44	E-Factor Total Rate	0.02467	-
44 45	Currently effective Rate	0.57280 0.38512	
46	Increase (Decrease) in Rate	0.18768	-
40	morease (Deorease) in Nate	0.10700	

<sup>1</sup>\_/ Includes 87,597,834 Therm Transportation Quantities for the Company's Choice Program

Exhibit No. 12 Schedule No. 8 Page 3 of 85 Witness: J. Siegler

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, 2021 THROUGH SEPTEMBER, 2022

Line	Description	Detail	Total
No.	<u>Description</u>	(1)	(2)
		(1)	(2)
1	Total estimated demand charges for the period		
2	October, 2021 through September, 2022	113,300,251	
3	Estimated Demand Quantity (Therms) 1_/	82,382,520	
4	Daily purchased gas demand rate (Line 2 / line 3)	\$1.37529	per Therm
			-
5	Daily purchased gas demand (Therms)	753,720	Therms
6	Daily purchased gas demand rate per Therm	\$1.37529	-
7	Total rate SS Daily Demand Cost to be		
8	Recovered (Line 5 x Line 6)		\$1,036,584

1\_/ Monthly Demand Billing Determinants x 12

Exhibit No. 12 Schedule No. 8 Page 4 of 85 Witness: Exhibit A Schedule 2 Sheet 1 of 4

# COLUMBIA GAS OF PENNSYLVANIA, INC. SUMMARY OF PROJECTED SALES QUANTITIES AND REVENUES FOR THE PERIOD SALES AT PGCC AND PGDC RATES OCTOBER, 2021 THROUGH SEPTEMBER, 2022

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 - 2021	9,357,626	0.31288	2,927,814	11,694,463	0.23853	2,789,480	5,717,294
2	November	25,344,311	0.31288	7,929,728	31,077,285	0.23853	7,412,865	15,342,593
3	December	53,369,405	0.31288	16,698,219	65,618,591	0.23853	15,652,003	32,350,222
4	January - 2022	73,628,800	0.31288	23,036,979	90,361,739	0.23853	21,553,986	44,590,965
5	February	73,862,241	0.31288	23,110,018	90,458,855	0.23853	21,577,151	44,687,169
6	March	62,825,964	0.31288	19,656,988	76,886,959	0.23853	18,339,846	37,996,834
7	April	40,504,091	0.31288	12,672,920	49,623,766	0.23853	11,836,757	24,509,677
8	May	18,465,975	0.31288	5,777,634	22,766,824	0.23853	5,430,571	11,208,205
9	June	9,587,525	0.31288	2,999,745	11,929,985	0.23853	2,845,659	5,845,404
10	July	5,429,493	0.31288	1,698,780	6,845,196	0.23853	1,632,785	3,331,565
11	August	4,830,979	0.31288	1,511,517	6,152,973	0.23853	1,467,669	2,979,186
12	September	5,852,899	0.31288	1,831,255	7,240,507	0.23853	1,727,078	3,558,333
13	Total	383,059,309		119,851,597	470,657,143		112,265,850	232,117,447

October 1, 2021 Quarterly Filing

Exhibit No. 12 Schedule No. 8 Page 5 of 85 Witness: J. Siegler

Exhibit 1-A Schedule 2 Sheet 2 of 4

# COLUMBIA GAS OF PENNSYLVANIA, INC. SUMMARY OF PROJECTED SALES QUANTITIES AND REVENUES FOR THE PERIOD SALES AT STANDBY RATE OCTOBER, 2021 THROUGH SEPTEMBER, 2022

Line No.	Month	Daily Purchased Gas Demand Quantity (1) Therms	Daily Gas Demand <u>Rate</u> (2) \$/Therm	Daily Purchased Gas Demand Revenue (3=1x2) \$
1	October - 2021	62,810	1.37529	86,382
2	November	62,810	1.37529	86,382
3	December	62,810	1.37529	86,382
4	January - 2022	62,810	1.37529	86,382
5	February	62,810	1.37529	86,382
6	March	62,810	1.37529	86,382
7	April	62,810	1.37529	86,382
8	May	62,810	1.37529	86,382
9	June	62,810	1.37529	86,382
10	July	62,810	1.37529	86,382
11	August	62,810	1.37529	86,382
12	September	62,810	1.37529	86,382
13	Total	753,720		1,036,584

Exhibit No. 12 Schedule No. 8 Page 6 of 85 Witness: J. Siegler

> Exhibit 1-A Schedule 2 Sheet 3 of 4

# COLUMBIA GAS OF PENNSYLVANIA, INC. SUMMARY OF PROJECTED SALES QUANTITIES AND REVENUES FOR THE PERIOD SALES AT BANKING AND BALANCING RATES OCTOBER, 2021 THROUGH SEPTEMBER, 2022

Line No.	Month	Lg. Quantity GDS Deliveries (1)	Rate (2)	Revenue (3=1x2)	Sm. Quantity GDS Deliveries (4)	Rate(5)	Revenue (6=4x5)	Total Trans. Revenue (7=3+6)
		Therms	\$/Therm	\$	Therms	\$/Therm	\$	\$
1	October - 2021	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 - 2022	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

Exhibit No. 12 Schedule No. 8 Page 7 of 85 Witness: J. Siegler

> Exhibit 1-A Schedule 2 Sheet 4 of 4

## COLUMBIA GAS OF PENNSYLVANIA, INC. SUMMARY OF PROJECTED TOTAL OVER/UNDERCOLLECTION FOR THE 2021 1307(f) PERIOD OCTOBER, 2021 THROUGH SEPTEMBER, 2022

Line No.	Month	Commodity Recoveries PGCC Revenue (1) \$	Total Commodity Cost of Gas 1_/ (2) \$	Commodity Over/ (Under) collection (3=1-2) \$	Demand Recoveries PGDC Revenue (4) \$	Total Demand Cost of Gas 1_/ (5) \$	Demand Over/ (Under) collection (6=4-5) \$	Total Over/ (Under) collection (7=3+6) \$
1	October - 2021	2,927,814	6,579,290	(3,651,476)	2,875,862	10,806,717	(7,930,855)	(11,582,331)
2	November	7,929,728	11,751,983	(3,822,255)	7,499,247	10,970,978	(3,471,731)	(7,293,986)
3	December	16,698,219	21,175,812	(4,477,593)	15,738,385	11,020,508	4,717,877	240,284
4	January - 2022	23,036,979	24,759,701	(1,722,722)	21,640,368	11,020,508	10,619,860	8,897,138
5	February	23,110,018	23,073,892	36,126	21,663,533	11,020,508	10,643,025	10,679,151
6	March	19,656,988	15,540,531	4,116,457	18,426,228	11,020,508	7,405,720	11,522,177
7	April	12,672,920	8,401,072	4,271,848	11,923,139	7,986,754	3,936,385	8,208,233
8	May	5,777,634	3,296,282	2,481,352	5,516,953	7,890,754	(2,373,801)	107,551
9	June	2,999,745	1,321,183	1,678,562	2,932,041	7,890,754	(4,958,713)	(3,280,151)
10	July	1,698,780	1,180,996	517,784	1,719,167	7,890,754	(6,171,587)	(5,653,803)
11	August	1,511,517	1,124,597	386,920	1,554,051	7,890,754	(6,336,703)	(5,949,783)
12	September	1,831,255	1,646,319	184,936	1,813,460	7,890,754	(6,077,294)	(5,892,358)
13	Total	119,851,597	119,851,657	(61)	113,302,434	113,300,251	2,183	2,123

<sup>1</sup>\_/ Refer to Exhibit 1-B, Schedule No. 1.

Exhibit No. 12 Schedule No. 8 Page 8 of 85 Witness: J. Sieglafbit 1-A Schedule 3 Sheet 1 of 2

## 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, 2022

\$113,300,251		1. Projected Demand Costs Oct. 2021 through Sept. 2022 (E	xh. 1-B, Sch. 1)
(1,036,584)		<ol> <li>Less Purchased Gas Demand Costs Recovered Under R (Exhibit 1-A, Schedule 1, Sheet 2)</li> </ol>	ate SS
0		1b. Less Purchased Gas Demand Allocated to Rates LTS, S	ΓS, SGS-TS, and MLS
8,127,735		1c. Experienced Demand Net Under/(Over) Collection (Exhibit	t No. 1-E)
\$120,391,402	=	2. Total Adjusted Demand Costs per 1307(f) Filing (1) + (1	a) + (1b) + (1c)
\$147.36	per Dth	3. Unit FT Demand Charge Per Dth of TCO/DTI capacity the marketer would pay TCO and DTI. (Exhibit 1-A, Scheol	dule 3, Sheet 2)
47,066	MMDth	4. Projected Sales & Choice Requirements for 12 billing period through September, 2022	ods of October, 2021
47,927	MMDth	5. Projected Sales & Choice Requirements 12 months ended Unaccounted For @ 1.8%	September 2022, including
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 Balancin	na Svetem
1.070	-	75. Offaccounted-for & Co. Ose Factor from Volume Balancin	ig Oystern
1.0183	Dth	7c. Quantity Delivered to the City Gate. (7a)/(1-7b)	
\$2.5579	per Dth	8. Unit Demand Charge: (2) / (4)	
(\$0.0328)	per Dth	9. OSS and Capacity Release Credit	
0.0028	Dth	10. Average Daily FT Delivery: (7c) / 365 days	
\$0.4126	per Dth	11. Annual Demand Charge for the Assigned FT Capacity pa	yable to the pipeline(s): (3) X (10)
\$2.1453	per Dth	12. Annual Demand Charge for other capacity that CPA retain	ns (8) - (11)
0.4622	Dth	13. Quantity Injected and Withdrawn to Deliver 1 Dth to the C	ustomer: (6) / (4)
\$0.0069		14a. Injection Charge @ \$0.0150/Dth	
\$0.0095		14b. FSS Shrinkage @ 0.622% for gas at \$3.3133/Dth	
\$0.0069		14c. Withdrawal Charge @ \$0.0150/Dth	
\$0.0077		14d. SST Commodity Charge @ \$0.0167/Dth	
\$0.0246	-	14e. SST retention @ 1.608% for gas at \$3.3133/Dth	
\$0.0556	per Dth	14f. Total Annual Variable Storage Costs	
		15. Credit to Purchased Gas Demand Charge for the CHOICI	E Customer:
\$0.4126	per Dth	15a. For Demand Cost Paid to Pipelines: = (11)	
(\$0.0556)	-	15b. Less Storage Costs: = (14f)	
\$0.3570	per Dth	15c. Net Credit: (15a) + (15b)	
\$0.03570	per Therm	15d. Per Therm: (15c)/10 - Capacity Assignment Factor	
\$2.1681	per Dth	16. Purchased Gas Demand Charge Paid By the CHOICE Cu	stomer: (8)+(9) - (15c)
\$0.21681	per Therm	17. Per Therm: (16)/10	October 1, 2021 Quarterly Filing

Exhibit No. 12
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Page 9 of 85
Witness: Exhibit 1-A
Schedule 3
Sheet 2 of 2

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

	-	TCO FT Capacity	DTI FT Capacity	Total: TCO and DTI
CPA FT Capacity on TCO and DT	<u>"I</u>			
2. CPA Contract: Dth/d		90,336	5,000	1/
3. Projected Demand Costs				
4. Annual Demand Cost 2/		\$13,798,644	\$250,446	
4a. Monthly Billing Determinants		90,336	5,000	
4b. Annual Demand Charge (4/ 4a)		\$152.75	\$50.09	
4c. Monthly Demand Charge (4b / nu	mber of months)	\$12.729	\$4.174	
Allocation Capacity and Costs.				
5. Retained Volume:		1.0000	1.0000	
6. Number of Months		12	12	
7. Capacity Allocation		0.9476	3/ 0.0524	4/
8. Unit Annual Cost of City Gate Cap	pacity: (4c) x (5) x (6) x (7) \$/Dth	\$144.74	\$2.62	\$147.36

### Notes:

<sup>1/</sup> Non-storage DTI FT capacity

<sup>2/</sup> Projected demand costs for the period 12 months ended September, 2022.

<sup>3/90,336/(90,336+5,000) = 0.9476</sup> 

<sup>4/ 5,000/(90,336+5,000) = 0.0524</sup> 

Exhibit No. 12 Schedule No. 8 Page 10 of 85 Witness: J. Siegler

> Exhibit 1-B Schedule 1 Sheet 1 of 4

#### COLUMBIA GAS OF PENNSYLVANIA, INC.

#### Summary of Total Estimated Purchased Gas Costs For the Period October 2021 Through September 2022

Line			2021						2022					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
1	Total Quantity													
2	DTH	1,772,000	4,311,000	7,081,000	8,230,000	7,620,000	5,806,000	2,628,000	1,008,000	293,000	232,000	212,000	421,000	39,614,000
3	Total Demand Costs	10,806,717	10,970,978	11,020,508	11,020,508	11,020,508	11,020,508	7,986,754	7,890,754	7,890,754	7,890,754	7,890,754	7,890,754	113,300,251
4	Total Commodity Costs	6,579,290	11,751,983	21,175,812	24,759,701	23,073,892	15,540,531	8,401,072	3,296,282	1,321,183	1,180,996	1,124,597	1,646,319	119,851,657
5	Total Estimated Gas Costs	17,386,007	22,722,961	32,196,320	35,780,209	34,094,400	26,561,039	16,387,826	11,187,036	9,211,937	9,071,750	9,015,351	9,537,073	233,151,908
	(Line 5 = Line 3 + Line 4)													

Exhibit No. 12 Schedule No. 8 Page 11 of 85 Witness: J. Siegler

> Exhibit 1-B Schedule 1 Sheet 2 of 4

### COLUMBIA GAS OF PENNSYLVANIA, INC.

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

Line		2022												
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
1	Columbia Gas Transmission	10,063,240	10,063,240	10,063,240	10,063,240	10,063,240	10,063,240	7,253,051	7,253,051	7,253,051	7,253,051	7,253,051	7,253,051	103,897,746
2	Texas Eastern Transmission	239,409	239,409	288,939	288,939	288,939	288,939	239,409	239,409	239,409	239,409	239,409	239,409	3,071,028
3	Dominion Transmission	173,973	203,192	203,192	203,192	203,192	203,192	171,527	171,527	171,527	171,527	171,527	171,527	2,219,095
4	Tennessee Gas	112,569	112,569	112,569	112,569	112,569	112,569	112,569	112,569	112,569	112,569	112,569	112,569	1,350,828
5	National Fuel Gas	19,486	19,486	19,486	19,486	19,486	19,486	19,486	19,486	19,486	19,486	19,486	19,486	233,832
6	Equitrans	223,040	358,082	358,082	358,082	358,082	358,082	215,712	119,712	119,712	119,712	119,712	119,712	2,827,722
7	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
8	Total Demand Cost	10,806,717	10,970,978	11,020,508	11,020,508	11,020,508	11,020,508	7,986,754	7,890,754	7,890,754	7,890,754	7,890,754	7,890,754	113,300,251

Exhibit No. 12 Schedule No. 8 Page 12 of 85 Witness: J. Siegler

> Exhibit 1-B Schedule 1 Sheet 3 of 4

#### COLUMBIA GAS OF PENNSYLVANIA, INC.

#### Summary of Total Estimated Purchased Gas Costs Commodity Costs

Line			2021						2022					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
1	Term	862,973	2,651,100	7,381,717	7,565,575	6,713,253	2,651,826	712,843	662,890	647,816	656,928	636,626	614,599	31,758,146
2	Spot	9,818,097	742,289	2,500,238	4,239,092	4,850,673	1,704,418	17,448,605	14,879,515	12,481,706	11,967,937	10,237,131	8,903,493	99,773,194
3	Local	80,960	84,903	93,478	96,041	85,460	85,712	64,953	61,644	58,842	60,478	59,972	56,952	889,395
4	Storage	(4,182,740)	8,273,691	11,200,379	12,858,993	11,424,506	11,098,575	(9,825,329)	(12,307,767)	(11,867,181)	(11,504,347)	(9,809,132)	(7,928,725)	(12,569,078)
5	Total Commodity Cost	6,579,290	11,751,983	21,175,812	24,759,701	23,073,892	15,540,531	8,401,072	3,296,282	1,321,183	1,180,996	1,124,597	1,646,319	119,851,657

Exhibit No. 12 Schedule No. 8 Page 13 of 85 Witness: J. Siegler

> Exhibit 1-B Schedule 1 Sheet 4 of 4

### COLUMBIA GAS OF PENNSYLVANIA, INC.

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

Line			2021						2022					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
	Term								_		_			
1	Total-DTH	241,000	649,000	1,666,000	1,664,000	1,505,000	668,000	232,000	239,000	231,000	238,000	238,000	231,000	7,802,000
2	<u>Spot</u> Total-DTH	2,625,000	179,000	528,000	912,000	1,081,000	394,000	5,537,000	5,172,000	4,340,000	4,242,000	3,681,000	3,216,000	31,907,000
3	<u>Local</u> Total-DTH	22,000	21,000	22,000	22,000	20,000	22,000	21,000	22,000	21,000	22,000	22,000	21,000	258,000
4	Storage Total-DTH	(1,116,000)	3,462,000	4,865,000	5,632,000	5,014,000	4,722,000	(3,162,000)	(4,425,000)	(4,299,000)	(4,270,000)	(3,729,000)	(3,047,000)	(353,000)
5	Total - All Sources Total-DTH	1,772,000	4,311,000	7,081,000	8,230,000	7,620,000	5,806,000	2,628,000	1,008,000	293,000	232,000	212,000	421,000	39,614,000

Exhibit 1-B Schedule 2 Sheet 1 of 1

#### COLUMBIA GAS OF PENNSYLVANIA, INC.

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

Line			2021						2022					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
	Columbia Gas Transmission FTS (2)													
1	Billing Determinant-Dth	95,551	95,551	95,551	95,551	95,551	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	
3	Net Billing Determinant - Dth	90,336	90,336	90,336	90,336	90,336	90,336	90,336	90,336	90,336	90,336	90,336	90,336	
4	Demand Rate	12.7290	12.7290	12.7290	12.7290	12.7290	12.7290	12.7290	12.7290	12.7290	12.7290	12.7290	12.7290	
5	Demand Cost	1,149,887	1,149,887	1,149,887	1,149,887	1,149,887	1,149,887	1,149,887	1,149,887	1,149,887	1,149,887	1,149,887	1,149,887	13,798,644
	FSS-Reservation (2)													
6	Billing Determinant-Dth	441,576	441,576	441,576	441,576	441,576	441,576	441,576	441,576	441,576	441,576	441,576	441,576	
7	Demand Rate	3.7300	3.7300	3.7300	3.7300	3.7300	3.7300	3.7300	3.7300	3.7300	3.7300	3.7300	3.7300	
8	Demand Cost	1,647,078	1,647,078	1,647,078	1,647,078	1,647,078	1,647,078	1,647,078	1,647,078	1,647,078	1,647,078	1,647,078	1,647,078	19,764,936
	FSS-Capacity (2)													
9	Total-DTH	24,492,495	24,492,495	24,492,495	24,492,495	24,492,495	24,492,495	24,492,495	24,492,495	24,492,495	24,492,495	24,492,495	24,492,495	
10	Demand Rate	0.0672	0.0672	0.0672	0.0672	0.0672	0.0672	0.0672	0.0672	0.0672	0.0672	0.0672	0.0672	
11	Demand Cost	1,645,896	1,645,896	1,645,896	1,645,896	1,645,896	1,645,896	1,645,896	1,645,896	1,645,896	1,645,896	1,645,896	1,645,896	19,750,752
	SST (2)													
12	Billing Determinant-Dth	441,576	441,576	441,576	441,576	441,576	441,576	220,788	220,788	220,788	220,788	220,788	220,788	
13	Demand Rate	12.7280	12.7280	12.7280	12.7280	12.7280	12.7280	12.7280	12.7280	12.7280	12.7280	12.7280	12.7280	
14	Demand Cost	5,620,379	5,620,379	5,620,379	5,620,379	5,620,379	5,620,379	2,810,190	2,810,190	2,810,190	2,810,190	2,810,190	2,810,190	50,583,414
15	Total TCO Demand Cost	10,063,240	10,063,240	10,063,240	10,063,240	10,063,240	10,063,240	7,253,051	7,253,051	7,253,051	7,253,051	7,253,051	7,253,051	103,897,746
								=====						

<sup>(1)</sup> 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.

<sup>(2)</sup> Rates per FERC Docket RP20-1060

Exhibit 1-B Schedule 3 Sheet 1 of 1

### COLUMBIA GAS OF PENNSYLVANIA, INC.

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

Line			2021						2022					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
	FT1-TCO Delmont													
1	Billing Determinant-Dth	3,082	3,082	3,082	3,082	3,082	3,082	3,082	3,082	3,082	3,082	3,082	3,082	
2	Demand Rate	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
	FT1-Uniontown													
4	Billing Determinant-Dth	11,753	11,753	11,753	11,753	11,753	11,753	11,753	11,753	11,753	11,753	11,753	11,753	
5	Demand Rate	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
_	CDS - Eagle/Rockwood	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	
/	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	17.8777	17.8777	17.8777	17.8777	17.8777	17.8777	17.8777	17.8777	17.8777	17.8777	17.8777	17.8777	500 440
9	Demand Cost	41,870	41,870	41,870	41,870	41,870	41,870	41,870	41,870	41,870	41,870	41,870	41,870	502,440
	CDS - Rockwood													
10	Billing Determinant-Dth	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	
10	Demand Rate	,	,	,	,	,	,	,	,	,			,	
	Demand Rate Demand Cost	15.3679	15.3679	15.3679 76.840	15.3679	15.3679	15.3679	15.3679	15.3679 76.840	15.3679 76.840	15.3679	15.3679 76.840	15.3679	000 000
12	Demand Cost	76,840	76,840	76,840	76,840	76,840	76,840	76,840	76,840	76,840	76,840	76,840	76,840	922,080
	CDS - Chambersburg													
13	Billing Determinant-Dth	158	158	158	158	158	158	158	158	158	158	158	158	
14	Demand Rate	17.8870	17.8870	17.8870	17.8870	17.8870	17.8870	17.8870	17.8870	17.8870	17.8870	17.8870	17.8870	
15	Demand Cost	2,826	2,826	2,826	2.826	2,826	2,826	2.826	2,826	2,826	2,826	2.826	2.826	33,912
13	Demand Cost	2,020	2,020	2,020	2,020	2,020	2,020	2,020	2,020	2,020	2,020	2,020	2,020	33,912
	FT1-TCO @ Eagle Zone 3 Zone 3													
16	Billing Determinant-Dth	0	0	10,000	10,000	10,000	10,000	0	0	0	0	0	0	
17	Demand Rate	0.0000	0.0000	4.9530	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
	Demand Cost													,
	Demand Cost	· ·	· ·	.0,000										
	FT1-MX	v	-	,										
19		100	100	100	100	100	100	100	100	100	100	100	100	
19 20	FT1-MX	100 1.5710	100 1.5710	100 1.5710	1.5710	1.5710	1.5710	100 1.5710	1.5710	1.5710	1.5710	1.5710	100 1.5710	
	FT1-MX Billing Determinant-Dth	100	100	100										1,884
20	FT1-MX Billing Determinant-Dth Demand Rate	100 1.5710	100 1.5710	100 1.5710	1.5710	1.5710	1.5710	1.5710	1.5710	1.5710	1.5710	1.5710	1.5710	1,884 3,071,028

