

## VERIFICATION

The undersigned hereby verifies that all the information contained in this foregoing application is true and correct to the best of my knowledge, opinion and belief, formed after due inquiry.

COLUMBIA GAS OF KENTUCKY, INC.

BY: Kimma H. Cole

ITS: President and Chief Operating Officer

**Columbia Gas of Kentucky, Inc.**  
**Annual Adjustment to the Safety Modification and Replacement Program ("SMRP")**  
**Forecasted Period Ending December 31, 2021**  
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**Columbia Gas of Kentucky, Inc.**  
**Annual Adjustment to the Safety Modification and Replacement Program ("SMRP")**  
**SMRP Rider by Rate Schedule**

Line No.	<u>Rate Schedule</u> (1)	<u>Base Revenue as Approved PSC Case No. 2016-00162</u> (2)	<u>Allocation Percent</u> <sup>(1)</sup> (3)	<u>Revenue Requirement</u> (4)	<u>Billing Determinant # of Bills</u> <sup>(2)</sup> (5)	<u>Monthly SMRP Rider</u> (6)	<u>Balancing Adjustment SMRP Rider</u> <sup>(4)</sup> (7)	<u>Total Monthly SMRP Rider</u> (8)
1	Rate GSR, Rate SVGTS - Residential Service	\$51,773,587	64.996%	\$11,710,940	1,459,739	\$8.02	\$0.02	\$8.04
2	Rate GSO, Rate GDS, Rate SVGTS - Com. or Ind. Service	\$22,237,376	27.917%	\$5,029,989	170,905	\$29.43	\$0.07	\$29.50
3	Rate IUS, Rate IUDS	\$26,686	0.034%	\$6,036	24	\$251.50	\$0.63	\$252.13
4	Rate IS, Rate DS <sup>(3)</sup> , Rate SAS	\$5,618,358	7.053%	\$1,270,847	860	\$1,477.73	\$3.97	\$1,481.70
5	TOTAL	<u>\$79,656,007</u>	<u>100.000%</u>	<u>\$18,017,812</u>	<u>1,631,528</u>			

## Notes:

<sup>(1)</sup> Allocation percent is based on the overall base revenue distribution approved in PSC Case No. 2016-00162

<sup>(2)</sup> Billing Determinants based on projected twelve months ending December 31, 2021 bills

<sup>(3)</sup> Excluding customers subject to the Flex Provisions of Rate Schedule DS.

<sup>(4)</sup> Per Case No. 2020-00099.

**Columbia Gas of Kentucky, Inc.**  
**Annual Adjustment to the Safety Modification and Replacement Program ("SMRP")**  
**Forecasted SMRP Revenue Requirement for 2021**

<u>Line No.</u>		<u>SMRP Investment</u> <u>December 31, 2021</u> (1)	<u>Reference</u> (2)
<b>Return on Investment</b>			
<b><u>Rate Base</u></b>			
1	Net SMRP Investment-Property, Plant and Equipment	147,004,994	Form 2.0
2	Cost of Removal	6,876,467	Form 2.0
3	Accumulated Reserve for Depreciation	<u>9,922,330</u>	Form 2.0 + Form 2.2
4	Net PP&E	163,803,790	
5	Deferred Taxes on Liberalized Depreciation	<u>(15,300,632)</u>	Form 2.1
6	Net Rate Base	148,503,158	Line 4 + Line 5
7	Authorized Rate of Return, Adjusted for Income Taxes	9.28%	Form 1.2
8	Required Return on SMRP Related Investment	<u>13,780,187</u>	Line 6 * Line 7
<b><u>Operating Expenses</u></b>			
9	Depreciation	2,654,637	Form 2.0
10	Property Tax <sup>(1)</sup>	2,028,669	Line 1 * 1.380%
11	O&M Savings FERC Account 887	(479,932)	Form 3.0
12	PSC Assessment <sup>(2)</sup>	<u>34,252</u>	(Sum Line 8 to 11) * (.1901%/(1-.1901%))
13	Total Operating Expenses	4,237,625	Sum Lines 9 to 12
14	<b>Total Annual Revenue Requirement</b>	<b><u>18,017,812</u></b>	Line 8 + Line 13

## Notes:

<sup>(1)</sup> Property taxes estimated using an effective rate of 1.380%

<sup>(2)</sup> PSC Assessment estimated using a rate of .1901%

**Columbia Gas of Kentucky, Inc.**  
**Annual Adjustment to the Safety Modification and Replacement Program**  
**Cost of Capital**

<b>Line No.</b>	<b><u>Capital Structure</u> (1)</b>	<b><u>Ratio</u> (2)</b>	<b><u>Cost</u> (3)</b>	<b><u>Weighted Cost</u> (4)</b>	<b><u>Pre-Tax @ Effect tax of 24.95%</u> (5)</b>
1	Short term Debt	1.26%	2.500%	0.03%	0.03%
2	Long term Debt	46.32%	5.640%	2.61%	2.61%
3	Equity	<u>52.42%</u>	9.500%	<u>4.98%</u>	<u>6.64%</u>
4	Total	100.00%		7.62%	9.28%

**Columbia Gas of Kentucky, Inc.**  
**Annual Adjustment to the Safety Modification and Replacement Program**  
**2021 Plant Additions and Depreciation**

<u>Line No.</u>	<u>Description</u> (1)	<u>Account Number</u> (2)	<u>2021 Beginning Plant Balance</u> (3)	<u>Depr Rates</u> (4)	<u>Depr on Beginning Balance</u> (5)=(3)*(4)	<u>2021 Additions &amp; Retirements</u> (6)	<u>Current Year Depr on Adds/(Ret)</u> (7)=(4)*(6)*50%	<u>2021 Ending Plant Balance</u> (8)=(6)+(3)
<b><u>Additions</u></b>								
1	Mains	376	77,406,210	1.65%	1,277,202	31,382,339	258,904	108,788,549
2	Mains - In-Line Inspections	376	-	1.65%	-	10,000,000	82,500	10,000,000
3	Plant Regulators	378	302,449	2.20%	6,654	865,992	9,526	1,168,441
4	Plant Regulators - LP Program	378	4,834,493	2.20%	106,359	-	-	4,834,493
5	Service Lines	380	29,915,251	3.80%	1,136,780	7,636,630	145,096	37,551,880
6	Meter Installations	382	184,798	2.08%	3,844	49,807	518	234,605
7	House Regulators	383	232,393	2.25%	5,229	65,232	734	297,626
8	GPS Devices	387	213,381	3.13%	6,679	-	-	213,381
9	<b>Total Additions</b>		<b>113,088,976</b>		<b>2,542,747</b>	<b>50,000,000</b>	<b>497,278</b>	<b>163,088,976</b>
<b><u>Retirements</u></b>								
10	Mains	376	(4,989,504)	1.65%	(82,327)	(2,112,031)	(17,424)	(7,101,535)
11	Mains - In-Line Inspections	376	-	1.65%	-	(673,000)	(5,552)	(673,000)
12	Plant Regulators	378	(4,302)	2.20%	(95)	(38,104)	(419)	(42,406)
13	Plant Regulators - LP Program	378	(221,737)	2.20%	(4,878)	-	-	(221,737)
14	Service Lines	380	(6,413,187)	3.80%	(243,701)	(1,566,273)	(29,759)	(7,979,460)
15	Meter Installations	382	(47,173)	2.08%	(981)	(12,716)	(132)	(59,889)
16	House Regulators	383	(4,650)	2.25%	(105)	(1,305)	(15)	(5,955)
17	GPS Devices	387	-	3.13%	-	-	-	-
18	<b>Total Retirements</b>		<b>(11,680,554)</b>		<b>(332,087)</b>	<b>(4,403,428)</b>	<b>(53,301)</b>	<b>(16,083,982)</b>
19	<b>Total Plant</b>		<b>101,408,422</b>		<b>2,210,660</b>	<b>45,596,572</b>	<b>443,977</b>	<b>147,004,994</b>
<b><u>Cost of Removal</u></b>								
20	Mains	376	863,045			422,406		1,285,451
21	Mains - In-Line Inspections	376	-			134,600		134,600
22	Plant Regulators	378	5,110			5,716		10,825
23	Plant Regulators - LP Program	378	33,369			-		33,369
24	Service Lines	380	4,393,443			1,018,077		5,411,520
25	Meter Installations	382	-			636		636
26	House Regulators	383	-			65		65
27	GPS Devices	387	-			-		-
28	<b>Total Cost of Removal</b>		<b>5,294,966</b>			<b>1,581,500</b>		<b>6,876,467</b>