Exhibit 1-B Schedule 4 Sheet 1 of 1

### COLUMBIA GAS OF PENNSYLVANIA, INC.

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

Line			2021						2022					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
	Dominion Transmission GSS - Reservation													
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	1.8716	1.8716	1.8716	1.8716	1.8716	1.8716	1.8716	1.8716	1.8716	1.8716	1.8716	1.8716	
3	Demand Cost	44,918	44,918	44,918	44,918	44,918	44,918	44,918	44,918	44,918	44,918	44,918	44,918	539,016
4	GSS - Capacity	1 071 176	4 074 476	1 071 176	4 074 476	4 074 476	4 074 476	1 071 176	4 074 476	1 074 176	1 071 176	1 071 176	1 071 176	
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	005 504
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	4.1741	4.1741	4.1741	4.1741	4.1741	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>FI</u>													
10	Billing Determinant-Dth	24,418	25,418	25,418	25,418	25,418	25,418	23,832	23,832	23,832	23,832	23,832	23,832	
11	Total-DTH	4.1741	4.1741	4.1741	4.1741	4.1741	4.1741	4.1741	4.1741	4.1741	4.1741	4.1741	4.1741	
12	Demand Cost	101,923	106,097	106,097	106,097	106,097	106,097	99,477	99,477	99,477	99,477	99,477	99,477	1,229,270
13	Total DTI Demand Cost	173,973	203,192	203,192	203,192	203,192	203,192	171,527	171,527	171,527	171,527	171,527	171,527	2,219,095

Exhibit No. 12 Schedule No. 8 Page 17 of 85 Witness: J. Siegler

> Exhibit 1-B Schedule 5 Sheet 1 of 1

### COLUMBIA GAS OF PENNSYLVANIA, INC.

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

Line			2021						2022					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
	Tennessee Gas FT-A (Direct) New Castle - 2	19 Line												
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	
2	Demand Rate	4.8063	4.8063	4.8063	4.8063	4.8063	4.8063	4.8063	4.8063	4.8063	4.8063	4.8063	4.8063	
3	Demand Cost	76,901	76,901	76,901	76,901	76,901	76,901	76,901	76,901	76,901	76,901	76,901	76,901	922,812
	Tennessee Gas FT-A (Direct) Pitt Teminal - 2	219 Line												
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	
5	Demand Rate	4.6931	4.6931	4.6931	4.6931	4.6931	4.6931	4.6931	4.6931	4.6931	4.6931	4.6931	4.6931	
6	Demand Cost	35,668	35,668	35,668	35,668	35,668	35,668	35,668	35,668	35,668	35,668	35,668	35,668	428,016
7	Total Tennessee Gas Demand Cost	112,569	112,569	112,569	112,569	112,569	112,569	112,569	112,569	112,569	112,569	112,569	112,569	1,350,828

Exhibit No. 12 Schedule No. 8 Page 18 of 85 Witness: J. Siegler

> Exhibit 1-B Schedule 6 Sheet 1 of 1

### COLUMBIA GAS OF PENNSYLVANIA, INC.

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

Line			2021						2022					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
	National - FT													
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	4.5274	4.5274	4.5274	4.5274	4.5274	4.5274	4.5274	4.5274	4.5274	4.5274	4.5274	4.5274	
3	Demand Cost	19,486	19,486	19,486	19,486	19,486	19,486	19,486	19,486	19,486	19,486	19,486	19,486	233,832
4	Total National Fuel Demand Cost	19,486	19,486	19,486	19,486	19,486	19,486	19,486	19,486	19,486	19,486	19,486	19,486	233,832

Exhibit No. 12 Schedule No. 8 Page 19 of 85 Witness: J. Siegler

> Exhibit 1-B Schedule 7 Sheet 1 of 1

#### COLUMBIA GAS OF PENNSYLVANIA, INC.

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

Line			2021						2022					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
	<u>Equitrans</u>													
	<u>FTS</u>													
1	Billing Determinant-Dth	27,880	28,249	28,249	28,249	28,249	28,249	26,964	14,964	14,964	14,964	14,964	14,964	
2	Demand Rate	8.0000	8.0000	8.0000	8.0000	8.0000	8.0000	8.0000	8.0000	8.0000	8.0000	8.0000	8.0000	
3	Demand Cost	223,040	225,992	225,992	225,992	225,992	225,992	215,712	119,712	119,712	119,712	119,712	119,712	2,167,272
	<u>FTS</u>													
4	Billing Determinant-Dth	0	18,870	18,870	18,870	18,870	18,870	0	0	0	0	0	0	
5	Demand Rate	0.0000	7.0000	7.0000	7.0000	7.0000	7.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
6	Demand Cost	0	132,090	132,090	132,090	132,090	132,090	0	0	0	0	0	0	660,450
7	Total Equitrans Demand Cost	223,040	358,082	358,082	358,082	358,082	358,082	215,712	119,712	119,712	119,712	119,712	119,712	2,827,722

Exhibit 1-B Schedule 8 Sheet 1 of 1

### COLUMBIA GAS OF PENNSYLVANIA, INC.

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

Line			2021						2022					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
	TERM COLUMBIA TRANSMISSION													
1	Quantity - DTH	0	0	769,000	769,000	694,000	0	0	0	0	0	0	0	2,232,000
2	Rate-\$/DTH	0.0000	0.0000	4.3351	4.4535	4.3595	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
3	Cost-\$	0	0	3,333,692	3,424,742	3,025,493	0	0	0	0	0	0	0	9,783,927
	TEXAS EASTERN													
4	Quantity - DTH	241,000	649,000	669,000	666,000	605,000	668,000	232,000	239,000	231,000	238,000	238,000	231,000	4,907,000
5	Rate-\$/DTH	3.5808	4.0849	4.3701	4.5032	4.4362	3.9698	3.0726	2.7736	2.8044	2.7602	2.6749	2.6606	
6	Cost-\$	862,973	2,651,100	2,923,597	2,999,131	2,683,901	2,651,826	712,843	662,890	647,816	656,928	636,626	614,599	18,704,230
7	TENNESSEE GAS PIPELINE Quantity - DTH	0	0	228,000	229,000	206,000	0	0	0	0	0	0	0	663,000
8	Rate-\$/DTH	0.0000	0.0000	4.9317	4.9856	4.8731	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
9	Cost-\$	0	0	1,124,428	1,141,702	1,003,859	0	0	0	0	0	0	0	3,269,989
	CAP													
10	Quantity - DTH	0	0	0	0	0	0	0	0	0	0	0	0	0
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
	LESS CAP BILLING													
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	
15	Cost-\$	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Total - DTH	241,000	649,000	1,666,000	1,664,000	1,505,000	668,000	232,000	239,000	231,000	238,000	238,000	231,000	7,802,000
17 18	Total Term Commodity Cost-\$	862,973	2,651,100	7,381,717	7,565,575	6,713,253	2,651,826	712,843	662,890	647,816	656,928	636,626	614,599	31,758,146

<sup>\*</sup>Beginning October 1, 2021, CAP customers will be served by Columbia sales service until a new supplier submits a successful bid to provide CAP gas supply.

Exhibit No. 12 Schedule No. 8 Page 21 of 85 Witness: J. Siegler

> Exhibit 1-B Schedule 9 Sheet 1 of 1

### COLUMBIA GAS OF PENNSYLVANIA, INC.

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

Line			2021						2022					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
	SPOT Base													
4	Base Quantity - DTH	2,444,000	135,000	528,000	907,000	729,000	388,000	4,493,000	4,910,000	4,080,000	3,980,000	3,421,000	2,954,000	28,969,000
2	Rate-\$/DTH	3.7390	3.9732	4.7353	4.6492	4.3820	4.3258	4,493,000 3.1492	2.8776	2.8767	2.8220	2.7806	2,954,000	20,909,000
3	Cost-\$	9,138,116	536,382	2,500,238	4,216,824	3,194,478	1,678,410	14,149,356	14,129,016	11,736,936	11,231,560	9,512,433	8,176,967	90,200,716
0	Ο03t-ψ	3,100,110	000,002	2,000,200	4,210,024	0,104,470	1,070,410	14,140,000	14,123,010	11,700,300	11,201,000	3,012,400	0,110,001	30,200,710
	Swing													
4	Quantity - DTH	181,000	44,000	0	5,000	352,000	6,000	1,044,000	262,000	260,000	262,000	260,000	262,000	2,938,000
5	Rate-\$/DTH	3.7568	4.6797	0.0000	4.4535	4.7051	4.3346	3.1602	2.8645	2.8645	2.8106	2.7873	2.7730	
6	Cost-\$	679,981	205,907	0	22,268	1,656,195	26,008	3,299,249	750,499	744,770	736,377	724,698	726,526	9,572,478
7	Total - DTH	2,625,000	179,000	528,000	912,000	1,081,000	394,000	5,537,000	5,172,000	4,340,000	4,242,000	3,681,000	3,216,000	31,907,000
8	Total Spot													
9	Commodity Cost - \$	9,818,097	742,289	2,500,238	4,239,092	4,850,673	1,704,418	17,448,605	14,879,515	12,481,706	11,967,937	10,237,131	8,903,493	99,773,194
	Local Direct													
10	Quantity - DTH	22,000	21,000	22,000	22,000	20,000	22,000	21,000	22,000	21,000	22,000	22,000	21,000	258,000
11	Rate-\$/DTH	3.6800	4.0430	4.2490	4.3655	4.2730	3.8960	3.0930	2.8020	2.8020	2.7490	2.7260	2.7120	
12	Cost-\$	80,960	84,903	93,478	96,041	85,460	85,712	64,953	61,644	58,842	60,478	59,972	56,952	889,395
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 - \$	80,960	84,903	93,478	96,041	85,460	85,712	64,953	61,644	58,842	60,478	59,972	56,952	889,395

Exhibit 1-B Schedule 10 Sheet 1 of 2

#### COLUMBIA GAS OF PENNSYLVANIA, INC.

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

Line			2021						2022					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
	DOMINION TRANSMISSION	- GSS												
1	Injections - DTH	(115,000)	0	0	0	0	0	(118,000)	(272,000)	(273,000)	(270,000)	(273,000)	(274,000)	(1,595,000)
2	Injection Rate - \$/Dth	3.7265	4.0969	4.5015	4.5807	4.4702	4.0977	3.1479	2.8721	2.8720	2.8177	2.7744	2.7610	
3	Withdrawals - DTH	0	138,000	473,000	538,000	434,000	170,000	0	0	0	0	0	0	1,753,000
4	Withdrawl Rate - \$/Dth	2.4161	2.4161	2.4161	2.4162	2.4161	2.4163	2.8942	2.8833	2.8796	2.8642	2.8480	2.8367	
5	Cost-\$	(428,548)	333,422	1,142,815	1,299,916	1,048,587	410,771	(371,452)	(781,211)	(784,056)	(760,779)	(757,411)	(756,514)	(404,460)
6	Injection Rate \$/Dth	0.0267	0.0267	0.0267	0.0267	0.0267	0.0267	0.0267	0.0267	0.0267	0.0267	0.0267	0.0267	
7	Withdrawl Rate \$/Dth	0.0147	0.0147	0.0207	0.0147	0.0147	0.0147	0.0147	0.0147	0.0147	0.0147	0.0147	0.0147	
8	Cost - \$	3.071	2.029	6,953	7.909	6,380	2.499	3,151	7,262	7.289	7,209	7.289	7,316	68,357
Ü	σσε ψ	0,071	2,020	0,000	1,000	0,000	2,400	0,101	7,202	7,200	7,200	7,200	7,010	00,007
	EQUITRANS - SS													
9	Injections - DTH	(178,000)	0	0	0	0	0	(300,000)	(262,000)	(260,000)	(262,000)	(260,000)	(262,000)	(1,784,000)
10	Injection Rate - \$/Dth	3.7265	4.0969	4.5015	4.5807	4.4702	4.0977	3.1479	2.8721	2.8720	2.8177	2.7744	2.7610	
11	Withdrawals - DTH	0	360,000	360,000	360,000	360,000	426,000	0	0	0	0	0	0	1,866,000
12	Withdrawl Rate - \$/Dth	2.4161	2.4161	2.4161	2.4162	2.4161	2.4163	2.8942	2.8833	2.8796	2.8642	2.8480	2.8367	
13	Cost-\$	(663,317)	869,796	869,796	869,832	869,796	1,029,344	(944,370)	(752,490)	(746,720)	(738,237)	(721,344)	(723,382)	(781,296)
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
40	TCO - FSS	(4.400.000)	0	0	0	0	0	(0.000.000)	(4.000.000)	(4.000.000)	(4.000.000)	(0.757.000)	(2.000.000)	(00,000,000)
16 17	Injections - DTH Injection Rate - \$/Dth	(1,102,000) 3,7265	0 4.0969	4.5015	0 4.5807	4.4702	0 4.0977	(2,839,000) 3,1479	(4,296,000) 2.8721	(4,296,000) 2.8720	(4,296,000) 2.8177	(3,757,000) 2,7744	(3,022,000) 2.7610	(23,608,000)
18	Withdrawals - DTH	3.7265 0	3,144,000	4,695,000	5,606,000	5,017,000	4,552,000	3.1479 0	2.0721	2.6720	2.0177	2.7744	2.7610	23,014,000
19	Withdrawl Rate - \$/Dth	2.4161	2.4161	2.4161	2.4162	2.4161	2.4163	2.8942	2.8833	2.8796	2.8642	2.8480	2.8367	23,014,000
20	Cost-\$	(4,106,603)	7,596,218	11,343,590	13,545,217	12,121,574	10,998,998	(8,936,888)	(12,338,542)	(12,338,112)	(12,104,839)	(10,423,421)	(8,343,742)	(12,986,550)
20	305t ¢	(4,100,000)	7,000,210	11,040,000	10,040,217	12,121,014	10,000,000	(0,000,000)	(12,000,042)	(12,000,112)	(12,104,000)	(10,420,421)	(0,040,142)	(12,000,000)
21	Inject/With. Rate \$/DTH	0.0150	0.0150	0.0150	0.0150	0.0150	0.0150	0.0150	0.0150	0.0150	0.0150	0.0150	0.0150	
22	Cost - \$	16,530	47,160	70,425	84,090	75,255	68,280	42,585	64,440	64,440	64,440	56,355	45,330	699,330
23	Quantity - DTH	(1,395,000)	3,642,000	5,528,000	6,504,000	5,811,000	5,148,000	(3,257,000)	(4,830,000)	(4,829,000)	(4,828,000)	(4,290,000)	(3,558,000)	(354,000)
23	Quantity - DTF	(1,393,000)	3,042,000	5,526,000	0,504,000	5,611,000	5, 146,000	(3,237,000)	(4,030,000)	(4,029,000)	(4,020,000)	(4,290,000)	(3,336,000)	(334,000)
24	Total Purchase Cost	(5,198,468)	8,799,436	13,356,201	15,714,965	14,039,957	12,439,113	(10,252,710)	(13,872,243)	(13,868,888)	(13,603,855)	(11,902,176)	(9,823,638)	(14,172,306)
25	Total Inject/With. Cost	19,601	49,189	77,378	91,999	81,635	70,779	45,736	71,702	71,729	71,649	63,644	52,646	767,687

Exhibit No. 12 Schedule No. 8 Page 23 of 85 Witness: J. Siegler

> Exhibit 1-B Schedule 10 Sheet 2 of 2

### COLUMBIA GAS OF PENNSYLVANIA, INC.

### Summary of Total Estimated Purchased Gas Commodity Costs <u>Storage Transportation Charges</u>

Line			2021						2022					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
	TCO - SST													
1	Injections - DTH	(1,102,000)	0	0	0	0	0	(2,839,000)	(4,296,000)	(4,296,000)	(4,296,000)	(3,757,000)	(3,022,000)	(23,608,000)
2	, Withdrawals - DTH	0	3,144,000	4,695,000	5,606,000	5,017,000	4,552,000	0	0	0	0	0	0	23,014,000
3	Trans. Chrg. \$/Dth	0.0167	0.0167	0.0167	0.0167	0.0167	0.0167	0.0167	0.0167	0.0167	0.0167	0.0167	0.0167	
4	Cost-\$	18,403	52,505	78,407	93,620	83,784	76,018	47,411	71,743	71,743	71,743	62,742	50,467	778,586
-	DOMINION TRANSMISSIC		0	0	0	0	0	(440,000)	(070,000)	(070,000)	(070,000)	(070,000)	(074 000)	(4 505 000)
5	Injections - DTH	(115,000)	0	0	0	0 434.000	0	(118,000)	(272,000)	(273,000)	(270,000)	(273,000)	(274,000)	(1,595,000)
6	Withdrawals - DTH	0.0407	138,000	473,000	538,000	. ,	170,000	0	0	0	0	0	0	1,753,000
/ 8	Trans. Chrg. \$/Dth Cost-\$	0.0167 1,921	<u>0.0153</u> 2,111	7,237	0.0153 8,231	0.0153 6,640	0.0153 2,601	0.0167 1.971	<u>0.0167</u> 4,542	<u>0.0167</u> 4,559	<u>0.0167</u> 4,509	<u>0.0167</u> 4,559	<u>0.0167</u> 4,576	53,457
8	Cost-\$	1,921	2,111	1,231	8,231	6,640	2,001	1,971	4,542	4,559	4,509	4,559	4,576	53,457
	EQUITRANS - SS													
9	Injections - DTH	(178,000)	0	0	0	0	0	(300,000)	(262,000)	(260,000)	(262,000)	(260,000)	(262,000)	(1,784,000)
10	Withdrawals - DTH	` o´	360,000	360,000	360,000	360,000	426,000	) o	) o	) o	) o	) O	` o´	1,866,000
11	Trans. Chrg. \$/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	(1,395,000)	3,642,000	5,528,000	6,504,000	5,811,000	5,148,000	(3,257,000)	(4,830,000)	(4,829,000)	(4,828,000)	(4,290,000)	(3,558,000)	(354,000)
14	Total EUB - DTH	279,000	(180,000)	(663,000)	(872,000)	(797,000)	(426,000)	95,000	405,000	530,000	558,000	561,000	511,000	1,000
15	Total DTH	(1,116,000)	3,462,000	4,865,000	5,632,000	5,014,000	4,722,000	(3,162,000)	(4,425,000)	(4,299,000)	(4,270,000)	(3,729,000)	(3,047,000)	(353,000)
16	Total Purchase Cost	(5,198,468)	8,799,436	13,356,201	15.714.965	14,039,957	12,439,113	(10,252,710)	(13,872,243)	(13,868,888)	(13,603,855)	(11,902,176)	(9,823,638)	(14,172,306)
17	Total Choice Bank Cost	975,803	(629,550)	(2,318,844)	(3,049,822)	(2,787,510)	(1,489,936)	332,263	1,416,489	1,853,676	1,951,607	1,962,099	1,787,224	3,498
18	Total Inject/With. Cost	19,601	49,189	77.378	91,999	81,635	70,779	45,736	71.702	71.729	71,649	63,644	52,646	767,687
19	Total Transp. Charge	20,324	54,616	85,644	101,851	90,424	78,619	49,382	76,285	76,302	76,252	67,301	55,043	832,043
20	Total Storage Cost	(4,182,740)	8,273,691	11,200,379	12,858,993	11,424,506	11,098,575	(9,825,329)	(12,307,767)	(11,867,181)	(11,504,347)	(9,809,132)	(7,928,725)	(12,569,078)
20	. S.a. Olorago Oool	(4,102,140)	0,210,001	. 1,200,010	.2,000,000	. 1,424,000	. 1,000,010	(0,020,020)	(12,001,101)	(11,007,101)	(11,004,047)	(0,000,102)	(1,020,120)	(12,000,010)

Exhibit 1-E Schedule 1

## COLUMBIA GAS OF PENNSYLVANIA, INC. STATEMENT OF EXPERIENCED NET OVER (UNDER) COLLECTION OCTOBER, 2020 THROUGH SEPTEMBER, 2021

Line No.	<u>Description</u>	Total Demand \$	Total Commodity \$	Total Amount \$
1 2	Remaining Balance - Over (Under) Collection from 2020 - 1307(f) (See Schedule 2a and 2b)	(337,091)	(448,012)	(785,103)
3 4	Unified Credit for Off-system Sales and Capacity Release for the period October, 2020 through September, 2021 (See Schedule 3 herein)	(465,381)	0	(465,381)
5 6	Over (Under) Collection for the period October, 2020 through September 2021 (See Schedule 4 herein)	(7,355,980)	(2,296,153)	(9,652,133)
7 8	Interest on Over (Under) Collection for the period October, 2020 through September, 2021 (See Schedule 4 herein)	30,717	(90,233)	(59,516)
9	TOTAL EXPERIENCED NET OVER (UNDER) COLLECTION	(8,127,735)	(2,834,398)	(10,962,133)

Exhibit 1-E Schedule 2a Sheet 1 of 2

### COLUMBIA GAS OF PENNSYLVANIA, INC.

### RECONCILIATION OF COMMODITY COST OF GAS FROM 2020 - 1307(f) OCTOBER, 2020 THROUGH SEPTEMBER, 2021

### **COMMODITY**

Line No.	_Month	Sales Subject to Commodity E-Factor Therm	Rate \$/ Therm	Amount Recovered \$	Net Commodity Over (Under) Collection
1	True-up of Net Commodity	y Costs Included in 20	020 1307(f):		4,802,468
2	Beginning Balance Adjust	ment			(154,452) 2_/
3 4	October, 2020	4,157,767 5,655,839	(0.01632) (0.00680)	(67,855) (38,460)	
5 6	November	20,426,805 (73,049)	(0.01632) (0.00680)	(333,365) 497	
7	December	44,212,386	(0.01632)	(721,546)	
8 9	January, 2021 1_/	29,028,431 37,224,561	(0.01426) (0.01632)	(413,945) (607,505)	
10 11	February	69,911,639 1,507	(0.01426) (0.01632)	(996,940) (25)	
12	March	56,521,726	(0.01426)	(806,000)	
13	April	30,029,089	(0.01426)	(428,215)	
14	May	19,685,302	(0.01426)	(280,712)	
15	June	10,401,319	(0.01426)	(148,323)	
16	July	6,373,428	(0.01426)	(90,885)	
17	August	5,712,875	(0.01426)	(81,466)	
18	September	5,700,077	(0.01426)	(81,283)	
19	Amount Collected/(Passe	d Back) during 2020 1	307(f) Period	_	(5,096,028)
20	Remaining Balance to be	Collected in the 2021	1307(f)	=	(448,012)

<sup>1</sup>\_/ Rate in effect January 1, 2021.

<sup>2</sup>\_/ Represents a commodity interest adjustment for the period of February 2020 to September 2020 decreasing the interest rate from 4.75% to the prime rate as of January 31, 2021 of 3.25%. Please refer to Exh. 1-E, Schedule 2a, Sheet 2 for a detailed calculation for this adjustment.

Exhibit No. 12 Schedule No. 8 Page 26 of 85 Witness: J. Siegler

> Exhibit 1-E Schedule 2a Sheet 2 of 2

### COLUMBIA GAS OF PENNSYLVANIA, INC. STATEMENT OF COMMODITY OVER/(UNDER) COLLECTIONS FROM GAS COST RATE FEBRUARY, 2020 THROUGH SEPTEMBER, 2020

Line No.	<u>Month</u>	Total Commodity Purchase Gas Cost Recovery (1)	Total Cost of Fuel (2)	Total Over (Under) Collection (3 = 1 - 2)	Number of Months (4)		Over (Under) Collection Interest (6=3x4x5)	Rate(7)	Over (Under) Collection Interest (8=3x4x7)	Interest Difference (9=8-6)
1	February, 2020	13,752,182	12,215,061	1,537,121	14 / 12	4.75%	85,182	3.25%	58,282	(26,900)
2	March	11,750,731	8,066,235	3,684,495	13 / 12	4.75%	189,598	3.25%	129,725	(59,873)
3	April	6,675,900	4,258,839	2,417,061	12 / 12	4.75%	114,810	3.25%	78,554	(36,256)
4	May	5,139,294	3,156,568	1,982,726	11 / 12	4.75%	86,331	3.25%	59,069	(27,262)
5	June	2,154,904	498,174	1,656,730	10 / 12	4.75%	65,579	3.25%	44,870	(20,709)
6	July	1,231,107	941,203	289,904	9 / 12	4.75%	10,328	3.25%	7,066	(3,262)
7	August	1,091,192	2,330,064	(1,238,872)	8 / 12	4.75%	(39,231)	3.25%	(26,842)	12,389
8	September	1,230,364	2,078,473	(848,109)	7 / 12	4.75%	(23,500)	3.25%	(16,079)	7,421
9	TOTAL	43,025,675	33,544,618	9,481,056			489,097		334,645	(154,452)

Exhibit 1-E Schedule 2b Sheet 1 of 2

### COLUMBIA GAS OF PENNSYLVANIA, INC.

### RECONCILIATION OF DEMAND COST OF GAS FROM 2020 - 1307(f) OCTOBER, 2020 THROUGH SEPTEMBER, 2021

### **DEMAND**

Line No.	<u>Month</u>	Sales Subject to Demand <u>E-Factor</u> Therm	Rate \$/ Therm	Amount \$	Net Demand Over (Under) Collection
1	True-up of Net Demand Co			·	(5,818,521)
2	Beginning Balance Adjustm				6,076 2_/
3 4	October, 2020	5,526,848 7,540,022	0.01181 0.01063	65,272 80,150	
5 6	November	27,013,520 (56,575)	0.01181 0.01063	319,029 (601)	
7	December	58,707,519	0.01181	693,336	
8 9	January, 2021 1_/	38,043,876 48,843,512	0.01224 0.01181	465,657 576,842	
10 11	February	91,497,297 (370)	0.01224 0.01181	1,119,927 (4)	
12	March	73,822,837	0.01224	903,592	
13	April	39,684,299	0.01224	485,736	
14	May	25,779,973	0.01224	315,547	
15	June	13,613,057	0.01224	166,624	
16	July	8,314,558	0.01224	101,770	
17	August	7,448,217	0.01224	91,166	
18	September	7,460,035	0.01224	91,311	
19	Amount Collected/(Passed	Back) during 2020 130	07(f) Period		5,475,354
20	Remaining Balance to be C	Collected in the 2021 13	307(f)		(337,091)

<sup>1</sup>\_/ Rate in effect January 1, 2021.

<sup>2</sup>\_/ Represents a commodity interest adjustment for the period of February 2020 to September 2020 decreasing the interest rate from 4.75% to the prime rate as of January 31, 2021 of 3.25%. Please refer to Exh. 1-E, Schedule 2a, Sheet 2 for a detailed calculation for this adjustment.

Exhibit No. 12 Schedule No. 8 Page 28 of 85 Witness: J. Siegler

> Exhibit 1-E Schedule 2b Sheet 2 of 2

### COLUMBIA GAS OF PENNSYLVANIA, INC. STATEMENT OF DEMAND OVER/(UNDER) COLLECTIONS FROM GAS COST RATE FEBRUARY, 2020 THROUGH SEPTEMBER, 2020

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, 2020	9,146,961	5,964,198	3,182,763	14 / 12	4.75%	176,378	3.25%	120,680	(55,698)
2	March	7,807,981	5,973,335	1,834,646	13 / 12	4.75%	94,408	3.25%	64,595	(29,813)
3	April	5,068,571	4,133,922	934,648	12 / 12	4.75%	44,396	3.25%	30,376	(14,020)
4	May	4,518,107	3,767,494	750,613	11 / 12	4.75%	32,683	3.25%	22,362	(10,321)
5	June	1,948,207	3,891,869	(1,943,662)	10 / 12	4.75%	(76,937)	3.25%	(52,641)	24,296
6	July	1,128,938	4,044,509	(2,915,572)	9 / 12	4.75%	(103,867)	3.25%	(71,067)	32,800
7	August	1,010,651	4,015,264	(3,004,613)	8 / 12	4.75%	(95,146)	3.25%	(65,100)	30,046
8	September	1,117,804	4,407,659	(3,289,855)	7 / 12	4.75%	(91,156)	3.25%	(62,370)	28,786
9	TOTAL	31,747,220	36,198,251	(4,451,031)			(19,241)		(13,165)	6,076

Exhibit 1-E Schedule 3

### COLUMBIA GAS OF PENNSYLVANIA, INC.

### RECONCILIATION OF OFF SYSTEM SALES CREDIT FROM 2020 - 1307(f) OCTOBER, 2020 THROUGH SEPTEMBER, 2021

### **DEMAND**

Line No.	<u>Month</u>	Sales Subject to Off-System Sales Credit Therm	Rate \$/Therm	Amount \$	Net Demand Over (Under) Collection
1 2	October, 2020	5,526,848 7,540,022	(0.00492) (0.00837)	(27,192) (63,110)	
3 4	November	27,013,520 (56,575)	(0.00492) (0.00837)	(132,907) 474	
5	December	58,707,519	(0.00492)	(288,841)	
6	January, 2021 1_/	86,887,388	(0.00492)	(427,486)	
7	February	91,496,927	(0.00492)	(450,165)	
8	March	73,822,837	(0.00492)	(363,208)	
9	April	39,684,299	(0.00492)	(195,247)	
10	May	25,779,973	(0.00492)	(126,837)	
11	June	13,613,057	(0.00492)	(66,976)	
12	July	8,314,558	(0.00492)	(40,908)	
13	August	7,448,217	(0.00492)	(36,645)	
14	September	7,460,035	(0.00492)	(36,703)	
15	Amount Passed Back in th		(2,255,751)		
16	Current Estimate Unified S		1,790,370		
17	Amount to be Collected in	(465,381)			

<sup>1</sup>\_/ Rate in effect January 1, 2021.

Exhibit No. 12 Schedule No. 8 Page 30 of 85 Witness: J. Siegler

Exhibit 1-E Schedule 4 Sheet 1a of 6 Commodity

### COLUMBIA GAS OF PENNSYLVANIA, INC. STATEMENT OF COMMODITY OVER/(UNDER) COLLECTIONS FROM GAS COST RATE OCTOBER, 2020 THROUGH SEPTEMBER, 2021

Line No.	Month Reference:	Total Commodity Sales Revenue  (1) \$ Sch. 4, Pg. 2	Rate Schedule NSS Gas Cost Recovery (2) \$ Sch. 4, Pg. 3	Total Commodity Purchase Gas Cost Recovery (3 = 1 + 2) \$	Total Commodity Cost of Fuel (4) \$	Total Commodity Over/(Under) Collection (5 = 3 - 4)	Number of Months (6)	Rate (7)	Commodity Over/(Under) Collection Interest (8 = 5 x 6 x 7)	Total Commodity Over/(Under) Collection (9 = 5 + 8)
	Actuals throu	gh August 2021								
1	October, 2020	2,006,062	3,619	2,009,682	2,193,565	(183,884)	18 / 12	3.25%	(8,964)	(192,848)
2	November	4,528,154	16,600	4,544,754	4,781,696	(236,942)	17 / 12	3.25%	(10,909)	(247,851)
3	December	9,829,676	18,159	9,847,835	12,142,110	(2,294,275)	16 / 12	3.25%	(99,419)	(2,393,694)
4	January, 2021	13,408,748	23,280	13,432,028	14,018,552	(586,524)	15 / 12	3.25%	(23,828)	(610,352)
5	February	12,361,096	25,560	12,386,656	13,640,943	(1,254,287)	14 / 12	3.25%	(47,558)	(1,301,845)
6	March	9,994,999	21,519	10,016,518	7,427,883	2,588,634	13 / 12	3.25%	91,142	2,679,776
7	April	5,310,064	16,460	5,326,525	4,510,279	816,246	12 / 12	3.25%	26,528	842,774
8	May	3,480,288	6,927	3,487,215	2,765,649	721,566	11 / 12	3.25%	21,497	743,063
9	June	1,837,510	8,191	1,845,701	1,456,167	389,534	10 / 12	3.25%	10,550	400,084
10	July	1,127,832	6,377	1,134,209	1,570,339	(436,130)	9 / 12	3.25%	(10,631)	(446,761)
11	August	1,007,538	7,418	1,014,956	2,541,521	(1,526,565)	8 / 12	3.25%	(33,076)	(1,559,641)
12	September	1,007,717	0	1,007,717	1,301,243	(293,526)	7 / 12	3.25%	(5,565)	(299,091)
13	TOTAL	65,899,684	154,111	66,053,795	68,349,947	(2,296,153)			(90,233)	(2,386,386)

Exhibit No. 12 Schedule No. 8 Page 31 of 85 Witness: J. Siegler

> Exhibit 1-E Schedule 4 Sheet 1b of 6 Demand

### COLUMBIA GAS OF PENNSYLVANIA, INC. STATEMENT OF DEMAND OVER/(UNDER) COLLECTIONS FROM GAS COST RATE OCTOBER, 2020 THROUGH SEPTEMBER, 2021

Line No.	Month  Reference:	Total Demand Sales Revenue (1) \$ Sch. 4,	Total Banking and Balancing Revenue (2) \$ Sch. 4,	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 ##		Demand Over/(Under) Collection Interest (10 = 7 x 8 x 9)	Total Demand Over/(Under) Collection (11 = 7 + 10)
		Pg. 4	Pg. 6	Pg. 5	Pg. 6							
	Actuals throu	igh August 202	1									
1	October, 2020	1,691,881	73	39,748	30	1,731,731	5,600,714	(3,868,982)	18 / 12	3.25%	(188,613)	(4,057,595)
2	November	3,310,535	178	39,733	73	3,350,519	5,794,055	(2,443,536)	17 / 12	3.25%	(112,504)	(2,556,040)
3	December	7,219,632	179	49,829	74	7,269,714	5,807,180	1,462,534	16 / 12	3.25%	63,376	1,525,910
4	January, 2021	13,935,056	232	49,814	1,062	13,986,165	5,830,412	8,155,753	15 / 12	3.25%	331,327	8,487,080
5	February	19,073,688	223	71,906	986	19,146,803	10,832,838	8,313,965	14 / 12	3.25%	315,238	8,629,203
6	March	15,387,106	204	71,906	115	15,459,331	10,609,637	4,849,694	13 / 12	3.25%	170,750	5,020,444
7	April	8,273,812	164	71,906	68	8,345,950	7,494,251	851,699	12 / 12	3.25%	27,680	879,379
8	May	5,371,251	64	71,871	26	5,443,212	7,663,751	(2,220,539)	11 / 12	3.25%	(66,154)	(2,286,693)
9	June	2,839,420	74	71,906	30	2,911,429	7,540,112	(4,628,683)	10 / 12	3.25%	(125,360)	(4,754,043)
10	July	1,735,557	48	71,906	19	1,807,530	7,527,133	(5,719,603)	9 / 12	3.25%	(139,415)	(5,859,018)
11	August	1,555,130	52	71,906	21	1,627,109	7,555,345	(5,928,236)	8 / 12	3.25%	(128,445)	(6,056,681)
12	September	1,605,922	0	71,906	0	1,677,828	7,857,872	(6,180,044)	7 / 12	3.25%	(117,163)	(6,297,207)
13	TOTAL	81,998,990	1,492	754,333	2,504	82,757,319	90,113,299	(7,355,980)			30,717	(7,325,263)

Exhibit 1-E Schedule 4 Sheet 2a of 6

### COLUMBIA GAS OF PENNSYLVANIA, INC. DETAIL OF COMMODITY GAS COST RECOVERY OCTOBER, 2020 THROUGH SEPTEMBER, 2021

		SALES		TOTAL
		SUBJECT TO	COMMODITY	COMMODITY
LINE		COMMODITY	COST OF	COST
NO.	MONTH	COST OF GAS	GAS	RECOVERY
		(1)	(2)	$(3 = 1 \times 2)$
		THERM	\$/THERM	\$
1	October, 2020 Est. Old	5,648,287	0.19128	1,080,404
2	October, 2020 Est. New	4,157,767	0.22236	924,521
3	September, 2020 Est.	(6,421,225)	0.19128	(1,228,252)
4	September, 2020 Act.	6,428,777	0.19128	1,229,696
5	September Act. Prior Period Adjustments		-	(308)
6	Total	9,813,606		2,006,062
7	November, 2020 Est. New	20,480,577	0.22236	4,554,061
8	October, 2020 Est. Old	(5,648,287)	0.19128	(1,080,404)
9	October, 2020 Est. New	(4,157,767)	0.22236	(924,521)
10	October, 2020 Act. Old	5,575,238	0.19128	1,066,432
11	October, 2020 Act. New	4,103,995	0.22236	912,564
12	October Act. Prior Period Adjustments		-	22
13	Total	20,353,756		4,528,154
14	December, 2020 Est.	44,317,227	0.22236	9,854,379
15	November, 2020 Est.	(20,480,577)	0.22236	(4,554,061)
16	November, 2020 Act.	20,375,736	0.22236	4,530,749
17	November Act. Prior Period Adjustments		-	(1,391)
18	Total	44,212,386		9,829,676
19	January, 2021 Est. Old	37,398,184	0.22236	8,315,860
20	January, 2021 Est. New	29,028,431	0.17679	5,131,936
21	December, 2020 Est.	(44,317,227)	0.22236	(9,854,379)
22	December, 2020 Act.	44,143,604	0.22236	9,815,772
23	December Act. Prior Period Adjustments	00.050.000	-	(441)
24	Total	66,252,992		13,408,748
25	February, 2021 Est. New	69,910,470	0.17679	12,359,472
26	January, 2021 Est. Old	(37,398,184)	0.22236	(8,315,860)
27	January, 2021 Est. New	(29,028,431)	0.17679	(5,131,936)
28	January, 2021 Act. Old	37,399,691	0.22236	8,316,195
29	January, 2021 Act. New	29,029,600	0.17679	5,132,143
30	January Act. Prior Period Adjustments		-	1,082
31	Total	69,913,146		12,361,096
32	March, 2021 Est.	56,470,944	0.17679	9,983,498
33	February, 2021 Est.	(69,910,470)	0.17679	(12,359,472)
34	February, 2021 Act.	69,961,252	0.17679	12,368,450
35	February Act. Prior Period Adjustments		-	2,523
36	Total	56,521,726		9,994,999

Exhibit 1-E Schedule 4 Sheet 2b of 6

### COLUMBIA GAS OF PENNSYLVANIA, INC. DETAIL OF COMMODITY GAS COST RECOVERY OCTOBER, 2020 THROUGH SEPTEMBER, 2021

		SALES SUBJECT TO	COMMODITY	TOTAL COMMODITY
LINE		COMMODITY	COST OF	COST
NO.	MONTH	COST OF GAS	GAS	RECOVERY
		(1)	(2)	(3 = 1 x 2)
		THERM	\$/THERM	\$
1	April, 2021 Est.	30,033,859	0.17679	5,309,686
2	March, 2021 Est.	(56,470,944)	0.17679	(9,983,498)
3	March, 2021 Act.	56,466,174	0.17679	9,982,655
4	March Act. Prior Period Adjustments		-	1,222
5	Total	30,029,089		5,310,064
6	May, 2021 Est.	19,773,977	0.17679	3,495,841
7	April, 2021 Est.	(30,033,859)	0.17679	(5,309,686)
8	April, 2021 Act.	29,945,184	0.17679	5,294,009
9	April Act. Prior Period Adjustments		=	123
10	Total	19,685,302		3,480,288
11	June, 2021 Est.	10,375,004	0.17679	1,834,197
12	May, 2021 Est.	(19,773,977)	0.17679	(3,495,841)
13	May, 2021 Act.	19,800,290	0.17679	3,500,493
14	May Act. Prior Period Adjustments		-	(1,339)
15	Total	10,401,317		1,837,510
16	July, 2021 Est.	6,381,482	0.17679	1,128,182
17	June, 2021 Est.	(10,375,004)	0.17679	(1,834,197)
18	June, 2021 Act.	10,366,950	0.17679	1,832,773
19	June Act. Prior Period Adjustments		-	1,074
20	Total	6,373,428		1,127,832
21	August, 2021 Est.	5,727,991	0.17679	1,012,652
22	July, 2021 Est.	(6,381,482)	0.17679	(1,128,182)
23	July, 2021 Act.	6,366,366	0.17679	1,125,510
24	July Act. Prior Period Adjustments		=	(2,441)
25	Total	5,712,875		1,007,538
26	September, 2021 Est.	5,700,077	0.17679	1,007,717
27	August, 2021 Est.	0	-	0
28	August, 2021 Act.	0	-	0
29	August Act. Prior Period Adjustments		-	0
30	Total	5,700,077		1,007,717
31	TOTAL	344,969,700		65,899,684

Exhibit 1-E Schedule 4 Sheet 3 of 6

### COLUMBIA GAS OF PENNSYLVANIA, INC. DETAIL OF NSS COMMODITY COST RECOVERY OCTOBER, 2020 THROUGH SEPTEMBER, 2021

LINE	MONTH	RATE SCHEDULE NSS	DATE	NSS GAS COST
NO.	MONTH	VOLUMES (1) THERM	(2) \$/THERM	(3=1*2) \$
1	October, 2020 Est.	33,000	0.11364	3,750
2	September, 2020 Act. September, 2020 Est.	23,090 (24,000)	0.14357 0.14357	3,315 (3,446)
4		32,090	0.1.100.	3,619
5	November, 2020 Est.	69,000	0.22466	15,502
6 7	October, 2020 Act. October, 2020 Est.	42,670 (33,000)	0.11364 0.11364	4,849 (3,750)
8	,	78,670		16,600
9	December, 2020 Est.	85,000	0.22852	19,424
10 11	November, 2020 Act. November, 2020 Est.	63,370 (69,000)	0.22466 0.22466	14,237 (15,502)
12	November, 2020 Est.	79,370	0.22400	18,159
13	January, 2021 Est.	101,000	0.22626	22,852
14 15	December, 2020 Act. December, 2020 Est.	86,870 (85,000)	0.22852 0.22852	19,852 (19,424)
16	,	102,870		23,280
17	February, 2021 Est.	101,000	0.25822	26,080
18	January, 2021 Act.	98,700	0.22626	22,332
19 20	January, 2021 Est.	(101,000) 98,700	0.22626	(22,852) 25,560
21	March, 2021 Est.	87,000	0.23716	20,633
22 23	February, 2021 Act. February, 2021 Est.	104,430 (101,000)	0.25822 0.25822	26,966 (26,080)
24	rebluary, 2021 Est.	90,430	0.23022	21,519
25	April, 2021 Est.	76,000	0.22710	17,260
26	March, 2021 Act.	83,630	0.23716	19,834
27 28	March, 2021 Est.	(87,000) 72,630	0.23716	(20,633) 16,460
29	May, 2021 Est.	37,000	0.24178	8,946
30 31	April, 2021 Act. April, 2021 Est.	67,110 (76,000)	0.22710 0.22710	15,241 (17,260)
32	April, 2021 LSt.	28,110	0.22710	6,927
33	June, 2021 Est.	24,000	0.25356	6,085
34 35	May, 2021 Act. May, 2021 Est.	45,710 (37,000)	0.24178 0.24178	11,052 (8,946)
36	May, 2021 LSt.	32,710	0.24170	8,191
37	July, 2021 Est.	22,000	0.29838	6,564
38	June, 2021 Act.	23,260	0.25356	5,898
39 40	June, 2021 Est.	<u>(24,000)</u> 21,260	0.25356	(6,085) 6,377
41	August, 2021 Est.	23,000	0.32214	7,409
42	July, 2021 Act.	22,030	0.29838	6,573 (6,564)
43 44	July, 2021 Est.	23,030	0.29838	(6,564) 7,418
45	September, 2021 Est.	0	-	0
46 47	August, 2021 Act. August, 2021 Est.	0 0	-	0 0
48	. agast, 2021 Lot.	0	-	0
49	TOTAL	659,870		154,111

Exhibit 1-E Schedule 4 Sheet 4a of 6

### COLUMBIA GAS OF PENNSYLVANIA, INC. DETAIL OF DEMAND GAS COST RECOVERY OCTOBER, 2020 THROUGH SEPTEMBER, 2021

LINE NO.	MONTH	VOLUMES SUBJ. TO DEMAND COST OF GAS	COST OF GAS	DEMAND COST RECOVERY
		(1) <b>THERM</b>	(2) <b>\$/THERM</b>	(3 = 1 x 2) <b>\$</b>
1	October, 2020 Est. Old	5,648,287	0.13888	784,434
2	October, 2020 Est. New	4,157,777	0.12711	528,495
3	October Choice - Est. Old	1,744,529	0.11893	207,477
4	October Choice - Est. New	1,252,944	0.10879	136,308
5	October Est. Priority One Transportation Old	157,771	0.13888	21,911
6	October Est. Priority One Transportation New	116,137	0.12711	14,762
7	September, 2020 Est.	(6,421,225)	0.13888	(891,780)
8	September 2020 Act.	6,428,777	0.13888	892,829
9 10	September Choice - Est.	(1,357,640)	0.11893	(161,464)
10	September Choice - Act. September Est. Priority One Transportation	1,359,575	0.11893 0.13888	161,694
12	September Act. Priority One Transportation	(218,332) 198,280	0.13888	(30,322) 27,537
13	Total	13,066,880	0.13000	1,691,881
14	November, 2020 Est. New	20,480,577	0.12711	2,603,286
15	November Choice - Est. New	6,291,157	0.10879	684,415
16	November Est. Priority One Transportation New	283,453	0.12711	36,030
17	October Est. Old	(5,648,287)	0.13888	(784,434)
18	October Est. New	(4,157,777)	0.12711	(528,495)
19	October Act. Old	5,575,238	0.13888	774,289
20	October Act. New	4,103,995	0.12711	521,659
21	October Choice - Est. Old	(1,744,529)	0.11893	(207,477)
22	October Choice - Est. New	(1,252,944)	0.10879	(136,308)
23 24	October Choice - Act. Old October Choice - Act. New	1,745,761	0.11893	207,623
2 <del>4</del> 25	October Est. Priority One Transportation Old	1,253,829 (157,771)	0.10879 0.13888	136,404 (21,911)
26	October Est. Priority One Transportation New	(116,137)	0.13666	(14,762)
27	October Act. Priority One Transportation Old	173,013	0.12711	24,028
28	October Act. Priority One Transportation New	127,357	0.12711	16,188
29	Total	26,956,935	0	3,310,535
30	December, 2020 Est.	44,317,227	0.12711	5,633,163
31	December Choice - Est.	13,252,015	0.10879	1,441,687
32	December Est. Priority One Transportation	1,008,719	0.12711	128,218
33	November Est.	(20,480,577)	0.12711	(2,603,286)
34	November Act.	20,375,736	0.12711	2,589,960
35	November Choice - Est.	(6,291,157)	0.10879	(684,415)
36	November Choice - Act.	6,285,889	0.10879	683,842
37 38	November Est. Priority One Transportation  November Act. Priority One Transportation	(283,453) 523,120	0.12711 0.12711	(36,030) 66.494
39	Total	58,707,519	0.12711	7,219,632
40	January, 2021 Est. Old	37,398,184	0.12711	4,753,683
41	January, 2021 Est. New	29,028,431	0.21527	6,248,950
42	January Choice - Est. Old	11,084,378	0.10879	1,205,869
43	January Choice - Est. New	8,499,329	0.18464	1,569,316
44	January Est. Priority One Transportation Old	664,928	0.12711	84,519
45	January Est. Priority One Transportation New	516,117	0.21527	111,105
46	December 2020 Est.	(44,317,227)	0.12711	(5,633,163)
47	December 2020 Act.	44,143,604	0.12711	5,611,094
48	December Choice - Est.	(13,252,015)	0.10879	(1,441,687)
49	December Choice - Act.	13,238,238	0.10879	1,440,188
50	December Est. Priority One Transportation	(1,008,719)	0.12711	(128,218)
51	December Act. Priority One Transportation	892,140	0.12711	113,400
52	Total	86,887,388		13,935,056