**Columbia Gas of Kentucky, Inc.  
Annual Adjustment to the Safety Modification and Replacement Program  
2020 Plant Additions and Depreciation**

<u>Line No.</u>	<u>Description</u> (1)	<u>Account Number</u> (2)	<u>2020 Beginning Plant Balance</u> (3)	<u>Depr Rates</u> (4)	<u>Depr on Beginning Balance</u> (5)=(3)*(4)	<u>2020 Additions &amp; Retirements</u> (6)	<u>Current Year Depr on Adds/(Ret)</u> (7)=(4)*(6)*50%	<u>2020 Ending Plant Balance</u> (8)=(6)+(3)
<b><u>Additions</u></b>								
1	Mains	376	50,165,500	1.65%	827,731	27,240,710	224,736	77,406,210
2	Plant Regulators	378	302,449	2.20%	6,654	-	-	302,449
3	Plant Regulators - LP Program	378	288,929	2.20%	6,356	4,545,564	50,001	4,834,493
4	Service Lines	380	21,294,796	3.80%	809,202	8,620,455	163,789	29,915,251
5	Meter Installations	382	184,798	2.08%	3,844	-	-	184,798
6	House Regulators	383	232,393	2.25%	5,229	-	-	232,393
7	GPS Devices	387	213,381	3.13%	6,679	-	-	213,381
8	Total Additions		72,682,247		1,665,695	40,406,729	438,526	113,088,976
<b><u>Retirements</u></b>								
9	Mains	376	(3,156,204)	1.65%	(52,077)	(1,833,300)	(15,125)	(4,989,504)
10	Plant Regulators	378	(4,302)	2.20%	(95)	-	-	(4,302)
11	Plant Regulators - LP Program	378	(21,732)	2.20%	(478)	(200,005)	(2,200)	(221,737)
12	Service Lines	380	(4,645,132)	3.80%	(176,515)	(1,768,055)	(33,593)	(6,413,187)
13	Meter Installations	382	(47,173)	2.08%	(981)	-	-	(47,173)
14	House Regulators	383	(4,650)	2.25%	(105)	-	-	(4,650)
15	GPS Devices	387	-	3.13%	-	-	-	-
16	Total Retirements		(7,879,194)		(230,251)	(3,801,360)	(50,918)	(11,680,554)
17	<b>Total Plant</b>		<b>64,803,053</b>		<b>1,435,444</b>	<b>36,605,369</b>	<b>387,608</b>	<b>101,408,422</b>
<b><u>Cost of Removal</u></b>								
18	Mains	376	496,385			366,660		863,045
19	Plant Regulators	378	5,110			-		5,110
20	Plant Regulators - LP Program	378	3,368			30,001		33,369
21	Service Lines	380	3,244,207			1,149,236		4,393,443
22	Meter Installations	382	-			-		-
23	House Regulators	383	-			-		-
24	GPS Devices	387	-			-		-
25	Total Cost of Removal		3,749,070			1,545,897		5,294,966

**Columbia Gas of Kentucky, Inc.**  
**Annual Adjustment to the Safety Modification and Replacement Program**  
**2019 Plant Additions and Depreciation**

<u>Line No.</u>	<u>Description</u> (1)	<u>Account Number</u> (2)	<u>2019 Beginning Plant Balance</u> (3)	<u>Depr Rates</u> (4)	<u>Depr on Beginning Balance</u> (5)=(3)*(4)	<u>2019 Additions &amp; Retirements</u> (6)	<u>Current Year Depr on Adds/(Ret)</u> (7)=(4)*(6)*50%	<u>2019 Ending Plant Balance</u> (8)=(6)+(3)
<b><u>Additions</u></b>								
1	Mains	376	24,991,378	1.65%	412,358	25,174,122	207,687	50,165,500
2	Plant Regulators	378	227,813	2.20%	5,012	74,636	821	302,449
3	Plant Regulators - LP Program	378	-	2.20%	-	288,929	3,178	288,929
4	Service Lines	380	11,779,616	3.80%	447,625	9,515,180	180,788	21,294,796
5	Meter Installations	382	143,423	2.08%	2,983	41,375	430	184,798
6	House Regulators	383	120,946	2.25%	2,721	111,448	1,254	232,393
7	GPS Devices	387	213,381	3.13%	6,679	-	-	213,381
8	Total Additions		37,476,557		877,378	35,205,689	394,158	72,682,247
<b><u>Retirements</u></b>								
9	Mains	376	(1,312,591)	1.65%	(21,658)	(1,843,613)	(15,210)	(3,156,204)
10	Plant Regulators	378	(4,277)	2.20%	(94)	(26)	-	(4,302)
11	Plant Regulators - LP Program	378	-	2.20%	-	(21,732)	(239)	(21,732)
12	Service Lines	380	(2,592,188)	3.80%	(98,503)	(2,052,943)	(39,006)	(4,645,132)
13	Meter Installations	382	(30,363)	2.08%	(632)	(16,810)	(175)	(47,173)
14	House Regulators	383	(2,758)	2.25%	(62)	(1,892)	(21)	(4,650)
15	GPS Devices	387	-	3.13%	-	-	-	-
16	Total Retirements		(3,942,177)		(120,949)	(3,937,017)	(54,651)	(7,879,194)
17	<b>Total Plant</b>		<b>33,534,380</b>		<b>756,429</b>	<b>31,268,673</b>	<b>339,507</b>	<b>64,803,053</b>
<b><u>Cost of Removal</u></b>								
18	Mains	376	279,125			217,259		496,385
19	Plant Regulators	378	5,110			-		5,110
20	Plant Regulators - LP Program	378	-			3,368		3,368
21	Service Lines	380	2,188,776			1,055,431		3,244,207
22	Meter Installations	382	-			-		-
23	House Regulators	383	-			-		-
24	GPS Devices	387	-			-		-
25	Total Cost of Removal		2,473,011			1,276,059		3,749,070



**Columbia Gas of Kentucky, Inc.**  
**Annual Adjustment to the Safety Modification and Replacement Program**  
**2018 Plant Additions and Depreciation**

Line No.	Description (1)	Account Number (2)	2018 Beginning Plant Balance (3)	Depr Rates (4)	Depr on Beginning Balance (5)=(3)*(4)	2018 Additions & Retirements (6)	Current Year Depr on Adds/(Ret) (7)=(4)*(6)*50%	2018 Ending Plant Balance (8)=(6)+(3)
<b><u>Additions</u></b>								
1	Mains	376	10,446,894	1.65%	172,374	14,544,484	119,992	24,991,378
2	Plant Regulators	378	98,242	2.20%	2,161	129,571	1,425	227,813
3	Service Lines	380	4,164,307	3.80%	158,244	7,615,309	144,691	11,779,616
4	Meter Installations	382	32,675	2.08%	680	110,748	1,152	143,423
5	House Regulators	383	65,220	2.25%	1,467	55,726	627	120,946
6	GPS Devices	387	213,381	3.13%	6,679	-	-	213,381
7	Total Additions		15,020,719		341,605	22,455,838	267,887	37,476,557
<b><u>Retirements</u></b>								
8	Mains	376	(92,176)	1.65%	(1,521)	(1,220,415)	(10,068)	(1,312,591)
9	Plant Regulators	378	(4,128)	2.20%	(91)	(149)	(2)	(4,277)
10	Service Lines	380	(997,218)	3.80%	(37,894)	(1,594,970)	(30,304)	(2,592,188)
11	Meter Installations	382	(12,084)	2.08%	(251)	(18,279)	(190)	(30,363)
12	House Regulators	383	(1,152)	2.25%	(26)	(1,606)	(18)	(2,758)
13	GPS Devices	387	-	3.13%	-	-	-	-
14	Total Retirements		(1,106,758)		(39,783)	(2,835,419)	(40,582)	(3,942,177)
15	<b>Total Plant</b>		<u>13,913,961</u>		<u>301,822</u>	<u>19,620,419</u>	<u>227,305</u>	<u>33,534,380</u>
<b><u>Cost of Removal</u></b>								
16	Mains	376	145,583			133,542		279,125
17	Plant Regulators	378	4,035			1,075		5,110
18	Service Lines	380	1,031,624			1,157,152		2,188,776
19	Meter Installations	382	-			-		-
20	House Regulators	383	-			-		-
21	GPS Devices	387	-			-		-
22	Total Cost of Removal		1,181,242			1,291,769		2,473,011

Notes:

(1) See Form 2.2 for detail of 2017 AMRP eligible capital additions.