Exhibit 1-E Schedule 4 Sheet 4b of 6

### COLUMBIA GAS OF PENNSYLVANIA, INC. DETAIL OF DEMAND GAS COST RECOVERY OCTOBER, 2020 THROUGH SEPTEMBER, 2021

		VOLUMES SUBJ.		DEMAND
LINE	MONTH	TO DEMAND	COST OF	COST
NO.	MONTH	COST OF GAS (1)	(2)	(3 = 1 x 2)
		THERM	\$/THERM	(3 - 1 x 2) <b>\$</b>
		IIILKW	Ψ/111EIXW	Ψ
1	February, 2021 Est. New	69,910,470	0.21527	15,049,627
2	February Choice - Est. New	20,338,580	0.18464	3,755,315
3	February Est. Priority One Transportation New	1,248,516	0.21527	268,768
4	January Est. Old	(37,398,184)	0.12711	(4,753,683)
5	January Est. New	(29,028,431)	0.21527	(6,248,950)
6	January Act. Old	37,399,691	0.12711	4,753,875
7	January Act. New	29,029,600	0.21527	6,249,202
8	January Choice - Est. Old	(11,084,378)	0.10879	(1,205,869)
9	January Choice - Est. New	(8,499,329)	0.18464	(1,569,316)
10	January Choice - Act. Old	11,082,397	0.10879	1,205,654
11	January Choice - Act. New	8,497,810	0.18464	1,569,036
12	January Est. Priority One Transportation Old	(664,928)	0.12711	(84,519)
13	January Est. Priority One Transportation New	(516,117)	0.21527	(111,105)
14	January Act. Priority One Transportation Old	665,032	0.12711	84,532
15	January Act. Priority One Transportation New	516,198	0.21527	111,122
16	Total	91,496,927		19,073,688
17	March, 2021 Est.	56,470,944	0.21527	12,156,500
18	March Choice - Est.	16,466,343	0.18464	3,040,346
19	March Est. Priority One Transportation	858,605	0.21527	184,832
20	February Est.	(69,910,470)	0.21527	(15,049,627)
21	February Act.	69,961,252	0.21527	15,060,559
22	February Choice - Est.	(20,338,580)	0.18464	(3,755,315)
23	February Choice - Act.	20,350,739	0.18464	3,757,560
24	February Est. Priority One Transportation	(1,248,516)	0.21527	(268,768)
25	February Act. Priority One Transportation	1,212,520	0.21527	261,019
26	Total	73,822,837		15,387,106
27	April, 2021 Est.	30,033,859	0.21527	6,465,389
28	April Choice - Est.	8,778,504	0.18464	1,620,863
29	April Est. Priority One Transportation	788,363	0.21527	169,711
30	March Est.	(56,470,944)	0.21527	(12,156,500)
31	March Act.	56,466,174	0.21527	12,155,473
32	March Choice - Est.	(16,466,343)	0.18464	(3,040,346)
33	March Choice - Act.	16,470,951	0.18464	3,041,196
34	March Est. Priority One Transportation	(858,605)	0.21527	(184,832)
35	March Act. Priority One Transportation	942,340	0.21527	202,858
36	Total	39,684,299		8,273,812
27	May 2024 Fat	40 772 077	0.04507	4.050.744
37	May, 2021 Est.	19,773,977	0.21527	4,256,744
38 39	May Choice - Est.	5,833,815 460,503	0.18464	1,077,156
39 40	May Est. Priority One Transportation	469,503	0.21527	101,070
	April, 2021 Est.	(30,033,859)	0.21527	(6,465,389)
41 42	April, 2021 Act. April Choice - Est.	29,945,184 (8,778,504)	0.21527 0.18464	6,446,300 (1,620,863)
42 43	April Choice - Est. April Choice - Act.	(8,778,504) 8,769,170	0.18464 0.18464	1,619,140
43 44	April Choice - Act.  April Est. Priority One Transportation	(788,363)	0.16464	(169,711)
44 45	April Act. Priority One Transportation	(766,363) 589,050	0.21527	126,805
46	Total	25,779,973	0.21321	5,371,251
70	i ottai	20,110,010		0,071,201

Exhibit 1-E Schedule 4 Sheet 4c of 6

### COLUMBIA GAS OF PENNSYLVANIA, INC. DETAIL OF DEMAND GAS COST RECOVERY OCTOBER, 2020 THROUGH SEPTEMBER, 2021

LINE NO.	MONTH	VOLUMES SUBJ. TO DEMAND COST OF GAS (1) THERM	COST OF GAS (2) \$/THERM	DEMAND COST RECOVERY (3 = 1 x 2)
1	June, 2021 Est.	10.375.004	0.21527	2 222 427
2	June Choice - Est.	2,972,702	0.18464	2,233,427 548,880
3	June Est. Priority One Transportation	288,081	0.21527	62,015
4	May Est.	(19,773,977)	0.21527	(4,256,744)
5	May Act.	19,800,290	0.21527	4,262,408
6	May Choice - Est.	(5,833,815)	0.18464	(1,077,156)
7	May Choice - Act.	5,834,103	0.18464	1,077,209
8	May Est. Priority One Transportation	(469,503)	0.21527	(101,070)
9	May Act. Priority One Transportation	420,170	0.21527	90,450
10	Total	13,613,055		2,839,420
11	July, 2021 Est.	6,381,482	0.21527	1,373,742
12	July Choice - Est.	1,772,584	0.18464	327,290
13	July Est. Priority One Transportation	203,612	0.21527	43,832
14	June 2021 Est.	(10,375,004)	0.21527	(2,233,427)
15	June 2021 Act.	10,366,950	0.21527	2,231,693
16	June Choice - Est.	(2,972,702)	0.18464	(548,880)
17	June Choice - Act.	2,973,487	0.18464	549,025
18 19	June Est. Priority One Transportation June Act. Priority One Transportation	(288,081) 252,230	0.21527 0.21527	(62,015)
20	Total	8,314,558	0.21321	54,298 1,735,557
20	Total	0,314,000		1,700,007
21	August, 2021 Est.	5,727,991	0.21527	1,233,065
22	August Choice - Est.	1,575,496	0.18464	290,900
23	August Est. Priority One Transportation	181,605	0.21527	39,094
24	July, 2021 Est.	(6,381,482)	0.21527	(1,373,742)
25	July 2021 Act.	6,366,366	0.21527	1,370,488
26 27	July Choice - Est. July Choice - Act.	(1,772,584) 1,772,277	0.18464 0.18464	(327,290) 327,233
28	July Est. Priority One Transportation	(203,612)	0.21527	(43,832)
29	July Act. Priority One Transportation	182,160	0.21527	39,214
30	Total	7,448,217	0.21021	1,555,130
31	September, 2021 Est.	7,460,035	0.21527	1,605,922
32	September Choice - Est.	0	-	0
33	September Est. Priority One Transportation	0	-	0
34	August Est.	0	_	0
35	August Act.	0	-	0
36	August Choice - Est.	0	-	0
37	August Choice - Act.	0	-	0
38	August Est. Priority One Transportation	0	=	0
39	August Act. Priority One Transportation	0	-	0
40	Total	7,460,035		1,605,922
41	TOTAL	453,238,623		81,998,990

Exhibit 1-E Schedule 4 Sheet 5 of 6

### COLUMBIA GAS OF PENNSYLVANIA, INC. DETAIL OF STANDBY DEMAND COST RECOVERY OCTOBER, 2020 THROUGH SEPTEMBER, 2021

LINE NO.	MONTH	STANDBY VOLUMES	STANDBY DEMAND RATE	STANDBY GAS DEMAND RECOVERIES
		(1) Therm	(2) <b>\$/THERM</b>	(3 = 1 x 2) <b>\$</b>
1 2 3 4	October, 2020 Est. September, 2020 Act. September, 2020 Est.	53,030 0 53,030	0.74953 -	39,748 0 39,748
5 6 7 8	November, 2020 Est. October, 2020 Act. October, 2020 Est.	53,010 0 53,010	- 0.74953 -	0 39,733 0 39,733
9 10 11 12	December, 2020 Est. November, 2020 Act. November, 2020 Est.	0 66,400 0 66,400	0.75043 -	49,829 0 49,829
13 14 15 16	January, 2021 Est. December, 2020 Act. December, 2020 Est.	0 66,380 0 66,380	0.75043 -	0 49,814 0 49,814
17 18 19 20	February, 2021 Est. January, 2021 Act. January, 2021 Est.	62,810 62,810	- 1.14481 -	71,906 0 71,906
21 22 23 24	March, 2021 Est. February, 2021 Act. February, 2021 Est.	62,810 62,810	- 1.14481 -	71,906 0 71,906
25 26 27 28	April, 2021 March, 2021 Act. March, 2021 Est.	0 62,810 0 62,810	- 1.14481 -	71,906 0 71,906
29 30 31 32	May, 2021 April, 2021 Act. April, 2021 Est.	0 62,780 0 62,780	- 1.14481 -	0 71,871 0 71,871
33 34 35 36	June, 2021 May, 2021 Act. May, 2021 Est.	62,810 62,810	- 1.14481 -	71,906 0 71,906
37 38 39 40	July, 2021 June, 2021 Act. June, 2021 Est.	62,810 0 62,810	1.14481 -	71,906 0 71,906
41 42 43 44	August, 2021 July, 2021 Act. July, 2021 Est.	62,810 62,810	- 1.14481 -	71,906 0 71,906
45 46 47 48	September, 2021 August, 2021 Act August, 2021 Est.	62,810 62,810	1.14481 -	71,906 0 71,906
49	TOTAL	741,270		754,333

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, 2020 THROUGH SEPTEMBER, 2021

		NSS-BANKING		ANCING	NSS-CAPACITY RELEASE		
NO.	DESCRIPTION	VOLUME	RATE	AMOUNT	VOLUME	RATE	AMOUNT
		(1) THERM	(2) \$/THERM	(3=1 x 2)	(4) THERM	(5) \$/THERM	(6=4 x5) \$
						•	
1 2	October, 2020 Est.	33,000 23,090	0.00226 0.00226	75 52	33,000 23,090	0.00093	31 21
3	September, 2020 Act. September, 2020 Est.	(24,000)	0.00226	52 (54)	(24,000)	0.00093 0.00093	(22)
4		32,090		73	32,090		30
5	November, 2020 Est.	69,000	0.00226	156	69,000	0.00093	64
6 7	October, 2020 Act.	42,670	0.00226	96 (75)	42,670 (33,000)	0.00093	40
8	October, 2020 Est.	(33,000) 78,670	0.00226	<u>(75)</u> 178	78,670	0.00093	(31) 73
9	December, 2020 Est.	85,000	0.00226	192	85,000	0.00093	79
10	November, 2020 Act.	63,370	0.00226	143	63,370	0.00093	59
11	November, 2020 Est.	(69,000)	0.00226	(156)	(69,000)	0.00093	(64)
12		79,370		179	79,370		74
13	January, 2021 Est.	101,000	0.00226	228	101,000	0.01050	1,061
14 15	December, 2020 Act. December, 2020 Est.	86,870 (85,000)	0.00226 0.00226	196 (192)	86,870 (85,000)	0.00093 0.00093	81 (79)
16	Describer, 2020 Est.	102,870	0.00220	232	102,870	0.00000	1,062
17	February, 2021 Est.	101,000	0.00226	228	101,000	0.01000	1,010
18	January, 2021 Act.	98,700	0.00226	223	98,700	0.01050	1,036
19 20	January, 2021 Est.	(101,000) 98,700	0.00226	<u>(228)</u> 223	(101,000) 98,700	0.01050	(1,061) 986
		90,700		223	90,700		900
21 22	March, 2021 Est.	87,000	0.00226	197 236	87,000	0.00093	81
23	February, 2021 Act. February, 2021 Est.	104,430 (101,000)	0.00226 0.00226	(228)	104,430 (101,000)	0.01000 0.01000	1,044 (1,010)
24	, <b>,</b> ,	90,430		204	90,430		115
25	April, 2021 Est.	76,000	0.00226	172	76,000	0.00093	71
26	March, 2021 Act.	83,630	0.00226	189	83,630	0.00093	78
27 28	March, 2021 Est.	(87,000) 72,630	0.00226	<u>(197)</u> 164	<u>(87,000)</u> 72,630	0.00093	(81) 68
29	May, 2021 Est.	37,000	0.00226	84	37,000	0.00093	34
30	April, 2021 Act.	67,110	0.00226	152	67,110	0.00093	62
31	April, 2021 Est.	(76,000)	0.00226	(172)	(76,000)	0.00093	(71)
32		28,110		64	28,110		26
33	June, 2021 Est.	24,000	0.00226	54	24,000	0.00093	22
34 35	May, 2021 Act. May, 2021 Est.	45,710 (37,000)	0.00226 0.00226	103 (84)	45,710 (37,000)	0.00093 0.00093	43 (34)
36	Way, 2021 LSt.	32,710	0.00220	74	32,710	0.00000	30
37	July, 2021 Est.	22,000	0.00226	50	22,000	0.00093	20
38	June, 2021 Act.	23,260	0.00226	53	23,260	0.00093	22
39 40	June, 2021 Est.	(24,000)	0.00226	<u>(54)</u> 48	(24,000)	0.00093	<u>(22)</u> 19
40		21,260		40	21,260		19
41 42	August, 2021 Est. July, 2021 Act.	23,000 22,030	0.00226 0.00226	52 50	23,000 22,030	0.00093 0.00093	21 20
43	July, 2021 Act. July, 2021 Est.	(22,000)	0.00226	(50)	(22,000)	0.00093	(20)
44	<b>3</b> , - <del></del>	23,030		52	23,030		21
45	September, 2021 Est.	0	-	0	0	-	0
46 47	August, 2021 Act.	0 0	-	0	0 0	-	0
48	August, 2021 Est.	0	-	0	0	-	0
49	TOTAL	659,870		1,492	659,870		2,504

## **ATTACHMENT A**

Attachment A Sheet 1 of 3

# COLUMBIA GAS OF PENNSYLVANIA, INC. PENALTY CREDITS/SUPPLIER REFUNDS RECEIVED DECEMBER 2020 - AUGUST 2021 PASSBACK OF NON-RESIDENTIAL PORTION CALCULATED RATE EFFECTIVE OCTOBER 2021 - SEPTEMBER 2022

Line No.	Refund Type	Date Received	Amount	Non-Residential Allocation 1_/
1	Columbia Gas Transmission, LLC: Penalty Credit Docket No. RP 21-000	December 2020	12,534	(3,693) 2_/
2	Texas Eastern Transmission: Penalty Credit Docket No. RP21-78-000	December 2020	860	(253) 2_/
3	Texas Eastern Transmission: Penalty Credit Docket No. RP 21-648	April 2021	1,846	(534) 2_/
4	Dominion Transmission: Penalty Credit Docket No. RP21-953-000	July 2021	2,639	(749) 2_/
5	Total Refunds to Pass Back		17,878	(5,228)
6	SGSS, SGDS (Priority One Only), SCD, LGSS and MLSS Therms			126,015,469
7	Rate per Therm			(0.00004) \$/Therms

<sup>1</sup>\_/ Allocation is based on the PGDC Sales forecast during the periods that refunds were received. See Attachment A Sheet 2 of 3 for Non-Residential Allocation Details.

<sup>2</sup>\_/ Includes applicable interest as shown on Attachment A Sheet 3 of 3.

Attachment A Sheet 2 of 3

## COLUMBIA GAS OF PENNSYLVANIA, INC. PENALTY CREDIT/SUPPLIER REFUND PASSBACK NON-RESIDENTIAL ALLOCATION CALCULATION

Line			
No.	Period & Type	PGDC Sales	Allocation
		Therm	
	October 2020 - September 2021		
1	Residential	345,576,146	72.7%
2	Commercial & Industrial	129,647,603	27.3%
3	Total October 2020 - September 2021	475,223,749	100.0%

Attachment A Sheet 3 of 3

## COLUMBIA GAS OF PENNSYLVANIA, INC. PENALTY CREDITS/SUPPLIER REFUNDS RECEIVED DECEMBER 2020 - AUGUST 2021 PASSBACK OF NON-RESIDENTIAL PORTION INTEREST CALCULATION

Line No.	Month	Refund (1) \$	of M	mbe onth		Rate (3) %	Amount of Interest $\frac{(4 = 1 \times 2 \times 3)}{\$}$	Total (5 = 1 + 4) \$
1	December, 2020	(3,654)	16	/	12	6.00%	(292)	(3,946)
2	January, 2021	0	15	/	12	6.00%	0	0
3	February	0	14	/	12	6.00%	0	0
4	March	0	13	/	12	6.00%	0	0
5	April	(504)	12	/	12	6.00%	(30)	(534)
6	May	0	11	/	12	6.00%	0	0
7	June	0	10	/	12	6.00%	0	0
8	July	0	9	/	12	6.00%	0	0
9	August	(720)	8	/	12	6.00%	(29)	(749)
10	TOTAL	(4,877)					(351)	(5,228)

Exhibit 1-A Schedule 1 Sheet 1 of 6

### COLUMBIA GAS OF PENNSYLVANIA, INC. COMPUTATION OF CHANGE IN RATE PURSUANT TO SECTION 1307(f) APPLICATION PERIOD: OCTOBER, 2021 THROUGH SEPTEMBER, 2022

Line	B			0	E" " 1100
No.	Description	Amount	_		Effective 1-1-22
		(1)		(2=3-1)	(3)
1	Purchased Gas Commodity Cost	\$			
2	Commodity Cost of Gas (Exhibit 1-B, Schedule 1)	119,851,657			
3	Projected tariff sales for the twelve billing periods of		<b>-</b> .		
4	October, 2021 through September, 2022	383,059,309	herms		
5	PGCC (Line 2/Line 4)	0.31288		0.01527	0.32815
•					
6	Commodity (Over)/Under Collection				
7	Commodity E-Factor	0.004.000		0.057.707	4 000 404
8	(Exhibit No. 1-E)	2,834,398		2,057,737	4,892,134
9	Projected sales for the twelve billing periods of	202 252 222	Th		202 050 200
10	October, 2021 through September, 2022	383,059,309	_ i nerms		383,059,309
11	Commodity E-Factor (Line 8/ Line 10)	0.00740		0.00537	0.01277
12	Purchased Gas Demand Cost				
13	Demand cost of gas (Exhibit 1-B, Schedule 1)	112 200 251			
14	Less: Purchased Gas Demand recovered under Rate SS	113,300,251			
15		1 026 594			
16	(Exhibit 1-A, Schedule 2, Sheet 2)	1,036,584			
	Less: Purchased Gas Demand Cost allocated to Rates LTS, STS,	0			
17 18	SGS-TS and MLS (Exh 1-A, Sch 2, Page 3)	112,263,667	-		
	Subtotal (Line 13 - Line 15 - Line 17) Projected sales for the twelve billing periods of	112,203,007			
19 20	October, 2021 through September, 2022 1_/	470 657 142	Thormo		
21	PGDC Rate prior to Capacity Release Credit (Line 18 / Line 20)	470,657,143 0.23853	- 111611118	(0.04325)	0.10529
22				0.00000	0.19528
23	Off System Sales and Capacity Release Credit PGDC Rate	(0.00328) 0.23525	_	(0.04325)	0.19200
23	1 GDG Nate	0.23323		(0.04323)	0.19200
24	Demand (Over)/Under Collection				
25	Demand E- Factor				
26	(Exhibit No. 1-E)	8,127,735		(356,276)	7,771,459
27	Projected sales for the twelve billing periods of	0, .2. ,. 00		(000,2.0)	.,,
28	October, 2021 through September, 2022 1_/	470,657,143	Therms		470,657,143
29	Demand E-Factor (Line 26 / Line 28)	0.01727	-	(0.00076)	0.01651
	(			(,	
30	Total Purchased Gas Cost				
31	PGCC Rate (Line 5)	0.31288		0.01527	0.32815
32	PGDC Rate (Line 23)	0.23525		(0.04325)	0.19200
33	PGC Rate	0.54813	_	(0.02798)	0.52015
34	Currently effective PGC	0.38714			0.54813
35	Increase (Decrease) in PGC	0.16099	='		(0.02798)
36	Net (Over) Under Collection				
37	Commodity E-Factor (Line 11)	0.00740		0.00537	0.01277
38	Demand E-Factor (Line 29)	0.01727	_	(0.00076)	0.01651
39	E-Factor	0.02467		0.00461	0.02928
40	Currently effective E-Factor	(0.00202)	_		0.02467
41	Increase (Decrease) in E-Factor	0.02669			0.00461
42	DCC Pata	0.54842		(0.02700)	0.52045
42	PGC Rate	0.54813		(0.02798)	0.52015
43	E-Factor Total Rate	0.02467	_	0.00461	0.02928
44 45	Total Rate	0.57280		(0.02337)	0.54943
45 46	Currently effective Rate	0.38512	_		0.57280
46	Increase (Decrease) in Rate	0.18768			(0.02337)

<sup>1</sup>\_/ Includes 87,597,834 Therm Transportation Quantities for the Company's Choice Program

Exhibit No. 12 Schedule No. 8 Page 45 of 85 Witness: J. Siegler Exhibit 1-A

Exhibit 1-A Schedule 1 Sheet 2 of 6

### COLUMBIA GAS OF PENNSYLVANIA, INC. QUARTERLY PURCHASED GAS ADJUSTMENT INCREMENTAL CHANGE EFFECTIVE JANUARY 1, 2022

		Projected Over/(Under) Collection (1) \$	Actual Over/(Under) Collection (2) \$	Difference (3) \$	Projected Sales (4) (Therms)	Change In Rate (5=3/4) (\$/Therm)
C-FA	CTOR_	Ψ	Ψ	Ψ	(memis)	(φ/ mem)
	Commodity Cost of Gas					
1	October , 2021	(3,651,476)	(4,712,511)	1,061,034		
2	November, 2021	(3,822,255)	(10,331,191)	6,508,936		
3	Change in PGCC January 1	(7,473,731)	(15,043,701)	7,569,971	383,059,309	0.01976
4	December, 2021	0	0	0		
5	January, 2022	0	0	0		
6	February, 2022	0	0	0		
7	Change in PGCC April 1	0	0	0	383,059,309	0.00000
8	March, 2022	0	0	0		
9	April, 2022	0	0	0		
10	May, 2022	0	0	0		
11	Change in PGCC July 1	0	0	0	383,059,309	0.00000
<u></u>	Demand Cost of Gas					
12	October , 2021	(7,930,855)	(8,418,203)	487,348		
13	November, 2021	(3,471,731)	(4,341,126)	869,395		
14	Change in PGDC January 1	(11,402,586)	(12,759,329)	1,356,743	470,657,143	0.00288
15	December, 2021	0	0	0		
16	January, 2022	0	0	0		
17	February, 2022	0	0	0		
18	Change in PGDC April 1	0	0	0	470,657,143	0.00000
19	March, 2022	0	0	0		
20	April, 2022	0	0	0		
21	May, 2022	0	0	0		
22	Change in PGDC July 1	0	0	0	470,657,143	0.00000
E-FA	CTOR					
23 (	Commodity E Factor	(2,834,398)	(4,892,134)	2,057,737	383,059,309	0.00537
24 [	Demand E Factor	(8,127,735)	(7,771,459)	(356,276)	470,657,143	(0.00076)
25 (	Change in PGCC (line 3 + line 7 + line	e 11 + line 23)				0.02513
26 (	Change in PGDC (line 14 + line 18 + l	line 22 + line 24)		Janua	ry 1, 2022 Quarterly Fil	0.00212 ing

Exhibit No. 12 Schedule No. 8 Page 46 of 85 Witness: J. Siegler Exhibit 1-A

Schedule 1
Sheet 3 of 6

## COLUMBIA GAS OF PENNSYLVANIA, INC. QUARTERLY PURCHASED GAS ADJUSTMENT - COMMODITY INCREMENTAL CHANGE EFFECTIVE JANUARY 1, 2022