**Columbia Gas of Kentucky, Inc.**  
**Calculation of Accumulated Deferred Income Tax**  
**Annual Adjustment to the Safety Modification and Replacement Program**

Ln. No.	MACRS 20 Year Tax Depr Rates	Year	2017 Jan-Sept Additions	2017 Oct-Dec Additions	2018 Additions	2019 Additions	2020 Additions	2021 Additions	Annual Tax Depreciation	Cost of Removal	Book Depreciation	Difference	Deferred Tax @ [1] [2] 24.95%	Accumulated Deferred Income Taxes-Fed NOL	ADIT Normalization Adjustment	Accumulated Deferred Inc. Taxes
	(1)	(2)	(3)	(4)	(4)	(5)	(6)	(7)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
1	Total Plant Additions		2,770,290	12,250,429	22,455,838	35,205,689	40,406,729	50,000,000								
2																
3	0.03750	1	1,659,688	7,462,981					9,122,669	1,181,242	58,900	10,245,011	3,651,494	(1,063,610)	-	2,587,884
4	0.07219	2	83,298	359,071	6,999,162				7,441,531	1,291,769	529,127	8,204,173	2,072,300	22,720	-	4,682,903
5	0.06677	3	77,044	332,112	1,159,291	13,325,890			14,894,337	1,276,059	1,095,936	15,074,460	3,784,531	4,326	-	8,471,761
6	0.06177	4	71,274	307,242	1,072,251	1,641,042	14,081,338		17,173,147	1,545,897	1,823,052	16,895,992	4,237,247	-	-	12,709,008
7	0.05713	5	65,921	284,163	991,957	1,517,833	1,974,473	18,849,753	23,684,100	1,581,500	2,654,637	22,610,963	5,661,503	-	(3,069,879)	15,300,632
8	0.05285	6	60,982	262,875	917,444	1,404,171	1,826,230	2,336,350	6,808,052		2,654,637	4,153,415	1,054,842	-	-	16,355,473
9	0.04888	7	56,401	243,128	848,712	1,298,694	1,689,474	2,160,937	6,297,346		2,654,637	3,642,709	926,026	-	-	17,281,499
10	0.04522	8	52,178	224,923	784,958	1,201,400	1,562,566	1,999,117	5,825,142		2,654,637	3,170,505	806,925	-	-	18,088,425
11	0.04462	9	51,486	221,939	726,182	1,111,153	1,445,504	1,848,949	5,405,213		2,654,637	2,750,576	701,943	-	-	18,790,367
12	0.04461	10	51,474	221,889	716,548	1,027,953	1,336,919	1,710,431	5,065,214		2,654,637	2,410,577	617,109	-	-	19,407,476
13	0.04462	11	51,486	221,939	716,387	1,014,313	1,236,815	1,581,947	4,822,887		2,654,637	2,168,250	556,652	-	-	19,964,128
14	0.04461	12	51,474	221,889	716,548	1,014,086	1,220,404	1,463,495	4,687,896		2,654,637	2,033,259	522,968	-	-	20,487,096
15	0.04462	13	51,486	221,939	716,387	1,014,313	1,220,130	1,444,077	4,668,332		2,654,637	2,013,695	518,091	-	-	21,005,187
16	0.04461	14	51,474	221,889	716,548	1,014,086	1,220,404	1,443,753	4,668,154		2,654,637	2,013,517	518,043	-	-	21,523,230
17	0.04462	15	51,486	221,939	716,387	1,014,313	1,220,130	1,444,077	4,668,332		2,654,637	2,013,695	518,091	-	-	22,041,320
18	0.04461	16	51,474	221,889	716,548	1,014,086	1,220,404	1,443,753	4,668,154		2,654,637	2,013,517	518,043	-	-	22,559,363
19	0.04462	17	51,486	221,939	716,387	1,014,313	1,220,130	1,444,077	4,668,332		2,654,637	2,013,695	518,091	-	-	23,077,454
20	0.04461	18	51,474	221,889	716,548	1,014,086	1,220,404	1,443,753	4,668,154		2,654,637	2,013,517	518,043	-	-	23,595,497
21	0.04462	19	51,486	221,939	716,387	1,014,313	1,220,130	1,444,077	4,668,332		2,654,637	2,013,695	518,091	-	-	24,113,588
22	0.04461	20	51,474	221,889	716,548	1,014,086	1,220,404	1,443,753	4,668,154		2,654,637	2,013,517	518,043	-	-	24,631,631
23	0.02231	21	25,743	110,969	716,387	1,014,313	1,220,130	1,444,077	4,531,619		2,654,637	1,876,982	476,144	-	-	25,107,774
24		22	-	-	358,274	1,014,086	1,220,404	1,443,753	4,036,517		2,654,637	1,381,880	349,059	-	-	25,456,833
25						507,157	1,220,130	1,444,077	3,171,364		2,654,637	516,727	128,924	-	-	25,585,757
26							610,202	1,443,753	2,053,955		2,654,637	-	-	-	-	25,585,757
27								722,038	722,038							
28			2,770,289	12,250,432	22,455,841	35,205,687	40,406,725	49,999,997	163,088,971	6,876,467	56,599,755					

Notes:  
 [1] Includes adjustment for state disallowance on 2017 bonus tax depreciation as calculated on Form 2.1 pages 4 through 8.  
 [2] Deferred Taxes calculated beginning 1/1/2018 using 21% Corporate Tax Rate and 5% State Tax Rate.

**Columbia Gas of Kentucky, Inc.**  
**Calculation of Accumulated Deferred Income Tax**  
**Annual Adjustment to the Safety Modification and Replacement Program**

Ln. No.	MACRS 20 Year Tax Depr Rates (1)	Year (2)	2017 Jan-Sept Additions (3) (\$)	2017 Oct-Dec Additions (4) (\$)	2018 Additions (4) (\$)	2019 Additions (5) (\$)	2020 Additions (6) (\$)	2021 Additions (7) (\$)	Annual Tax Depreciation (7) (\$)	Cost of Removal (8) (\$)	Book Depreciation (9) (\$)	Difference (10) (\$)	Deferred Tax @ 24.95% [3] (11) (\$)	Accumulated Deferred Income Taxes-Fed NOL (12) (\$)	ADIT Normalization Adjustment (13) (\$)	Accumulated Deferred Inc. Taxes (14) (\$)
1	AMRP Plant Additions [1]		2,374,447	12,236,754	22,159,793	34,689,302	35,861,165	49,018,968								
2	Composite Tax Rate [2]		59.406%	59.406%	28.814%	35.898%	35.898%	35.898%								
3	0.03750	1	1,446,706	7,455,623					8,902,329	1,177,207	55,213	10,024,323	3,899,462	(1,034,612)	-	2,864,850
4	0.07219	2	69,583	358,597	6,976,634				7,404,814	1,290,694	515,514	8,179,994	2,040,909	22,420	-	4,928,179
5	0.06677	3	64,359	331,674	1,138,776	13,286,595			14,821,404	1,272,690	1,074,081	15,020,013	3,747,493	4,263	-	8,679,935
6	0.06177	4	59,539	306,837	1,053,277	1,605,259	13,735,438		16,760,350	1,515,896	1,748,148	16,528,098	4,123,760	-	-	12,803,695
7	0.05713	5	55,067	283,788	974,404	1,484,736	1,659,487	18,775,101	23,232,583	1,575,084	2,521,719	22,285,948	5,560,344	-	(3,009,646)	15,354,393
8	0.05285	6	50,941	262,528	901,209	1,373,553	1,534,893	2,268,369	6,391,493		2,521,719	3,869,774	965,509	-	-	16,319,902
9	0.04888	7	47,115	242,807	833,693	1,270,376	1,419,954	2,098,060	5,912,005		2,521,719	3,390,286	845,876	-	-	17,165,778
10	0.04522	8	43,587	224,626	771,068	1,175,203	1,313,291	1,940,949	5,468,724		2,521,719	2,947,005	735,278	-	-	17,901,056
11	0.04462	9	43,009	221,646	713,332	1,086,924	1,214,904	1,795,150	5,074,965		2,521,719	2,553,246	637,035	-	-	18,538,091
12	0.04461	10	42,999	221,596	703,868	1,005,538	1,123,642	1,660,663	4,758,306		2,521,719	2,236,587	558,028	-	-	19,096,119
13	0.04462	11	43,009	221,646	703,710	992,196	1,039,507	1,535,917	4,535,985		2,521,719	2,014,266	502,559	-	-	19,598,678
14	0.04461	12	42,999	221,596	703,868	991,974	1,025,714	1,420,912	4,407,063		2,521,719	1,885,344	470,393	-	-	20,069,071
15	0.04462	13	43,009	221,646	703,710	992,196	1,025,484	1,402,059	4,388,104		2,521,719	1,866,385	465,663	-	-	20,534,734
16	0.04461	14	42,999	221,596	703,868	991,974	1,025,714	1,401,744	4,387,895		2,521,719	1,866,176	465,611	-	-	21,000,345
17	0.04462	15	43,009	221,646	703,710	992,196	1,025,484	1,402,059	4,388,104		2,521,719	1,866,385	465,663	-	-	21,466,008
18	0.04461	16	42,999	221,596	703,868	991,974	1,025,714	1,401,744	4,387,895		2,521,719	1,866,176	465,611	-	-	21,931,619
19	0.04462	17	43,009	221,646	703,710	992,196	1,025,484	1,402,059	4,388,104		2,521,719	1,866,385	465,663	-	-	22,397,282
20	0.04461	18	42,999	221,596	703,868	991,974	1,025,714	1,401,744	4,387,895		2,521,719	1,866,176	465,611	-	-	22,862,893
21	0.04462	19	43,009	221,646	703,710	992,196	1,025,484	1,402,059	4,388,104		2,521,719	1,866,385	465,663	-	-	23,328,556
22	0.04461	20	42,999	221,596	703,868	991,974	1,025,714	1,401,744	4,387,895		2,521,719	1,866,176	465,611	-	-	23,794,167
23	0.02231	21	21,504	110,823	703,710	992,196	1,025,484	1,402,059	4,255,776		2,521,719	1,734,057	432,647	-	-	24,226,814
24		22			351,934	991,974	1,025,714	1,401,744	3,771,366		2,521,719	1,249,647	311,787	-	-	24,538,601
25						496,098	1,025,484	1,402,059	2,923,641		2,521,719	401,922	100,280	-	-	24,638,881
26							512,857	1,401,744	1,914,601		2,521,719	(607,118)	(151,476)	-	-	24,487,405
27								701,029	701,029							
28			2,374,447	12,236,753	22,159,791	34,689,302	35,861,161	49,018,968	155,639,401	6,831,571	53,827,336					

Notes:

[1] Plant additions eligible for repairs tax deduction.

[2] Composite rate including repairs (15.42% for 2017, 25.84% for 2018, and 33.22% for 2019-2021) and mixed services 263A (4.01%) and bonus tax (50% for January-September 2017 and October-December 2017) deductions.

[3] Deferred Taxes calculated beginning 1/1/2018 using 21% Corporate Tax Rate and 5% State Tax Rate.

**Columbia Gas of Kentucky, Inc.**  
**Calculation of Accumulated Deferred Income Tax**  
**Annual Adjustment to the Safety Modification and Replacement Program**

Ln. No.	MACRS 20 Year Tax Depr Rates	Year	2017 Jan-Sept Additions	2017 Oct-Dec Additions	2018 Additions	2019 Additions	2020 Additions	2021 Additions	Annual Tax Depreciation	Cost of Removal	Book Depreciation	Difference	Deferred Tax @ 24.95% [3]	Accumulated Deferred Income Taxes-Fed NOL	ADIT Normalization Adjustment	Accumulated Deferred Inc. Taxes
	(1)	(2)	(3)	(4)	(4)	(5)	(6)	(7)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
1	Plant Additions [1]		395,843	13,675	296,045	516,388	4,545,564	981,031								
2	Composite Tax Rate [2]		52.005%	52.005%	4.010%	4.010%	4.010%	4.010%								
3	0.03750	1	212,982	7,358					220,340	4,035	3,687	220,688	85,848	(28,998)	-	56,850
4	0.07219	2	13,715	474	22,528				36,717	1,075	13,613	24,179	6,033	300	-	63,183
5	0.06677	3	12,685	438	20,515	39,295			72,933	3,368	21,855	54,446	13,584	63	-	76,830
6	0.06177	4	11,735	405	18,974	35,783	345,900		412,797	30,001	74,904	367,894	91,789	-	-	168,619
7	0.05713	5	10,854	375	17,553	33,097	314,986	74,652	451,517	6,417	132,918	325,016	81,091	-	(60,233)	189,477
8	0.05285	6	10,041	347	16,235	30,618	291,337	67,981	416,559		132,918	283,641	70,768	-	-	260,245
9	0.04888	7	9,286	321	15,019	28,318	269,520	62,877	385,341		132,918	252,423	62,980	-	-	323,225
10	0.04522	8	8,591	297	13,890	26,197	249,275	58,168	356,418		132,918	223,500	55,763	-	-	378,988
11	0.04462	9	8,477	293	12,850	24,229	230,600	53,799	330,248		132,918	197,330	49,234	-	-	428,222
12	0.04461	10	8,475	293	12,680	22,415	213,277	49,768	306,908		132,918	173,990	43,411	-	-	471,633
13	0.04462	11	8,477	293	12,677	22,117	197,308	46,030	286,902		132,918	153,984	38,419	-	-	510,052
14	0.04461	12	8,475	293	12,680	22,112	194,690	42,583	280,833		132,918	147,915	36,905	-	-	546,957
15	0.04462	13	8,477	293	12,677	22,117	194,646	42,018	280,228		132,918	147,310	36,754	-	-	583,711
16	0.04461	14	8,475	293	12,680	22,112	194,690	42,009	280,259		132,918	147,341	36,762	-	-	620,473
17	0.04462	15	8,477	293	12,677	22,117	194,646	42,018	280,228		132,918	147,310	36,754	-	-	657,227
18	0.04461	16	8,475	293	12,680	22,112	194,690	42,009	280,259		132,918	147,341	36,762	-	-	693,989
19	0.04462	17	8,477	293	12,677	22,117	194,646	42,018	280,228		132,918	147,310	36,754	-	-	730,743
20	0.04461	18	8,475	293	12,680	22,112	194,690	42,009	280,259		132,918	147,341	36,762	-	-	767,505
21	0.04462	19	8,477	293	12,677	22,117	194,646	42,018	280,228		132,918	147,310	36,754	-	-	804,259
22	0.04461	20	8,475	293	12,680	22,112	194,690	42,009	280,259		132,918	147,341	36,762	-	-	841,021
23	0.02231	21	4,239	146	12,677	22,117	194,646	42,018	275,843		132,918	142,925	35,660	-	-	876,681
24		22			6,340	22,112	194,690	42,009	265,151		132,918	132,233	32,992	-	-	909,673
25						11,059	194,646	42,018	247,723		132,918	114,805	28,644	-	-	938,317
26							97,345	42,009	139,354		132,918	6,436	1,606	-	-	939,923
27								21,009	21,009							
28			395,840	13,677	296,046	516,385	4,545,564	981,029	6,727,532	44,896	2,772,419					

Notes:  
 [1] Plant additions not eligible for repairs tax deduction.  
 [2] Composite rate including mixed services 263A (4.01%) and bonus tax (50% for January-September 2017 and October-December 2017) deductions.  
 [3] Deferred Taxes calculated beginning 1/1/2018 using 21% Corporate Tax Rate and 5% State Tax Rate.