		Original Projected Exhibit 1-B	Updated for 1/1/22 Exhibit 1-B	Difference Included in	Updated for 4/1/22 Exhibit 1-B	Difference Included in	Updated for 7/1/22 Exhibit 1-B	Difference Included in
		Schedule 1 (1)	Schedule 1 (2)	1/1/22 GCR (3=2-1)	Schedule 1 (4)	4/1/22 GCR (5=4-2)	Schedule 1 (6)	7/1/22 GCR (7=6-4)
		\$	\$	\$	\$	\$	\$	\$
C-FA	CTOR_							
<u>(</u>	Commodity Cost of Gas							
1	December, 2021	21,175,812	21,175,812	0				
2	January, 2022	24,759,701	23,256,387	(1,503,314)				
3	February	23,073,892	21,475,876	(1,598,016)				
4	March	15,540,531	16,106,543	566,013				
5	April	8,401,072	8,338,187	(62,885)				
6	Мау	3,296,282	3,583,429	287,147				
7	June	1,321,183	1,567,274	246,091				
8	July	1,180,996	1,415,104	234,108				
9	August	1,124,597	1,359,310	234,713				
10	September	1,646,319	1,916,647	270,328				
11	Total	101,520,384	100,194,568	(1,325,816)				
12	Projected Sales			294,987,967				
13	Change in PGCC Rate	e per Therm		(0.00449)				

Exhibit No. 12 Schedule No. 8 Page 47 of 85 Witness: J. Siegler Exhibit 1-A

Schedule 1 Sheet 4 of 6

### COLUMBIA GAS OF PENNSYLVANIA, INC. QUARTERLY PURCHASED GAS ADJUSTMENT - DEMAND INCREMENTAL CHANGE EFFECTIVE JANUARY 1, 2022

		Original Projected Exhibit 1-B Schedule 1 (1) \$	Updated for 1/1/22 Exhibit 1-B Schedule 1 (2) \$	Difference Included in 1/1/22 GCR (3=2-1)	Updated for 4/1/22 Exhibit 1-B Schedule 1 (4)	Difference Included in 4/1/22 GCR (5=4-2)	Updated for 7/1/22 Exhibit 1-B Schedule 1 (6) \$	Difference Included in 7/1/22 GCR (7=6-4) \$
D-FAC	CTOR_	Ψ	Ψ	Ψ	Ψ	Ψ	Ψ	Ψ
<u>D</u>	emand Cost of Gas							
1	December, 2021	11,020,508	11,020,508	0				
2	January, 2022	11,020,508	8,234,884	(2,785,624)				
3	February	11,020,508	8,234,884	(2,785,624)				
4	March	11,020,508	8,612,617	(2,407,891)				
5	April	7,986,754	6,511,697	(1,475,057)				
6	May	7,890,754	6,415,697	(1,475,057)				
7	June	7,890,754	6,415,697	(1,475,057)				
8	July	7,890,754	6,415,697	(1,475,057)				
9	August	7,890,754	6,415,697	(1,475,057)				
10	September	7,890,754	6,415,697	(1,475,057)				
11	Total	91,522,556	74,693,075	(16,829,481)				
12	Projected Sales			362,266,804				
13	Change in PGDC R	ate per Therm		(0.04646)				

Exhibit No. 12 Schedule No. 8 Page 48 of 85 Witness: J. Sieglabit 1-A Schedule 1 Sheet 5 of 6

### COLUMBIA GAS OF PENNSYLVANIA, INC. ACTUAL OVER/(UNDER)COLLECTION FOR THE PERIOD OCTOBER, 2021 THROUGH SEPTEMBER, 2022

		Commodity			Demand		
Line <u>No.</u>		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 Noven	nber 2021					
1	October, 2021	1,852,536	6,565,047	(4,712,511)	2,168,298	10,586,501	(8,418,203)
2	November	7,092,548	17,423,739	(10,331,191)	6,411,915	10,753,040	(4,341,126)
3	December			0			0
4	January, 2022			0			0
5	February			0			0
6	March			0			0
7	April			0			0
8	Мау			0			0
9	June			0			0
10	July			0			0
11	August			0			0
12	September		_	0			0
13	Total	8,945,085	23,988,786	(15,043,701)	8,580,213	21,339,541 <sub>1, 2</sub>	022 Quarterly Filing ,329)

Schedule No. 8
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Witness: J. Siegler

Exhibit No. 12

Exhibit 1-A Schedule 1 Sheet 6 of 6

# COLUMBIA GAS OF PENNSYLVANIA, INC. PURCHASED GAS COST RECOVERED UNDER RATES SS AND COMPUTATION OF DAILY PURCHASED GAS DEMAND APPLICATION PERIOD: OCTOBER, 2021 THROUGH SEPTEMBER, 2022

Line				
No.	Description	Detail		Total
		(1)		(2)
1	Total estimated demand charges for the period			
2	October, 2021 through September, 2022	96,470,770		
		, ,		
3	Estimated Demand Quantity (Therms) 1_/	82,382,520		
4	Daily purchased gas demand rate (Line 2 / line 3)	\$1.17101	per Ther	m
5	Daily purchased gas demand (Therms)	753 720	Therms	
6	Daily purchased gas demand rate per Therm	\$1.17101	THEITIS	
Ü	Daily paronaced gae domand rate per morni	Ψ1.17 101	_	
7	Total rate SS Daily Demand Cost to be			
8	Recovered (Line 5 x Line 6)			\$882,614
•	T			
9	Total Rate SS Daily Demand Cost to be	•		¢4 026 E94
10	Recovered (Effective October 1, 2021)		-	\$1,036,584
11	Difference (Line	8 minus Line 10)	١	(\$153,970)
	Emerence (Eme	5 minds Eme 10)	•	(\$100,010)
12	Projected Sales for the Period October 2021 through	September 2022		470,657,143
	•			
13		Rate Differential	l \$	(0.00033)

Exhibit No. 12 Schedule No. 8 Page 50 of 85 Witness Asignler A Schedule 2 Sheet 1 of 4

# COLUMBIA GAS OF PENNSYLVANIA, INC. SUMMARY OF PROJECTED SALES QUANTITIES AND REVENUES FOR THE PERIOD SALES AT PGCC AND PGDC RATES OCTOBER, 2021 THROUGH SEPTEMBER, 2022

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 - 2021	9,357,626	0.31288	2,927,814	11,694,463	0.23853	2,789,480	5,717,294
2	November	25,344,311	0.31288	7,929,728	31,077,285	0.23853	7,412,865	15,342,593
3	December	53,369,405	0.31288	16,698,219	65,618,591	0.23853	15,652,003	32,350,222
4	January - 2022	73,628,800	0.32052	23,599,135	90,361,739	0.21691	19,599,913	43,199,048
5	February	73,862,241	0.32815	24,237,894	90,458,855	0.19528	17,664,805	41,902,699
6	March	62,825,964	0.32815	20,616,340	76,886,959	0.19528	15,014,485	35,630,825
7	April	40,504,091	0.32815	13,291,417	49,623,766	0.19528	9,690,529	22,981,946
8	May	18,465,975	0.32815	6,059,610	22,766,824	0.19528	4,445,905	10,505,515
9	June	9,587,525	0.32815	3,146,146	11,929,985	0.19528	2,329,687	5,475,833
10	July	5,429,493	0.32815	1,781,688	6,845,196	0.19528	1,336,730	3,118,418
11	August	4,830,979	0.32815	1,585,286	6,152,973	0.19528	1,201,553	2,786,839
12	September	5,852,899	0.32815	1,920,629	7,240,507	0.19528	1,413,926	3,334,555
13	Total	383,059,309		123,793,906	470,657,143		98,551,881	222,345,787

Exhibit No. 12 Schedule No. 8 Page 51 of 85 Witness: J. Siegler

Exhibit 1-A Schedule 2 Sheet 2 of 4

# COLUMBIA GAS OF PENNSYLVANIA, INC. SUMMARY OF PROJECTED SALES QUANTITIES AND REVENUES FOR THE PERIOD SALES AT STANDBY RATE OCTOBER, 2021 THROUGH SEPTEMBER, 2022

Line No.	Month	Daily Purchased Gas Demand Quantity (1) Therms	Daily Gas Demand <u>Rate</u> (2) \$/Therm	Daily Purchased Gas Demand Revenue (3=1x2) \$
1	October - 2021	62,810	1.37529	86,382
2	November	62,810	1.37529	86,382
3	December	62,810	1.37529	86,382
4	January - 2022	62,810	1.17101	73,551
5	February	62,810	1.17101	73,551
6	March	62,810	1.17101	73,551
7	April	62,810	1.17101	73,551
8	May	62,810	1.17101	73,551
9	June	62,810	1.17101	73,551
10	July	62,810	1.17101	73,551
11	August	62,810	1.17101	73,551
12	September	62,810	1.17101	73,551
13	Total	753,720		921,106

Exhibit No. 12 Schedule No. 8 Page 52 of 85 Witness: J. Siegler

> Exhibit 1-A Schedule 2 Sheet 3 of 4

# COLUMBIA GAS OF PENNSYLVANIA, INC. SUMMARY OF PROJECTED SALES QUANTITIES AND REVENUES FOR THE PERIOD SALES AT BANKING AND BALANCING RATES OCTOBER, 2021 THROUGH SEPTEMBER, 2022

Line No.	<u>Month</u>	Lg. Quantity GDS Deliveries (1)	Rate (2)	Revenue (3=1x2)	Sm. Quantity GDS Deliveries (4)	Rate (5)	Revenue (6=4x5)	Total Trans. Revenue (7=3+6)
		Therms	\$/Therm	\$	Therms	\$/Therm	\$	\$
1	October - 2021	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 - 2022	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

Exhibit No. 12 Schedule No. 8 Page 53 of 85 Witness: J. Siegler

> Exhibit 1-A Schedule 2 Sheet 4 of 4

# COLUMBIA GAS OF PENNSYLVANIA, INC. SUMMARY OF PROJECTED TOTAL OVER/UNDERCOLLECTION FOR THE 2021 1307(f) PERIOD OCTOBER, 2021 THROUGH SEPTEMBER, 2022

Line No.	Month	Commodity Recoveries PGCC Revenue (1) \$	Total Commodity Cost of Gas 1_/ (2) \$	Commodity Over/ (Under) collection (3=1-2)	Demand Recoveries PGDC Revenue (4) \$	Total Demand Cost of Gas 1_/ (5) \$	Demand Over/ (Under) collection (6=4-5) \$	Total Over/ (Under) collection (7=3+6) \$
1	October - 2021	2,927,814	6,579,290	(3,651,476)	2,875,862	10,806,717	(7,930,855)	(11,582,331)
2	November	7,929,728	11,751,983	(3,822,255)	7,499,247	10,970,978	(3,471,731)	(7,293,986)
3	December	16,698,219	21,175,812	(4,477,593)	15,738,385	11,020,508	4,717,877	240,284
4	January - 2022	23,599,135	23,256,387	342,748	19,673,464	8,234,884	11,438,580	11,781,328
5	February	24,237,894	21,475,876	2,762,018	17,738,356	8,234,884	9,503,472	12,265,490
6	March	20,616,340	16,106,543	4,509,797	15,088,036	8,612,617	6,475,419	10,985,216
7	April	13,291,417	8,338,187	4,953,231	9,764,080	6,511,697	3,252,383	8,205,614
8	May	6,059,610	3,583,429	2,476,182	4,519,456	6,415,697	(1,896,241)	579,941
9	June	3,146,146	1,567,274	1,578,872	2,403,238	6,415,697	(4,012,459)	(2,433,587)
10	July	1,781,688	1,415,104	366,584	1,410,281	6,415,697	(5,005,416)	(4,638,832)
11	August	1,585,286	1,359,310	225,976	1,275,104	6,415,697	(5,140,593)	(4,914,617)
12	September	1,920,629	1,916,647	3,982	1,487,477	6,415,697	(4,928,220)	(4,924,238)
13	Total	123,793,906	118,525,841	5,268,064	99,472,987	96,470,770	3,002,217	8,270,282

<sup>1</sup>\_/ Refer to Exhibit 1-B, Schedule No. 1.

Exhibit No. 12 Schedule No. 8 Page 54 of 85 Witness: ExhibiterA Schedule 3 Sheet 1 of 2

#### 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, 2022

\$113,300,251		1. Projected Demand Costs Oct. 2021 through Sept. 2022 (E	xh. 1-B, Sch. 1 from Oct. 2021 PGC
(882,614)		1a. Less Purchased Gas Demand Costs Recovered Under Re (Exhibit 1-A, Schedule 1, Sheet 6)	ate SS
0		1b. Less Purchased Gas Demand Allocated to Rates LTS, S1	S, SGS-TS, and MLS
7,771,459		1c. Experienced Demand Net Under/(Over) Collection (Exhibit	No. 1-E)
\$120,189,096	=	2. Total Adjusted Demand Costs per 1307(f) Filing (1) + (1	a) + (1b) + (1c)
\$120.28	per Dth	3. Unit FT Demand Charge Per Dth of Gulf/TCO/DTI capacity the marketer would pay Gulf and TCO. (Exhibit 1-A, Scher	
47,066	MMDth	Projected Sales & Choice Requirements for 12 billing period through September, 2022	ds of October, 2021
47,781	MMDth	5. Projected Sales & Choice Requirements 12 months ended Unaccounted For @ 1.5%	September 2022, including
21,755	MMDth	6. Annual Injections and Withdrawals, Normal Weather	
1	Dth	7a. Quantity Delivered to the Customer	
1.5%		7b. Unaccounted-for & Co. Use Factor from Volume Balancin	a System
1.070	=	7b. Onaccounted-for & Co. Osc Factor from Volume Balancin	g Gystem
1.0152	Dth	7c. Quantity Delivered to the City Gate. (7a)/(1-7b)	
\$2.5537	per Dth	8. Unit Demand Charge: (2) / (4)	
\$0.0288	F	9a. Quarterly Purchased Gas Demand Adjustment (Jan. 1, 20)	22 Filing Schedule 1 Sheet 2)
(\$0.4646)		9b. Quarterly Purchased Gas Demand Adjustment (Jan. 1, 20)	
\$2.1179	-	10. Net Unit Demand Charge (8) + (9a) + (9b)	22 7 milg, Contours 1, Chock 1)
Ψ2.1170		10. Not offic Bolliand officings (b) (bb)	
(\$0.0328)	per Dth	11. OSS and Capacity Release Credit	
0.0028	Dth	12. Average Daily FT Delivery: (7c) / 365 days	
\$0.3368	per Dth	13. Annual Demand Charge for the Assigned FT Capacity page	yable to the pipeline(s): (3) X (12)
\$2.2169	per Dth	14. Annual Demand Charge for other capacity that CPA retain	ns (8) - (13)
0.4622	Dth	15. Quantity Injected and Withdrawn to Deliver 1 Dth to the C	ustomer: (6) / (4)
\$0.0069		14a. Injection Charge @ \$0.0150/Dth	
\$0.0093		14b. FSS Shrinkage @ 0.622% for gas at \$3.2252/Dth	
\$0.0069		14c. Withdrawal Charge @ \$0.0150/Dth	
\$0.0069		14d. SST Commodity Charge @ \$0.0150/Dth	
\$0.0240	<u>-</u>	14e. SST retention @ 1.608% for gas at \$3.2252/Dth	
\$0.0540	per Dth	16f. Total Annual Variable Storage Costs	
		17. Credit to Purchased Gas Demand Charge for the CHOICE	E Customer:
\$0.3368	per Dth	17a. For Demand Cost Paid to Pipelines: = (13)	
(\$0.0540)	•	17b. Less Storage Costs: = (16f)	
\$0.2828	per Dth	17c. Net Credit: (17a) + (17b)	
\$0.02828	- '	17d. Per Therm: (17c)/10 - Capacity Assignment Factor	
		, , , ,	
\$1.8023	per Dth	18. Purchased Gas Demand Charge Paid By the CHOICE Cu	stomer: (10)+(11) - (17c)
\$0.18023	per Therm	19. Per Therm: (18)/10	January 1, 2022 Quarterly Filing

Exhibit No. 12 Schedule No. 8 Page 55 of 85 Witness: Exhibit 1-A Schedule 3 Sheet 2 of 2

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

	TCO FT Capacity	DTI FT Capacity	Total: TCO, Gulf and DTI
CPA FT Capacity on TCO, Gulf and DTI			
2. CPA Contract: Dth/d	113,308	5,000	1/
3. Projected Demand Costs			
4. Annual Demand Cost 2/	\$13,892,319	\$336,327	
4a. Monthly Billing Determinants	113,308	5,000	
4b. Annual Demand Charge (4/ 4a)	\$122.61	\$67.27	
4c. Monthly Demand Charge (4b / number of months)	\$10.218	\$5.606	
Allocation Capacity and Costs.			
5. Retained Volume:	1.0000	1.0000	
6. Number of Months	12	12	
7. Capacity Allocation	0.9577	3/ 0.0423	4/
8. Unit Annual Cost of City Gate Capacity: (4c) x (5) x (6) \$/Dth	x (7) \$117.44	\$2.84	\$120.28

#### Notes:

<sup>1/</sup> Non-storage DTI FT capacity

<sup>2/</sup> Projected demand costs for the period 12 months ended September, 2021.

<sup>3/ 113,308/(113,308+5,000) = 0.9577</sup> 

<sup>4/5,000/(113,308+5,000) = 0.0423</sup> 

Exhibit No. 12 Schedule No. 8 Page 56 of 85 Witness: J. Siegler

> Exhibit 1-B Schedule 1 Sheet 1 of 4

#### COLUMBIA GAS OF PENNSYLVANIA, INC.

#### Summary of Total Estimated Purchased Gas Costs For the Period October 2021 Through September 2022

Line			2021						2022					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
1	Total Quantity													
2	DTH	2,051,000	4,131,000	6,418,000	7,362,000	6,825,000	5,380,000	2,724,000	1,414,000	824,000	791,000	773,000	932,000	39,625,000
3	Total Demand Costs	10,806,717	10,970,978	11,020,508	8,234,884	8,234,884	8,612,617	6,511,697	6,415,697	6,415,697	6,415,697	6,415,697	6,415,697	96,470,770
4	Total Commodity Costs	6,579,290	11,751,983	21,175,812	23,256,387	21,475,876	16,106,543	8,338,187	3,583,429	1,567,274	1,415,104	1,359,310	1,916,647	118,525,841
5	Total Estimated Gas Costs (Line 5 = Line 3 + Line 4)	17,386,007	22,722,961	32,196,320	31,491,271	29,710,760	24,719,160	14,849,884	9,999,126	7,982,971	7,830,801	7,775,007	8,332,344	214,996,611

Exhibit No. 12 Schedule No. 8 Page 57 of 85 Witness: J. Siegler

> Exhibit 1-B Schedule 1 Sheet 2 of 4

#### COLUMBIA GAS OF PENNSYLVANIA, INC.

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

Line			2021 20								2022				
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total	
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
1	Columbia Gas Transmission	10,063,240	10,063,240	10,063,240	7,239,917	7,239,917	7,617,650	5,526,126	5,526,126	5,526,126	5,526,126	5,526,126	5,526,126	85,443,960	
2	Texas Eastern Transmission	239,409	239,409	288,939	288,939	288,939	288,939	317,588	317,588	317,588	317,588	317,588	317,588	3,540,102	
3	Dominion Transmission	173,973	203,192	203,192	202,455	202,455	202,455	306,780	306,780	306,780	306,780	306,780	306,780	3,028,402	
4	Tennessee Gas	112,569	112,569	112,569	112,020	112,020	112,020	112,020	112,020	112,020	112,020	112,020	112,020	1,345,887	
5	National Fuel Gas	19,486	19,486	19,486	58,471	58,471	58,471	58,471	58,471	58,471	58,471	58,471	58,471	584,697	
6	Equitrans	223,040	358,082	358,082	358,082	358,082	358,082	215,712	119,712	119,712	119,712	119,712	119,712	2,827,722	
7	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	
8	Total Demand Cost	10,806,717	10,970,978	11,020,508	8,234,884	8,234,884	8,612,617	6,511,697	6,415,697	6,415,697	6,415,697	6,415,697	6,415,697	96,470,770	

Exhibit No. 12 Schedule No. 8 Page 58 of 85 Witness: J. Siegler

> Exhibit 1-B Schedule 1 Sheet 3 of 4

#### COLUMBIA GAS OF PENNSYLVANIA, INC.

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

Line			2021						2022					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
1	Term	862,973	2,651,100	7,381,717	5,654,753	5,109,497	2,199,724	717,715	696,216	675,675	712,483	688,033	583,132	27,933,018
2	Spot	9,818,097	742,289	2,500,238	2,902,217	2,515,975	1,382,056	13,080,649	14,166,312	11,489,387	11,180,792	9,551,759	8,338,607	87,668,378
3	Local	80,960	84,903	93,478	70,664	64,050	68,640	64,250	64,999	61,226	63,910	63,151	57,173	837,404
4	Storage	(4,182,740)	8,273,691	11,200,379	14,628,753	13,786,354	12,456,123	(5,524,428)	(11,344,099)	(10,659,014)	(10,542,081)	(8,943,633)	(7,062,265)	2,087,041
5	Total Commodity Cost	6,579,290	11,751,983	21,175,812	23,256,387	21,475,876	16,106,543	8,338,187	3,583,429	1,567,274	1,415,104	1,359,310	1,916,647	118,525,841

Exhibit No. 12 Schedule No. 8 Page 59 of 85 Witness: J. Siegler

> Exhibit 1-B Schedule 1 Sheet 4 of 4

#### COLUMBIA GAS OF PENNSYLVANIA, INC.

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

Line			2021		2022									
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
	Term													
1	Total-DTH	241,000	649,000	1,666,000	1,663,000	1,505,000	668,000	232,000	240,000	231,000	239,000	239,000	232,000	7,805,000
2	<u>Spot</u> Total-DTH	2,625,000	179,000	528,000	822,000	715,000	388,000	4,193,000	4,698,000	3,853,000	3,755,000	3,260,000	3,024,000	28,040,000
3	<u>Local</u> Total-DTH	22,000	21,000	22,000	22,000	20,000	22,000	21,000	22,000	21,000	22,000	22,000	21,000	258,000
4	Storage Total-DTH	(837,000)	3,282,000	4,202,000	4,855,000	4,585,000	4,302,000	(1,722,000)	(3,546,000)	(3,281,000)	(3,225,000)	(2,748,000)	(2,345,000)	3,522,000
5	Total - All Sources Total-DTH	2,051,000	4,131,000	6,418,000	7,362,000	6,825,000	5,380,000	2,724,000	1,414,000	824,000	791,000	773,000	932,000	39,625,000

Exhibit 1-B Schedule 2 Sheet 1 of 1

#### COLUMBIA GAS OF PENNSYLVANIA, INC.

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

Line			2021						2022					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
	Columbia Gas Transmission													
	FTS													
1	Billing Determinant-Dth	95,551	95,551	95,551	95,551	95,551	134,931	134,931	134,931	134,931	134,931	134,931	134,931	
2	Less Capacity Release (1)	5,215	5,215	5,215	5,215	5,215	5,215	5,215	5,215	5,215	5,215	5,215	5,215	
3	Net Billing Determinant - Dth	90,336	90,336	90,336	90,336	90,336	129,716	129,716	129,716	129,716	129,716	129,716	129,716	
4	Demand Rate	12.7290	12.7290	12.7290	9.5920	9.5920	9.5920	9.5920	9.5920	9.5920	9.5920	9.5920	9.5920	
5	Demand Cost	1,149,887	1,149,887	1,149,887	866,503	866,503	1,244,236	1,244,236	1,244,236	1,244,236	1,244,236	1,244,236	1,244,236	13,892,319
	FSS-Reservation													
6	Billing Determinant-Dth	441,576	441.576	441,576	441,576	441,576	441,576	441,576	441,576	441,576	441,576	441,576	441,576	
7	Demand Rate	3.7300	3.7300	3.7300	2.4810	2.4810	2.4810	2.4810	2.4810	2.4810	2.4810	2.4810	2.4810	
8	Demand Cost	1,647,078	1,647,078	1,647,078	1,095,550	1,095,550	1,095,550	1,095,550	1,095,550	1,095,550	1,095,550	1,095,550	1,095,550	14,801,184
	FSS-Capacity													
9	Total-DTH	24,492,495	24,492,495	24,492,495	24,492,495	24,492,495	24,492,495	24,492,495	24,492,495	24,492,495	24,492,495	24,492,495	24,492,495	
10	Demand Rate	0.0672	0.0672	0.0672	0.0447	0.0447	0.0447	0.0447	0.0447	0.0447	0.0447	0.0447	0.0447	
11	Demand Cost	1,645,896	1,645,896	1,645,896	1,094,815	1,094,815	1,094,815	1,094,815	1,094,815	1,094,815	1,094,815	1,094,815	1,094,815	14,791,023
	SST													
12	Billing Determinant-Dth	441,576	441.576	441.576	441,576	441,576	441,576	220,788	220,788	220,788	220,788	220,788	220,788	
13	Demand Rate	12.7280	12.7280	12.7280	9.4730	9.4730	9.4730	9.4730	9.4730	9.4730	9.4730	9.4730	9.4730	
14	Demand Cost	5,620,379	5,620,379	5,620,379	4,183,049	4,183,049	4,183,049	2,091,525	2,091,525	2,091,525	2,091,525	2,091,525	2,091,525	41,959,434
15	Total TCO Demand Cost	10,063,240	10,063,240	10,063,240	7,239,917	7,239,917	7,617,650	5,526,126	5,526,126	5,526,126	5,526,126	5,526,126	5,526,126	85,443,960
										-	-			

<sup>(1)</sup> 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.

Exhibit 1-B Schedule 3 Sheet 1 of 1

#### COLUMBIA GAS OF PENNSYLVANIA, INC.

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

Line			2021						2022					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
	FT1-TCO Delmont													
1	Billing Determinant-Dth	3,082	3,082	3,082	3,082	3,082	3,082	3,082	3,082	3,082	3,082	3,082	3,082	
2	Demand Rate	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
	FT1-Uniontown													
4	Billing Determinant-Dth	11,753	11,753	11,753	11,753	11,753	11,753	11,753	11,753	11,753	11,753	11,753	11,753	
5	Demand Rate	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
_	CDS - Eagle/Rockwood													
7	Billing Determinant-Dth	2,342	2,342	2,342	2,342	2,342	2,342	2,342	2,342	2,342	2,342	2,342	2,342	
8	Demand Rate	17.8777	17.8777	17.8777	17.8777	17.8777	17.8777	29.3972	29.3972	29.3972	29.3972	29.3972	29.3972	224 222
9	Demand Cost	41,870	41,870	41,870	41,870	41,870	41,870	68,848	68,848	68,848	68,848	68,848	68,848	664,308
	CDS - Rockwood													
10	Billing Determinant-Dth	5.000	5.000	5,000	5.000	5,000	5.000	5.000	5,000	5.000	5,000	5.000	5,000	
11	Demand Rate	15.3679	15.3679	15.3679	15.3679	15.3679	15.3679	25.2339	25.2339	25.2339	25.2339	25.2339	25.2339	
12	Demand Cost	76,840	76,840	76,840	76,840	76,840	76,840	126,170	126.170	126,170	126,170	126,170	126,170	1,218,060
12	Demand Cost	70,040	70,040	70,040	70,040	70,040	70,040	120,170	120,170	120,170	120,170	120,170	120,170	1,210,000
	CDS - Chambersburg													
13	Billing Determinant-Dth	158	158	158	158	158	158	158	158	158	158	158	158	
14	Demand Rate	17.8870	17.8870	17.8870	17.8870	17.8870	17.8870	29.4106	29.4106	29.4106	29.4106	29.4106	29.4106	
15	Demand Cost	2.826	2.826	2.826	2.826	2,826	2,826	4.647	4.647	4.647	4.647	4.647	4.647	44,838
10	Bernana Gost	2,020	2,020	2,020	2,020	2,020	2,020	4,047	4,047	4,047	4,047	4,047	4,047	44,000
	FT1-TCO @ Eagle Zone 3 Zone 3													
16	Billing Determinant-Dth	0	0	10,000	10,000	10,000	10,000	0	0	0	0	0	0	
17	Demand Rate	0.0000	0.0000	4.9530	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
	FT1-MX													
19	Billing Determinant-Dth	100	100	100	100	100	100	100	100	100	100	100	100	
20	Demand Rate	1.5710	1.5710	1.5710	1.5710	1.5710	1.5710	2.0670	2.0670	2.0670	2.0670	2.0670	2.0670	
21	Demand Cost	157	157	157	157	157	157	207	207	207	207	207	207	2,184
22	Total TETCO Demand Cost	239,409	239,409	288,939	288,939	288,939	288,939	317,588	317,588	317,588	317,588	317,588	317,588	3,540,102

Exhibit 1-B Schedule 4 Sheet 1 of 1

#### COLUMBIA GAS OF PENNSYLVANIA, INC.

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

Line			2021						2022					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
	<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	1.8716	1.8716	1.8716	1.8655	1.8655	1.8655	3.2829	3.2829	3.2829	3.2829	3.2829	3.2829	
3	Demand Cost	44,918	44,918	44,918	44,772	44,772	44,772	78,790	78,790	78,790	78,790	78,790	78,790	741,810
	GSS - Capacity													
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	0.0321	0.0321	0.0321	0.0321	0.0321	0.0321	
6	Demand Cost	27,132	27,132	27,132	27,132	27,132	27,132	60,065	60,065	60,065	60,065	60,065	60,065	523,182
	<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	4.1741	4.1741	4.1553	4.1553	4.1553	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
9	Demand Cost	0	25,045	25,045	24,932	24,932	24,932	0	0	0	0	0	0	124,886
	<u>FT</u>													
10	Billing Determinant-Dth	24,418	25,418	25,418	25,418	25,418	25,418	23,832	23,832	23,832	23,832	23,832	23,832	
11	Total-DTH	4.1741	4.1741	4.1741	4.1553	4.1553	4.1553	7.0462	7.0462	7.0462	7.0462	7.0462	7.0462	
12	Demand Cost	101,923	106,097	106,097	105,619	105,619	105,619	167,925	167,925	167,925	167,925	167,925	167,925	1,638,524
13	Total DTI Demand Cost	173,973	203,192	203,192	202,455	202,455	202,455	306,780	306,780	306,780	306,780	306,780	306,780	3,028,402

Exhibit No. 12 Schedule No. 8 Page 63 of 85 Witness: J. Siegler

> Exhibit 1-B Schedule 5 Sheet 1 of 1

#### COLUMBIA GAS OF PENNSYLVANIA, INC.

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

Line			2021						2022					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
	Tennessee Gas FT-A (Direct) New Castle - 2	19 Line												
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	
2	Demand Rate	4.8063	4.8063	4.8063	4.8138	4.8138	4.8138	4.8138	4.8138	4.8138	4.8138	4.8138	4.8138	
3	Demand Cost	76,901	76,901	76,901	77,021	77,021	77,021	77,021	77,021	77,021	77,021	77,021	77,021	923,892
	Tennessee Gas FT-A (Direct) Pitt Teminal - 2	219 Line												
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	
5	Demand Rate	4.6931	4.6931	4.6931	4.6051	4.6051	4.6051	4.6051	4.6051	4.6051	4.6051	4.6051	4.6051	
6	Demand Cost	35,668	35,668	35,668	34,999	34,999	34,999	34,999	34,999	34,999	34,999	34,999	34,999	421,995
7	Total Tennessee Gas Demand Cost	112,569	112,569	112,569	112,020	112,020	112,020	112,020	112,020	112,020	112,020	112,020	112,020	1,345,887

Exhibit 1-B Schedule 6 Sheet 1 of 1

#### COLUMBIA GAS OF PENNSYLVANIA, INC.

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

Line			2021						2022					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
	National - FT													
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	4.5274	4.5274	4.5274	4.5445	4.5445	4.5445	4.5445	4.5445	4.5445	4.5445	4.5445	4.5445	
3	Demand Cost	19,486	19,486	19,486	19,560	19,560	19,560	19,560	19,560	19,560	19,560	19,560	19,560	234,498
	National - EFT													
4	Billing Determinant-Dth	0	0	0	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	
5	Demand Rate	0.0000	0.0000	0.0000	4.6881	4.6881	4.6881	4.6881	4.6881	4.6881	4.6881	4.6881	4.6881	
6	Demand Cost	0	0	0	18,752	18,752	18,752	18,752	18,752	18,752	18,752	18,752	18,752	168,768
	National - ESS Reservation													
7	Billing Determinant-Dth	0	0	0	2,429	2,429	2,429	2,429	2,429	2,429	2,429	2,429	2,429	
8	Demand Rate	0.0000	0.0000	0.0000	2.7675	2.7675	2.7675	2.7675	2.7675	2.7675	2.7675	2.7675	2.7675	
9	Demand Cost	0	0	0	6,722	6,722	6,722	6,722	6,722	6,722	6,722	6,722	6,722	60,498
	National - ESS Capacity													
10	Billing Determinant-Dth	0	0	0	267,143	267,143	267,143	267,143	267,143	267,143	267,143	267,143	267,143	
11	Demand Rate	0.0000	0.0000	0.0000	0.0503	0.0503	0.0503	0.0503	0.0503	0.0503	0.0503	0.0503	0.0503	
12	Demand Cost	0	0	0	13,437	13,437	13,437	13,437	13,437	13,437	13,437	13,437	13,437	120,933
13	Total National Fuel Demand Cost	19,486	19,486	19,486	58,471	58,471	58,471	58,471	58,471	58,471	58,471	58,471	58,471	584,697

Exhibit No. 12 Schedule No. 8 Page 65 of 85 Witness: J. Siegler

> Exhibit 1-B Schedule 7 Sheet 1 of 1

#### COLUMBIA GAS OF PENNSYLVANIA, INC.

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

Line			2021						2022					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
	Equitrans													
	<u>FTS</u>													
1	Billing Determinant-Dth	27,880	28,249	28,249	28,249	28,249	28,249	26,964	14,964	14,964	14,964	14,964	14,964	
2	Demand Rate	8.0000	8.0000	8.0000	8.0000	8.0000	8.0000	8.0000	8.0000	8.0000	8.0000	8.0000	8.0000	
3	Demand Cost	223,040	225,992	225,992	225,992	225,992	225,992	215,712	119,712	119,712	119,712	119,712	119,712	2,167,272
	<u>FTS</u>													
4	Billing Determinant-Dth	0	18,870	18,870	18,870	18,870	18,870	0	0	0	0	0	0	
5	Demand Rate	0.0000	7.0000	7.0000	7.0000	7.0000	7.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
6	Demand Cost	0	132,090	132,090	132,090	132,090	132,090	0	0	0	0	0	0	660,450
7	Total Equitrans Demand Cost	223,040	358,082	358,082	358,082	358,082	358,082	215,712	119,712	119,712	119,712	119,712	119,712	2,827,722

Exhibit 1-B Schedule 8 Sheet 1 of 1

#### COLUMBIA GAS OF PENNSYLVANIA, INC.

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

Line			2021						2022					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
	TERM COLUMBIA TRANSMISSION													
1	Quantity - DTH	0	0	769,000	769,000	694,000	0	0	0	0	0	0	0	2,232,000
2	Rate-\$/DTH	0.0000	0.0000	4.3351	3.2795	3.2698	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
3	Cost-\$	0	0	3,333,692	2,521,936	2,269,241	0	0	0	0	0	0	0	8,124,869
	TEXAS EASTERN													
4	Quantity - DTH	241,000	649,000	669,000	666,000	605,000	668,000	232,000	240,000	231,000	239,000	239,000	232,000	4,911,000
5	Rate-\$/DTH	3.5808	4.0849	4.3701	3.3931	3.4014	3.2930	3.0936	2.9009	2.9250	2.9811	2.8788	2.5135	
6	Cost-\$	862,973	2,651,100	2,923,597	2,259,805	2,057,847	2,199,724	717,715	696,216	675,675	712,483	688,033	583,132	17,028,300
7	TENNESSEE GAS PIPELINE Quantity - DTH	0	0	228,000	228,000	206,000	0	0	0	0	0	0	0	662,000
8	Rate-\$/DTH	0.0000	0.0000	4.9317	3.8290	3.7981	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
9	Cost-\$	0	0	1,124,428	873,012	782,409	0	0	0	0	0	0	0	2,779,849
	CAP													
10	Quantity - DTH	0	0	0	0	0	0	0	0	0	0	0	0	0
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
	LESS CAP BILLING													
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	
15	Cost-\$	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Total - DTH	241,000	649,000	1,666,000	1,663,000	1,505,000	668,000	232,000	240,000	231,000	239,000	239,000	232,000	7,805,000
17 18	Total Term Commodity Cost-\$	862,973	2,651,100	7,381,717	5,654,753	5,109,497	2,199,724	717,715	696,216	675,675	712,483	688,033	583,132	27,933,018

<sup>\*</sup>Beginning October 1, 2021, CAP customers will be served by Columbia sales service until a new supplier submits a successful bid to provide CAP gas supply.

Exhibit 1-B Schedule 9 Sheet 1 of 1

#### COLUMBIA GAS OF PENNSYLVANIA, INC.

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

Line			2021						2022					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
	<u>SPOT</u>													
	<u>Base</u>													
1	Quantity - DTH	2,444,000	135,000	528,000	763,000	660,000	388,000	3,996,000	4,351,000	3,516,000	3,408,000	2,913,000	2,687,000	25,789,000
2	Rate-\$/DTH	3.7390	3.9732	4.7353	3.5501	3.5396	3.5620	3.1194	3.0152	2.9823	2.9786	2.9297	2.7544	
3	Cost-\$	9,138,116	536,382	2,500,238	2,708,726	2,336,136	1,382,056	12,465,122	13,119,135	10,485,767	10,151,069	8,534,216	7,401,073	80,758,036
	Swing													
4	Quantity - DTH	181,000	44,000	0	59,000	55,000	0	197,000	347,000	337,000	347,000	347,000	337,000	2,251,000
5	Rate-\$/DTH	3.7568	4.6797	0.0000	3.2795	3.2698	0.0000	3.1245	3.0178	2.9781	2.9675	2.9324	2.7820	
6	Cost-\$	679,981	205,907	0	193,491	179,839	0	615,527	1,047,177	1,003,620	1,029,723	1,017,543	937,534	6,910,342
7	Total - DTH	2,625,000	179,000	528,000	822,000	715,000	388,000	4,193,000	4,698,000	3,853,000	3,755,000	3,260,000	3,024,000	28,040,000
_														
8	Total Spot	0.040.007	740.000	0.500.000	0.000.047	0.545.075	4 000 050	40,000,040	44 400 040	44 400 007	44 400 700	0.554.750	0.000.007	07.000.070
9	Commodity Cost - \$	9,818,097	742,289	2,500,238	2,902,217	2,515,975	1,382,056	13,080,649	14,166,312	11,489,387	11,180,792	9,551,759	8,338,607	87,668,378
	Local Direct													
10	Quantity - DTH	22,000	21,000	22,000	22,000	20,000	22,000	21,000	22,000	21,000	22,000	22,000	21,000	258,000
11	Rate-\$/DTH	3.6800	4.0430	4.2490	3.2120	3.2025	3.1200	3.0595	2.9545	2.9155	2.9050	2.8705	2.7225	
12	Cost-\$	80,960	84,903	93,478	70,664	64,050	68,640	64,250	64,999	61,226	63,910	63,151	57,173	837,404
40	T-4-L DTU	00.000	04.000	00.000	00.000	00.000	00.000	04.000	00.000	04.000	00.000	00.000	04.000	050 000
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
11	Tatalilanal													
14 15	Total Local Commodity Cost - \$	90.060	94.002	93,478	70,664	64.050	68,640	64.250	64.000	64 226	62.010	62 151	E7 179	927 404
15	Commodity Cost - \$	80,960	84,903	93,478	70,004	64,050	08,040	64,250	64,999	61,226	63,910	63,151	57,173	837,404

Exhibit 1-B Schedule 10 Sheet 1 of 2

#### COLUMBIA GAS OF PENNSYLVANIA, INC.

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

Line			2021						2022					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
	DOMINION TRANSMISSION	- GSS												
1	Injections - DTH	(115,000)	0	0	0	0	0	0	(355,000)	(350,000)	(342,000)	(329,000)	(319,000)	(1,810,000)
2	Injection Rate - \$/Dth	3.7265	4.0969	4.5015	3.4414	3.4328	3.3863	3.1180	3.0096	2.9784	2.9774	2.9261	2.7400	, , , ,
3	Withdrawals - DTH	0	138,000	473,000	528,000	507,000	496,000	8,000	0	0	0	0	0	2,150,000
4	Withdrawl Rate - \$/Dth	2.4161	2.4161	2.4161	2.7229	2.7230	2.7229	2.8657	2.9307	2.9455	2.9531	2.9484	2.9209	
5	Cost-\$	(428,548)	333,422	1,142,815	1,437,691	1,380,561	1,350,558	22,926	(1,068,408)	(1,042,440)	(1,018,271)	(962,687)	(874,060)	273,559
0	Indication Data 6/DH	0.0007	0.0007	0.0007	0.0070	0.0070	0.0070	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
6	Injection Rate \$/Dth	0.0267	0.0267	0.0267	0.0273	0.0273	0.0273	0.0369 0.0263	0.0369	0.0369	0.0369	0.0369	0.0369	
8	Withdrawl Rate \$/Dth Cost - \$	<u>0.0147</u> 3.071	0.0147 2,029	0.0147 6,953	0.0153 8.078	<u>0.0153</u> 7.757	0.0153 7,589	210	0.0263 13,100	0.0263 12,915	0.0263 12,620	0.0263 12.140	0.0263 11,771	98,233
O	σοστ - φ	3,071	2,023	0,000	0,070	1,131	7,505	210	15,100	12,313	12,020	12,140	11,771	30,233
	EQUITRANS - SS													
9	Injections - DTH	(178,000)	0	0	0	0	0	(97,000)	(310,000)	(300,000)	(310,000)	(310,000)	(300,000)	(1,805,000)
10	Injection Rate - \$/Dth	3.7265	4.0969	4.5015	3.4414	3.4328	3.3863	3.1180	3.0096	2.9784	2.9774	2.9261	2.7400	
11	Withdrawals - DTH	0	360,000	360,000	593,000	248,000	437,000	0	0	0	0	0	0	1,998,000
12	Withdrawl Rate - \$/Dth	2.4161	2.4161	2.4161	2.7229	2.7230	2.7229	2.8657	2.9307	2.9455	2.9531	2.9484	2.9209	
13	Cost-\$	(663,317)	869,796	869,796	1,614,680	675,304	1,189,907	(302,446)	(932,976)	(893,520)	(922,994)	(907,091)	(822,000)	(224,861)
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 - \$	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0
	, , , , , , , , , , , , , , , , , , ,													
	TCO - FSS													
16	Injections - DTH	(1,102,000)	0	0	0	0	0	(1,794,000)	(3,654,000)	(3,654,000)	(3,652,000)	(3,194,000)	(2,711,000)	(19,761,000)
17	Injection Rate - \$/Dth	3.7265	4.0969	4.5015	3.4414	3.4328	3.3863	3.1180	3.0096	2.9784	2.9774	2.9261	2.7400	
18	Withdrawals - DTH	0	3,144,000	4,695,000	5,478,000	5,424,000	4,221,000	0	0	0	0	0	0	22,962,000
19 20	Withdrawl Rate - \$/Dth Cost-\$	2.4161 (4,106,603)	2.4161 7,596,218	2.4161 11,343,590	2.7229 14,916,046	2.7230 14,769,552	2.7229 11,493,361	2.8657 (5,593,692)	2.9307 (10,997,078)	2.9455 (10,883,074)	2.9531 (10,873,465)	2.9484 (9,345,963)	2.9209 (7,428,140)	890,752
20	Cost-\$	(4,100,003)	7,390,210	11,343,390	14,910,040	14,709,552	11,493,301	(5,595,692)	(10,997,076)	(10,003,074)	(10,673,403)	(9,345,903)	(7,420,140)	690,752
21	Inject/With. Rate \$/DTH	0.0150	0.0150	0.0150	0.0153	0.0153	0.0153	0.0153	0.0153	0.0153	0.0153	0.0153	0.0153	
22	Cost - \$	16,530	47,160	70,425	83,813	82,987	64,581	27,448	55,906	55,906	55,876	48,868	41,478	650,978
	NATIONAL FUEL - ESS													
23	Injections - DTH	0	0	0	0	0	0	(29,000)	(37,000)	(37,000)	(37,000)	(37,000)	(37,000)	(214,000)
24	Injection Rate - \$/Dth	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	3.1180	3.0096	2.9784	2.9774	2.9261	2.7400	_
25	Withdrawals - DTH	0	0	0	0	0	0	0	0	0	0	0	0	0
26 27	Withdrawl Rate - \$/Dth Cost-\$	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.8657 (90,422)	2.9307 (111,355)	2.9455 (110,201)	2.9531 (110,164)	2.9484 (108,266)	2.9209 (101,380)	(631,788)
21	Cost-\$	U	U	U	U	U	U	(90,422)	(111,355)	(110,201)	(110,104)	(106,200)	(101,360)	(631,766)
28	Inject/With. Rate \$/DTH	0.0000	0.0000	0.0000	0.0470	0.0470	0.0470	0.0470	0.0470	0.0470	0.0470	0.0470	0.0470	
29	Cost - \$	0	0	0	0	0	0	1,363	1,739	1,739	1,739	1,739	1,739	10,058
										•				•
30	Quantity - DTH	(1,395,000)	3,642,000	5,528,000	6,599,000	6,179,000	5,154,000	(1,912,000)	(4,356,000)	(4,341,000)	(4,341,000)	(3,870,000)	(3,367,000)	3,520,000
21	Total Durahasa Cost	/E 100 460\	9 700 426	12 256 204	17 060 417	16 005 417	14 022 026	/E 062 624\	(12 100 917)	(12.020.225)	(12.024.904)	(11 224 007)	(0.225.500)	020 450
31 32	Total Purchase Cost Total Inject/With. Cost	(5,198,468) 19,601	8,799,436 49,189	13,356,201 77,378	17,968,417 91,891	16,825,417 90,744	14,033,826 72,170	(5,963,634) 29,021	(13,109,817) 70,745	(12,929,235) 70,560	(12,924,894) 70,235	(11,324,007) 62,747	(9,225,580) 54,988	939,450 749,211
32	rotal inject/with. Cost	19,001	49,109	11,318	91,091	90,744	12,110	∠9,∪∠ I	10,140	70,500	10,235	02,141	34,900	148,211