**Columbia Gas of Kentucky, Inc.**  
**Calculation of State Disallowance on Bonus Tax Depreciation for 2017 Additions**

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<u>Ln.</u>	<u>Year</u>	<u>State Tax Depr</u>	<u>State ADIT</u>			<u>Total ADIT Adj</u>	<u>Cumulative ADIT Adj</u>
			<u>State vs. Fed Tax Depr</u>	<u>on Disallowed Bonus</u>	<u>Fed Benefit ADIT</u>		
	<u>(1)</u>	<u>(2)</u>	<u>(3)</u>	<u>(4)</u>	<u>(5)</u>	<u>(6)</u>	<u>(7)</u>
1	2017	563,277	8,559,392	513,564	(179,747)	333,816	333,816
2	2018	1,084,346	(641,977)	(32,099)	6,741	(25,358)	308,458
3	2019	1,002,933	(593,777)	(29,689)	6,235	(23,454)	285,004
4	2020	927,830	(549,314)	(27,466)	5,768	(21,698)	263,306
5	2021	858,134	(508,050)	(25,402)	5,335	(20,068)	243,238
6	2022	793,845	(469,988)	(23,499)	4,935	(18,565)	224,674
7	2023	734,213	(434,684)	(21,734)	4,564	(17,170)	207,504
8	2024	679,237	(402,136)	(20,107)	4,222	(15,884)	191,619
9	2025	670,224	(396,799)	(19,840)	4,166	(15,674)	175,946
10	2026	670,074	(396,711)	(19,836)	4,165	(15,670)	160,276
11	2027	670,224	(396,799)	(19,840)	4,166	(15,674)	144,602
12	2028	670,074	(396,711)	(19,836)	4,165	(15,670)	128,932
13	2029	670,224	(396,799)	(19,840)	4,166	(15,674)	113,258
14	2030	670,074	(396,711)	(19,836)	4,165	(15,670)	97,588
15	2031	670,224	(396,799)	(19,840)	4,166	(15,674)	81,915
16	2032	670,074	(396,711)	(19,836)	4,165	(15,670)	66,245
17	2033	670,224	(396,799)	(19,840)	4,166	(15,674)	50,571
18	2034	670,074	(396,711)	(19,836)	4,165	(15,670)	34,901
19	2035	670,224	(396,799)	(19,840)	4,166	(15,674)	19,227
20	2036	670,074	(396,711)	(19,836)	4,165	(15,670)	3,557
21	2037	335,112	(198,400)	(9,920)	2,083	(7,837)	(4,280)
22	Total	15,020,719	2	85,594	(89,874)	(4,280)	-

**Columbia Gas of Kentucky, Inc.**  
**Calculation of State Disallowance on Bonus Tax Depreciation for 2018 Additions**

<u>Ln.</u>	<u>Year</u>	<u>State Tax Depr</u>	<u>State vs. Fed</u>	<u>State ADIT</u>		<u>Total</u>	<u>Cumulative</u>
				<u>Tax Depr</u>	<u>on Disallowed</u>		
	(1)	(2)	(3)	<u>Bonus</u>	<u>ADIT</u>	(6)	(7)
				(4)	(5)		
1	2018	-	-	-	-	-	-
2	2019	-	-	-	-	-	-
3	2020	-	-	-	-	-	-
4	2021	-	-	-	-	-	-
5	2022	-	-	-	-	-	-
6	2023	-	-	-	-	-	-
7	2024	-	-	-	-	-	-
8	2025	-	-	-	-	-	-
9	2026	-	-	-	-	-	-
10	2027	-	-	-	-	-	-
11	2028	-	-	-	-	-	-
12	2029	-	-	-	-	-	-
13	2030	-	-	-	-	-	-
14	2031	-	-	-	-	-	-
15	2032	-	-	-	-	-	-
16	2033	-	-	-	-	-	-
17	2034	-	-	-	-	-	-
18	2035	-	-	-	-	-	-
19	2036	-	-	-	-	-	-
20	2037	-	-	-	-	-	-
21	2038	-	-	-	-	-	-
22	Total	-	-	-	-	-	-

**Columbia Gas of Kentucky, Inc.**  
**Calculation of State Disallowance on Bonus Tax Depreciation for 2019 Additions**

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<u>Ln.</u>	<u>Year</u>	<u>State Tax Depr</u>	<u>State vs. Fed</u>		<u>State ADIT</u>	<u>Fed Benefit</u>	<u>Total</u>	<u>Cumulative</u>
			<u>Tax Depr</u>	<u>on Disallowed</u>	<u>Bonus</u>			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	
1	2019	-	-	-	-	-	-	-
2	2020	-	-	-	-	-	-	-
3	2021	-	-	-	-	-	-	-
4	2022	-	-	-	-	-	-	-
5	2023	-	-	-	-	-	-	-
6	2024	-	-	-	-	-	-	-
7	2025	-	-	-	-	-	-	-
8	2026	-	-	-	-	-	-	-
9	2027	-	-	-	-	-	-	-
10	2028	-	-	-	-	-	-	-
11	2029	-	-	-	-	-	-	-
12	2030	-	-	-	-	-	-	-
13	2031	-	-	-	-	-	-	-
14	2032	-	-	-	-	-	-	-
15	2033	-	-	-	-	-	-	-
16	2034	-	-	-	-	-	-	-
17	2035	-	-	-	-	-	-	-
18	2036	-	-	-	-	-	-	-
19	2037	-	-	-	-	-	-	-
20	2038	-	-	-	-	-	-	-
21	2039	-	-	-	-	-	-	-
22	Total	-	-	-	-	-	-	-

**Columbia Gas of Kentucky, Inc.**  
**Calculation of State Disallowance on Bonus Tax Depreciation for 2020 Additions**

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<u>Ln.</u>	<u>Year</u>	<u>State Tax Depr</u>	<u>State vs. Fed</u>		<u>State ADIT</u>	<u>Fed Benefit</u>	<u>Total</u>	<u>Cumulative</u>
			<u>Tax Depr</u>	<u>on Disallowed</u>	<u>Bonus</u>			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	
1	2020	-	-	-	-	-	-	-
2	2021	-	-	-	-	-	-	-
3	2022	-	-	-	-	-	-	-
4	2023	-	-	-	-	-	-	-
5	2024	-	-	-	-	-	-	-
6	2025	-	-	-	-	-	-	-
7	2026	-	-	-	-	-	-	-
8	2027	-	-	-	-	-	-	-
9	2028	-	-	-	-	-	-	-
10	2029	-	-	-	-	-	-	-
11	2030	-	-	-	-	-	-	-
12	2031	-	-	-	-	-	-	-
13	2032	-	-	-	-	-	-	-
14	2033	-	-	-	-	-	-	-
15	2034	-	-	-	-	-	-	-
16	2035	-	-	-	-	-	-	-
17	2036	-	-	-	-	-	-	-
18	2037	-	-	-	-	-	-	-
19	2038	-	-	-	-	-	-	-
20	2039	-	-	-	-	-	-	-
21	2040	-	-	-	-	-	-	-
22	Total	-	-	-	-	-	-	-



**Columbia Gas of Kentucky, Inc.**  
**Calculation of State Disallowance on Bonus Tax Depreciation for 2021 Additions**

<u>Ln.</u>	<u>Year</u>	<u>State Tax Depr</u>	<u>State vs. Fed</u>		<u>State ADIT</u>		<u>Total</u>	<u>Cumulative</u>
			<u>Tax Depr</u>	<u>on Disallowed</u>	<u>Bonus</u>	<u>Fed Benefit</u>		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	
1	2021	-	-	-	-	-	-	-
2	2022	-	-	-	-	-	-	-
3	2023	-	-	-	-	-	-	-
4	2024	-	-	-	-	-	-	-
5	2025	-	-	-	-	-	-	-
6	2026	-	-	-	-	-	-	-
7	2027	-	-	-	-	-	-	-
8	2028	-	-	-	-	-	-	-
9	2029	-	-	-	-	-	-	-
10	2030	-	-	-	-	-	-	-
11	2031	-	-	-	-	-	-	-
12	2032	-	-	-	-	-	-	-
13	2033	-	-	-	-	-	-	-
14	2034	-	-	-	-	-	-	-
15	2035	-	-	-	-	-	-	-
16	2036	-	-	-	-	-	-	-
17	2037	-	-	-	-	-	-	-
18	2038	-	-	-	-	-	-	-
19	2039	-	-	-	-	-	-	-
20	2040	-	-	-	-	-	-	-
21	2041	-	-	-	-	-	-	-
22	Total	-	-	-	-	-	-	-

**Columbia Gas of Kentucky, Inc.**  
**Annual Adjustment to the Safety Modification and Replacement Program**  
**Development of AMRP Plant Excluded From Base Rates**