Exhibit 1-B Schedule 10 Sheet 2 of 2

#### COLUMBIA GAS OF PENNSYLVANIA, INC.

#### Summary of Total Estimated Purchased Gas Commodity Costs <u>Storage Transportation Charges</u>

Line			2021						2022					
No.	Description	October	November	December	January	February	March	April	May	June	July	August	September	Total
	TCO - SST													
1	Injections - DTH	(1,102,000)	0	0	0	0	0	(1,794,000)	(3,654,000)	(3,654,000)	(3,652,000)	(3,194,000)	(2,711,000)	(19,761,000)
2	Withdrawals - DTH	0	3,144,000	4,695,000	5,478,000	5,424,000	4,221,000	0	0	0	0	0	0	22,962,000
3	Trans. Chrg. \$/Dth	0.0167	0.0167	0.0167	0.0150	0.0150	0.0150	0.0150	0.0150	0.0150	0.0150	0.0150	0.0150	
4	Cost-\$	18,403	52,505	78,407	82,170	81,360	63,315	26,910	54,810	54,810	54,780	47,910	40,665	656,045
	DOMINION TRANSMISSIO	N - GSS												
5	Injections - DTH	(115,000)	0	0	0	0	0	0	(355,000)	(350,000)	(342,000)	(329,000)	(319,000)	(1,810,000)
6	Withdrawals - DTH	0	138,000	473,000	528,000	507,000	496,000	8,000	0	0	0	0	0	2,150,000
7	Trans. Chrg. \$/Dth	0.0167	0.0153	0.0153	0.0142	0.0142	0.0142	0.0150	0.0150	0.0150	0.0150	0.0150	0.0150	
8	Cost-\$	1,921	2,111	7,237	7,498	7,199	7,043	120	5,325	5,250	5,130	4,935	4,785	58,554
	EQUITRANS - SS													
9	Injections - DTH	(178,000)	0	0	0	0	0	(97,000)	(310,000)	(300,000)	(310,000)	(310,000)	(300,000)	(1,805,000)
10	Withdrawals - DTH	(170,000)	360,000	360,000	593,000	248,000	437,000	(07,000)	(010,000)	0	(010,000)	(0.10,000)	(000,000)	1,998,000
11	Trans. Chrg. \$/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	1,000,000
12	Cost-\$	0	0	0	0	0	0	0	0	0	0.0000	0	0	0
40	NATIONAL FUEL		•					(00.000)	(07.000)	(07.000)	(07.000)	(07.000)	(07.000)	(044.000)
13	Injections - DTH	0	0	0	0	0	0	(29,000)	(37,000)	(37,000)	(37,000)	(37,000)	(37,000)	(214,000)
14	Withdrawals - DTH	· ·	0.0000	•	•	0	•	0	0	0	0	0	0	0
15 16	Trans. Chrg. \$/Dth Cost-\$	0.0000	0.0000	0.0000	0.0160	0.0160	0.0160	0.0160 464	0.0160 592	0.0160 592	<u>0.0160</u> 592	<u>0.0160</u> 592	<u>0.0160</u> 592	3,424
10	Cost-\$	U	U	U	Ü	U	Ü	404	592	592	592	592	592	3,424
17	Total Storage - DTH	(1,395,000)	3,642,000	5,528,000	6,599,000	6,179,000	5,154,000	(1,912,000)	(4,356,000)	(4,341,000)	(4,341,000)	(3,870,000)	(3,367,000)	3,520,000
18	Total EUB - DTH	279,000	(180,000)	(663,000)	(872,000)	(797,000)	(426,000)	95,000	405,000	530,000	558,000	561,000	511,000	1,000
19	Total DTH	(1,116,000)	3,462,000	4,865,000	5,727,000	5,382,000	4,728,000	(1,817,000)	(3,951,000)	(3,811,000)	(3,783,000)	(3,309,000)	(2,856,000)	3,521,000
20	Total Purchase Cost	(5,198,468)	8,799,436	13,356,201	17,968,417	16,825,417	14,033,826	(5,963,634)	(13,109,817)	(12,929,235)	(12,924,894)	(11,324,007)	(9,225,580)	307,662
21	Total Choice Bank Cost	975,803	(629,550)	(2,318,844)	(3,521,223)	(3,218,366)	(1,720,231)	383,620	1,635,431	2,140,193	2,253,260	2,265,374	2,063,469	308,935
22	Total Inject/With. Cost	19,601	49,189	77,378	91,891	90,744	72,170	29,021	70,745	70,560	70,235	62,747	54,988	759,269
23	Total Transp. Charge	20,324	54,616	85,644	89,668	88,559	72,170	26,566	70,745 59,543	70,560 59,468	70,235 59,318	52,253	54,966 44,858	759,269 711,175
23	Total Storage Cost	(4,182,740)	8,273,691	11,200,379	14,628,753	13,786,354	12,456,123	(5,524,428)	(11,344,099)	(10,659,014)	(10,542,081)	(8,943,633)	(7,062,265)	2,087,041
27	Total Otolage Oost	(4,102,140)	0,270,031	11,200,019	17,020,700	10,700,004	12,700,120	(0,024,420)	(11,077,033)	(10,000,014)	(10,042,001)	(0,040,000)	(1,002,200)	2,007,041

Exhibit 1-E Schedule 1

## COLUMBIA GAS OF PENNSYLVANIA, INC. STATEMENT OF EXPERIENCED NET OVER (UNDER) COLLECTION OCTOBER, 2020 THROUGH SEPTEMBER, 2021

Line No.	Description	Total Demand \$	Total Commodity \$	Total Amount \$
1 2	Remaining Balance - Over (Under) Collection from 2020 - 1307(f) (See Schedule 2a and 2b)	(332,424)	(359,704)	(692,128)
3 4	Unified Credit for Off-system Sales and Capacity Release for the period October, 2020 through September, 2021 (See Schedule 3 herein)	(479,522)	0	(479,522)
5 6	Over (Under) Collection for the period October, 2020 through September 2021 (See Schedule 4 herein)	(6,997,035)	(4,402,269)	(11,399,304)
7 8	Interest on Over (Under) Collection for the period October, 2020 through September, 2021 (See Schedule 4 herein)	37,522	(130,161)	(92,639)
9	TOTAL EXPERIENCED NET OVER (UNDER) COLLECTION	(7,771,459)	(4,892,134)	(12,663,593)

Exhibit 1-E Schedule 2a Sheet 1 of 2

#### COLUMBIA GAS OF PENNSYLVANIA, INC.

#### RECONCILIATION OF COMMODITY COST OF GAS FROM 2020 - 1307(f) OCTOBER, 2020 THROUGH SEPTEMBER, 2021

#### COMMODITY

		Sales			
Line		Subject to Commodity		Amount	Net Commodity Over (Under)
No.	Month	E-Factor	Rate	Recovered	Collection
INO.	MOTHI	Therm	\$/ Therm	\$	\$
		mom	Ψ	Ψ	Ψ
1	True-up of Net Commodit	y Costs Included in 20	020 1307(f):		4,802,468
2	Beginning Balance Adjust	ment			(154,452) 2 /
3	Beginning Balance Adjust				92,705 3_/
	0.1.1.0000	4 457 707	(0.04000)	(07.055)	
4	October, 2020	4,157,767	(0.01632)	(67,855)	
5		5,655,839	(0.00680)	(38,460)	
6	November	20,426,805	(0.01632)	(333,365)	
7		(73,049)	(0.00680)	497	
8	December	44,212,386	(0.01632)	(721,546)	
9	January, 2021 1 /	29,028,431	(0.01426)	(413,945)	
10	oundary, 2021 1_/	37,224,561	(0.01632)	(607,505)	
		,,	(515155)	(551,555)	
11	February	69,911,639	(0.01426)	(996,940)	
12		1,507	(0.01632)	(25)	
10	Marrah	EC E04 706	(0.04406)	(006,000)	
13	March	56,521,726	(0.01426)	(806,000)	
14	April	30,029,089	(0.01426)	(428,215)	
	'	,,	(	( -, -,	
15	May	19,685,302	(0.01426)	(280,712)	
4.0		40 404 040	(0.04.400)	(1.10.000)	
16	June	10,401,319	(0.01426)	(148,323)	
17	July	6,373,428	(0.01426)	(90,885)	
	,	2,212,122	(0.01.10)	(==,===)	
18	August	5,712,875	(0.01426)	(81,466)	
			<i>( ,</i>	()	
19	September	6,008,430	(0.01426)	(85,680)	
20	Amount Collected/(Passe	d Back) during 2020 1	307(f) Period		(5,100,425)
	,	, ,	.,	_	, , , , ,
21	Remaining Balance to be	Collected in the 2021	1307(f)	=	(359,704)

<sup>1</sup>\_/ Rate in effect January 1, 2021.

<sup>2</sup>\_/ Represents a commodity interest adjustment for the period of February 2020 to September 2020 decreasing the interest rate from 4.75% to the prime rate as of January 31, 2021 of 3.25%. Please refer to Exh. 1-E, Schedule 2a, Sheet 2 for a detailed calculation for this adjustment.

 $<sup>3\</sup>_/$  Audit correction relating to the Company's 2018-2021 Purchased Gas Cost Audit.

Exhibit No. 12 Schedule No. 8 Page 72 of 85 Witness: J. Siegler

> Exhibit 1-E Schedule 2a Sheet 2 of 2

## COLUMBIA GAS OF PENNSYLVANIA, INC. STATEMENT OF COMMODITY OVER/(UNDER) COLLECTIONS FROM GAS COST RATE FEBRUARY, 2020 THROUGH SEPTEMBER, 2020

Line No.	<u>Month</u>	Total Commodity Purchase Gas Cost Recovery (1)	Total Cost of Fuel (2)	Total Over (Under) Collection (3 = 1 - 2)	Number of Months (4)		Over (Under) Collection Interest (6=3x4x5)	Rate(7)	Over (Under) Collection Interest (8=3x4x7)	Interest Difference (9=8-6)
1	February, 2020	13,752,182	12,215,061	1,537,121	14 / 12	4.75%	85,182	3.25%	58,282	(26,900)
2	March	11,750,731	8,066,235	3,684,495	13 / 12	4.75%	189,598	3.25%	129,725	(59,873)
3	April	6,675,900	4,258,839	2,417,061	12 / 12	4.75%	114,810	3.25%	78,554	(36,256)
4	May	5,139,294	3,156,568	1,982,726	11 / 12	4.75%	86,331	3.25%	59,069	(27,262)
5	June	2,154,904	498,174	1,656,730	10 / 12	4.75%	65,579	3.25%	44,870	(20,709)
6	July	1,231,107	941,203	289,904	9 / 12	4.75%	10,328	3.25%	7,066	(3,262)
7	August	1,091,192	2,330,064	(1,238,872)	8 / 12	4.75%	(39,231)	3.25%	(26,842)	12,389
8	September	1,230,364	2,078,473	(848,109)	7 / 12	4.75%	(23,500)	3.25%	(16,079)	7,421
9	TOTAL	43,025,675	33,544,618	9,481,056			489,097		334,645	(154,452)

Exhibit 1-E Schedule 2b Sheet 1 of 2

#### COLUMBIA GAS OF PENNSYLVANIA, INC.

#### RECONCILIATION OF DEMAND COST OF GAS FROM 2020 - 1307(f) OCTOBER, 2020 THROUGH SEPTEMBER, 2021

#### **DEMAND**

Line No.	<u>Month</u>	Sales Subject to Demand E-Factor Therm	Rate \$/ Therm	Amount \$	Net Demand Over (Under) Collection
1	True-up of Net Demand Costs Ir			*	(5,818,521)
'	True-up of Net Demand Costs if	iciadea iii 2020 T	30 <i>1</i> (1).		(3,010,321)
2	Beginning Balance Adjustment				6,076 2_/
3	October, 2020	5,526,848	0.01181	65,272	
4		7,540,022	0.01063	80,150	
5	November	27,013,520	0.01181	319,029	
6		(56,575)	0.01063	(601)	
7	December	58,707,519	0.01181	693,336	
8	January, 2021 1_/	38,043,876	0.01224	465,657	
9	, , , <u>=</u>	48,843,512	0.01181	576,842	
10	February	91,497,297	0.01224	1,119,927	
11	i editidity	(370)	0.01224	(4)	
12	March	73,822,837	0.01224	903,592	
13	April	39,684,299	0.01224	485,736	
14	May	25,779,973	0.01224	315,547	
15	June	13,613,057	0.01224	166,624	
16	July	8,314,558	0.01224	101,770	
17	August	7,448,217	0.01224	91,166	
18	September	7,841,309	0.01224	95,978	
19	Amount Collected/(Passed Back	) during 2020 130	07(f) Period		5,480,021
20	Remaining Balance to be Collect	ted in the 2021 1	307(f)		(332,424)

<sup>1</sup>\_/ Rate in effect January 1, 2021.

<sup>2</sup>\_/ Represents a commodity interest adjustment for the period of February 2020 to September 2020 decreasing the interest rate from 4.75% to the prime rate as of January 31, 2021 of 3.25%. Please refer to Exh. 1-E, Schedule 2a, Sheet 2 for a detailed calculation for this adjustment.

Exhibit No. 12 Schedule No. 8 Page 74 of 85 Witness: J. Siegler

> Exhibit 1-E Schedule 2b Sheet 2 of 2

## COLUMBIA GAS OF PENNSYLVANIA, INC. STATEMENT OF DEMAND OVER/(UNDER) COLLECTIONS FROM GAS COST RATE FEBRUARY, 2020 THROUGH SEPTEMBER, 2020

Line No.	Month	Total Purchased Gas Cost Recovery (1)	Total Cost of Fuel (2)	Total Over (Under) Collection (3 = 1 - 2)	Number of Months (4)		Over (Under) Collection Interest (6=3x4x5)	Rate(7)	Over (Under) Collection Interest (8=3x4x7)	Interest Difference (9=8-6)
1	February, 2020	9,146,961	5,964,198	3,182,763	14 / 12	4.75%	176,378	3.25%	120,680	(55,698)
2	March	7,807,981	5,973,335	1,834,646	13 / 12	4.75%	94,408	3.25%	64,595	(29,813)
3	April	5,068,571	4,133,922	934,648	12 / 12	4.75%	44,396	3.25%	30,376	(14,020)
4	May	4,518,107	3,767,494	750,613	11 / 12	4.75%	32,683	3.25%	22,362	(10,321)
5	June	1,948,207	3,891,869	(1,943,662)	10 / 12	4.75%	(76,937)	3.25%	(52,641)	24,296
6	July	1,128,938	4,044,509	(2,915,572)	9 / 12	4.75%	(103,867)	3.25%	(71,067)	32,800
7	August	1,010,651	4,015,264	(3,004,613)	8 / 12	4.75%	(95,146)	3.25%	(65,100)	30,046
8	September	1,117,804	4,407,659	(3,289,855)	7 / 12	4.75%	(91,156)	3.25%	(62,370)	28,786
9	TOTAL	31,747,220	36,198,251	(4,451,031)			(19,241)		(13,165)	6,076

Exhibit 1-E Schedule 3

#### COLUMBIA GAS OF PENNSYLVANIA, INC.

#### RECONCILIATION OF OFF SYSTEM SALES CREDIT FROM 2020 - 1307(f) OCTOBER, 2020 THROUGH SEPTEMBER, 2021

#### **DEMAND**

Line No.	Month	Sales Subject to Off-System Sales Credit Therm	Rate \$/Therm	Amount \$	Net Demand Over (Under) Collection	
1 2	October, 2020	5,526,848 7,540,022	(0.00492) (0.00837)	(27,192) (63,110)		
3 4	November	27,013,520 (56,575)	(0.00492) (0.00837)	(132,907) 474		
5	December	58,707,519	(0.00492)	(288,841)		
6	January, 2021 1_/	86,887,388	(0.00492)	(427,486)		
7	February	91,496,927	(0.00492)	(450,165)		
8	March	73,822,837	(0.00492)	(363,208)		
9	April	39,684,299	(0.00492)	(195,247)		
10	May	25,779,973	(0.00492)	(126,837)		
11	June	13,613,057	(0.00492)	(66,976)		
12	July	8,314,558	(0.00492)	(40,908)		
13	August	7,448,217	(0.00492)	(36,645)		
14	September	7,841,309	(0.00492)	(38,579)		
15	Amount Passed Back in t	he 2020 1307(f)			(2,257,627)	
16	Current Estimate Unified	Current Estimate Unified Sharing Mechanism - \$1,778,105				
17	Amount to be Collected in	(479,522)				

<sup>1</sup>\_/ Rate in effect January 1, 2021.

Exhibit No. 12 Schedule No. 8 Page 76 of 85 Witness: J. Siegler

Exhibit 1-E Schedule 4 Sheet 1a of 6 Commodity

## COLUMBIA GAS OF PENNSYLVANIA, INC. STATEMENT OF COMMODITY OVER/(UNDER) COLLECTIONS FROM GAS COST RATE OCTOBER, 2020 THROUGH SEPTEMBER, 2021

Line No.	Month Reference:	Total Commodity Sales Revenue  (1) \$ Sch. 4, Pg. 2	Rate Schedule NSS Gas Cost Recovery (2) \$ Sch. 4, Pg. 3	Total Commodity Purchase Gas Cost Recovery (3 = 1 + 2) \$	Total Commodity Cost of Fuel (4) \$	Total Commodity Over/(Under) Collection (5 = 3 - 4)	Number of Months (6)	Rate (7)	Commodity Over/(Under) Collection Interest (8 = 5 x 6 x 7)	Total Commodity Over/(Under) Collection (9 = 5 + 8)
	Actuals throu	gh September 2021								
1	October, 2020	2,006,062	3,619	2,009,682	2,193,565	(183,884)	18 / 12	3.25%	(8,964)	(192,848)
2	November	4,528,154	16,600	4,544,754	4,781,696	(236,942)	17 / 12	3.25%	(10,909)	(247,851)
3	December	9,829,676	18,159	9,847,835	12,142,110	(2,294,275)	16 / 12	3.25%	(99,419)	(2,393,694)
4	January, 2021	13,408,748	23,280	13,432,028	14,018,552	(586,524)	15 / 12	3.25%	(23,828)	(610,352)
5	February	12,361,096	25,560	12,386,656	13,640,943	(1,254,287)	14 / 12	3.25%	(47,558)	(1,301,845)
6	March	9,994,999	21,519	10,016,518	7,427,883	2,588,634	13 / 12	3.25%	91,142	2,679,776
7	April	5,310,064	16,460	5,326,525	4,510,279	816,246	12 / 12	3.25%	26,528	842,774
8	May	3,480,288	6,927	3,487,215	2,765,649	721,566	11 / 12	3.25%	21,497	743,063
9	June	1,837,510	8,191	1,845,701	1,456,167	389,534	10 / 12	3.25%	10,550	400,084
10	July	1,127,832	6,377	1,134,209	1,570,339	(436,130)	9 / 12	3.25%	(10,631)	(446,761)
11	August	1,007,538	7,418	1,014,956	2,541,521	(1,526,565)	8 / 12	3.25%	(33,076)	(1,559,641)
12	September	1,061,023	8,841	1,069,864	3,469,507	(2,399,643)	7 / 12	3.25%	(45,493)	(2,445,136)
13	TOTAL	65,952,991	162,952	66,115,942	70,518,212	(4,402,269)			(130,161)	(4,532,430)

Exhibit No. 12 Schedule No. 8 Page 77 of 85 Witness: J. Siegler

> Exhibit 1-E Schedule 4 Sheet 1b of 6 Demand

## COLUMBIA GAS OF PENNSYLVANIA, INC. STATEMENT OF DEMAND OVER/(UNDER) COLLECTIONS FROM GAS COST RATE OCTOBER, 2020 THROUGH SEPTEMBER, 2021

Line No.	Month  Reference:	Total Demand Sales Revenue (1) \$ Sch. 4, Pg. 4	Total Banking and Balancing Revenue (2) \$ Sch. 4, Pg. 6	Total Standby Demand Revenue (3) \$ Sch. 4, Pg. 5	NSS Capacity Release Revenue (4) \$ Sch. 4, Pg. 6	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 ##		Demand Over/(Under) Collection Interest (10 = 7 x 8 x 9)	Total Demand Over/(Under) Collection (11 = 7 + 10)
	Actuals throu	igh September		J ·	J							
1	October, 2020	1,691,881	73	39,748	30	1,731,731	5,600,714	(3,868,982)	18 / 12	3.25%	(188,613)	(4,057,595)
2	November	3,310,535	178	39,733	73	3,350,519	5,794,055	(2,443,536)	17 / 12	3.25%	(112,504)	(2,556,040)
3	December	7,219,632	179	49,829	74	7,269,714	5,807,180	1,462,534	16 / 12	3.25%	63,376	1,525,910
4	January, 2021	13,935,056	232	49,814	1,062	13,986,165	5,830,412	8,155,753	15 / 12	3.25%	331,327	8,487,080
5	February	19,073,688	223	71,906	986	19,146,803	10,832,838	8,313,965	14 / 12	3.25%	315,238	8,629,203
6	March	15,387,106	204	71,906	115	15,459,331	10,609,637	4,849,694	13 / 12	3.25%	170,750	5,020,444
7	April	8,273,812	164	71,906	68	8,345,950	7,494,251	851,699	12 / 12	3.25%	27,680	879,379
8	May	5,371,251	64	71,871	26	5,443,212	7,663,751	(2,220,539)	11 / 12	3.25%	(66,154)	(2,286,693)
9	June	2,839,420	74	71,906	30	2,911,429	7,540,112	(4,628,683)	10 / 12	3.25%	(125,360)	(4,754,043)
10	July	1,735,557	48	71,906	19	1,807,530	7,527,133	(5,719,603)	9 / 12	3.25%	(139,415)	(5,859,018)
11	August	1,555,130	52	71,906	21	1,627,109	7,555,345	(5,928,236)	8 / 12	3.25%	(128,445)	(6,056,681)
12	September	1,638,179	54	71,906	23	1,710,162	7,531,262	(5,821,099)	7 / 12	3.25%	(110,358)	(5,931,457)
13	TOTAL	82,031,248	1,546	754,333	2,527	82,789,654	89,786,689	(6,997,035)			37,522	(6,959,513)

Exhibit 1-E Schedule 4 Sheet 2a of 6

#### COLUMBIA GAS OF PENNSYLVANIA, INC. DETAIL OF COMMODITY GAS COST RECOVERY OCTOBER, 2020 THROUGH SEPTEMBER, 2021

		SALES		TOTAL
		SUBJECT TO	COMMODITY	COMMODITY
LINE		COMMODITY	COST OF	COST
NO.	MONTH	COST OF GAS	GAS	RECOVERY
		(1)	(2)	$(3 = 1 \times 2)$
		THERM	\$/THERM	\$
1	October, 2020 Est. Old	5,648,287	0.19128	1,080,404
2	October, 2020 Est. New	4,157,767	0.22236	924,521
3	September, 2020 Est.	(6,421,225)	0.19128	(1,228,252)
4	September, 2020 Act.	6,428,777	0.19128	1,229,696
5	September Act. Prior Period Adjustments		-	(308)
6	Total	9,813,606		2,006,062
7	November, 2020 Est. New	20,480,577	0.22236	4,554,061
8	October, 2020 Est. Old	(5,648,287)	0.19128	(1,080,404)
9	October, 2020 Est. New	(4,157,767)	0.22236	(924,521)
10	October, 2020 Act. Old	5,575,238	0.19128	1,066,432
11	October, 2020 Act. New	4,103,995	0.22236	912,564
12	October Act. Prior Period Adjustments		-	22
13	Total	20,353,756		4,528,154
14	December, 2020 Est.	44,317,227	0.22236	9,854,379
15	November, 2020 Est.	(20,480,577)	0.22236	(4,554,061)
16	November, 2020 Act.	20,375,736	0.22236	4,530,749
17	November Act. Prior Period Adjustments		-	(1,391)
18	Total	44,212,386		9,829,676
19	January, 2021 Est. Old	37,398,184	0.22236	8,315,860
20	January, 2021 Est. New	29,028,431	0.17679	5,131,936
21	December, 2020 Est.	(44,317,227)	0.22236	(9,854,379)
22	December, 2020 Act.	44,143,604	0.22236	9,815,772
23	December Act. Prior Period Adjustments	00.050.000	-	(441)
24	Total	66,252,992		13,408,748
25	February, 2021 Est. New	69,910,470	0.17679	12,359,472
26	January, 2021 Est. Old	(37,398,184)	0.22236	(8,315,860)
27	January, 2021 Est. New	(29,028,431)	0.17679	(5,131,936)
28	January, 2021 Act. Old	37,399,691	0.22236	8,316,195
29	January, 2021 Act. New	29,029,600	0.17679	5,132,143
30	January Act. Prior Period Adjustments		-	1,082
31	Total	69,913,146		12,361,096
32	March, 2021 Est.	56,470,944	0.17679	9,983,498
33	February, 2021 Est.	(69,910,470)	0.17679	(12,359,472)
34	February, 2021 Act.	69,961,252	0.17679	12,368,450
35	February Act. Prior Period Adjustments	0	-	2,523
36	Total	56,521,726		9,994,999