**Test Year 12/31/17 AMRP Investment Summary**

Line No.	Month	Number of Months	AMRP CapEx	Rate Case Projected CapEx	13 Mo. Avg Rate Case Projections (1)	Actual Retirements	Rate Case Projected Retirements	13 Mo. Avg Rate Case Projections (1)	Actual Cost of Removal	Rate Case Projected Cost of Removal	13 Mo. Avg Rate Case Projections (1)	Depreciation Difference (2)
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	
1	Jan-17	12	203,041	787,036	726,495	(205,883)	(94,444)	(87,179)	(30,462)	(28,611)	(26,410)	(745)
2	Feb-17	11	922,620	420,451	355,766	(186,937)	(50,454)	(42,692)	(242,178)	(15,243)	(12,898)	(811)
3	Mar-17	10	607,894	512,097	393,921	(85,345)	(61,451)	(47,270)	(102,824)	(18,585)	(14,296)	243
4	Apr-17	9	775,824	741,213	513,147	(116,998)	(88,945)	(61,577)	(107,563)	(26,940)	(18,651)	943
5	May-17	8	876,331	1,199,444	738,119	(123,416)	(143,933)	(88,574)	(86,050)	(43,650)	(26,862)	1,462
6	Jun-17	7	1,602,481	1,657,675	892,594	(99,874)	(198,921)	(107,111)	(152,240)	(60,361)	(32,502)	2,449
7	Jul-17	6	823,855	1,657,675	765,081	(147,310)	(198,921)	(91,810)	(258,600)	(60,361)	(27,859)	3,319
8	Aug-17	5	2,151,785	2,917,811	1,122,235	(271,819)	(350,138)	(134,668)	(126,063)	(106,314)	(40,890)	4,040
9	Sep-17	4	1,190,456	2,849,075	876,638	(222,726)	(341,889)	(105,197)	(162,635)	(103,808)	(31,941)	5,142
10	Oct-17	3	2,371,548	2,917,811	673,341	(228,831)	(350,138)	(80,801)	(46,556)	(106,314)	(24,534)	7,141
11	Nov-17	2	6,490,489	1,772,233	272,651	(176,567)	(212,668)	(32,718)	(41,336)	(64,538)	(9,929)	13,741
12	Dec-17	1	4,470,710	1,772,233	136,326	(137,009)	(212,668)	(16,359)	(96,471)	(64,538)	(4,964)	21,976
13			22,487,034	19,204,754	7,466,315	(2,002,715)	(2,304,570)	(895,957)	(1,452,978)	(699,263)	(271,736)	58,900
14	Rate Year Summary		20,484,319	6,570,358	13,913,961				(3,455,693)	(1,167,693)	(2,288,000)	

**Test Year 12/31/17 AMRP - Mains Gas Plant Account 376**

Line No.	Month	Number of Months	Actual AMRP CapEx	Rate Case Projected CapEx	13 Mo. Avg Rate Case Projections (1)	Actual Retirements	Rate Case Projected Retirements	13 Mo. Avg Rate Case Projections (1)	Actual Cost of Removal	Rate Case Projected Cost of Removal	13 Mo. Avg Rate Case Projections (1)	Depreciation Difference (2)
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	
1	Jan-17	12	202,765	443,119	409,033	(144,500)	(53,174)	(49,084)	(28,920)	(7,976)	(7,362)	(207)
2	Feb-17	11	265,790	237,719	201,147	(115,673)	(28,526)	(24,137)	(76,799)	(4,279)	(3,621)	(433)
3	Mar-17	10	91,930	289,069	222,361	(3,618)	(34,688)	(26,683)	(1,566)	(5,203)	(4,002)	(526)
4	Apr-17	9	250,848	417,444	289,000	(2,295)	(50,093)	(34,680)	(1,836)	(7,514)	(5,202)	(603)
5	May-17	8	327,909	674,194	414,889	(12,563)	(80,903)	(49,786)	(4,486)	(12,135)	(7,468)	(642)
6	Jun-17	7	825,284	930,943	501,277	(3,713)	(111,713)	(60,153)	(3,277)	(16,757)	(9,023)	(414)
7	Jul-17	6	301,451	930,943	429,666	(8,665)	(111,713)	(51,560)	(1,665)	(16,757)	(7,734)	(211)
8	Aug-17	5	1,439,639	1,637,005	629,617	(53,989)	(196,441)	(75,554)	(39,460)	(29,466)	(11,333)	302
9	Sep-17	4	190,029	1,598,492	491,844	(43,650)	(191,819)	(59,021)	(33,461)	(28,773)	(8,853)	677
10	Oct-17	3	1,447,194	1,637,005	377,770	(97,804)	(196,441)	(45,333)	(16,495)	(29,466)	(6,800)	1,179
11	Nov-17	2	5,232,912	995,131	153,097	(12,782)	(119,416)	(18,372)	(6,996)	(17,912)	(2,756)	5,374
12	Dec-17	1	4,067,392	995,131	76,549	(96,473)	(119,416)	(9,186)	(6,154)	(17,912)	(1,378)	11,554
13			14,643,143	10,786,195	4,196,249	(595,725)	(1,294,343)	(503,549)	(221,115)	(194,150)	(75,532)	16,048
14	Rate Year GPA 376 Summary		14,047,418	3,692,700	10,354,718				(816,840)	(579,081)	(237,759)	

Notes:

(1) Recovered through base rates in Case No. 2016-00162

(2) AMRP spend not recovered through base rates and eligible for recovery through 2017 AMRP

**Columbia Gas of Kentucky, Inc.**  
**Annual Adjustment to the Safety Modification and Replacement Program**  
**Development of AMRP Plant Excluded From Base Rates**

**Test Year 12/31/17 AMRP - Services Gas Plant Account 380**

Line No.	Month	Number of Months	Actual AMRP CapEx	Rate Case Projected CapEx	13 Mo. Avg Rate Case Projections (1)	Actual Retirements	Rate Case Projected Retirements	13 Mo. Avg Rate Case Projections (1)	Actual Cost of Removal	Rate Case Projected Cost of Removal	13 Mo. Avg Rate Case Projections (1)	Depreciation Difference (2)
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)
1	Jan-17	12	-	343,917	317,462	(59,289)	(41,270)	(38,095)	-	(20,635)	(19,048)	(536)
2	Feb-17	11	635,163	182,732	154,619	(70,166)	(21,928)	(18,554)	(165,125)	(10,964)	(9,277)	(393)
3	Mar-17	10	514,412	223,028	171,560	(80,460)	(26,763)	(20,587)	(101,258)	(13,382)	(10,294)	734
4	Apr-17	9	512,040	323,769	224,148	(113,703)	(38,852)	(26,898)	(105,727)	(19,426)	(13,449)	1,500
5	May-17	8	526,252	525,250	323,231	(109,791)	(63,030)	(38,788)	(81,564)	(31,515)	(19,394)	2,028
6	Jun-17	7	773,120	726,732	391,317	(95,580)	(87,208)	(46,958)	(148,963)	(43,604)	(23,479)	2,764
7	Jul-17	6	516,148	726,732	335,415	(136,811)	(87,208)	(40,250)	(256,856)	(43,604)	(20,125)	3,425
8	Aug-17	5	671,925	1,280,806	492,618	(217,062)	(153,697)	(59,114)	(86,603)	(76,848)	(29,557)	3,592
9	Sep-17	4	713,739	1,250,583	384,795	(177,531)	(150,070)	(46,175)	(129,174)	(75,035)	(23,088)	3,939
10	Oct-17	3	918,342	1,280,806	295,571	(129,326)	(153,697)	(35,469)	(30,061)	(76,848)	(17,734)	5,089
11	Nov-17	2	1,249,901	777,102	119,554	(160,212)	(93,252)	(14,346)	(32,180)	(46,626)	(7,173)	7,485
12	Dec-17	1	403,331	777,102	59,777	(39,695)	(93,252)	(7,173)	(90,317)	(46,626)	(3,587)	9,537
13			7,434,373	8,418,559	3,270,066	(1,389,626)	(1,010,227)	(392,408)	(1,227,828)	(505,113)	(196,204)	39,165

Line No.	Month	Actual Net Plant Additions	Rate Case 13-Month Average Net Plant Additions	Net Plant Additions Not Included in Base Rates - Jan 2017 - Dec 2017 (2)	Actual Depreciation Reserve - Retirements and Cost of Removal	Rate Case 13-Mo. Avg Depreciation Reserve - Retirements and Cost of Removal	Depreciation Reserve Not Included in Base Rates - Jan 2017 - Dec 2017 (2)
14	Rate Year GPA 380 Summary	6,044,747	2,877,658	3,167,089	(2,617,454)	(588,612)	(2,028,842)

**Test Year 12/31/17 AMRP - Plant Regulators Plant Account 378**

Line No.	Month	Number of Months	Actual AMRP CapEx	Rate Case Projected CapEx	13 Mo. Avg Rate Case Projections (1)	Actual Retirements	Rate Case Projected Retirements	13 Mo. Avg Rate Case Projections (1)	Actual Cost of Removal	Rate Case Projected Cost of Removal	13 Mo. Avg Rate Case Projections (1)	Depreciation Difference (2)
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)
1	Jan-17	12	276	-	-	(1,595)	-	-	(1,542)	-	-	(1)
2	Feb-17	11	9,775	-	-	(254)	-	-	(254)	-	-	6
3	Mar-17	10	(2,414)	-	-	-	-	-	-	-	-	13
4	Apr-17	9	551	-	-	-	-	-	-	-	-	11
5	May-17	8	15,722	-	-	-	-	-	-	-	-	26
6	Jun-17	7	-	-	-	-	-	-	-	-	-	40
7	Jul-17	6	-	-	-	(79)	-	-	(79)	-	-	40
8	Aug-17	5	-	-	-	-	-	-	-	-	-	40
9	Sep-17	4	71,679	-	-	-	-	-	-	-	-	106
10	Oct-17	3	2,653	-	-	-	-	-	-	-	-	174
11	Nov-17	2	-	-	-	(2,200)	-	-	(2,160)	-	-	175
12	Dec-17	1	-	-	-	-	-	-	-	-	-	173
13			98,242	0	0	(4,128)	0	0	(4,035)	0	0	803

Line No.	Month	Actual Net Plant Additions	Rate Case 13-Month Average Net Plant Additions	Net Plant Additions Not Included in Base Rates - Jan 2017 - Dec 2017 (2)	Actual Depreciation Reserve - Retirements and Cost of Removal	Rate Case 13-Mo. Avg Depreciation Reserve - Retirements and Cost of Removal	Depreciation Reserve Not Included in Base Rates - Jan 2017 - Dec 2017 (2)
14	Rate Year GPA 378 Summary	94,114	0	94,114	(8,163)	0	(8,163)

**Notes:**

<sup>(1)</sup> Recovered through base rates in Case No. 2016-00162

<sup>(2)</sup> AMRP spend not recovered through base rates and eligible for recovery through 2017 AMRP

**Columbia Gas of Kentucky, Inc.**  
**Annual Adjustment to the Safety Modification and Replacement Program**  
**Development of AMRP Plant Excluded From Base Rates**

**Test Year 12/31/17 AMRP - Meter Installations Plant Account 382**

Line No.	Month	Number of Months	Actual AMRP CapEx	Rate Case Projected CapEx	13 Mo. Avg Rate Case Projections (1)	Actual Retirements	Rate Case Projected Retirements	13 Mo. Avg Rate Case Projections (1)	Actual Cost of Removal	Rate Case Projected Cost of Removal	13 Mo. Avg Rate Case Projections (1)	Depreciation Difference (2)
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)
1	Jan-17	12	-	-	-	(376)	-	-	-	-	-	(0)
2	Feb-17	11	4,788	-	-	(782)	-	-	-	-	-	3
3	Mar-17	10	3,883	-	-	(1,120)	-	-	-	-	-	9
4	Apr-17	9	1,149	-	-	(973)	-	-	-	-	-	11
5	May-17	8	4,974	-	-	(954)	-	-	-	-	-	15
6	Jun-17	7	2,114	-	-	(546)	-	-	-	-	-	20
7	Jul-17	6	5,345	-	-	(1,674)	-	-	-	-	-	24
8	Aug-17	5	1,464	-	-	(721)	-	-	-	-	-	28
9	Sep-17	4	3,093	-	-	(1,337)	-	-	-	-	-	30
10	Oct-17	3	1,317	-	-	(1,565)	-	-	-	-	-	32
11	Nov-17	2	4,763	-	-	(1,255)	-	-	-	-	-	34
12	Dec-17	1	(215)	-	-	(781)	-	-	-	-	-	37
13			32,675	0	0	(12,084)	0	0	0	0	0	242

Line No.	Month	Number of Months	Actual Net Plant Additions	Rate Case 13-Month Average Net Plant Additions	Net Plant Additions Not Included in Base Rates - Jan 2017 - Dec 2017 (2)	Actual Depreciation Reserve - Retirements and Cost of Removal	Rate Case 13-Mo. Avg Depreciation Reserve - Retirements and Cost of Removal	Depreciation Reserve Not Included in Base Rates - Jan 2017 - Dec 2017 (2)
14	Rate Year GPA 382 Summary		20,591	0	20,591	(12,084)	0	(12,084)

**Test Year 12/31/17 AMRP - House Regulators Plant Account 383**

Line No.	Month	Number of Months	Actual AMRP CapEx	Rate Case Projected CapEx	13 Mo. Avg Rate Case Projections (1)	Actual Retirements	Rate Case Projected Retirements	13 Mo. Avg Rate Case Projections (1)	Actual Cost of Removal	Rate Case Projected Cost of Removal	13 Mo. Avg Rate Case Projections (1)	Depreciation Difference (2)
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)
1	Jan-17	12	-	-	-	(123)	-	-	-	-	-	(0)
2	Feb-17	11	7,104	-	-	(62)	-	-	-	-	-	6
3	Mar-17	10	83	-	-	(147)	-	-	-	-	-	13
4	Apr-17	9	11,236	-	-	(27)	-	-	-	-	-	23
5	May-17	8	1,474	-	-	(108)	-	-	-	-	-	35
6	Jun-17	7	1,963	-	-	(35)	-	-	-	-	-	38
7	Jul-17	6	911	-	-	(81)	-	-	-	-	-	41
8	Aug-17	5	38,757	-	-	(47)	-	-	-	-	-	78
9	Sep-17	4	995	-	-	(208)	-	-	-	-	-	115
10	Oct-17	3	2,042	-	-	(136)	-	-	-	-	-	117
11	Nov-17	2	453	-	-	(118)	-	-	-	-	-	120
12	Dec-17	1	202	-	-	(60)	-	-	-	-	-	120
13			65,220	0	0	(1,152)	0	0	0	0	0	707

Line No.	Month	Number of Months	Actual Net Plant Additions	Rate Case 13-Month Average Net Plant Additions	Net Plant Additions Not Included in Base Rates - Jan 2017 - Dec 2017 (2)	Actual Depreciation Reserve - Retirements and Cost of Removal	Rate Case 13-Mo. Avg Depreciation Reserve - Retirements and Cost of Removal	Depreciation Reserve Not Included in Base Rates - Jan 2017 - Dec 2017 (2)
14	Rate Year GPA 383 Summary		64,068	0	64,068	(1,152)	0	(1,152)

**Notes:**

<sup>(1)</sup> Recovered through base rates in Case No. 2016-00162

<sup>(2)</sup> AMRP spend not recovered through base rates and eligible for recovery through 2017 AMRP

**Columbia Gas of Kentucky, Inc.**  
**Annual Adjustment to the Safety Modification and Replacement Program**  
**Development of AMRP Plant Excluded From Base Rates**

**Test Year 12/31/17 AMRP - GPS Devices Plant Account 387**

Line No.	Month	Number of Months	Actual AMRP CapEx	Rate Case Projected CapEx	13 Mo. Avg Rate Case Projections (1)	Actual Retirements	Rate Case Projected Retirements	13 Mo. Avg Rate Case Projections (1)	Actual Cost of Removal	Rate Case Projected Cost of Removal	13 Mo. Avg Rate Case Projections (1)	Depreciation Difference (2)
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)
1	Jan-17	12	-	-	-	-	-	-	-	-	-	-
2	Feb-17	11	-	-	-	-	-	-	-	-	-	-
3	Mar-17	10	-	-	-	-	-	-	-	-	-	-
4	Apr-17	9	-	-	-	-	-	-	-	-	-	-
5	May-17	8	-	-	-	-	-	-	-	-	-	-
6	Jun-17	7	-	-	-	-	-	-	-	-	-	-
7	Jul-17	6	-	-	-	-	-	-	-	-	-	-
8	Aug-17	5	-	-	-	-	-	-	-	-	-	-
9	Sep-17	4	210,921	-	-	-	-	-	-	-	-	275
10	Oct-17	3	-	-	-	-	-	-	-	-	-	550
11	Nov-17	2	2,460	-	-	-	-	-	-	-	-	553
12	Dec-17	1	-	-	-	-	-	-	-	-	-	557
13			213,381	0	0	-	0	0	0	0	0	1,935
14	Rate Year GPA 387 Summary		213,381	0	213,381				0	0	0	