Exhibit 1-E Schedule 4 Sheet 2b of 6

#### COLUMBIA GAS OF PENNSYLVANIA, INC. DETAIL OF COMMODITY GAS COST RECOVERY OCTOBER, 2020 THROUGH SEPTEMBER, 2021

		SALES SUBJECT TO	COMMODITY	TOTAL COMMODITY
LINE		COMMODITY	COST OF	COST
NO.	MONTH	COST OF GAS	GAS	RECOVERY
NO.	WONTT	(1)	(2)	(3 = 1 x 2)
		THERM	\$/THERM	\$
		HILKW	φ/ I I I LIXIVI	Ψ
1	April, 2021 Est.	30,033,859	0.17679	5,309,686
2	March, 2021 Est.	(56,470,944)	0.17679	(9,983,498)
3	March, 2021 Act.	56,466,174	0.17679	9,982,655
4	March Act. Prior Period Adjustments		=	1,222
5	Total	30,029,089		5,310,064
6	May, 2021 Est.	19,773,977	0.17679	3,495,841
7	April, 2021 Est.	(30,033,859)	0.17679	(5,309,686)
8	April, 2021 Act.	29,945,184	0.17679	5,294,009
9	April Act. Prior Period Adjustments		_	123
10	Total	19,685,302		3,480,288
11	June, 2021 Est.	10,375,004	0.17679	1,834,197
12	May, 2021 Est.	(19,773,977)	0.17679	(3,495,841)
13	May, 2021 Act.	19,800,290	0.17679	3,500,493
14	May Act. Prior Period Adjustments	1,,	-	(1,339)
15	Total	10,401,317		1,837,510
16	July, 2021 Est.	6,381,482	0.17679	1,128,182
17	June, 2021 Est.	(10,375,004)	0.17679	(1,834,197)
18	June, 2021 Act.	10,366,950	0.17679	1,832,773
19	June Act. Prior Period Adjustments	10,000,000	-	1,074
20	Total	6,373,428		1,127,832
21	August, 2021 Est.	5,727,991	0.17679	1,012,652
22	July, 2021 Est.	(6,381,482)	0.17679	(1,128,182)
23	July, 2021 Act.	6,366,366	0.17679	1,125,510
24	July Act. Prior Period Adjustments	0,000,000	-	(2,441)
25	Total	5,712,875		1,007,538
26	September, 2021 Est.	6,013,821	0.17679	1,063,183
27	August, 2021 Est.	(5,727,991)	0.17679	(1,012,652)
28	August, 2021 Est. August, 2021 Act.	5,722,600	0.17679	1,011,698
29	August Act. Prior Period Adjustments	3,122,000	0.11019	(1,207)
30	Total	6,008,430	-	1,061,023
31	TOTAL	345,278,053		65,952,991
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Exhibit 1-E Schedule 4 Sheet 3 of 6

#### COLUMBIA GAS OF PENNSYLVANIA, INC. DETAIL OF NSS COMMODITY COST RECOVERY OCTOBER, 2020 THROUGH SEPTEMBER, 2021

LINE NO.	MONTH	RATE SCHEDULE NSS VOLUMES (1) THERM	RATE (2) \$/THERM	NSS GAS COST RECOVERY (3=1*2)
1	October, 2020 Est.	33,000	0.11364	3,750
2	September, 2020 Act.	23,090	0.14357	3,315
3 4	September, 2020 Est.	<u>(24,000)</u> 32,090	0.14357	(3,446) 3,619
5	November, 2020 Est.	69,000	0.22466	15,502
6	October, 2020 Act.	42,670	0.11364	4,849
7	October, 2020 Est.	(33,000)	0.11364	(3,750)
8		78,670		16,600
9	December, 2020 Est.	85,000	0.22852	19,424
10	November, 2020 Act.	63,370	0.22466	14,237
11	November, 2020 Est.	(69,000)	0.22466	(15,502)
12		79,370		18,159
13	January, 2021 Est.	101,000	0.22626	22,852
14	December, 2020 Act.	86,870	0.22852	19,852
15	December, 2020 Est.	(85,000)	0.22852	(19,424)
16		102,870		23,280
17	February, 2021 Est.	101,000	0.25822	26,080
18	January, 2021 Act.	98,700	0.22626	22,332
19	January, 2021 Est.	(101,000)	0.22626	(22,852)
20		98,700		25,560
21	March, 2021 Est.	87,000	0.23716	20,633
22	February, 2021 Act.	104,430	0.25822	26,966
23	February, 2021 Est.	(101,000)	0.25822	(26,080)
24		90,430		21,519
25	April, 2021 Est.	76,000	0.22710	17,260
26	March, 2021 Act.	83,630	0.23716	19,834
27	March, 2021 Est.	(87,000)	0.23716	(20,633)
28		72,630		16,460
29	May, 2021 Est.	37,000	0.24178	8,946
30	April, 2021 Act.	67,110	0.22710	15,241
31	April, 2021 Est.	(76,000)	0.22710	(17,260)
32		28,110		6,927
33	June, 2021 Est.	24,000	0.25356	6,085
34	May, 2021 Act.	45,710	0.24178	11,052
35	May, 2021 Est.	(37,000)	0.24178	(8,946)
36		32,710		8,191
37	July, 2021 Est.	22,000	0.29838	6,564
38	June, 2021 Act.	23,260	0.25356	5,898
39	June, 2021 Est.	(24,000)	0.25356	(6,085)
40		21,260		6,377
41	August, 2021 Est.	23,000	0.32214	7,409
42	July, 2021 Act.	22,030	0.29838	6,573
43	July, 2021 Est.	(22,000)	0.29838	(6,564)
44		23,030		7,418
45	September, 2021 Est.	24,000	0.36595	8,783
46	August, 2021 Act.	23,180	0.32214	7,467
47 49	August, 2021 Est.	(23,000)	0.32214	(7,409)
48		24,180		8,841
49	TOTAL	684,050		162,952
70		007,000		102,332

Exhibit 1-E Schedule 4 Sheet 4a of 6

#### COLUMBIA GAS OF PENNSYLVANIA, INC. DETAIL OF DEMAND GAS COST RECOVERY OCTOBER, 2020 THROUGH SEPTEMBER, 2021

	0010BEN, 2020 1111000	TOET TEMBER, 2021		
		VOLUMES SUBJ.		DEMAND
LINE		TO DEMAND	COST OF	COST
NO.	MONTH	COST OF GAS	GAS	RECOVERY
		(1)	(2)	$(3 = 1 \times 2)$
		THERM	\$/THERM	\$
1	October, 2020 Est. Old	5,648,287	0.13888	784,434
2	October, 2020 Est. Old October, 2020 Est. New	4,157,777	0.13666	528,495
3	October Choice - Est. Old	1,744,529	0.12711	207,477
4	October Choice - Est. New	1,252,944	0.11893	136,308
5	October Est. Priority One Transportation Old	157,771	0.13888	21,911
6	October Est. Priority One Transportation New	116,137	0.12711	14,762
7	September, 2020 Est.	(6,421,225)	0.13888	(891,780)
8	September 2020 Act.	6,428,777	0.13888	892,829
9	September Choice - Est.	(1,357,640)	0.11893	(161,464)
10	September Choice - Act.	1,359,575	0.11893	161,694
11	September Est. Priority One Transportation	(218,332)	0.13888	(30,322)
12	September Act. Priority One Transportation	198,280	0.13888	27,537
13	Total	13,066,880	0.10000	1,691,881
	. 514.	.0,000,000		.,00.,00.
14	November, 2020 Est. New	20,480,577	0.12711	2,603,286
15	November Choice - Est. New	6,291,157	0.10879	684,415
16	November Est. Priority One Transportation New	283,453	0.12711	36,030
17	October Est. Old	(5,648,287)	0.13888	(784,434)
18	October Est. New	(4,157,777)	0.12711	(528,495)
19	October Act. Old	5,575,238	0.13888	774,289
20	October Act. New	4,103,995	0.12711	521,659
21	October Choice - Est. Old	(1,744,529)	0.11893	(207,477)
22	October Choice - Est. New	(1,252,944)	0.10879	(136,308)
23	October Choice - Act. Old	1,745,761	0.11893	207,623
24	October Choice - Act. New	1,253,829	0.10879	136,404
25	October Est. Priority One Transportation Old	(157,771)	0.13888	(21,911)
26	October Est. Priority One Transportation New	(116,137)	0.12711	(14,762)
27	October Act. Priority One Transportation Old	173,013	0.13888	24,028
28	October Act. Priority One Transportation New	127,357	0.12711	16,188
29	Total	26,956,935		3,310,535
00	B 1 0000 F 1	44.047.007	0.40744	5 000 400
30	December, 2020 Est.	44,317,227	0.12711	5,633,163
31	December Choice - Est.	13,252,015	0.10879	1,441,687
32	December Est. Priority One Transportation	1,008,719	0.12711	128,218
33	November Est.	(20,480,577)	0.12711	(2,603,286)
34	November Act. November Choice - Est.	20,375,736	0.12711	2,589,960
35 36	November Choice - Est.  November Choice - Act.	(6,291,157)	0.10879	(684,415)
37	November Est. Priority One Transportation	6,285,889	0.10879 0.12711	683,842
38	November Act. Priority One Transportation	(283,453)	0.12711	(36,030) 66,494
39	Total	523,120 58,707,519	0.12711	7,219,632
39	i Otai	30,707,319		7,219,032
40	January, 2021 Est. Old	37,398,184	0.12711	4,753,683
41	January, 2021 Est. New	29,028,431	0.21527	6,248,950
42	January Choice - Est. Old	11,084,378	0.10879	1,205,869
43	January Choice - Est. New	8,499,329	0.18464	1,569,316
44	January Est. Priority One Transportation Old	664,928	0.12711	84,519
45	January Est. Priority One Transportation New	516,117	0.21527	111,105
46	December 2020 Est.	(44,317,227)	0.12711	(5,633,163)
47	December 2020 Act.	44,143,604	0.12711	5,611,094
48	December Choice - Est.	(13,252,015)	0.10879	(1,441,687)
49	December Choice - Act.	13,238,238	0.10879	1,440,188
50	December Est. Priority One Transportation	(1,008,719)	0.12711	(128,218)
51	December Act. Priority One Transportation	892,140	0.12711	113,400
52	Total	86,887,388		13,935,056

Exhibit 1-E Schedule 4 Sheet 4b of 6

#### COLUMBIA GAS OF PENNSYLVANIA, INC. DETAIL OF DEMAND GAS COST RECOVERY OCTOBER, 2020 THROUGH SEPTEMBER, 2021

		VOLUMES SUBJ.		DEMAND
LINE	MONTH	TO DEMAND	COST OF	COST
NO.	MONTH	COST OF GAS (1)	(2)	(3 = 1 x 2)
		THERM	\$/THERM	(3 - 1 x 2) <b>\$</b>
		IIILKW	Ψ/111EIXW	Ψ
1	February, 2021 Est. New	69,910,470	0.21527	15,049,627
2	February Choice - Est. New	20,338,580	0.18464	3,755,315
3	February Est. Priority One Transportation New	1,248,516	0.21527	268,768
4	January Est. Old	(37,398,184)	0.12711	(4,753,683)
5	January Est. New	(29,028,431)	0.21527	(6,248,950)
6	January Act. Old	37,399,691	0.12711	4,753,875
7	January Act. New	29,029,600	0.21527	6,249,202
8	January Choice - Est. Old	(11,084,378)	0.10879	(1,205,869)
9	January Choice - Est. New	(8,499,329)	0.18464	(1,569,316)
10	January Choice - Act. Old	11,082,397	0.10879	1,205,654
11	January Choice - Act. New	8,497,810	0.18464	1,569,036
12	January Est. Priority One Transportation Old	(664,928)	0.12711	(84,519)
13	January Est. Priority One Transportation New	(516,117)	0.21527	(111,105)
14	January Act. Priority One Transportation Old	665,032	0.12711	84,532
15	January Act. Priority One Transportation New	516,198	0.21527	111,122
16	Total	91,496,927		19,073,688
17	March, 2021 Est.	56,470,944	0.21527	12,156,500
18	March Choice - Est.	16,466,343	0.18464	3,040,346
19	March Est. Priority One Transportation	858,605	0.21527	184,832
20	February Est.	(69,910,470)	0.21527	(15,049,627)
21	February Act.	69,961,252	0.21527	15,060,559
22	February Choice - Est.	(20,338,580)	0.18464	(3,755,315)
23	February Choice - Act.	20,350,739	0.18464	3,757,560
24	February Est. Priority One Transportation	(1,248,516)	0.21527	(268,768)
25	February Act. Priority One Transportation	1,212,520	0.21527	261,019
26	Total	73,822,837		15,387,106
27	April, 2021 Est.	30,033,859	0.21527	6,465,389
28	April Choice - Est.	8,778,504	0.18464	1,620,863
29	April Est. Priority One Transportation	788,363	0.21527	169,711
30	March Est.	(56,470,944)	0.21527	(12,156,500)
31	March Act.	56,466,174	0.21527	12,155,473
32	March Choice - Est.	(16,466,343)	0.18464	(3,040,346)
33	March Choice - Act.	16,470,951	0.18464	3,041,196
34	March Est. Priority One Transportation	(858,605)	0.21527	(184,832)
35	March Act. Priority One Transportation	942,340	0.21527	202,858
36	Total	39,684,299		8,273,812
27	May 2024 Fat	40 772 077	0.04507	4.050.744
37	May, 2021 Est.	19,773,977	0.21527	4,256,744
38 39	May Choice - Est.	5,833,815 460,503	0.18464	1,077,156
39 40	May Est. Priority One Transportation	469,503	0.21527	101,070
	April, 2021 Est.	(30,033,859)	0.21527	(6,465,389)
41 42	April, 2021 Act. April Choice - Est.	29,945,184 (8,778,504)	0.21527 0.18464	6,446,300 (1,620,863)
42 43	April Choice - Est. April Choice - Act.	(8,778,504) 8,769,170	0.18464 0.18464	1,619,140
43 44	April Choice - Act.  April Est. Priority One Transportation	(788,363)	0.16464	(169,711)
44 45	April Act. Priority One Transportation	(766,363) 589,050	0.21527	126,805
46	Total	25,779,973	0.21321	5,371,251
70	i ottai	20,110,010		0,071,201

Exhibit 1-E Schedule 4 Sheet 4c of 6

#### COLUMBIA GAS OF PENNSYLVANIA, INC. DETAIL OF DEMAND GAS COST RECOVERY OCTOBER, 2020 THROUGH SEPTEMBER, 2021

LINE NO.	MONTH	VOLUMES SUBJ. TO DEMAND COST OF GAS	COST OF GAS (2)	DEMAND COST RECOVERY (3 = 1 x 2)
		(1) <b>THERM</b>	\$/THERM	(3 - 1 x 2) \$
1	June, 2021 Est.	10,375,004	0.21527	2,233,427
2	June Choice - Est.	2,972,702	0.18464	548,880
3	June Est. Priority One Transportation	288,081	0.21527	62,015
4	May Est.	(19,773,977)	0.21527	(4,256,744)
5	May Act.	19,800,290	0.21527	4,262,408
6 7	May Choice - Est.	(5,833,815)	0.18464	(1,077,156)
8	May Choice - Act.  May Est. Priority One Transportation	5,834,103 (469,503)	0.18464 0.21527	1,077,209 (101,070)
9	May Act. Priority One Transportation	(469,503) 420,170	0.21527	90,450
10	Total	13,613,055	0.21327	2,839,420
	. 3.6.	. 0,0 . 0,000		2,000, .20
11	July, 2021 Est.	6,381,482	0.21527	1,373,742
12	July Choice - Est.	1,772,584	0.18464	327,290
13	July Est. Priority One Transportation	203,612	0.21527	43,832
14	June 2021 Est.	(10,375,004)	0.21527	(2,233,427)
15	June 2021 Act.	10,366,950	0.21527	2,231,693
16	June Choice - Est.	(2,972,702)	0.18464	(548,880)
17	June Choice - Act.	2,973,487	0.18464	549,025
18	June Est. Priority One Transportation	(288,081)	0.21527	(62,015)
19	June Act. Priority One Transportation	252,230	0.21527	54,298
20	Total	8,314,558		1,735,557
21	August, 2021 Est.	5,727,991	0.21527	1,233,065
22	August Choice - Est.	1,575,496	0.18464	290,900
23	August Est. Priority One Transportation	181,605	0.21527	39,094
24	July, 2021 Est.	(6,381,482)	0.21527	(1,373,742)
25	July 2021 Act.	6,366,366	0.21527	1,370,488
26	July Choice - Est.	(1,772,584)	0.18464	(327,290)
27	July Choice - Act.	1,772,277	0.18464	327,233
28	July Est. Priority One Transportation	(203,612)	0.21527	(43,832)
29	July Act. Priority One Transportation	182,160	0.21527	39,214
30	Total	7,448,217		1,555,130
31	September, 2021 Est.	6,013,821	0.21527	1,294,595
32	September Choice - Est.	1,626,231	0.18464	300,267
33	September Est. Priority One Transportation	221,271	0.21527	47,633
34	August Est.	(5,727,991)	0.21527	(1,233,065)
35	August Act.	5,722,600	0.21527	1,231,904
36	August Choice - Est.	(1,575,496)	0.18464	(290,900)
37	August Choice - Act.	1,575,748	0.18464	290,946
38	August Est. Priority One Transportation	(181,605)	0.21527	(39,094)
39	August Act. Priority One Transportation	166,730	0.21527	35,892
40	Total	7,841,309		1,638,179
41	TOTAL	453,619,897		82,031,248

Exhibit 1-E Schedule 4 Sheet 5 of 6

#### COLUMBIA GAS OF PENNSYLVANIA, INC. DETAIL OF STANDBY DEMAND COST RECOVERY OCTOBER, 2020 THROUGH SEPTEMBER, 2021

LINE NO.	MONTH	STANDBY VOLUMES (1)	STANDBY DEMAND RATE (2)	STANDBY GAS DEMAND RECOVERIES (3 = 1 x 2)
		THERM	\$/THERM	\$
1 2 3 4	October, 2020 Est. September, 2020 Act. September, 2020 Est.	53,030 0 53,030	0.74953 -	0 39,748 0 39,748
5 6 7 8	November, 2020 Est. October, 2020 Act. October, 2020 Est.	53,010 0 53,010	0.74953 -	39,733 0 39,733
9 10 11 12	December, 2020 Est. November, 2020 Act. November, 2020 Est.	0 66,400 0 66,400	- 0.75043 -	49,829 0 49,829
13 14 15 16	January, 2021 Est. December, 2020 Act. December, 2020 Est.	0 66,380 0 66,380	0.75043 -	0 49,814 0 49,814
17 18 19 20	February, 2021 Est. January, 2021 Act. January, 2021 Est.	62,810 62,810	- 1.14481 -	71,906 0 71,906
21 22 23 24	March, 2021 Est. February, 2021 Act. February, 2021 Est.	62,810 0 62,810	- 1.14481 -	71,906 0 71,906
25 26 27 28	April, 2021 March, 2021 Act. March, 2021 Est.	62,810 62,810	- 1.14481 -	71,906 0 71,906
29 30 31 32	May, 2021 April, 2021 Act. April, 2021 Est.	62,780 0 62,780	- 1.14481 -	71,871 0 71,871
33 34 35 36	June, 2021 May, 2021 Act. May, 2021 Est.	62,810 62,810	- 1.14481 -	71,906 0 71,906
37 38 39 40	July, 2021 June, 2021 Act. June, 2021 Est.	62,810 62,810	- 1.14481 -	71,906 0 71,906
41 42 43 44	August, 2021 July, 2021 Act. July, 2021 Est.	0 62,810 0 62,810	- 1.14481 -	71,906 0 71,906
45 46 47 48	September, 2021 August, 2021 Act August, 2021 Est.	62,810 62,810	- 1.14481 -	71,906 0 71,906
49	TOTAL	741,270		754,333

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, 2020 THROUGH SEPTEMBER, 2021

		NSS-BANKING & BALANCING		NSS-CAPACITY RELEASE			
NO.	DESCRIPTION	VOLUME (1)	RATE (2)	AMOUNT (3=1 x 2)	VOLUME (4)	<u>RATE</u> (5)	AMOUNT (6=4 x5)
		THERM	\$/THERM	\$	THERM	\$/THERM	\$
1	October, 2020 Est.	33,000	0.00226	75	33,000	0.00093	31
2	September, 2020 Act.	23,090	0.00226	73 52	23,090	0.00093	21
3	September, 2020 Est.	(24,000)	0.00226	(54)	(24,000)	0.00093	(22)
4		32,090	0.00220	73	32,090	0.0000	30
5	November, 2020 Est.	69,000	0.00226	156	69,000	0.00093	64
6	October, 2020 Act.	42,670	0.00226	96	42,670	0.00093	40
7 8	October, 2020 Est.	(33,000) 78,670	0.00226	<u>(75)</u> 178	<u>(33,000)</u> 78,670	0.00093	<u>(31)</u> 73
9	December, 2020 Est.	85,000	0.00226	192	85,000	0.00093	79
10	November, 2020 Act.	63,370	0.00226	143	63,370	0.00093	7 <del>9</del> 59
11	November, 2020 Est.	(69,000)	0.00226	(156)	(69,000)	0.00093	(64)
12	,	79,370		179	79,370		74
13	January, 2021 Est.	101,000	0.00226	228	101,000	0.01050	1,061
14	December, 2020 Act.	86,870	0.00226	196	86,870	0.00093	81
15 16	December, 2020 Est.	(85,000)	0.00226	(192)	(85,000)	0.00093	(79)
16		102,870		232	102,870		1,062
17	February, 2021 Est.	101,000	0.00226	228	101,000	0.01000	1,010
18	January, 2021 Act.	98,700	0.00226	223	98,700	0.01050	1,036
19 20	January, 2021 Est.	(101,000) 98,700	0.00226	<u>(228)</u> 223	(101,000)	0.01050	(1,061) 986
20		90,700		223	98,700		960
21	March, 2021 Est.	87,000	0.00226	197	87,000	0.00093	81
22	February, 2021 Act.	104,430	0.00226	236	104,430	0.01000	1,044
23 24	February, 2021 Est.	(101,000) 90,430	0.00226	<u>(228)</u> 204	(101,000) 90,430	0.01000	<u>(1,010)</u> 115
25	April, 2021 Est.	76,000	0.00226	172	76,000	0.00093	71
26	March, 2021 Act.	83,630	0.00226	189	83,630	0.00093	78
27 28	March, 2021 Est.	(87,000) 72,630	0.00226	(197 <u>)</u> 164	(87,000) 72,630	0.00093	<u>(81)</u> 68
29	May, 2021 Est.	37,000	0.00226	84	37,000	0.00093	34
30	April, 2021 Act.	67,110	0.00226	152	67,110	0.00093	62
31 32	April, 2021 Est.	<u>(76,000)</u> 28,110	0.00226	(172) 64	<u>(76,000)</u> 28,110	0.00093	<u>(71)</u> 26
33	June, 2021 Est.	24,000	0.00226	54	24,000	0.00093	22
34 35	May, 2021 Act. May, 2021 Est.	45,710 (37,000)	0.00226 0.00226	103 (84)	45,710 (37,000)	0.00093 0.00093	43 (34)
36	May, 2021 Lst.	32,710	0.00220	74	32,710	0.00093	30
37	July, 2021 Est.	22,000	0.00226	50	22,000	0.00093	20
38	June, 2021 Act.	23,260	0.00226	53	23,260	0.00093	22
39	June, 2021 Est.	(24,000)	0.00226	(54)	(24,000)	0.00093	(22)
40		21,260		48	21,260		19
41	August, 2021 Est.	23,000	0.00226	52	23,000	0.00093	21
42	July, 2021 Act.	22,030	0.00226	50 (50)	22,030	0.00093	20
43 44	July, 2021 Est.	<u>(22,000)</u> 23,030	0.00226	<u>(50)</u> 52	<u>(22,000)</u> 23,030	0.00093	<u>(20)</u> 21
45	Sept., 2021 Est.	24,000	0.00226	54	24,000	0.00093	22
46	August, 2021 Act.	23,180	0.00226	52	23,180	0.00093	22
47	August, 2021 Est.	(23,000)	0.00226	(52)	(23,000)	0.00093	(21)
48		24,180		54	24,180		23
49	TOTAL	684,050		1,546	684,050		2,527