Notes:

<sup>(1)</sup> Recovered through base rates in Case No. 2016-00162

<sup>(2)</sup> AMRP spend not recovered through base rates and eligible for recovery through 2017 AMRP

Columbia Gas of Kentucky, Inc.  
Annual Adjustment to the Safety Modification and Replacement Program  
Calculation of O&M Savings

FERC Account 887

(\$)

Projected 2021 O&M Account 887 Costs  
2017 O&M Account 887 per Case No. 2016-00162  
Projected O&M Savings

2,406,774

2,886,706

(479,932)

**Columbia Gas of Kentucky**  
**SMRP Rider Billing Determinants by Rate Schedule**  
**For the Twelve Months Ending December 31, 2021**

**Form 4.0**

<u>Rate Schedule</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Total</u>
GSR - Residential	107,556	107,864	107,839	107,357	106,704	105,868	105,435	105,228	105,097	105,459	106,858	108,288	1,279,553
SVGTS - Residential	15,520	15,428	15,336	15,245	15,153	15,061	14,970	14,878	14,786	14,695	14,603	14,511	180,186
GSO - Commercial or Industrial	11,348	11,406	11,409	11,364	11,294	11,225	11,177	11,151	11,153	11,195	11,376	11,542	135,640
GDS - Commercial or Industrial	21	20	20	20	20	20	21	21	21	21	21	21	247
SVGTS - Commercial or Industrial	2,904	2,889	2,881	2,870	2,865	2,853	2,993	2,977	2,966	2,951	2,944	2,925	35,018
IUS, IUDS	2	2	2	2	2	2	2	2	2	2	2	2	24
IS, DS	72	72	71	71	71	71	72	72	72	72	72	72	860
SAS	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>137,423</b>	<b>137,681</b>	<b>137,558</b>	<b>136,929</b>	<b>136,109</b>	<b>135,100</b>	<b>134,670</b>	<b>134,329</b>	<b>134,097</b>	<b>134,395</b>	<b>135,876</b>	<b>137,361</b>	<b>1,631,528</b>

**SMRP RIDER  
SAFETY MODIFICATION AND REPLACEMENT PROGRAM RIDER**

**APPLICABILITY**

Applicable to all customers receiving service under the Company's Rate Schedules GS, IS, IUS, SVGTS, DS and SAS.

**CALCULATION OF SAFETY MODIFICATION AND REPLACEMENT RIDER REVENUE REQUIREMENT**

The SMRP Rider Revenue Requirement includes the following:

- a. SMRP-related Plant In-Service not included in base gas rates minus the associated SMRP-related accumulated depreciation and accumulated deferred income taxes;
- b. Retirement and removal of plant related to SMRP construction;
- c. The rate of return on the net rate base is the overall rate of return on capital authorized in the Company's latest base gas rate case, grossed up for federal and state income taxes;
- d. Depreciation expense on the SMRP = related Plant In-Service less retirement and removals;
- e. Property taxes related to the SMRP; and
- f. Reduction for savings in Account No. 887 – Maintenance of Mains,

**SAFETY MODIFICATION AND REPLACEMENT PROGRAM FACTORS**

All customers receiving service under Rate Schedules GSR, GSO, IS, IUS, SVGTS, DS, GDS and SAS shall be assessed a monthly charge in addition to the Customer Charge component of their applicable rate schedule that will enable the Company to complete the safety modification and replacement program.

Rider SMRP will be updated annually in order to reflect the expected impact on the Company's revenue requirements of forecasted net plant additions and subsequently adjusted to true up the actual costs with the projected costs. A filing to update the projected costs for the upcoming calendar year will be submitted annually by October 15 to become effective with meter readings on and after the first billing cycle of January. The allocation of the program costs shall be based on the revenue distribution approved by the Commission. Company will submit a balancing adjustment annually by March 31 to true-up the actual costs, as offset by operations and maintenance expense reductions, during the most recent twelve months ended December with the projected program costs for the same period. The balancing adjustment true-up to the rider will become effective with meter readings on and after the first billing cycle of June.

The charges for the respective gas service schedules effective December 30, 2020 are:

Rate GSR, Rate SVGTS - Residential Service	\$8.04
Rate GSO, Rate GDS, Rate SVGTS - Commercial or Industrial Service	\$29.50
Rate IUS, Rate IU DS	\$252.13
Rate IS, Rate DS <sup>1/</sup> , Rate SAS	\$1,481.70
<u>1/</u> - Excluding customers subject to Flex Provisions of Rate Schedule DS	

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DATE OF ISSUE: October 15, 2020  
DATE EFFECTIVE: December 30, 2020 (Unit 1 January Billing)  
ISSUED BY: /s/ Kimra H. Cole  
TITLE: President & Chief Operating Officer



**SMRP RIDER  
SAFETY MODIFICATION AND REPLACEMENT PROGRAM RIDER**

**APPLICABILITY**

Applicable to all customers receiving service under the Company's Rate Schedules GS, IS, IUS, SVGTS, DS and SAS.

**CALCULATION OF SAFETY MODIFICATION AND REPLACEMENT RIDER REVENUE REQUIREMENT**

The SMRP Rider Revenue Requirement includes the following:

- a. SMRP-related Plant In-Service not included in base gas rates minus the associated SMRP-related accumulated depreciation and accumulated deferred income taxes;
- b. Retirement and removal of plant related to SMRP construction;
- c. The rate of return on the net rate base is the overall rate of return on capital authorized in the Company's latest base gas rate case, grossed up for federal and state income taxes;
- d. Depreciation expense on the SMRP = related Plant In-Service less retirement and removals;
- e. Property taxes related to the SMRP; and
- f. Reduction for savings in Account No. 887 – Maintenance of Mains,

**SAFETY MODIFICATION AND REPLACEMENT PROGRAM FACTORS**

All customers receiving service under Rate Schedules GSR, GSO, IS, IUS, SVGTS, DS, GDS and SAS shall be assessed a monthly charge in addition to the Customer Charge component of their applicable rate schedule that will enable the Company to complete the safety modification and replacement program.

Rider SMRP will be updated annually in order to reflect the expected impact on the Company's revenue requirements of forecasted net plant additions and subsequently adjusted to true up the actual costs with the projected costs. A filing to update the projected costs for the upcoming calendar year will be submitted annually by October 15 to become effective with meter readings on and after the first billing cycle of January. The allocation of the program costs shall be based on the revenue distribution approved by the Commission. Company will submit a balancing adjustment annually by March 31 to true-up the actual costs, as offset by operations and maintenance expense reductions, during the most recent twelve months ended December with the projected program costs for the same period. The balancing adjustment true-up to the rider will become effective with meter readings on and after the first billing cycle of June.

The charges for the respective gas service schedules effective ~~December 30~~ ~~May 29~~, 2020 are:

Rate GSR, Rate SVGTS - Residential Service	\$8,045.46
Rate GSO, Rate GDS, Rate SVGTS - Commercial or Industrial Service	\$29,5020.54
Rate IUS, Rate IUDS	\$252,13470.96
Rate IS, Rate DS <sup>1/</sup> , Rate SAS	\$1,481,704,074.50
<u>1/</u> - Excluding customers subject to Flex Provisions of Rate Schedule DS	

DATE OF ISSUE: ~~October 15~~ ~~May 22~~, 2020

DATE EFFECTIVE: ~~December 30~~ ~~May 29~~, 2020 (Unit 1  
~~January~~ ~~June~~ Billing)

ISSUED BY: /s/ Kimra H. Cole

TITLE: President & Chief Operating Officer

~~Issued pursuant to an Order of the Public Service Commission in Case No. 2020-00099 dated May 15, 2020.~~